

## GENERAL TOOLS CATALOG 2023

Price List in IDR



# A CENTURY OF EXPERIENCE FOR THE NEW MILLENNIUM.

For centuries, we have been proud of our long-standing traditions and international reputation as a development partner in the production, transformation and processing of metals. Certainly, our strengths include the combining and cooperation of different departments, as this enriches what we offer and bolsters our competitiveness, paving the way for entering tough foreign markets.



1919

## "We are proud of our long tradition and international reputation!"

Many years of tradition, reliable and professionally trained employees, expert knowledge, state-of-the-art technological solutions, high-quality products and services, social responsibility and a modern marketing approach are features that provide us with a wide-ranging sales network with which we carefully work to cultivate the satisfaction and loyalty of the public.

We are trusted by the most respected players in the automotive industry, professional and amateur craftsmen, buyers of CNC machines, as well as many domestic and foreign users of Unior products. All have been won over by our professionalism, quality and reliability.







## WE GIVE QUALITY A NAME!

"The tradition of the past for the sustainable development of products for the future."

Development based on rich tradition is our mission. Only in this way will we be able to continue to develop in harmony with nature, the environment and society into a successful international company that connects us and guarantees a better future for all of us.

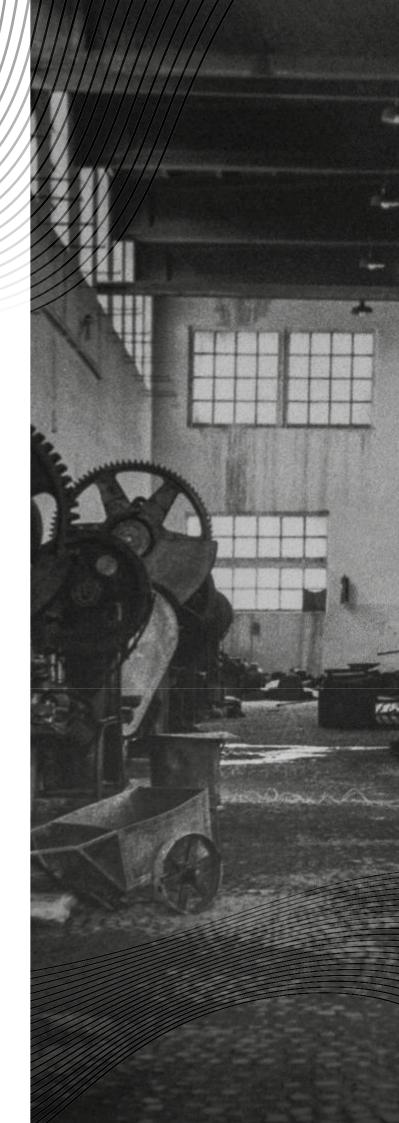
The tradition of the first iron works and larger forges from the Pohorje area in Slovenia still lives on in people's minds, but today they master the latest metal processing procedures. The experience of designing handy tools for agriculture, forestry and various trades is written in the character of the company, which today develops innovative and ergonomic solutions for many users of hand tools. The pride that was aroused decades ago by the first partnerships with prominent European car companies is embedded in every European car in the form of at least one piece created in Zreče.

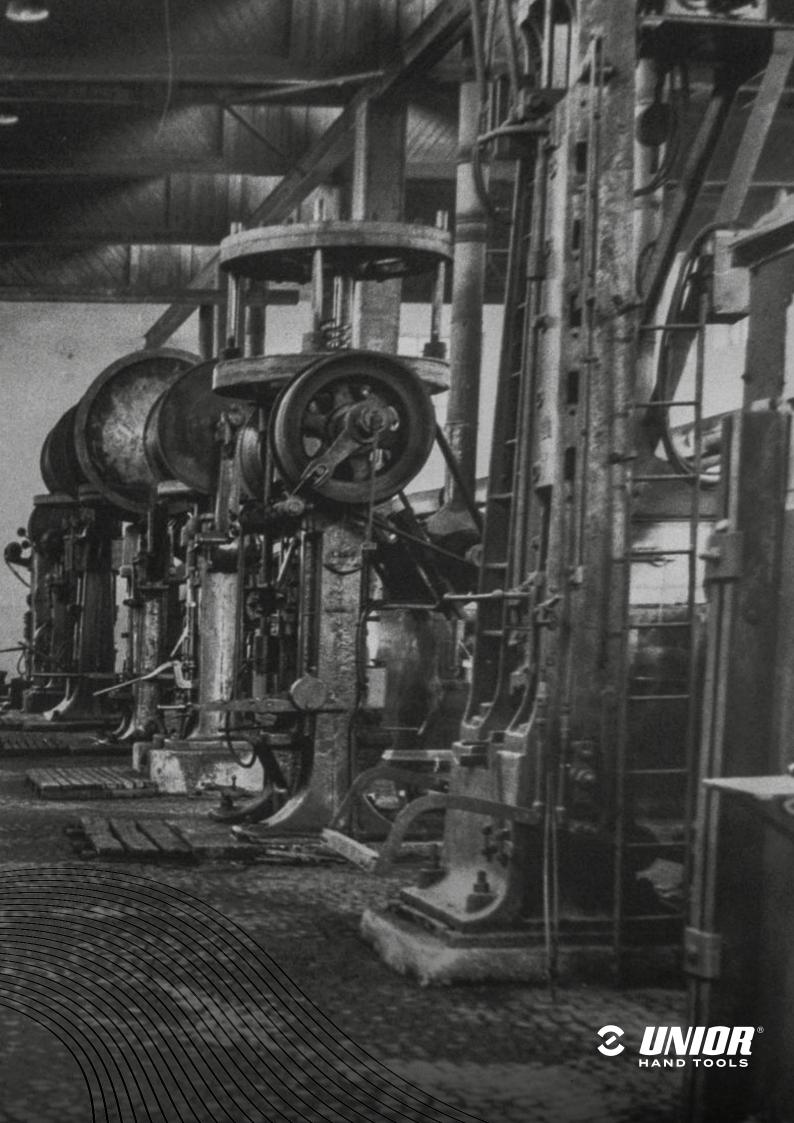


"Unior – a global brand of hand tools!"

# **WE RESPECT**A RICH HERITAGE.

The excellence of the programmes and companies of today's Unior Group stems from respect for the heritage of the Pohorje ironworks from the 18th century. A Styrian iron industrial company with limited connection, founded in 1919, the post-war Forged Tool Factory of Zreče, and finally Unior, which has been operating as a joint stock company since 1997, has grown with a network of companies across Europe, the USA and Asia into an important international group that combines centuries-old Slovenian blacksmith and toolmaking culture with state-of-the-art metalworking approaches. It has the advantage of combining the development of its own solutions in the field of own-brand hand tools with the biggest developmental achievements and challenges in the field of machine manufacture and metal forging.







# WE ARE GUIDED BY INNOVATION.

We strive to ensure that our products have a long service life and that we use materials that are easier on the environment, lighter and more energy efficient. With the construction of hand tools, we take into account the optimal use of materials. We strive for the development of smart tools for rapid servicing, containing electrical, mechatronic and electronic components.

**Product development is oriented towards sustainability.** It is based on the development of partnerships, on knowledge and on innovation, leading to improved business performance for our customers.

In the future we will focus on the **growth of specialist programmes** for cycling tools, metal packaging and tools for high-voltage work.

In the field of **renewable energy sources** (solar power plants, wind farms), we are an reliable supplier of tools for high-voltage work. Our advantage is that the tools are tailored to work at height, where we follow European regulations to make safe, reliable and efficient work possible for the user.

In the field of general hand tools, we are looking to grow in the sectors of pullers and pliers, as the market specialises in this field. In cold forging, we specialise in beams, rotors and stators that are installed in hydraulic motors.

## A GLIMPSE INTO THE FUTURE ...

- ➤ Maintain its position among the top five manufacturers of general hand tools in Europe.
- > To be the world's leading manufacturer of cycling tools and supplier of many bicycle repair shops.
- > To be the leading LMS provider in Europe for industry.
- > To be an employment provider, committed to sustainable development and caring for all the stakeholders with whom we do business.



#### **HAND TOOLS**

#### **FORGING**

#### **MACHINE TOOLS**

#### **Quality brand**

For the development of hand tools at Unior, we always take into account the requirements and expectations of our customers and build long-term cooperative partnerships with them. Our products are manufactured from recyclable materials that are safe for the user and have a long service life. At the same time, they are lighter, easier on the environment and more energy efficient.

### We are trusted by the most reputable brands

With the forging of steel and machining come the creation of steering mechanisms and gearboxes, chassis supports, jigs, driveshaft elements and forgings for vehicles of the most distinguished European and world brands such as VW, BMW, Audi, Mercedes and Renault.

### Automated treatment of metal

Unior hardware provides comprehensive solutions from concept to final product. In addition to dedicated CNC processing machines for batch machining of aluminium castings and forgings, Unior offers flexible production cells, deep drilling machines, processing of parts and bodywork treatments, turntables, as well as specially customised machines. Unior is also a supplier of machines for renowned automotive manufacturers such as VW, BMW, Audi, Daimler and others.

## UNIOR HAND TOOLS

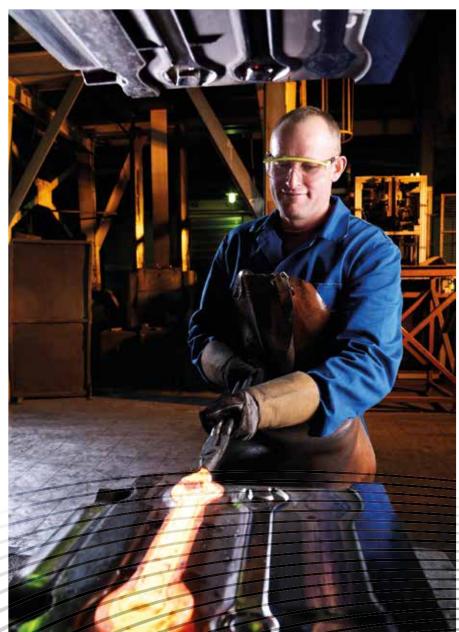
"For decades now, the very best partner for professional and domestic hand tool users!"

As part of its hand tools programme, Unior annually produces **more than 100 million** tools and sheet metal storage, which are sold in **120 markets.** 

With the help of state-of-the-art technology, the tools are developed by a team of experienced specialists in individual areas, and when developing hand tools, we always keep the needs of users in mind. We are committed to the continual improvement of materials, finding ergonomic solutions, taking into account all safety aspects and finding functional solutions in accordance with the latest standards and trends on the international market. Originality and improvements provide excellent usable value, more comfort and better safety at work. With these processes, Unior has shown for decades that it is the best partner for all professional hand tool users.

It is for this reason that every year we place more and more labels on our products, as well as on the packaging, so that customers get the most reliable information. When designing a product, we focus on user safety, which is why Unior products are designed in such a way to lessen the physical effort used in the performance of the work and to completely focus on the purpose of the work.











- **COST-EFFICIENCY** is ensured by the longer service life of Unior hand tools, which is the result of excellent design and quality production.
- THE OPTIMAL CONSTRUCTION OF UNIOR TOOLS ensures long-term durability, which leads to an uninterrupted work process.
- **THE ERGONOMIC DESIGN OF UNIOR TOOLS** ensures reduced physical effort while performing work.
- **THE FUNCTIONALITY OF UNIOR TOOLS** is expressed through time efficiency in the performance of work.
- **THE DEVELOPMENT OF TOOLS** with added value ensures greater user productivity.
- **THE SUPREMACY OF UNIOR TOOLS** is reflected in a complete orientation towards the purpose of the work. No slips or injuries occur.
- **A DEVELOPMENT PARTNERSHIP** to solve specific problems by developing custom tools at the user's request.
- THE FLEXIBILITY and control of Unior's processes is reflected in the rapid responsiveness to the customer.

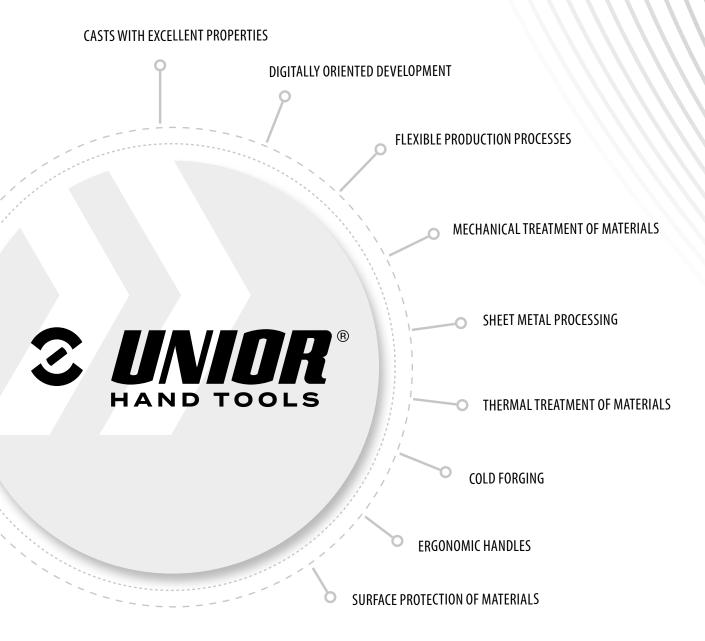




# **COMPLETE**DEVELOPMENT CYCLE

With a comprehensive multidisciplinary development-oriented approach, Unior successfully meets the high expectations of users of its products. By taking into account the purpose, ergonomics, safety, quality and aesthetics, our solutions adapt to all customer needs.

With the ownership of a steelworks, our own forge, constantly investing in our own development, upgrading production processes and checking quality in all phases from materials to final checks, we ensure that Unior products are truly of the highest quality.



Products entirely designed and manufactured in Europe!

# **QUALITY AND**SAFETY MARK



Unior is a reliable partner. It operates according to the EFQM business excellence model and has certificates for its products that prove our standards of quality and safety. We fulfil customer requirements and orders with up-to-date logistics. With an appropriately protected brand, with our own representative offices and with a diversified network of distributors, we provide comprehensive user information and quality after-sales services.

Our brand is protected in more than 80 countries, and the quality of the tools meets demanding global and European standards.

The high quality of products from Unior is founded on carefully planned, managed and verified processes. We operate in accordance with certified systems and international standards ISO 9001 and ISO/TS 16949 VDA 6.4. ISO 14001. Unior was one of the first manufacturers of hand tools in Europe to receive ISO 9001 quality certification for the development, production and marketing of hand tools, sheet metal storage for hand tools, and for machine forging. The tools comply with the DIN standard, as evidenced by the GS certificate. The live work tools boast a VDE certificate. The hand tools programme operates according to the EFQM business excellence model. The forgings programme meets the standards of the automotive industry VDA 6.1, QS 9000 and IATF 16949. As early as 2004, the machine manufacturing programme was the proud recipient of the VW Mexico award for best supplier of custom machines.

In addition, the Unior Hand Tools Programme is officially certified as a European manufacturer of hand tools, as we have obtained the European Brand Quality Certificate.



"Unior hand tools are accessible to users on all continents of the world."

# GUIDED BY A PARTNERSHIP WITH REAL CRAFTSMEN

Who can rely on expert demonstrations of the use of tools for specific needs, trading partners to whom Unior offers improved solutions for sales outlets and, last but not least, athletes, who achieve their goals with perfectly maintained bicycles, motorbikes and cars.

With a thorough knowledge of international standards and trends, Unior constantly develops innovations for the needs of professional users. With original solutions, it provides them with excellent functional characteristics, with ergonomics giving more comfort at work, all the while complying with the demanding high safety standards at work

Users can learn about innovations that enable faster and simpler work through video presentations showing correct usage and instructions for safe use, which complement the entire hand tool programme on the website

#### www.uniortools.com.

Users can also get to know and test out the tools with the help of a special demonstration vehicle. With specialised tool catalogues for bicycle, automotive, electrician, motorcycle, industrial and other individual user groups, Unior brings its tools closer to various professional areas.

### WE CARE FOR THE COMMUNITY

Unior, with its three programmes, is considered one of the largest employers in the region. We demonstrate our responsibility to people not only by respecting social dialogue and fulfilling the rights of employees, but also by carefully ensuring safety and health at work according to the requirements of the OHSAS 18001 standard and through additional programmes that raise the quality of people's lives.

The company is certified as a Family Friendly Enterprise, which is affiliated with the European work & family audit licence.

The reputation of the Unior brand is co-created by professional craftsmen.



Special attention is also paid to those with disabilities. Unior received a special award in 2017 from the Slovenian Ministry of Labour, Family, Social Affairs and Equal Opportunities for good practice in the employment of persons with disabilities.

"We strive to balance employees' professional and private lives and to raise their levels of satisfaction."

# CARING FOR FUTURE GENERATIONS BY REDUCING OUR CARBON FOOTPRINT

Unior is a global company, so we are aware that a strategic approach to sustainable development is vital, both for today and for the future.

"As much as 70% of purchased material comes from Slovenian suppliers!"



The objectives of all our processes are aimed at reducing negative impacts and increasing positive impacts on the environment, society and people, both inside and outside the company. The Unior Group follows a strategy of environmental protection, waste management, use of materials and resources, innovation of basic production processes, care for employees, awareness of customers, work with suppliers and active participation and contribution to economic development.

At Unior, we also transfer our management systems to our suppliers. About 70% of our purchased materials are bought from local or Slovenian suppliers, while at the same time we develop and strengthen lasting partnerships with our customers, founded on a mutual and equal relationship.

Through the entire supply chain of raw materials – Unior-Customer we strive to reduce our carbon footprint. An important part of our competitiveness in the global market is our drive for low-carbon operation, as we develop new models and solutions that reduce the impact on the environment and enable "green business". Only in this way can we guarantee long-term operation in accordance with the requirements of the ISO 14001 and ISO 50001 standards.

### E-MOBILITY TO PROMOTE SPECIALISED TOOL DEVELOPMENT

E-mobility is a concept based on green energy, reducing carbon footprint and the emissions of particulate matter in transport. Today's society is increasingly striving for efficient use of energy, which would result in reducing carbon footprint, and which is why Unior is increasingly developing purpose-made tools for the repair and maintenance of e-bikes, personal electric vehicles, electric trains,

## "The future lies in the custom production of tools."

electric motors and electrical heavy machinery. We also produce tools for the installation and maintenance of the electrical charging station infrastructure, while developing dedicated tools for the repair and maintenance of renewable energy equipment. We also offer tools for working at height, which are attached to the user for safe work when repairing wind turbines and solar panels.



### ROBOTICS TO ACHIEVE SUSTAINABLE DEVELOPMENT

Robotics is a major contributor to our strategy for achieving sustainable development. As such, in the future we will test the ergonomics of a tool with a 3D printer, raise the usage level of key machines, optimise the flow of production, reduce time between phases, and optimise internal transportation.

#### DIGITALISATION FOR AN EASIER FUTURE

At Unior we have set ourselves high goals, which we will achieve with a carefully planned strategy and strategic goals. In the coming years we intend to carry out planned investments for increasing capacity and for the more cost-effective production of hand tools, digitalisation of production and business processes, optimisation of logistics processes in the programme, increasing productivity through automation, increasing the level of specialisation by plant, and improving efficiency in production processes by reducing flow times.







#### Premium chrome vanadium steel

#### Reliability without wear and tear

When it comes to tools, such as spanners and pipe pliers, for example, which need to withstand high loads, properties such as high tensile strength, the corresponding ductility of the material with higher elasticity and the lowest possible susceptibility to cracking are of particular importance. These requirements are particularly well met by Premium chrome/ vanadium steel, an alloyed tool steel with manganese, chrome, silicon and carbon. Tools made from this steel have a long service life and are an excellent choice for many years of use.

#### **Premium Flex chrome vanadium steel**

#### Excellence that can withstand high torque

A lower susceptibility to cracking is particularly important for tools such as socket wrenches. Tool steel with a higher chrome and manganese content guarantees a higher tensile strength. An appropriate carbon content simultaneously ensures the corresponding hardness of the tool. Premium Flex chrome vanadium steel, an alloyed tool steel with manganese, chrome and carbon, allows for the redesign of tools that can withstand high torques.

#### **Premium Hard chrome vanadium steel**

#### Durability

Hand tools such as screwdrivers, the reliability, safety and long service life of which depend on the elasticity and at the same time the hardness of their shafts, are manufactured from specially alloyed tool steel, which makes it possible to achieve higher strength due to their higher content of selected elements. The molybdenum content of the tool steel Premium Hard chrome/vanadium steel results in their higher durability, tensile strength and ductility, while the increased silicon content ensures their higher elasticity and lower susceptibility to cracking. The appropriate hardness and resistance to wear are achieved with a corresponding carbon content.

#### Alloyed tool steel 31CrV3, in accordance with EU directive 2000/53/EC

- > 0.60% manganese for higher tensile strength and ductility
- > 0.60% chrome for lower susceptibility to cracking and higher tensile strength
- > 0.30% silicon for higher elasticity
- > 0.35% carbon for appropriate tool hardness

#### Alloyed tool steel 25CrMo4, in accordance with EU directive 2000/53/EC

- > 0.75% manganese for higher tensile strength and ductility
- > 1,00% chrome for lower susceptibility to cracking and higher tensile strength
- > 0.35% carbon for appropriate tool hardness

#### Specially alloyed tool steel 73MoV52, according to EU directive 2000/53/EC

- > 0.60% manganese for higher tensile strength and ductility
- > 1,15% silicon for higher elasticity and lower susceptibility to cracking
- > 0.70% carbon for appropriate hardness and resistance to wear

Wrenches and pipe wrenches made of chrome/ vanadium steel with added alloyed elements for even better properties have a particular ergonomic shape, are safe to use and are now also characterised by even higher resistance to wear.

Tools made from high-quality chrome vanadium steel with a higher content of selected alloyed elements can now be even better adapted to specific uses, due to their suitability for high torques and their corresponding strength.

benches are made from cold-rolled plate steel of high

quality. Cold-rolled plate steel is characterised by smooth

steel plate and construction techniques such as optimal

ensure higher stability.

reinforcement of the parts subjected to the highest loads

surfaces and improved strength tolerance. The high-quality

Cold-forged steel with high quality characteristics ensures that profiles now have an even longer-lasting strength, with shafts of extraordinary hardness.





#### **Premium metal sheet**

#### Keeping the accessibility of tools in mind

High-quality plate steel is the basic material used for shelving, boxes and other accessories used to store, access and effectively handle tools. Workshop equipment and similar products to ensure the easy accessibility of tools are stable, sturdy and durable. In addition to quality, they are also characterised by well-designed construction solutions that render them fit for purpose.







#### **Premium Plus carbon steel**

#### For optimal grip and cutting strength

Steel with a medium carbon content is particularly suitable for pliers due to its incorporation of selected alloved elements. Together with the hardness achieved through inductive tempering, this material property allows for extraordinary clamping strength. Pliers made of various improved steels have a suitable hardness and higher tensile strength, due to their higher carbon content. Manganese also contributes towards improvement, as it increases the ductility of the material. Silicon was used to improve the elasticity of the material, while chrome reduces its susceptibility to cracking.

#### **Premium Flex Plus carbon steel**

#### Efficiency and durability under considerable crushing and deformation stress

Construction and trade steels have special properties that guarantee their appropriate hardness, ductility and elasticity, as is required for tools such as setters, hammers and screw clamps, which are exposed to great force during hammering and clamping. Steels with a medium carbon content that are used to make tools have a higher carbon content, resulting in better durability. A suitable manganese content increases the tensile strength and ductility of the material, which is particularly important under high load conditions. The chrome content reduces the susceptibility to cracking, while the silicon content increases the elasticity of tool materials subjected to strong forces.

#### Premium Hard Plus carbon steel

#### Effortless cutting

In addition to carbon, manganese, silicon and chrome, this special carbon steel also contains vanadium, which considerably improves the pinching characteristics of the tool by increasing its carbide hardness. Pincers made from this steel prove their excellent efficiency, even when used on the hardest of wires. The high carbon content results in both a higher tensile strength of the material and in increased durability. Improvements made subsequent to the inductive forging process lead to extraordinarily high jaw hardness.

#### Alloyed tool steel C45E, in accordance with EU Directive 2000/53/EC and the EN 10083-1 standards

- > 0,45% carbon for higher tensile strength and ductility > 0,70% manganese for higher tensile strength and ductility
- > 0.30% silicon for higher elasticity
- > 0,30% chrome for lower susceptibility to cracking and higher tensile strength

#### Medium carbon steel C45R, according to EU directive 2000/53/EC and the EN 10083-2 standards

- > 0,45% carbon for higher tensile strength and better tempering
- > 0,70% manganese for higher tensile strength and ductility
- > 0,35% chrome for higher tensile strength and lower susceptibility to cracking
- > 0,20% silicon for higher elasticity

#### Special carbon steel, in accordance with EU Directive 2000/53/EC and the EN 10058 standards

- > 0,80% carbon for higher tensile strength and durability
- > 0,70% manganese for higher tensile strength and ductility
- > 0.30% silicon for higher elasticity
- > 0,25% chrome for higher tensile strength and lower susceptibility to cracking

Pliers with optimal, inductively hardened jaws are characterised by excellent clamping properties, an outstanding grip and flexible joints.

#### HAMMER

Steel with higher tensile strength reduces the possibility of new cracks forming on impact faces.

SHARK CUTTER

These strong cutters made from high-quality material with a special composition have extremely flexible joints; their most notable characteristic is the ability to pinch through even the hardest wires. They are characterised by extraordinary strenath

#### Alloyed tool steel C60E, in accordance with EU Directive 2000/53/EC and the EN 10083-2 standards

- ➤ 0,60% carbon for higher tensile strength and ductility
- > 0,70% manganese for higher tensile strength and ductility
- > 0.30% silicon for higher elasticity

The design and manufacturing quality of high-quality steel pliers with special properties ensure efficient pinching off of hard wire

#### **PULLER BODY** A steel tool with a high carbon content that can withstand

high pull-off forces. High-quality material and well- designed manufacturing ensure strength and durability.

#### **Qualifoat**

#### Qualicoat

#### Compatible with humans and the environment

Unior products are protected against corrosion. Highquality ecological epoxy paints have been applied using powder coating. These paints are environmentally compatible, contain no heavy metals and can be safely used by humans, as confirmed by their accreditation by the International Institute for Public Health. The paint is applied to a thickness of 90 microns, thus ensuring excellent mechanical characteristics and extraordinary resistance to the effects of weather.



#### **Packaging**

#### Δ

#### Small cardboard card

The tool is attached to a cardboard card. Packaged in quantities of four pieces in a laminated folding transport box.



#### В

### Small cardboard card with plastic attachment

The tool is attached to a cardboard card with a plastic attachment. Packaged in quantities of four pieces in a laminated folding transport box.



#### C

#### Cardboard card with tie

The tool is attached to the cardboard card with tie.



#### D

#### Special envelope

There is a special envelope on the tool and it is additionally packaged in transparent LD-PE packaging.



#### E

### Cardboard card with a LD-PE sleeve

The tool is attached to the cardboard card for hanging and is additionally protected with a transparent LD-PE sleeve



#### F

#### General laminated boxes

This packaging is used for products with retail-ready packaging. The packaging is printed with a general Unior design. It is used to protect the products during transport.



#### G

#### **Special designed boxes**

The functionality of hand tools is explained.



#### Н

#### Cardboard with safety tie and packed into general laminated boxes

A cardboard card with all the necessary product information is attached to the tools with a safety tie. Packed in general laminated packaging.



#### K

#### Transport brown packaging

Transport brown packaging is used for packaging and protection of larger and heavier products.



#### Р

#### **Plastic Wallet**

Tools are packed in a plastic wallet with a hole which allows them to be hanged from single or double hooks. The upper side of the case is transparent for easier identification.



#### 5

#### Plastic case

Tools are packed in a plastic case for easier storage and protection.



#### Т

### Bags with a transparent sleeve

Sets of tools in bags are in a transparent sleeve with a padlock and a color label that displays a list of the tools in the set.





#### Wallet

Tools are packed in a LD-PE bag or sleeve.



#### Z

#### General Envelope in LD-PE sleeve

Tools are packed in a general laminated cardboard envelope with all the necessary product information and inserted into a transparent LD-PE sleeve.



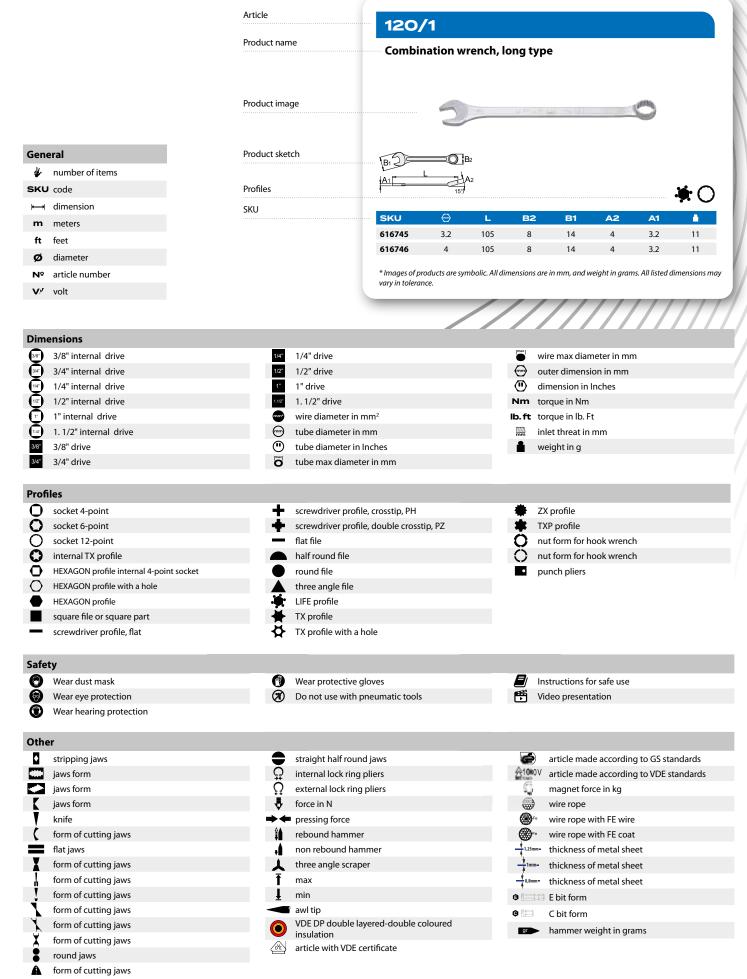
#### X

#### Different packaging

Different packaging is used to pack all other large tools which do not belong to other groups of packaging (tools on pallets, in wooden box, etc.).



#### Legend of symbols used in catalogue





# WRENCHES

#### One hundred years of tradition and quality!

One of the most traditional forms of tools, the wrench, is certainly distinguished by its functionality and exceptional power. They are designed to access hard-to-reach places with their design and certainly offer a solution to all such problems. Their carefully selected size and set combinations offer users a wide and varied choice. With careful development and the use of quality materials, Unior wrenches are practically indestructible in their intended daily use.





### Premium chrome vanadium steel - reliability without wear!

In the case of tools such as wrenches and pipe wrenches, which have to bear a greater load, particularly important properties are high tensile strength, adequate toughness of the material with greater elasticity and as little susceptibility to cracks as possible. These requirements are perfectly met by Premium Chrome Vanadium Steel, a tool steel alloyed with manganese, chromium, silicon and carbon. Tools made from this steel have a long life and are an excellent choice for long-term use.

## Alloyed tool steel 31CrV3, in accordance with EuroDirective 2000/53/EC

- → 0.60% manganese for higher tensile strength and toughness
- ➤ 0.60% chromium to reduce crack susceptibility and increase tensile strength
- > 0.30% silicon for greater elasticity
- > 0.35% carbon for adequate tool hardness

### We follow developments and prioritise innovation

Unior wrenches, with their innovative design and superior function, ensure that the force transfer to the bolt and nut heads is accurate and efficient. This is why we at Unior are constantly following the development of new profiles and shapes dictated by the rapidly evolving consumer market. For professional or domestic use; for all needs, situations and preferences. As such, the same apparent form of wrench today has actually made huge progress in development!



















## Manufacturing procedure for a combination wrench at Unior

- **1. Cutting:** Cutting material is the first operation in the technological procedure of wrench manufacturing. Optimum design of a cut provides optimal use of material.
- **2. Forging:** Forging technology at Unior ensures excellent strength characteristics of wrenches. Notably, it maintains appropriate fiber orientation in a forged part, leaving it uninterrupted and the same as in a rolled blank. That characteristic of forged parts is vital for achieving the characteristics of products exposed to heavy dynamic loads, such as Unior wrenches.
- **3. Trimming:** Superfluous material around a forged part is removed using a special-purpose trimming tool; material is trimmed to the desired shape, always making the weight of trimmings as low as possible.
- **4. Perforation:** Following the forging and trimming phases, perforations are made in the workpiece by punching or cutting. This procedure can be carried out either on hot or cold workpieces.
- **5. Burring and grinding:** Wrenches are contour-ground on grinding machines, thus making surfaces smooth on the edges of a wrench. After that, edges on forged parts are made smooth in special machines using mechanical and chemical means.
- **6. Machine marking and bending:** Each wrench is impressed with an appropriate marking providing information about the source of a wrench, dimensions and material used. The ring of the wrench is accordingly offset in line with the standard.
- **7. Broaching:** In broaching, suitable gaps are made on special-purpose tools; material is broached with linear motion of a tool incorporating a large number of cutting blades.
- **8. Tempering:** Tempering by heating and cooling is designed to improve the grain flow of the steel and thereby increase the toughness of the wrench at the desired points; this heat treatment process grants the Unior wrenches a long lifespan and resistance to high loads and pressure.
- **9. Sanding:** Various abrasive substances are blasted onto the surface of the wrenches by means of compressed air. The abrasives burr the surface, while at the same time imparting to it a certain asperity, important for the subsequent application of a suitable galvanic (protective) coating.
- **10. Chrome plating and polishing:** Wrenches are coated with a thin, but solid layer of chromium oxide to protect them from corrosion and other external influence. Chromium coating gives a wrench a professional appearance and warrants a long service life.

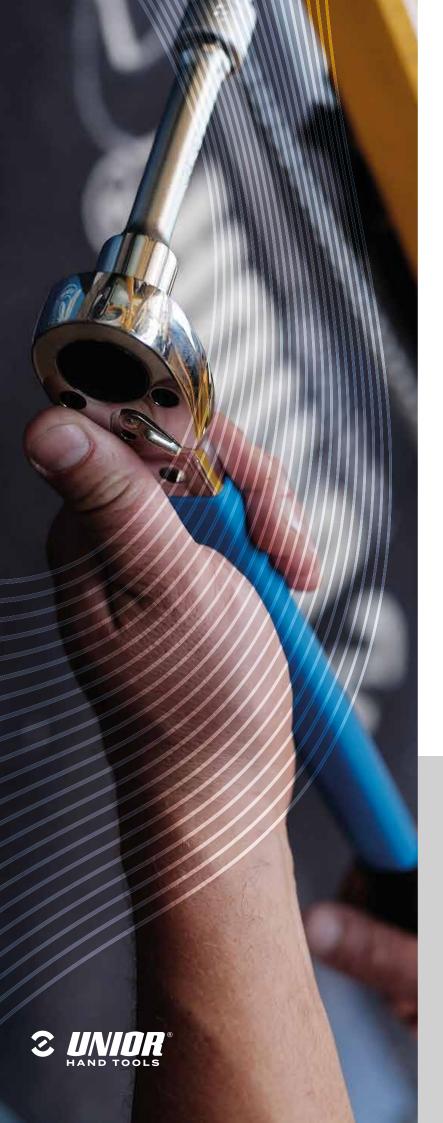




# RATCHETS, SOCKETS AND ACCESSORIES

#### The ratchet - an indispensable part of a socket set!

The ratchet is an indispensable and essential part of every set of socket wrenches. Unior Ratchets are based on carefully made forgings from our own forge, and are processed on dedicated CNC machines, developed and produced by us. The knowledge that we have with more than 100 years of tradition is captured in the overall design development, and over time has made for a very precise mechanism, thoughtful design and good optimisation. Thus, with the possibility of replacing worn out components with new ones that we offer as spare parts, a Unior tool can last forever.





#### **Premium Flex chrome vanadium steel**

#### **Excellence that can withstand high torque**

A lower susceptibility to cracking is particularly important for tools such as socket wrenches. Tool steel with a higher chrome and manganese content guarantees a higher tensile strength. An appropriate carbon content simultaneously ensures the corresponding hardness of the tool. Premium Flex chrome vanadium steel, an alloyed tool steel with manganese, chrome and carbon, allows for the redesign of tools that can withstand high torques.

### Alloyed tool steel 25CrMo4, in accordance with EU directive 2000/53/EC

- ➤ 0.75% manganese for higher tensile strength and ductility
- ➤ 1,00% chrome for lower susceptibility to cracking and higher tensile strength
- > 0.35% carbon for appropriate tool hardness



### WHEN USING ANY TOOL, PROPER PRECAUTIONS MUST BE TAKEN.

The incorrect use of tools can be dangerous. We recommend you read our Guides, for safety tips and instructions on the correct use of our tools. We provide information on common user errors encountered when using our tools so please, always follow our recommendations and check our web page for up to date information.



## A special procedure for the manufacture of ratchets

#### **Ratchet**

- **1. Cutting:** Cutting material is the first operation in the technological procedure to manufacture a ratchet casing. Optimum design of a cut provides optimal use of material.
- **2. Forging:** The forging technology at Unior ensures excellent strength properties of wrenches. Notably, it maintains an appropriate course of fibres in a forged part, leaving them uninterrupted and the same as in a rolled blank. That characteristic is vital for achieving the characteristics of products typically exposed to heavy and dynamic loads, such as a ratchet.
- **3. Trimming:** Superfluous material around a forged part is removed using a special purpose trimming tool; material is trimmed to the desired shape, always making the weight of trimmings as low as possible.

#### **Ratchet casing**

- **4. CNC working:** A CNC machine is used to make a ratchet casing within the necessary tolerance margins for optimal functioning of the final product.
- **5. Heat treatment (quenching and tempering) and sanding:** The heat treatment with hardening and tempering is intended to improve the structure of the steel, to provide greater hardness and toughness of the product and other properties required to overcome the strain that work with such products requires.
- **6. Sanding:** Cleaning the surface before chroming is important for the sake of quality and durable surface protection.
- **7. Chroming:** A ratchet housing is plated with a thin, but hard coating of chromium oxide that protects against corrosion and wear and other external influence. At the same time, it gives the entire product a brilliant and professional appearance.

#### **Pinion**

- **8. Machining is carried out on a CNC machine, which ensures the necessary accuracy.** The pinion is one of the essential elements of a ratchet and individual sizes have to be executed within very narrow tolerance margins.
- **9. Teeth on a pinion are shaped with a broaching operation.** The obtained 75-teeth geometry guarantees the necessary two-sided shifting of an Unior ratchet.
- 10. Cleaning the surface after heat treatment
- 11. Shift lever
- 12. Closing element
- 13. Shift button
- 14. Cover
- **15. Ejector pin:** Ratchet parts 12-16 are made using advanced manufacturing procedures, such as sintering and injection moulding. Quality materials provide optimum strength and premium durability.

#### Assembly

**16. Final assembly:** Well qualified, skilled and meticulous employees performing the final ratchet assembly will assemble the product into a whole ensuring a top quality final product. An Unior ratchet will withstand up to 30% higher loads than standard requirements.

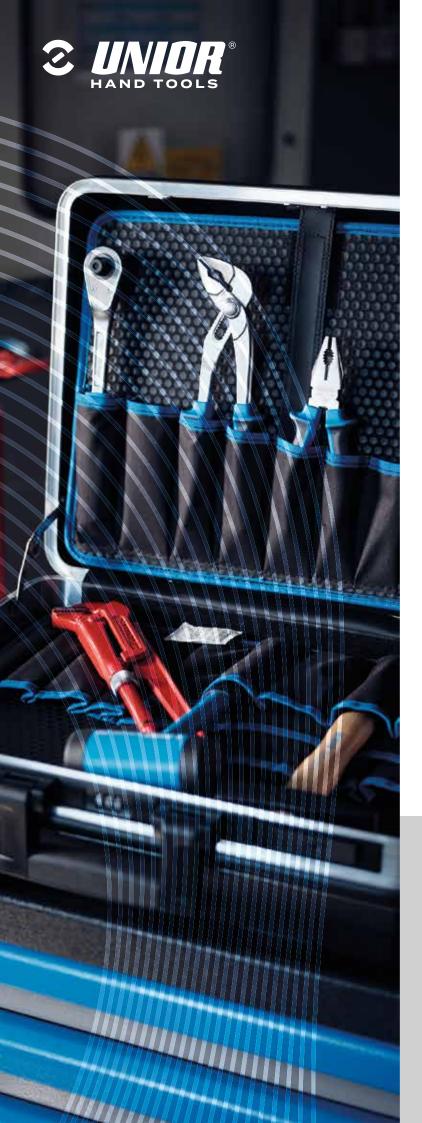




# **PLIERS**

#### From classical to modern development!

At Unior, we have always remained faithful to traditional forms of pliers, known to many, and for which we know to have a proven design and functionality. At the same time, we are constantly adding new solutions to the problems that arise in modern times. This is precisely the reason why, although on the one hand we hold on to classical forms, on the other hand we extend our development to other areas. All with the aim of a hint of innovation to solve modern problems.





#### **Premium Hard Plus carbon steel**

#### **Effortless cutting**

In addition to carbon, manganese, silicon and chrome, this special carbon steel also contains vanadium, which considerably improves the pinching characteristics of the tool by increasing its carbide hardness. Pincers made from this steel prove their excellent efficiency, even when used on the hardest of wires. The high carbon content results in both a higher tensile strength of the material and in increased durability. Improvements made subsequent to the inductive forging process lead to extraordinarily high jaw hardness.

## Special carbon steel, in accordance with EU Directive 2000/53/EC and the EN 10058 standards

- > 0,80% carbon for higher tensile strength and durability
- > 0,70% manganese for higher tensile strength and ductility
- > 0.30% silicon for higher elasticity
- ➤ 0,25% chrome for higher tensile strength and lower susceptibility to cracking



#### WANT TO GET IN TOUCH WITH US?

Use the form on the link and ask us a question. Select the appropriate category, then we will make sure that your question gets the appropriate answer as soon as possible.

Keep in touch with us and our experts!

## A special procedure for the manufacture of pliers



- **1. Cutting:** Cutting material is the first operation in the technological procedure of wrench manufacturing. Optimum design of a cut provides optimal use of material.
- **2. Forging:** Forging technology at Unior ensures excellent strength characteristics of wrenches. Notably, it maintains appropriate fiber orientation in a forged part, leaving it uninterrupted and the same as in a rolled blank. That characteristic of forged parts is vital for achieving the characteristics of products exposed to heavy and dynamic loads.
- **3. Trimming:** Excess material is removed from forged parts using a special-purpose tool that trims products along the dividing shape. Some products are also trimmed when hot, thus preventing major mechanical surface deformation on the cut part and providing a quality basis for undisturbed machining.
- **4. Joint processing:** Using a special-purpose CNC machine, a bore hole is drilled that will serve as the pivot point for pliers. At the same time, the joint is milled and sliding surfaces are made, ensuring precise and undisturbed movement of pliers during use.

#### 5. Broaching

- **6. Shaping the head part of pliers:** Using a special-purpose trimming tool with linear movement, complex surfaces of pliers are shaped. That operation includes the shaping of external radii of the joint and teeth on the jaw used to grip various shapes.
- **7. Milling the cutting edges:** A special-purpose CNC machine is used for making cutting edges, thus giving pliers the relevant functionality. Important elements are the angle of a cutting edge and the thickness of the edge top. Optimum and accurate machining of cutting edges gives pliers the properties required to cut wire.
- **8. Riveting:** Pliers are assembled and riveted together with a rivet. At that stage, it is important to ensure that the joint is firm enough, while still allowing the jaws to move freely, but with no slack.

#### 9. Wet grinding

- **10. Machining the head part of pliers:** At that stage, the surface of pliers is evened to remove any differences in height that might appear as a result of thickness tolerance margins when making a forged part or during further machining, including riveting.
- **11. Shaping:** Using a tape grinding machine, the remaining untreated surfaces are ground to create better quality surfaces than can be achieved in the forging process. The pliers now have their final shape, but the roughness of individual surfaces still needs to be adjusted.
- **12. Quenching and tempering:** The heat treatment of pliers is carried out by annealing pliers in oil and then tempering them. Such type of heat treatment ensures an appropriate microstructure of the material and excellent strength properties of the final product. Quality heat treatment maximises the mechanical properties of the material and gives pliers a long service life.
- **13. Sanding:** At this stage, the product surfaces are struck with abrasive materials to even the roughness of surfaces and remove the oxides that appear during heat treatment. The sanded surfaces are evenly rough and precise, giving products a better appearance. Some surfaces are later even more precisely treated, giving them a contrasting look.
- **14. Induction hardening:** The cutting edges of pliers must be covered with a thin layer of very rigid surface that is able to withstand damage caused by cutting solid wires.
- **15. Fine grinding:** Using tape grinding machines, specific surfaces on the head of pliers are ground to make them smooth, also giving them a visual effect or professional appearance.
- **16. Chrome plating and polishing:** Pliers are galvanised with a thin layer of nickel and chromium to prevent oxidation. That gives the products an aesthetic appearance with a glossy silver surface. Chrome-plated surfaces also make the pliers more resistant to external influence.
- **17. Laser inscription:** Using the modern process of laser inscription, pliers are inscribed with markings used for product identification.
- 18. Insulation mounting: Pliers are completed with plastic handles providing a good, firm and ergonomic grip.
- **19. Oiling and control:** The sliding surfaces of a joint are properly oiled to ensure unimpeded movement of pliers. In that operation, pliers are properly checked for quality and visual characteristics to ensure that Unior pliers always meet the requirements of the most demanding of users.







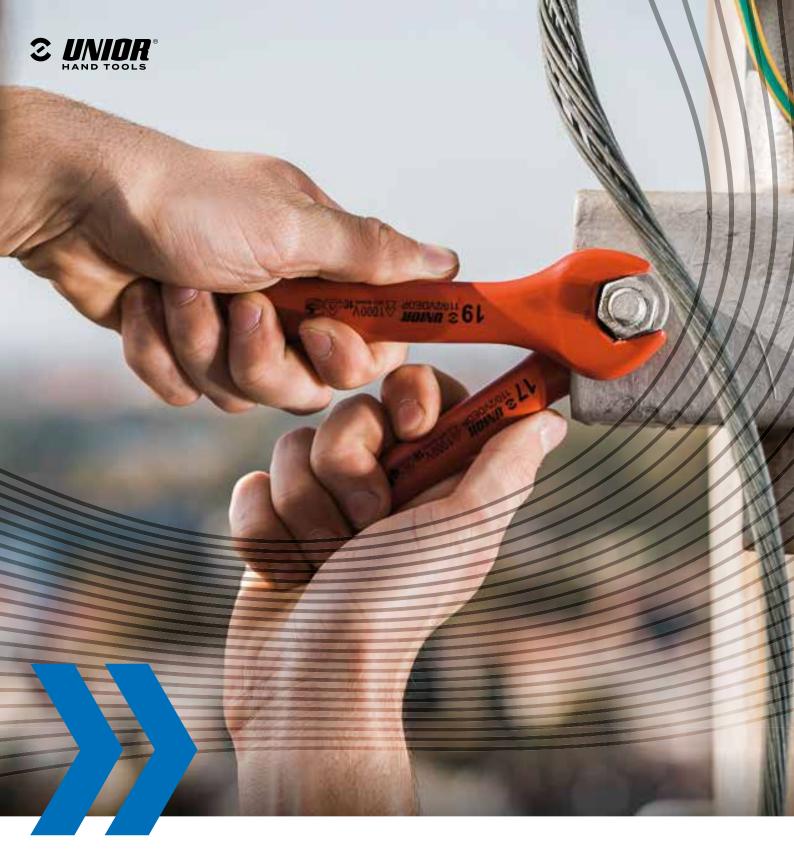






# CABLE CUTTING, STRIPPING AND CRIMPING TOOLS

A dedicated cable processing tool is an excellent utility aimed primarily at professional users; both electricians and industrial technicians, maintenance workers, etc. With its customized design and perfect functionality, it enables the latter to carry out their daily work easily and safely. High-quality steel with a special composition and additional chrome surface protection also gives the tool a longer service life.



## **INSULATED TOOLS**

#### When safety comes first!

In the case of isolated VDE tools, safety is of the utmost importance, even under 1000V high voltage, as this is precisely where extremely strict European regulations apply. Due to the awareness and importance of the latter, we have upgraded this in the development and production of Unior VDE tools, by testing the tools in even more demanding conditions. Quality assurance without defects gives us 100% control of products in the manufacture itself, and then additional sample control for the most demanding tests in the test laboratory. The possibility of complete quality control is also enabled by our 100% own VDE tool manufacture.



### Premium Hard Plus carbon steel - effortless cutting!

In addition to carbon, manganese, silicon and chromium, the special carbon structural steel also contains vanadium, which significantly improves the tool's clamping capabilities due to its effect on the higher hardness of the carbides. Pliers made of this steel prove their superior efficiency even when used on the hardest wires. The high carbon content, in addition to the higher tensile strength of the material, enables longer durability. As a result of the improvement, distinctly higher wafer hardnesses are achieved after induction hardening.

## Special carbon structural steel, compliant with EuroDirective 2000/53/EC and EN 10058 standard:

- > 0.80% carbon for greater tensile strength and durability
- ➤ 0.70% manganese for higher tensile strength and toughness
- > 0.30% silicon for greater elasticity
- ➤ 0.25% chromium for higher tensile strength and less susceptibility to cracks

#### Orange as a warning sign

The double plastic protection of VDE tools ensures double safety at work, because it enables the detection of worn out tools in due time. When tools are worn out, orange colour (protective layer 2) warns a user of the need for immediate replacement.





## A special procedure for the manufacture of insulated tools

- **1. Cold forging of the socket:** It involves a sequential technological process that includes annealing, phosphating, and contracting.
- **2. CNC working of the socket:** A special-purpose CNC machine is used to work the socket into the required size according to the ISO standard.
- **3. Wrench marking:** A special procedure is used to imprint an appropriate marking on a wrench indicating the dimensions and material of the wrench.
- **4. Heat treatment:** Annealing and tempering operations are used to give a wrench an appropriate microstructure and optimum strength characteristics, thus providing premium torque values and a long service life.
- **5. Sanding:** In sanding, abrasive material is shot on product surface, making it evenly coarse, while rendering it free of the oxides generated in heat treatment. Sanded surfaces are evenly coarse and exact, thus providing excellent product appearance and surface contrast on products that have certain surfaces treated further
- **6. Chroming:** A socket is plated with a thin, but hard coating of chromium oxide that protects against corrosion and other external influence. At the same time it gives the socket a proper professional appearance.

#### **Plastic coating process**

7. Double plastic coating: The process of coating of tools in multiple layers of plastic appropriate for work under high voltage conditions is a series of operations with precisely defined parameters of implementation that must not deviate from the requirements. This is the only way to obtain a quality and, most importantly, safe product. Before plastic coating, the piece - the metal part of the tool - has to be prepared for the process. It is degreased in a container of acetone and then dried. In order for the material and the metal part of the tool to adhere together effectively in the required places, the metal part of the tool is submerged in a special liquid that activates its adhesive property. This is followed by mounting the piece on special holders. The process of heating starts in a special chamber furnace and it is then immediately submerged in an orange material. It has to be removed from this material, which is heated to the right temperature, with the optimum speed so that the material drips off. Before the second plastic coating, the pieces are gelatinized in a furnace at the prescribed temperature. This is followed by a second plastic coating with a red material, the process of gelatinizing is repeated and the final plastic coating, once again of the red material, gives the piece the final thickness of a twoor three-layered coating. For the appropriate gloss and a professional appearance, the pieces are stabilized in a furnace at the prescribed temperature.



# **SHEARS**

#### Durability, durability, durability ...

One of the key qualities that characterises Unior snips, cutters and shears is their durability. As these tools are mainly used on construction sites, their practicality and continuous innovation are crucial to enable them to get the job done quickly and to effectively address potential problems on site. This is why this tool has a 10 times longer service life compared to other tools.





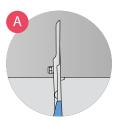
#### **Premium Hard Plus carbon steel**

#### **Effortless cutting**

In addition to carbon, manganese, silicon and chrome, this special carbon steel also contains vanadium, which considerably improves the pinching characteristics of the tool by increasing its carbide hardness. Pincers made from this steel prove their excellent efficiency, even when used on the hardest of wires. The high carbon content results in both a higher tensile strength of the material and in increased durability. Improvements made subsequent to the inductive forging process lead to extraordinarily high jaw hardness.

## Special carbon steel, in accordance with EU Directive 2000/53/EC and the EN 10058 standards

- ➤ 0,80% carbon for higher tensile strength and durability
- > 0,70% manganese for higher tensile strength and ductility
- > 0.30% silicon for higher elasticity
- → 0,25% chrome for higher tensile strength and lower susceptibility to cracking



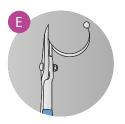
For long, straight continuous cuts.



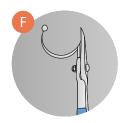
For straight continuous and shaped cuts.



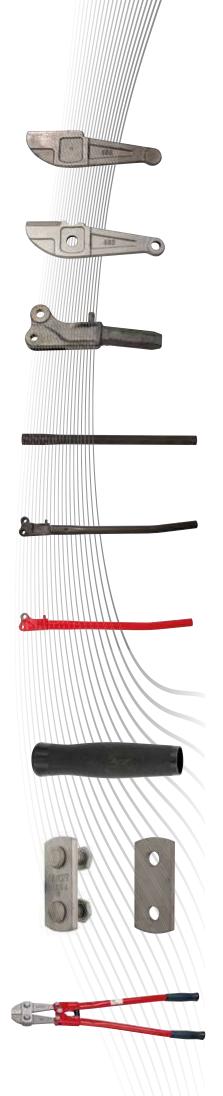
For straight continouous and shaped cuts.



For short, straight and shaped cuts.



For short, straight and shaped cuts.



## A special procedure for the manufacture of shears

#### **Jaws**

- **1. Cutting:** Cutting material is the first operation in the technological procedure of wrench manufacturing. Optimum design of a cut provides optimal use of material.
- **2. Forging:** Forging technology at Unior ensures excellent strength characteristics of wrenches. Notably, it maintains appropriate fiber orientation in a forged part, leaving it uninterrupted and the same as in a rolled blank. That characteristic of forged parts is vital for achieving the characteristics of products exposed to heavy and dynamic loads.
- **3. Trimming:** Superfluous material around a forged part is removed using a special-purpose trimming tool; material is trimmed to the desired shape, always making the weight of trimmings as low as possible.
- **4. CNC machining:** A jaw is treated in a single clamping device on a CNC machine, thus ensuring manufacture within the necessary tolerance margins of size and positioning.
- **5. Heat treatment (quenching and tempering):** The heat treatment with hardening and tempering is intended to improve the structure of the steel, to provide greater hardness and toughness of the product and other properties required to overcome the strain that work with such products requires.

#### **Joints**

- **6. Forging part:** The forging part is made by drop forging cutting, forging, trimming and calibrating.
- **7. CNC working:** The entire working of the jaw is done using CNC machines. Clamping devices on the machines provide the accuracy required for the quality operation of the cutters.

## Handle-joint assembly

- **8. Mounting the handle onto the joint and pressing:** The handle is firmly mounted onto the joint. The handle is then pressed onto the joint, which ensures that the mounted handle does not come loose under even the greatest strain
- **9. Bending the handle:** The handle is bent to the required functional angle with a special bending device, which provides the user with ergonomic applicability.
- **10. Coating:** A protective colour is applied using powder coating technology, which gives the product a professional appearance and also serves as surface protection.
- **11. Mounting the sleeve:** A PVC sleeve is mounted on the handle that gives a user a good and ergonomic grip.
- **12. Manufacturing screws and nuts:** Is done using CNC machines, which, besides quality material and heat treatment, ensures the optimum bonds between the individual elements of the cutter.
- **13. Assembly:** The trained, skilled and meticulous workers performing the final assembly put together the individual parts, examine the main characteristics and turn the Unior cutter into a high quality product.



# **SCREWDRIVERS**

## A traditional symbol of hand tools!

Screwdrivers are still the perfect symbol of hand tools and their varied use. With them, we can perform difficult work and servicing of larger devices to extremely small ones, like mobile phones. It is certainly the oldest representation of a hand tool and the grandfather of all other tools. This is precisely why screwdrivers have a special place among all hand tools. In view of progress, both in the field of sustainability and the increasing need for electrification, screwdrivers also need constant development and innovation. In this way, new profiles that are used today are additionally included. Nevertheless, its basic form remains the same.





## Premium Hard chrome vanadium steel - long lasting durability!

Hand tools, such as screwdrivers, where the reliability, safety and longevity of use depend on the elasticity and at the same time on the hardness of the stems, are made of special alloyed tool steel. This, with a higher content of selected elements, enables greater durability. In the Premium Hard tool steel, chrome vanadium steel with a molybdenum content enables, in addition to greater durability, greater tensile strength and toughness, while the increased silicon content increases elasticity and reduces susceptibility to cracks. Adequate hardness and wear resistance are achieved with an appropriate carbon content.

## Special alloy tool steel 73MoV52, compliant with EuroDirective 2000/53/EC:

- > 0.60% molybdenum for greater tensile strength and toughness
- ➤ 1.15% silicon for greater elasticity and reduced susceptibility to cracking
- > 0.70% carbon for adequate tool hardness and wear resistance

## TBI handles for screwdrivers are composed of three layers, namely:

- **1. layer:** Black PP (polypropylene) which surrounds the stem of the screwdriver and is extremely solid, preventing the turning of the screwdriver stem in the handle at high torque
- **2. layer:** Blue PP (polypropylene) which surrounds the 1st layer of the handle is very stiff and ensures the constant shape of the handle under various environmental effects
- **3. layer:** Grey TPE (thermoplastic elastomer) which partially surrounds the 2nd layer of the handle is a medium-strength material that gives the handle its final ergonomic shape, ensures a pleasant and non-slipping grip and thereby the achievement of high torques

Able to fit a variety of screw profiles and exhibiting innovative three-component handles, UNIOR screwdrivers ensure great efficiency and a slip-proof grip.

Unior screwdrivers are made of premium hard chrome vanadium steel. The surface is additionally protected with quality nickel and/or chrome plating. The superior quality of materials used for Unior screwdrivers is complemented by well-thought ergonomically designed handles to provide the best possible grip.

With its combination of soft and hard surfaces, the special, three-component handle – a Unior patent – ensures comfort and efficient performance with minimum strain on the wrist while working. The soft material ensures maximum gripe even when oily.

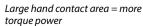












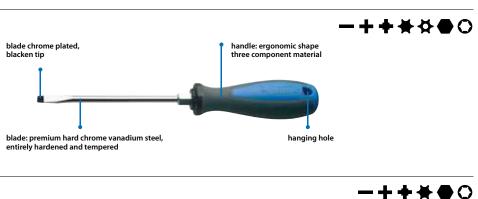


Ergonomic handle design = protecting your hand

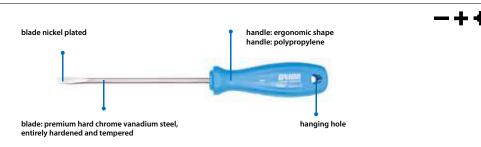
## **Ergonomic handle!**

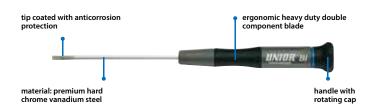
The combination of hard and soft surface improves the load factor and ensures smooth screwing. The handle was developed in such a way that it takes care of the user's health because it reduces the tension of the hand muscle.

## Features of Unior's screwdrivers

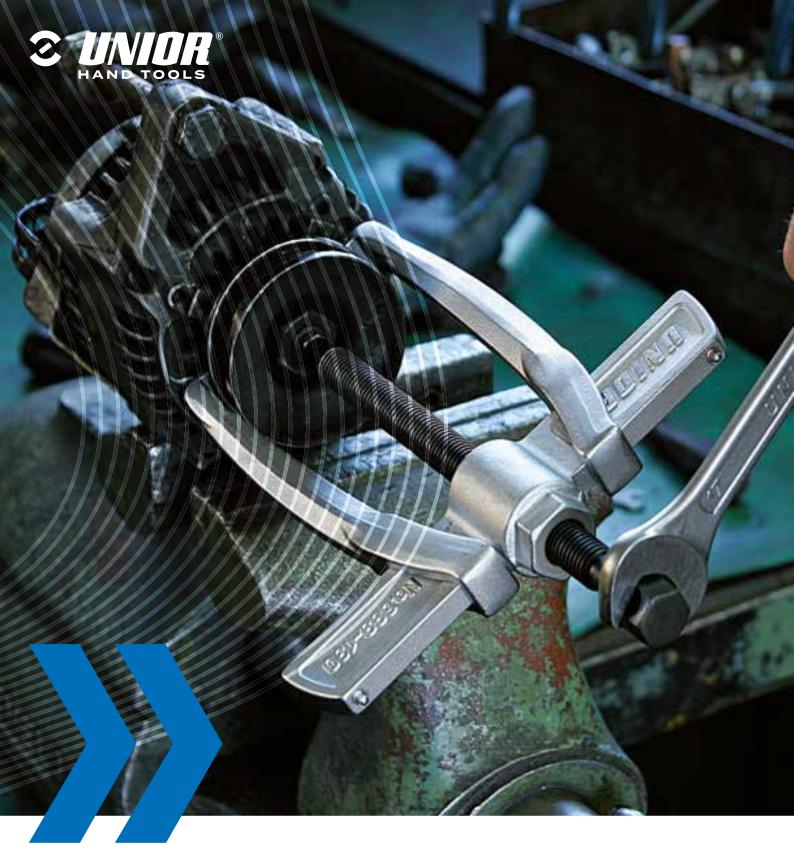












# **PULLERS**

## A strictly purpose-made tool tailored to professional users!

100% dedicated to professional users, for whom this tool represents an indispensable choice in their everyday work. It is an irreplaceable tool, without which craftsmen cannot do their job. Adapting to the increasingly precise and demanding construction of building machinery, means of transport, and the like, is certainly a consequence of the constant need to upgrade these kinds of tools and their purpose. This is why at Unior we have developed many models for different purposes over the years, and we are constantly updating them from year to year in order to meet the needs and expectations of professional users.



Don't use a spindle that is



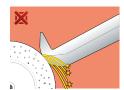
Always oil the puller spindle.



Don't use a puller which has a dirty spindle. Always clean your tools properly.



Always use the right tool for the job.



Don't grind, weld or reheattreat puller arms.



Always centre the puller spindle on the middle of the object, so the holding arms are distributed evenly on the body.



Don't use pneumatic tools with pullers.



Never put the puller spindle off centre, as slippage of the puller arm can occur.



Never use a pipe extension or other form of lever to increase the leverage.



## WHEN USING ANY TOOL, PROPER PRECAUTIONS MUST BE TAKEN.

The incorrect use of tools can be dangerous. We recommend you read our Guides, for safety tips and instructions on the correct use of our tools. We provide information on common user errors encountered when using our tools so please, always follow our recommendations and check our web page for up to date information.

# A special procedure for the manufacture of pullers

## Head (body)

- **1. Cutting:** Cutting material is the first operation in the technological procedure of wrench manufacturing. Optimum design of a cut provides optimal use of material.
- **2. Forging:** Forging technology at Unior ensures excellent strength characteristics of wrenches. Notably, it maintains appropriate fiber orientation in a forged part, leaving it uninterrupted and the same as in a rolled blank. That characteristic of forged parts is vital for achieving the characteristics of products exposed to heavy and dynamic loads.
- **3. Trimming:** Superfluous material around a forged part is removed using a special- purpose trimming tool; material is trimmed to the desired shape, always making the weight of trimmings as low as possible.
- **4. CNC working:** A CNC machine is used to accurately work the head of the puller, which ensures smooth movement of the small handles.
- **5. Threading:** The accurate threading of the internal trapezoid thread ensures the smooth movement of the spindle and thus enables rapid adjustment when using the puller.
- **6. Heat treatment (quenching and tempering) and sanding:** The heat treatment with hardening and tempering is intended to improve the structure of the steel, to provide greater hardness and toughness of the product and other properties required to overcome the strain that work with such products requires.
- **7. Sanding:** Cleaning the surface before chroming is important for the sake of quality and durable surface protection.
- **8. Chroming:** The handle of the puller is plated with a thin, hard coating of chromium oxide, which protects against corrosion and wear and other mechanical damage. At the same time, it gives the entire Unior puller a glossy appearance.

## **Spindle**

- **9. Forging part:** The forging part is made by warm upsetting, which provides the shape of the spindle head
- **10. CNC working:** The CNC machine is used to accurately work the spindle that is the basis for thread rolling.
- **11. Thread rolling:** Is carried out on a special machine with special rollers. The resulting trapezoid thread is intended for use under greater strain.
- **12. Heat treatment (quenching and tempering) and sanding:** The heat treatment with hardening and tempering is intended to improve the structure of the steel, to provide greater hardness and toughness of the product and other properties required to overcome the strain that work with such products requires.
- **13. Sanding:** Cleaning the surface before chroming is important for the sake of quality and durable surface protection.
- **14. Burnishing and oiling:** Burnishing gives a spindle a proper professional appearance and, together with the right oil, the necessary surface protection.











### **Small handle**

- **15. Forging and trimming a small handle:** A forged part is made using drop forging technology. Drop forging provides various ergonomic product shapes. Suitable forging procedures maintain appropriate fiber orientation, leaving it the same as in rolled blanks. Superfluous material around a forged part is removed using a special-purpose trimming tool; material is trimmed to the desired shape, always making the weight of trimmings as low as possible.
- **16. Hole broaching and CNC treatment:** Broaching shapes the tip of the jaw. The latter must have optimal thickness for the necessary functionality of the broach. That is followed by CNC treatment of small handles that provides the necessary positioning of the broach assembly.
- **17. CNC working:** CNC working of the small handles provides accuracy and thus improves the functioning of the entire product.
- **18. Heat treatment (quenching and tempering) and sanding:** Heat treatment with annealing and tempering is intended to enhance the structure of steel, product strength and toughness, and other properties required to withstand the loads to which such a product is exposed to. Sanding is used to clean the surface for further operations.
- **19. Sanding:** Cleaning the surface before chroming is important for the sake of quality and durable surface protection.
- **20. Chroming:** The handle of the puller is plated with a thin, hard coating of chromium oxide, which protects against corrosion and wear and other mechanical damage. At the same time, it gives the entire Unior puller a glossy appearance.

## **Assembly**

**21. Final assembly:** The trained, skilled and meticulous workers performing the final assembly assemble the product into a solid whole that ensures the functioning and high quality of the Unior puller.



## HAMMERS, PUNCHES AND CHISELS

#### The world's first hand tools!

We can say with certainty that the hammer was the world's first tool. Nowadays, every single one of us uses it – from the housewife to the mechanic. Despite hidden developments, progress is nevertheless noticeable in the area of hammering tools. Today, there are different designs, with different characteristics, for the various possible types of work. The use is the same, but shape, weight and characteristics somewhat differ. Also today, the development of hammers has moved towards very specialised forms for special purposes, such as hammers made from plastics, hammers with a very precise weight, dead blow hammers and the like. It is continuous and comprehensive development dictated by needs and market developments.





#### **Premium Flex Plus Carbon Steel**

## Efficiency and durability under considerable crushing and deformation stress

Construction and trade steels have special properties that guarantee their appropriate hardness, ductility and elasticity, as is required for tools such as setters, hammers and screw clamps, which are exposed to great force during hammering and clamping. Steels with a medium carbon content that are used to make tools have a higher carbon content, resulting in better durability. A suitable manganese content increases the tensile strength and ductility of the material, which is particularly important under high load conditions. The chrome content reduces the susceptibility to cracking, while the silicon content increases the elasticity of tool materials subjected to strong forces.

## Medium carbon steel C45R, according to EU directive 2000/53/ EC and the EN 10083-2 standards:

- > 0,45% carbon for higher tensile strength and better tempering
- ➤ 0,70% manganese for higher tensile strength and ductility
- → 0,35% chrome for higher tensile strength and lower susceptibility to cracking
- > 0,20% silicon for higher elasticity











## A special procedure for the manufacture of hammers

#### Hammer

- **1. Cutting:** Cutting material is the first operation in the technological procedure of wrench manufacturing. Optimum design of a cut provides optimal use of material.
- **2. Forging:** Forging technology at Unior ensures excellent strength characteristics of wrenches. Notably, it maintains appropriate fiber orientation in a forged part, leaving it uninterrupted and the same as in a rolled blank. That characteristic of forged parts is vital for achieving the characteristics of products exposed to heavy and dynamic loads.
- **3. Trimming:** Superfluous material around a forged part is removed using a special-purpose trimming tool; material is trimmed to the desired shape, always making the weight of trimmings as low as possible.
- **4. Broaching:** The appropriate size of the hammer is achieved by broaching.
- **5. Heat treatment and sanding:** Local heating and tempering of a hammer on the impact surface ensures a high degree of hardness for the functional part of Unior hammers. Annealing provides optimum microstructure and necessary hardness on impact surfaces. That ensures a long service life of hammers.
- **6. Coating:** The surface is protected by electrostatic coating.

### Handle

The handle is made using selected ash tree wood with the required characteristics in accordance with the DIN 68340 standard. It is protected with wax.

### **Forging part**

**7. Marking of a handle:** Making the blue inscription, which also reminds the user to handle the hammer correctly.

## **Assembly**

**8. Final assembly:** The trained, skilled and meticulous workers performing the final assembly will assemble the product into a solid whole that ensures the functioning and high quality of the Unior hammers.



# **WORKSHOP EQUIPMENT**

## An orderly working environment has never been more important than today!

If it was once considered that it was only important for a true artisan to have their own workshop, now it is considered that the workshop should also be comprehensively arranged and designed. Care for a well-kept workspace is becoming crucial, as working environments are these days often in the public eye. This is why we offer comprehensive solutions at Unior; from workshop design to layout and equipment, that can be 100% adapted to an individual's needs and wishes.



## Unior 3D Configurator – for full realisation of your wishes and needs, for a tidy working environment!

Therefore, we at Unior have developed the so-called 3D Configurator, which enables our craftsmen and other home users to draw up and customise the workspace according to their wishes and needs. In addition to individually adapted solutions, safety is also crucial, which is made possible by locking in place the work surfaces themselves and organisation of the drawer inserts.

Unior 3D configurator is a perfect tool for setting up your workshop in 3D. It provides our partners and customers with easier and more transparent shopping experience. It is simple to use while providing you with all necessary designing tools.





## Configurator for business public

We have developed special licensed version of the Unior 3D Configurator for our business partners.

As registered users they can export the project past so-called "Ticketing" system and prepare an offer directly to the customer. It gives sales personnel possibility to give their customers completed offer which will include 3D layout of their future shop.

For more information visit www.uniortools.com





IT IS INTENDED FOR END USERS AND FOR DISTRIBUTORS.



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ALL WORKSHOP EQUIPMENT IN 1:1 SCALE.



EASY TO USE.



POSSIBLE EXPORT OF LAYOUT AND LIST OF ITEMS TO YOUR COMPUTER.

Try Unior 3D Configurator today and be among the first to experience completely customized and uniquely designed workspace!





## Premium Plus sheet - excellent mechanical properties!

Unior carts and worktops are designed so that the tool is clearly at hand, and its storage is efficient and safe. Carts and counters are made of cold-rolled sheet metal, of superior quality, and its features are surface smoothness and improved thickness tolerance. High-quality sheet metal and construction details, such as optimal reinforcements on the more heavily loaded parts, ensure greater stability.

## Qualicoat - friendly to the environment and people!

Unior products are protected against corrosion. High-quality epoxy ECO paints are applied to them by powder coating, which are environmentally friendly, do not contain heavy metals and are harmless to humans. All this is also proven by the certificate of the International Institute for Public Health. The color coating, with a thickness of around 90 microns, ensures excellent mechanical properties and exceptional resistance to weather influences.





# A special procedure for the manufacture of the carriage

**1. Housing manufacture:** The cover, bottom, left pillar, right pillar and black wall are first stamped out from a reel on a CNC stamping machine, then bent on a CNC bending machine.

#### 2. Manufacture of wheel holders and handle reinforcement:

The wheel holder is first cut with shears, bent on a tool (in two stages), pierced and threaded for wheels. The handle brace is stamped out from a reel on a CNC stamping tool, then bent on a CNC bending machine and riveted onto the left pillar.

**3. Housing welding:** Then all the elements are loaded into a robotic cell for housing welding and the entire housing is welded before being transported for varnishing.

## **Drawer production**

Drawer 70 is stamped out from a reel on a CNC stamping machine, then bent on a CNC bending machine, pressed on a tool and spot welded using a spot welding device. The drawer is thus ready for coating.

Drawer 160 is stamped out from a reel on a CNC stamping machine, then bent twice on a CNC bending machine, pressed on a tool and spot welded using a spot welding device. The drawer is thus ready for coating.

A lifting rod is cut out with a laser on a laser cutting machine, pressed on a tool, bent on a CNC bending machine and then transported for coating. After coating, all the elements are ready for the ASSEMBLY of the carriage, which is carried out on the assembly line.

#### The assembly includes the following actions:

- > Serigraphy of the drawers
- ➤ Assembly of the drawers (the lifting rod and guides are riveted to the drawer and a synthetic lining is inserted)
- > Serigraphy of the housing
- > Placing the synthetic lining and border onto the carriage cover
- > Assembly of the lock and the locking mechanism
- > Riveting the guides onto the housing
- > Inserting the drawers
- > Examining the carriage and inserting the wheels and handles into the drawer
- > Packaging the carriage in Styrofoam using a specialpackaging device
- > Final packed products

# Exceptional design for high level work-flow!





### LEAN MANUFACTORING SYSTEM

Unior »Lean Manufactoring system« is a new line of products that creates a structured, optimized workflow and enables a well-organized workspace. The LMS system enables storing, charging, transport and the use of battery charged or regular hand tools, spare parts, documents and other materials and documents, used in your production line. The LMS has been designed along the 5S methodology, the five S being taken from five japanese principles: Seiri – separate, seiton – organize, seiso – clean, seiketsu – standardize, shitsuke – sustained usage). The purpose of the 5S system is to create a higher level of the work process without losses or bottlenecks at each workplace.



The metal sheet thickness of all supporting parts of modular workbenches is 1 mm, which provides them stability, durability, and diversity of use.



We offer a wide range of accessories for a well-organized workplace.



The parapet channel enables us to electrify the workplace. The standard parapet channel contains 2 sockets, whereas the longer 1500 mm option offers a total of 4 sockets. The parapet channel does not have pre-installed wiring.



The spacious drawer with its 260 mm height is suitable for storing larger items and can be used for sprays storage as well.



The tools stored in the work bench drawers are safely secured with a lock and a folding key.



The LED light with a low power consumption and a high luminosity is available in different lengths. With the attached adapters it is possible to connect the lights together. The light holder can be adjusted by height and depth.



The shelf has a load capacity of 60 kg and has an adjustable two-position incline, which provides a well-arranged and more convenient storing of materials



By height adjustable leg enables the adaptation of the workbench from a minimum height of 730 mm to a maximum of 1140 mm. The height is adjustable in steps of 30 mm.



The EUROloch perforation allows the usage of most standard accessories. A work bench upgraded with perforated plates offers a variety of layouts and can be adapted to the preferences of the individual user.



The connection plate provides maximum stability, even when moving the workbench



Reinforced rails enlarge greater stability of the drawers with a carrying capacity of 50 kg.



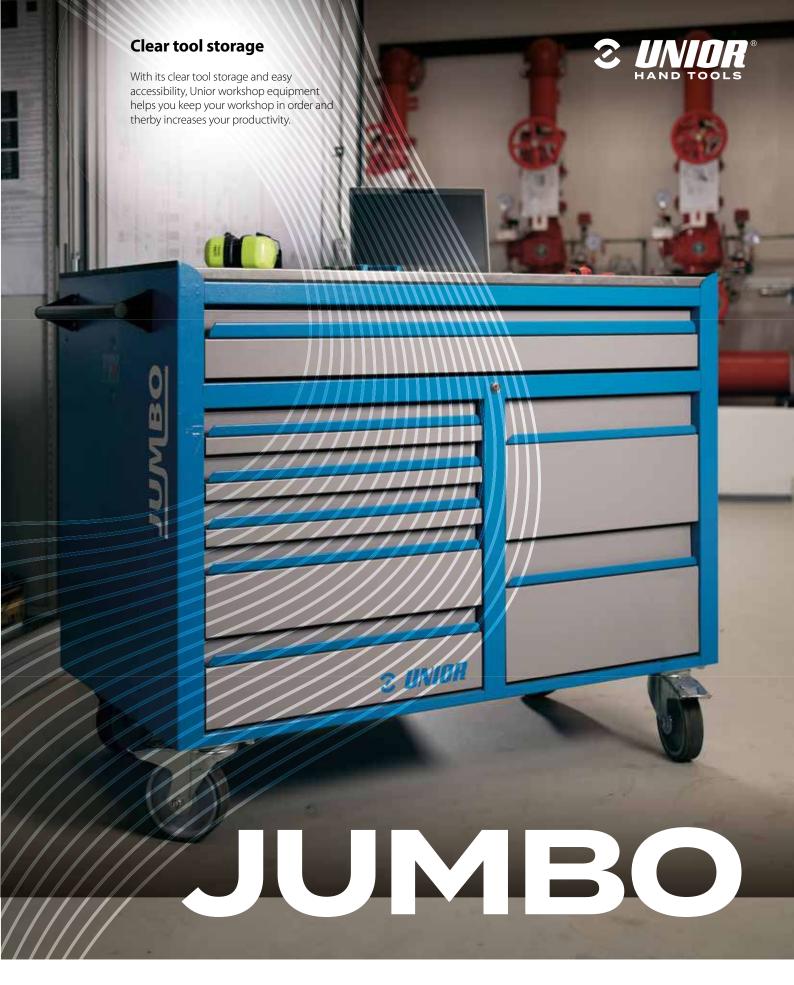
The multi-layered 40 mm thick bench top provides high impact resistance and stability in all lengths. The protective layer prevents the absorption of oils and dirt.



Over 300 SOS inserts with tools and inserts for storing of small materials are available for the narrow drawers, as well as for the wide ones. The inserts are combinable or can be custom made upon request.







Unior Hand Tools has developed something completely new for professionals, as well as hobby enthusiasts, who will definetly be impressed. Quality, convenience, functional perfection, order and above all, the size of the drawers, the working surface and the tool carriages themselves, are the main characteristics of the new Jumbo tool carriages. They will be an essential for all those who wouls like to take their approach to work and quality of the work to the next level. In addition to their size, which distinguishes them from othe Unior tools carriages, the new tool carriages are available in 3 different versions. With their attractive appearance and size, the new Jumbo carriages really live up to their name, so let us introduce them to you!

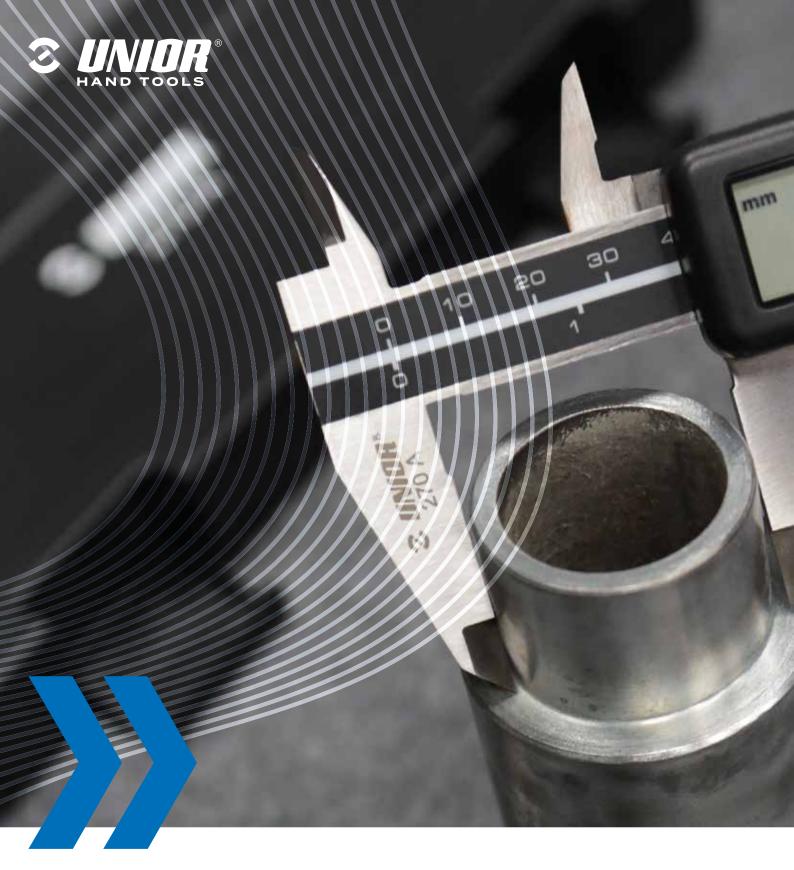




# PNEUMATIC TOOLS AND ACCESSORIES

### For better ergonomics, greater power and lightness of the tool!

In this area too, Unior has made a major breakthrough and comprehensive progress towards increasingly modern pneumatic tools. Unlike in the past, these are today made of artificial materials and with a much improved internal mechanism. All this provides the user with better ergonomics, greater strength and lightness of the tool itself, and above all enables faster work and a long service life for the tool, even in difficult conditions. Unior pneumatic tools are also characterized by high quality and safe operation, in accordance with the highest safety standards. Due to its simple use, the tool is suitable for both home and professional users.



# **MEASURING TOOLS**

## Precision is more important today than ever!

Measurements and measurement tools have always been important, but in this area, too, trends are changing, and everything is moving in the direction of upgrading the tools in the field of electronics. It is also important to measure, store and process data as accurately as possible. This is precisely why there is considerable progress in the integration of measuring tools with computers and in their digitisation.

## We focus! Unior torque spanner

Unior's product line contains several different types of torque wrenches, for different uses. Thus, we offer standard mechanical adjustable torque wrenches in a wide range of operation, as well as electronic torque wrenches. Unior torque wrenches are used in precision work, such as bicycle servicing, up to industrial use on heavier machines and devices where precision is crucial for the reliable operation of the machine or device.

Each wrench is designed to offer the highest possible precision and ease of use, while remaining ergonomic for comfortable working. This is why each Unior torque wrench is carefully calibrated and ready for immediate use, as confirmed by the included certificate on precision.

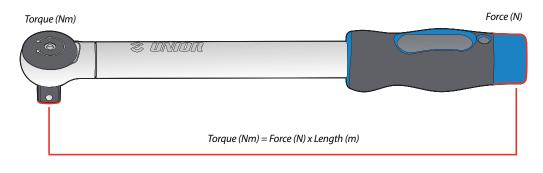
### **Torque wrenches**

Unior offers a broad range of professional torque products. Our torque product line ranges from dial torque wrenches, slipper torque wrenches, torque wrenches and industrial torque wrenches. Each torque wrench is manufactured to precise specifications for maximum performance for your torque application. Each Unior torque wrench includes Calibration Certificate that verifies the actual readings.

Unior torque wrenches are certified to meet, and exceed the standards specified in ISO 6789.

#### What is a torque wrench?

A torque wrench is a wrench used to precisely set the torque of a fastening such as a nut or bolt. It is usually in the form of a socket wrench with special internal mechanisms. A torque wrench is used where the tightness of screws and bolts is crucial. It allows the operator to measure the torque applied to the bolt so it can be matched to the specifications.







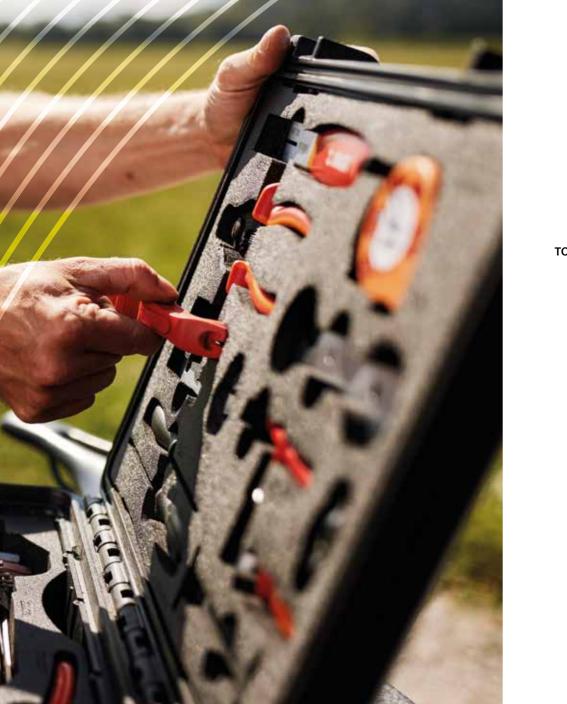


## **BIKE TOOLS**

## FOR MORE INFORMATION'S CHECK OUT BIKE CATALOGUE.

## The cycling trend conquering the peaks!

In the last few years, we have witnessed a boom in cycling. Not just at home, but all over the world. This is why Unior cycling tools are one of the fastest growing product lines in Slovenia. Strictly purpose- made tools for bicycle servicing, which have become increasingly advanced and development-oriented over the years, have become an indispensable addition to all cycling workshops, sports shops and racing teams. That is why we at Unior have adapted to the rapidly growing development of the market and the needs dictated by it.



MULTITOOLS

Y WRENCHES

HEX&TORX WRENCHES

GENERAL SHOP TOOLS

PLIERS

TORQUE WRENCHES & ACCESSORIES

BOTTOM BRACKET TOOLS

CRANK SET TOOLS

PEDAL TOOLS

CHAIN TOOLS

CASSETTE & FREEWHEEL TOOLS

BRAKE TOOLS

FRAME AND FORK TOOLS

BEARING TOOLS

SUSPENSION TOOLS

WHEEL TOOLS

TIRE & TUBE TOOLS

WHEEL TRUING STANDS & ACCESSORIES

REPAIR STANDS & ACCESSORIES

BIKE STORAGE

TOOL SETS

COMPLETE SERVICE SOLUTIONS

WORK SHOP A LA CART

UNIOR GEAR

**AN EXTENSIVE PRODUCT LINE** – including all the tools needed for the assembly, repair, maintenance and storage of bicycles.



**SPONSORSHIPS** – Unior bicycle servicing tools are an indispensable companion for most racing teams in the cycling world.



**TOOLKITS** – workshop sets offer a complete set of tools necessary for bicycle servicing, and the ones that come in a carry case offer a complete mobile workshop.

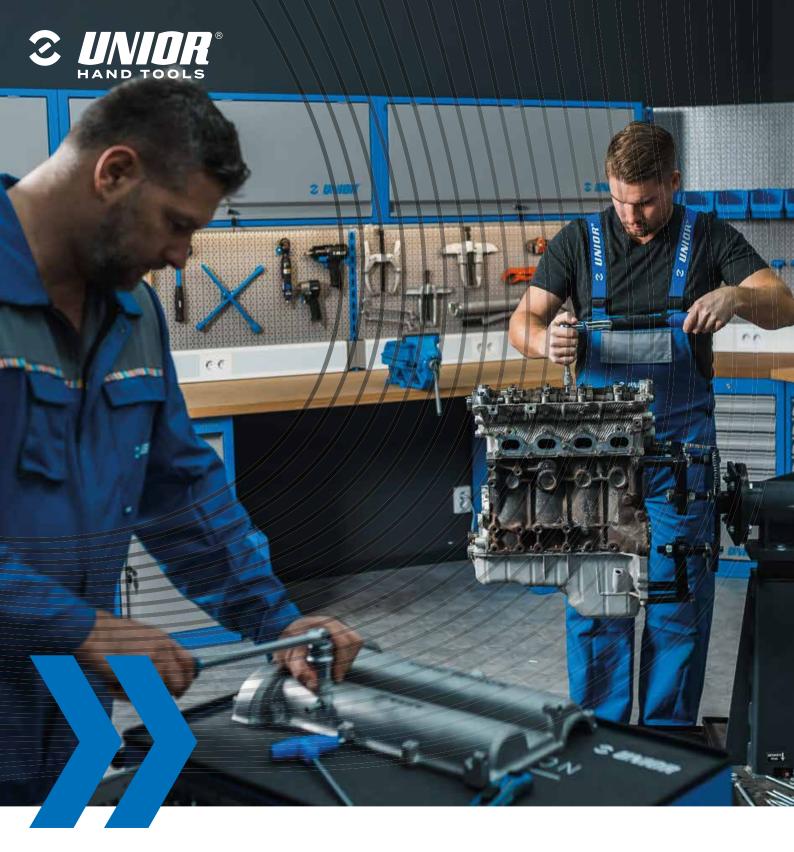


# **MOTORCYCLE TOOLS**

## **Complete freedom for motorcyclists!**

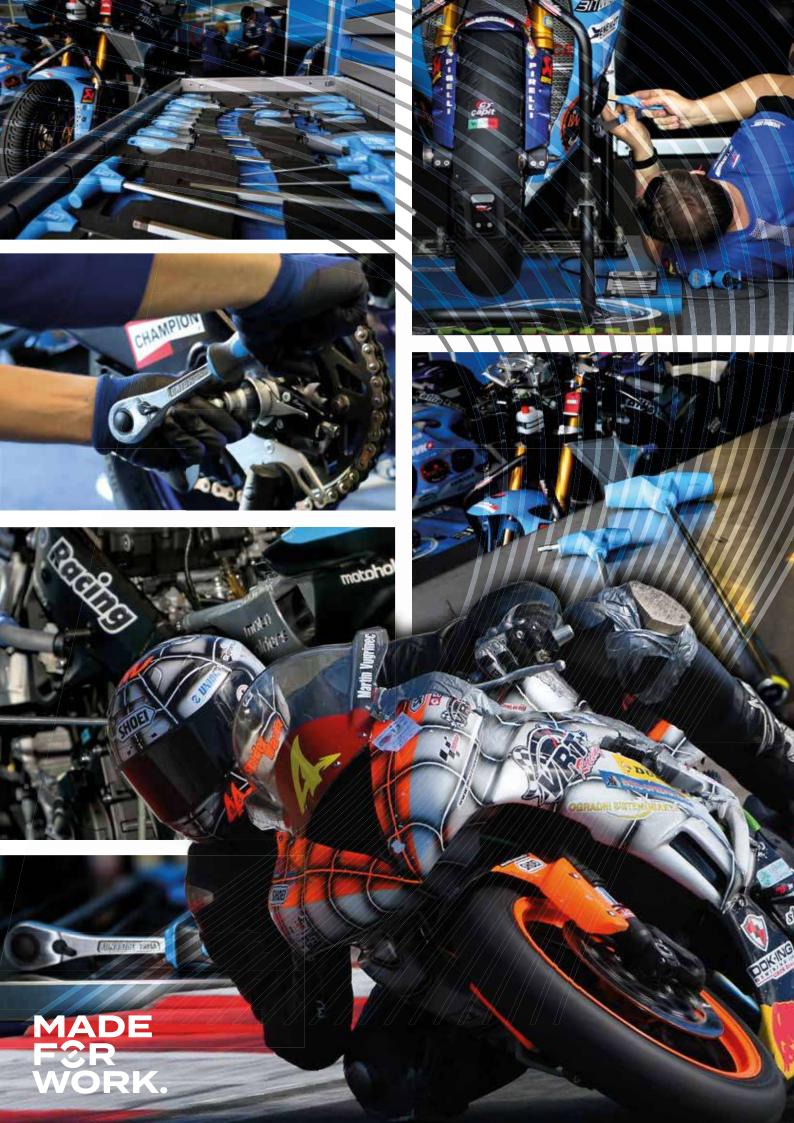
Our motorcycle tools are 100% Unior's own development, in collaboration with experts from the motorcycle industry. With their knowledge and development, competition teams and their professionally trained mechanics have contributed to the upgrading and development of our tools for motorcyclists. Whether it's road bikes or motocross bikes. This product line will certainly bloom in the future, and the breakthrough of electrification in the motor industry will also require and upgrading and the new development of additional tools.





## OTHER WORKSHOP TOOLS

The workshop accessories set has been built up over Unior's 100 years of development history. In this sector there are other tools, so called gadgets or support tools, which ensure uninterrupted work in workshops and elsewhere.





# SAFE TOOLS AT HEIGHTS

## Perfect tools adapted for working at height!

Working at height is associated with high risk, so nothing should be left to chance. When working at height, safety is of utmost importance, which is why a comprehensive and strategically focused tool design is important. Because of this, Unior has developed a tool that is attached in such a way that it does not hinder or disturb you at your work, with special fixing solutions. To this end, the fixings must be very well thought out and developed, for classical ways of thinking about tool development here are out of the question. It is also of great importance that the tool is 100% tested and properly inspected for continued use.



The total weight of tools that can be attached to a user's work belt should not exceed 10% of the user's weight.



Attachment ropes should not be shortened, reworked etc. If a rope is damaged or destroyed, do not use the tools.



During work, do not unfasten or detach tools from yourself.



When changing (switching) tools, it is recommended to observe the procedure of replacement described in the Unior d.d. catalogue (tools are attached throughout the replacement with one carabiner or the replacement is made at a so-called safe place).



Do not drop or throw tools deliberately, since this may result in a spring effect and unforeseen consequences.



Tools on a rope should not be wound, since that may lead to unforeseen consequences.



User selects Unior attachment elements depending on the purpose of use and with respect to the weight of tools (tool weight is indicated on a tool).



Tracking manufacture code and final control code are indicated on each tool.



User must be trained to perform work at heights pursuant to the national legislation.



User must use the prescribed personal protective equipment.



Working range at heights is the radius of two metres from the point of attachment on the user. No other person or equipment is permitted within that range due to the possibility of damage caused by a falling tool.



Please check the tools regularly and always before each use.



After any fall of a tool, check the rope and the tool. If necessary, replace the tool and/or rope.



The maximum weight of each tool defined by Unior as safe tool for work at heights attached to a work belt amounts to 2.3kg.



Since our goal is to provide quality products and work solutions to our customers, we have tested Unior safe tools at height and equipment by one of the most reputable organization in the field of certification and testing,

TÜV AUSTRIA SERVICES GMBH.

The testing results show that **UNIOR** products and equipment are appropriate for safe work at heights, considering the standards for secure work at height and manufacturer's instructions for use.

With the acquisition of the specified certificate, UNIOR Safe tools at height product group is considered to be fit for use.

## SAFE WORK AT HEIGHTS

### HIGHLY EFFICIENT SOLUTIONS

## Types of attachments for tools for working at heights

If several tools are attached to a single attachment, the total weight of all of the parts must be taken into account.



Attachment that slides along the tool with non-removable riveted metal ring, allows use of both ends of tool.



Rotating attachment prevents twisting of lanyards and other attachment devices.



**Fixed attachment point** non-removable riveted metal ring attached through the metal part of the tool, provides additional safety for heavy tools.



Attachment through metal part of tool not just through the PVC handle which is glued to the tool, but with a non-removable riveted metal ring; this provides additional assurance that the casing will not detach in extreme conditions.



the attachment point on the tool is made in accordance with the requirements of the VDE standard, which allows safe work at high voltage. The use of metal carabiners and lanyards with metal rings on the tool attachment end is prohibited.



Safety socket

wrenches the ratchet or T-handle is equipped with a non-removable riveted metal ring which is attached through the metal part of the tool. The connection between the wrench and the accessories is secured not with a ball bearing but with a pin which cannot be removed without a special tool, and cannot be released unintentionally; sockets are switched in a safe area using a special tool.



Safety saws specific tool attachment for working at heights useful for numerous applications when working at heights, with a non-removable riveted metal ring which is attached through the metal part of the tool. The saw blade is not secured, which in theory does not constitute a major danger, since its weight is low and its shape does not allow it to reach high speeds during a fall.



# SET OF TOOLS

## For domestic and professional users!

Tool sets are the right choice when we know that we'll need a specially adapted or a standard tool set for every occasion and type of work. They are suitable for both domestic and professional users, so we offer everything from classic to more advanced sets, and their thoughtful composition enables complete adaptability to the needs of our customers and their wishes. It is certainly a high quality, meaningful and cost-effective choice of tools.



# 2 UNIOR®







### **CONTENTS**



Wrenches



Automotive tools



Ratches, sockets and accessories



Insulated tools



Measuring tools



Plumbing tools



Cable cutting, stripping and crimping tools



Pliers



Tin snips and bolt cutters



Other workshop tools



Screwdrivers



punches and chisels



Pullers



Sets of tools



Workshop Equipment



Pneumatic tools and accessories



400	508.000
500	579.000
600	661.000
800	685.000
1000	795.000
1200	905.000
1500	1.085.000
2000	1.294.000
	1.630.000
ion _	Alu
	-14

IDR 996.000 1.060.000 1.159.000

204.000

781.000

610730		
610731	105	
610732	125	
610733	150	476.000
610734	200	558.000
734	250	597.000
	300	762.000
		844.000

### 1300/6



# Vlu - spirit level with magnet

Code	ma ma	gne+
615454	C:	
1300 ( )2" 1/0		IDR
3.2, 4.0, 4.8) 1300.1 (4,	$8x_{6}$ (3,2 $x_{6}$ ),	989.000
(4,0 x 6), 1300.1 (4,0 x 6), 4.8)	1300/6	(2.4 <sub>,</sub>



**SUNIOR**®

**Product Number** 

**Symbols** 

**Product Name** 

**Price** 

Code

### 1516











## Pneumatic die grinder

617731	Si-	•	
731	Size	IDR	
		2.856.000	





### LEGEND OF SYMBOLS

	DIMENSIONS		
3/8.	3/8" internal 4- point	3/8"	3/8" point
(m)	3/4" internal 4- point	3/4"	3/4" point
1/4"	1/4" internal 4- point	1/4"	1/4" point
(22)	1/2" internal 4- point	1/2"	1/2" point
0	1" internal 4- point	1"	1" point

	PROFILES		
0	socket 6-point		round file
0	socket 12-point		three angle file
	HEXAGON profile		LIFE profile
	square file or square part	*	TX profile
	screwdriver profile, flat	<b>☆</b>	TX profile with hole
+	screwdriver profile, crosstip, PH	0	nut form for hook wrench
+	screwdriver profile, double crosstip, PZ	•	punch pliers
	half round file		

	SAFETY		
•	Wear dust mask	3	Do not use with pneumatic tools
0	Wear eye protection		Instructions for safe use
1	Wear hearing protection	<b>P</b>	Video presentation
0	Wear protective gloves		

	OTHER		
<b>*</b>	stripping jaws		round jaws
4000	jaws form		straight half round jaws
•	jaws form	Q	internal lock ring pliers
K	jaws form	Ω	external lock ring pliers
V	knife	₹	force in N
(	form of cutting jaws	100:001	pressing force
	flat jaws	U	hammer weight in grams
X	form of cutting jaws	1	rebound hammer
A.	form of cutting jaws		non rebound hammer
1	form of cutting jaws	•	VDE DP double layered - double coloured insulation
Ţ	form of cutting jaws	<b>©</b> ₽	article made according to GS standards
4	form of cutting jaws	@10009	article made according to VDE standards
N.	form of cutting jaws		



### 110/1



### Open end wrench

Code	Size	IDR
603316	4 x 4.5	Rp143,000
603317	4 x 5	Rp143,000
603318	5 x 5.5	Rp143,000
600060	5.5 x 7	Rp164,000
600061	6 x 7	Rp116,000
600062	7 x 8	Rp136,000
600064	8 x 9	Rp120,000
600065	8 x 10	Rp148,000
600066	9 x 10	Rp151,000
600067	9 x 11	Rp164,000
600068	10 x 11	Rp148,000
600069	10 x 12	Rp175,000
600070	10 x 13	Rp185,000
600072	11 x 13	Rp185,000
600074	12 x 13	Rp168,000
600075	12 x 14	Rp185,000
600076	13 x 14	Rp186,000
600077	13 x 15	Rp190,000
600078	13 x 17	Rp201,000
600079	14 x 15	Rp179,000
600080	14 x 17	Rp201,000
600081	15 x 17	Rp225,000
600082	16 x 17	Rp204,000
600083	17 x 19	Rp230,000
600084	17 × 22	Rp280,000
600085	18 x 19	Rp227,000
600086	19 x 22	Rp269,000
600088	20 x 22	Rp262,000
600089	21 x 23	Rp274,000
600090	22 x 24	Rp298,000
600091	22 x 27	Rp405,000
600092	24 x 26	Rp334,000

600095         25 x 28         Rp367,000           600096         27 x 29         Rp521,000           600097         27 x 30         Rp532,000           600098         27 x 32         Rp458,000           600099         30 x 32         Rp497,000           603848         30 x 34         Rp569,000           602593         30 x 36         Rp889,000           600100         32 x 36         Rp892,000           600101         34 x 36         Rp1,073,000           605549         38 x 42         Rp1,355,000           602594         41 x 46         Rp1,693,000           605348         1/4" x 5/16"         Rp126,000           618658         1/4" x 9/32"         Rp108,000           605349         5/16" x 3/8"         Rp131,000           618656         11/32" x 13/32"         Rp132,000           605350         3/8" x 7/16"         Rp194,000           605351         7/16" x 1/2"         Rp194,000           605353         9/16" x 5/8"         Rp194,000           605354         5/8" x 11/16"         Rp220,000           605355         11/16" x 3/4"         Rp246,000           605356         13/16" x 7/8"         Rp283,000 <th>-</th> <th></th> <th></th>	-		
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600100         32 x 36         Rp892,000           600101         34 x 36         Rp1,073,000           600102         36 x 41         Rp1,162,000           605549         38 x 42         Rp1,355,000           602594         41 x 46         Rp1,693,000           602595         46 x 50         Rp2,253,000           605348         1/4" x 5/16"         Rp126,000           618658         1/4" x 9/32"         Rp108.000           605349         5/16" x 3/8"         Rp131,000           618656         11/32" x 13/32"         Rp132.000           605350         3/8" x 7/16"         Rp160,000           605351         7/16" x 1/2"         Rp194,000           605352         1/2" x 9/16"         Rp194,000           605353         9/16" x 5/8"         Rp194,000           605355         11/16" x 3/4"         Rp220,000           605355         11/16" x 3/4"         Rp246,000           605356         13/16" x 7/8"         Rp283,000           605358         1" x 1.1/8         Rp397,000	603848	30 x 34	Rp569,000
600101	602593	30 x 36	Rp889,000
600102       36 x 41       Rp1,162,000         605549       38 x 42       Rp1,355,000         602594       41 x 46       Rp1,693,000         602595       46 x 50       Rp2,253,000         605348       1/4" x 5/16"       Rp126,000         618658       1/4" x 9/32"       Rp108.000         605349       5/16" x 3/8"       Rp131,000         618656       11/32" x 13/32"       Rp132.000         605350       3/8" x 7/16"       Rp160,000         605351       7/16" x 1/2"       Rp194,000         605352       1/2" x 9/16"       Rp194,000         605353       9/16" x 5/8"       Rp194,000         605354       5/8" x 11/16"       Rp220,000         605355       11/16" x 3/4"       Rp246,000         605356       13/16" x 7/8"       Rp283,000         605357       15/16" x 1"       Rp364,000         605358       1" x 1.1/8       Rp397,000	600100	32 x 36	Rp892,000
605549       38 x 42       Rp1,355,000         602594       41 x 46       Rp1,693,000         602595       46 x 50       Rp2,253,000         605348       1/4" x 5/16"       Rp126,000         618658       1/4" x 9/32"       Rp108.000         605349       5/16" x 3/8"       Rp131,000         618656       11/32" x 13/32"       Rp132.000         605350       3/8" x 7/16"       Rp160,000         605351       7/16" x 1/2"       Rp194,000         605352       1/2" x 9/16"       Rp194,000         605353       9/16" x 5/8"       Rp194,000         605354       5/8" x 11/16"       Rp220,000         605355       11/16" x 3/4"       Rp246,000         605356       13/16" x 7/8"       Rp283,000         605357       15/16" x 1"       Rp364,000         605358       1" x 1.1/8       Rp397,000	600101	34 x 36	Rp1,073,000
602594 41 x 46 Rp1,693,000 602595 46 x 50 Rp2,253,000 605348 1/4" x 5/16" Rp126,000 618658 1/4" x 9/32" Rp108.000 605349 5/16" x 3/8" Rp131,000 618656 11/32" x 13/32" Rp132.000 605350 3/8" x 7/16" Rp160,000 605351 7/16" x 1/2" Rp194,000 605352 1/2" x 9/16" Rp194,000 605353 9/16" x 5/8" Rp194,000 605354 5/8" x 11/16" Rp220,000 605355 11/16" x 3/4" Rp246,000 605356 13/16" x 7/8" Rp283,000 605357 15/16" x 1" Rp364,000 605358 1" x 1.1/8 Rp397,000	600102	36 x 41	Rp1,162,000
602595       46 x 50       Rp2,253,000         605348       1/4" x 5/16"       Rp126,000         618658       1/4" x 9/32"       Rp108.000         605349       5/16" x 3/8"       Rp131,000         618656       11/32" x 13/32"       Rp132.000         605350       3/8" x 7/16"       Rp160,000         605351       7/16" x 1/2"       Rp194,000         605352       1/2" x 9/16"       Rp194,000         605353       9/16" x 5/8"       Rp194,000         605354       5/8" x 11/16"       Rp220,000         605355       11/16" x 3/4"       Rp246,000         605356       13/16" x 7/8"       Rp283,000         605357       15/16" x 1"       Rp364,000         605358       1" x 1.1/8       Rp397,000	605549	38 x 42	Rp1,355,000
605348       1/4" x 5/16"       Rp126,000         618658       1/4" x 9/32"       Rp108.000         605349       5/16" x 3/8"       Rp131,000         618656       11/32" x 13/32"       Rp132.000         605350       3/8" x 7/16"       Rp160,000         605351       7/16" x 1/2"       Rp194,000         605352       1/2" x 9/16"       Rp194,000         605353       9/16" x 5/8"       Rp194,000         605354       5/8" x 11/16"       Rp220,000         605355       11/16" x 3/4"       Rp246,000         605356       13/16" x 7/8"       Rp283,000         605357       15/16" x 1"       Rp364,000         605358       1" x 1.1/8       Rp397,000	602594	41 x 46	Rp1,693,000
618658       1/4" x 9/32"       Rp108.000         605349       5/16" x 3/8"       Rp131,000         618656       11/32" x 13/32"       Rp132.000         605350       3/8" x 7/16"       Rp160,000         605351       7/16" x 1/2"       Rp194,000         605352       1/2" x 9/16"       Rp194,000         605353       9/16" x 5/8"       Rp194,000         605354       5/8" x 11/16"       Rp220,000         605355       11/16" x 3/4"       Rp246,000         605356       13/16" x 7/8"       Rp283,000         605357       15/16" x 1"       Rp364,000         605358       1" x 1.1/8       Rp397,000	602595	46 x 50	Rp2,253,000
605349         5/16" x 3/8"         Rp131,000           618656         11/32" x 13/32"         Rp132.000           605350         3/8" x 7/16"         Rp160,000           605351         7/16" x 1/2"         Rp194,000           605352         1/2" x 9/16"         Rp194,000           605353         9/16" x 5/8"         Rp194,000           605354         5/8" x 11/16"         Rp220,000           605355         11/16" x 3/4"         Rp246,000           605356         13/16" x 7/8"         Rp283,000           605357         15/16" x 1"         Rp364,000           605358         1" x 1.1/8         Rp397,000	605348	1/4" x 5/16"	Rp126,000
618656 11/32" x 13/32" Rp132.000 605350 3/8" x 7/16" Rp160,000 605351 7/16" x 1/2" Rp194,000 605352 1/2" x 9/16" Rp194,000 605353 9/16" x 5/8" Rp194,000 605354 5/8" x 11/16" Rp220,000 605355 11/16" x 3/4" Rp246,000 605356 13/16" x 7/8" Rp283,000 605357 15/16" x 1" Rp364,000 605358 1" x 1.1/8 Rp397,000	618658	1/4" x 9/32"	Rp108.000
605350       3/8" x 7/16"       Rp160,000         605351       7/16" x 1/2"       Rp194,000         605352       1/2" x 9/16"       Rp194,000         605353       9/16" x 5/8"       Rp194,000         605354       5/8" x 11/16"       Rp220,000         605355       11/16" x 3/4"       Rp246,000         605356       13/16" x 7/8"       Rp283,000         605357       15/16" x 1"       Rp364,000         605358       1" x 1.1/8       Rp397,000	605349	5/16" x 3/8"	Rp131,000
605351       7/16" x 1/2"       Rp194,000         605352       1/2" x 9/16"       Rp194,000         605353       9/16" x 5/8"       Rp194,000         605354       5/8" x 11/16"       Rp220,000         605355       11/16" x 3/4"       Rp246,000         605356       13/16" x 7/8"       Rp283,000         605357       15/16" x 1"       Rp364,000         605358       1" x 1.1/8       Rp397,000	618656	11/32" x 13/32"	Rp132.000
605352       1/2" x 9/16"       Rp194,000         605353       9/16" x 5/8"       Rp194,000         605354       5/8" x 11/16"       Rp220,000         605355       11/16" x 3/4"       Rp246,000         605356       13/16" x 7/8"       Rp283,000         605357       15/16" x 1"       Rp364,000         605358       1" x 1.1/8       Rp397,000	605350	3/8" x 7/16"	Rp160,000
605353       9/16" x 5/8"       Rp194,000         605354       5/8" x 11/16"       Rp220,000         605355       11/16" x 3/4"       Rp246,000         605356       13/16" x 7/8"       Rp283,000         605357       15/16" x 1"       Rp364,000         605358       1" x 1.1/8       Rp397,000	605351	7/16" x 1/2"	Rp194,000
605354       5/8" x 11/16"       Rp220,000         605355       11/16" x 3/4"       Rp246,000         605356       13/16" x 7/8"       Rp283,000         605357       15/16" x 1"       Rp364,000         605358       1" x 1.1/8       Rp397,000	605352	1/2" x 9/16"	Rp194,000
605355       11/16" x 3/4"       Rp246,000         605356       13/16" x 7/8"       Rp283,000         605357       15/16" x 1"       Rp364,000         605358       1" x 1.1/8       Rp397,000	605353	9/16" x 5/8"	Rp194,000
605356       13/16" x 7/8"       Rp283,000         605357       15/16" x 1"       Rp364,000         605358       1" x 1.1/8       Rp397,000	605354	5/8" x 11/16"	Rp220,000
605357 15/16" x 1" Rp364,000 605358 1" x 1.1/8 Rp397,000	605355	11/16" x 3/4"	Rp246,000
605358 1" x 1.1/8 Rp397,000	605356	13/16" x 7/8"	Rp283,000
	605357	15/16" x 1"	Rp364,000
605359 1.1/16" x 1.1/4" <b>Rp492,000</b>	605358	1" x 1.1/8	Rp397,000
	605359	1.1/16" × 1.1/4"	Rp492,000

### 110/1CB



Set of open end wrenches in carton box



603715

#### Dim/Qty Code IDR 600105 6-22/8 Rp1,421,000 110/1 (6 x 7, 8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 17, 18 x 19, 20 x 22) 600106 6 - 32/12 Rp2,852,000 $6 \times 7$ , $8 \times 9$ , $10 \times 11$ , $12 \times 13$ , $14 \times 15$ , $16 \times 17$ , 18 x 19, 20 x 22, 21 x 23, 24 x 26, 25 x 28, 27 x 32

611018	6-27/10	Rp2,073,000
110/1	(6 x 7, 8 x 9, 10 x 11, 12 x 13	, 14
x 15, 16 x	( 17, 18 x 19, 20 x 22, 21 x 23,	
24 x 27)		

6-32/13 Rp3,411,000 110/1 (6 x 7, 8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 17, 18 x 19, 20 x 22, 21 x 23, 24 x 26, 25 x 28, 27 x 32 x 41)

600107 6-41/13 Rp4,014,000 110/1 (6 x 7, 8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 17, 18 x 19, 20 x 22, 21 x 23, 24 x 26, 25 x 28, 27 x 32, 36 x 41)

605531 1/4" - 1.1/4"/12 Rp2,995,000 **110/1** (1/4" x 5/16", 5/16" x 3/8",  $3/8" \times 7/16"$ ,  $7/16" \times 1/2"$ ,  $1/2" \times 1/2"$ 9/16", 9/16" x 5/8", 5/8" x 11/16", 11/16" x 3/4", 13/16" x 7/8", 15/16" x 1", 1" x 1.1/8, 1.1/16" x 1.1/4"1)

### 110/1MS



### Set of open end wrenches on metal stand

Code	Size	ID	R
605528	6-32/12	Rp3,3	97,000
x 15, 16 x	(6 x 7, 8 x 9, 10 x 11, 12 x 17, 18 x 19, 20 x 22, 21 x 25 x 28, 27 x 32),	*	(6-
32/12) <b>605532</b>	1/4" - 1.1/4"/12	Rp3,	539,000
3/8" x 7/1 9/16", 9/1 11/16" x 3/	(1/4" x 5/16", 5/16" x 3/3 16", 7/16" x 1/2", 1/2" x 6" x 5/8", 5/8" x 11/16", /4", 13/16" x 7/8", 15/16" (8, 1.1/16" x 1.1/4"),	′ x	l (6-

### 110/1CT



#### Set of open end wrenches in bag

Code	e Size	IDR
615465	6-22/8	Rp2,169,000
110/1	(6 x 7, 8 x 9, 10 x 11, 12 x	13, 14
x 15, 16	x 17, 18 x 19, 20 x 22),	CT110

### 110/2VDEDP









#### Insulated single open end wrench

Code	Size	IDR
618370	6	Rp528,000
618331	7	Rp534,000
617801	8	Rp559,000
621575	9	Rp580,000
612175	10	Rp583,000





612176	11	Rp597,000
612177	12	Rp597,000
612178	13	Rp624,000
612179	14	Rp638,000
612180	15	Rp655,000
621576	16	Rp693,000
612181	17	Rp714,000
621577	18	Rp755,000
612182	19	Rp821,000
618333	20	Rp845,000
619201	21	Rp845,000
612183	22	Rp890,000
618335	23	Rp925,000
612184	24	Rp983,000
621578	26	Rp1,086,000
617802	27	Rp1,124,000
621579	28	Rp1,182,000
618336	30	Rp1,241,000
618337	32	Rp1,400,000

117/4

### Single open end wrench

UNIOU 117

Code	Size	IDR
615262	10	Rp78,000
620207	12	Rp78,000
615263	13	Rp92,000
615264	17	Rp96,000
615265	19	Rp119,000
615266	21	Rp98.000
615267	22	Rp141,000
615268	24	Rp188,000
615269	27	Rp221,000
615270	30	Rp266,000
615271	32	Rp296,000
615272	34	Rp371,000
615273	36	Rp407,000
615274	38	Rp455,000
615275	41	Rp491,000
615276	46	Rp599,000
615277	50	Rp834,000
615278	55	Rp1,556,000
615279	60	Rp1,909,000
615280	65	Rp2,664,000
615281	70	Rp3,045,000
615282	75	Rp3,712,000
615283	80	Rp4,380,000
615285	90	Rp5,391,000
615287	100	Rp7,987,000

### 110/2VDEDPCB









### Set of insulated open end wrench in carton box

Code	Size	IDR
612676	10 - 24/10	Rp7,098,000
110/2VDEDP	(10, 11, 12, 13,	14, 15, 17,
19, 22, 24)		

118/7







### Slogging open end wrench

Code	Size	IDR
620466	24	Rp678,000
620467	27	Rp678,000
620468	30	Rp887,000
620469	32	Rp936,000
620470	36	Rp1,215,000
620471	41	Rp1,488,000
620472	46	Rp2,030,000
620473	50	Rp2,292,000
620474	55	Rp2,672,000
620475	60	Rp2,979,000
620476	65	Rp3,821,000
620477	70	Rp4,678,000
620478	75	Rp5,127,000
620479	80	Rp6,252,000
620480	85	Rp6,962,000
620481	90	Rp9,199,000
620482	95	Rp10,155,000
620483	100	Rp11,817,000
620484	105	Rp18,334,000
620485	110	Rp19,610,000
620486	115	Rp25,004,000
620487	120	Rp27,051,000
620488	125	Rp29,026,000
620489	130	Rp37,455,000
620490	135	Rp38,597,000
620491	140	Rp40,412,000
620492	145	Rp55,032,000
620493	150	Rp59,468,000

120/1





### Combination wrench, long type

Code	Size	IDR

616745	3.2	Rp203,000
616746	4	Rp203,000
616747	4.5	Rp203,000
616748	5	Rp203,000
616749	5.5	Rp203,000
600357	6	Rp167,000
600358	7	Rp168,000
600359	8	Rp172,000
600360	9	Rp195,000
600361	10	Rp211,000
600362	11	Rp221,000
600363	12	Rp234,000
600364	13	Rp250,000
600365	14	Rp257,000
600366	15	Rp276,000
600367	16	Rp280,000
600368	17	Rp300,000
600369	18	Rp318,000
600370	19	Rp340,000
600371	20	Rp363,000
600372	21	Rp387,000
600373	22	Rp418,000
600374	23	Rp473,000
600375	24	Rp489,000
600376	25	Rp544,000
600377	26	Rp561,000
600378	27	Rp619,000
600379	28	Rp670,000
600380	29	Rp723,000
600381	30	Rp765,000
600382	32	Rp826,000
607019	35	Rp1,340,000
602601	36	Rp1,396,000
605838	38	Rp1,508,000
602602	41	Rp1,842,000
618514	46	Rp2,980,000
618517	50	Rp3,442,000
616752	55	Rp4,206,000
616753	60	Rp4,881,000
616754	65	Rp9,019,000
616755	70	Rp9,959,000
616756	75	Rp11,310,000
616757	80	Rp13,219,000
618491	1/4"	Rp167,000
618492	5/16"	Rp172,000
618493	3/8"	Rp211,000
618494	7/16"	Rp221,000
618495	1/2"	Rp250,000
618496	9/16"	Rp257,000
3.0.00	0,10	,2207,000



618497	5/8"	Rp280,000
618498	11/16"	Rp318,000
618499	3/4"	Rp340,000
618500	13/16"	Rp387,000
618501	7/8"	Rp418,000
618502	15/16"	Rp489,000
618503	1"	Rp544,000
618504	1.1/16"	Rp619,000
618505	1.1/8"	Rp670,000
618506	1.1/4"	Rp765,000
618507	1.5/16"	Rp826,000
618508	1.3/8"	Rp1,757,000
618509	1.7/16"	Rp1,757,000
618510	1.1/2"	Rp1,757,000
618511	1.5/8"	Rp2,275,000
618512	1.11/16"	Rp2,275,000
618513	1.3/4"	Rp3,095,000
618515	1.13/16"	Rp3,095,000
618516	1.7/8"	Rp3,095,000
618518	2"	Rp3,481,000

611020	10-30/12	Rp4,374,000
120/1	(10, 11, 12, 13, 14, 15, 17,	19, 22, 24,
27, 30)		
619398	1/4" - 1.1/4"/16	Rp6,102,000
120/1	(1/4", 5/16", 3/8", 7/16"	', 1/2",
9/16", 5	/8", 11/16", 3/4", 13/16",	7/8",
15/16", 1	", 1.1/16", 1.1/8", 1.1/4")	

### 120/1CT





### Set of combination wrenches, long type in bag

Cod	e Size	IDR
615475	8 - 19/8	Rp3,073,000
120/1	(8, 10, 11, 13, 15, 17, 19,	
22), <b>C</b> 1	Γ129	

### 120/1CB





### Set of combination wrenches, long type in carton box

Code	Size	IDR
600383	6-22/17	Rp4,550,000
<b>120/1</b> ( 17, 18, 19, 2	6, 7, 8, 9, 10, 11, 12, 13, 20, 21, 22)	14, 15, 16,
600384	6-32/26	Rp10,215,000
120/1 (	6, 7, 8, 9, 10, 11, 12, 13,	14, 15, 16,
17, 18, 19, 2	20, 21, 22, 23, 24, 25, 2	26, 27, 28,
29, 30, 32	)	
611019	8-22/10	Rp2,675,000

(8, 10, 11, 12, 13, 14, 15, 17, 19, 22)

### 120/1MS





### Set of combination wrenches, long type on metal stand

Code	Size	IDR
605537	6 - 22/17	Rp5,094,000
<b>120/1</b> (6,	7, 8, 9, 10, 11, 12, 13, 1	4, 15,
16, 17, 18, 19,	20, 21, 22), <b>9</b>	<b>77/2</b> (6-
22/17)		



120/1



125/1



125/1CB







### Combination wrench, short type

Code	Size	IDR
618651	5	Rp227,000
618652	5.5	Rp227,000
600414	6	Rp154,000
600415	7	Rp156,000
600416	8	Rp162,000
600417	9	Rp177,000
600418	10	Rp195,000
600419	11	Rp205,000
600420	12	Rp216,000
600421	13	Rp225,000
600422	14	Rp234,000
600423	15	Rp250,000
600424	16	Rp258,000
600425	17	Rp276,000
600426	18	Rp295,000
600427	19	Rp313,000
600428	20	Rp333,000
600429	21	Rp357,000
600430	22	Rp385,000
602089	23	Rp434,000
602090	24	Rp447,000
602091	25	Rp495,000
602092	26	Rp515,000
602093	27	Rp571,000
602094	28	Rp615,000
602095	29	Rp666,000
602096	30	Rp702,000
602097	32	Rp762,000
603332	36	Rp1,265,000
618566	41	Rp2,066,000
618570	46	Rp2,564,000

### Set of combination wrenches, short type in carton box

Code	Size	IDR
600431	6-22/17	Rp4,183,000
-	(6, 7, 8, 9, 10, 11, 12, 13, 19, 20, 21, 22)	14, 15,
602098	6-32/16	Rp9,387,000
16, 17, 18,	(6, 7, 8, 9, 10, 11, 12, 13, 19, 20, 21, 22, 23, 24, 2, 30, 32)	
611021	8-22/10	Rp2,457,000
125/1	(8, 10, 11, 12, 13, 14, 15, 17	, 19, 22)
611022	10-30/12	Rp4,015,000
<b>125/1</b> 24, 27, 3	(10, 11, 12, 13, 14, 15, 17, <sup>2</sup>	19, 22,

### 125/1CT





Set of combination wrenches, short type in bag

Cod	e Size	IDR
615478	8-22/8	Rp2,756,000
125/1	(8, 10, 11, 13, 15, 17, 19, 22)	,
CT110		



### 125/1MS





### Set of combination wrenches, short type on metal stand

Code	Size		DR
605539	6-22/17	Rp	4,728,000
125/1	(6, 7, 8, 9, 10, 11, 12, 13	3, 14, 15,	
16, 17, 18,	19, 20, 21, 22),	977/3	(6-
22/17)			

### 180/1





#### Offset ring wrench

Code	Size	IDR
600511	6 x 7	Rp207,000
600512	8 x 9	Rp212,000
600513	8 x 10	Rp229,000
602663	9 x 11	Rp257,000
600514	10 x 11	Rp234,000
602997	10 x 12	Rp259,000
600515	11 x 12	Rp213.000
600516	12 x 13	Rp249,000
600517	12 x 14	Rp267,000
600518	13 x 15	Rp278,000
600519	13 x 17	Rp287,000
600520	14 x 15	Rp273,000
600521	14 x 17	Rp304,000
600522	16 x 17	Rp289,000

#### Rp336,000 603123 16 x 18 600523 17 x 19 Rp368,000 600524 18 x 19 Rp336,000 603844 18 x 21 Rp209.000 600525 19 x 22 Rp405,000 20 x 22 Rp394,000 600526 21 x 23 Rp435,000 600527 600528 22 x 24 Rp491,000 24 x 26 600529 Rp505,000 24 x 27 600530 Rp542,000 600531 25 x 28 Rp551,000 600532 27 x 29 Rp695,000 600533 27 x 30 Rp729,000 600534 27 x 32 Rp669,000 600535 30 x 32 Rp657,000 30 x 34 603845 Rp670.000 603124 30 x 36 Rp1,009,000 600536 32 x 36 Rp1,009,000 600537 36 x 41 Rp1,229,000 602664 Rp1,738,000 41 x 46 7/32" x 15/64" 618659 Rp166.000 618660 11/32" x 13/32" Rp179.000

#### 180/1CB





### Set of offset ring wrenches in carton box

Code	Size	IDR
600541	6-22/8	Rp2,192,000
180/1	(6 x 7, 8 x 9, 10 x 11, 12	2 x 13, 14
x 15, 16 x	17, 18 x 19, 20 x 22)	
603674	6-27/10	Rp3,168,000
180/1	(6 x 7, 8 x 9, 10 x 11, 12	2 x 13, 14
x 15, 16 x	17, 18 x 19, 20 x 22, 21	x 23,
24 x 27)		



600542 6-32/12 Rp4,351,000

**180/1** (6 x 7, 8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 17, 18 x 19, 20 x 22, 21 x 23, 24 x 26, 25 x 28, 27 x 32)

600543 Rp5,580,000 6-41/13

**180/1** (6 x 7, 8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 17, 18 x 19, 20 x 22, 21 x 23, 24 x 26, 25 x 28, 27 x 32, 36 x 41)

Code	Size	IDR
605545	6-32/12	Rp4,954,000
, ,	6 x 7, 8 x 9, 10 x 11, 12 x 7, 18 x 19, 20 x 22, 21 x	
24 x 26, 2 32/12)	5 x 28, 27 x 32),	<b>977/4</b> (6-

### **180/2VDEDP**













### Set of offset ring wrenches in bag

Cod	e Size	e IDR
615473	6-22/8	Rp2.680.000
180/1	(6 x 7, 8 x 9, 10 x	11, 12 x 13, 14
x 15, 16	x 17, 18 x 19, 20 x 2	(2), <b>CT129</b>
(470 x	330)	

### Insulated single offset ring wrench

Code	Size	IDR
621580	6	Rp576,000
621581	7	Rp576,000
621582	8	Rp604,000
621583	9	Rp604,000
612185	10	Rp631,000
612186	11	Rp631,000
612187	12	Rp652,000
612188	13	Rp652,000
612189	14	Rp697,000
612190	15	Rp697,000
621584	16	Rp776,000
612191	17	Rp776,000
621585	18	Rp862,000
612192	19	Rp862,000
621586	20	Rp952,000
619202	21	Rp1,021,000
612193	22	Rp952,000
621587	23	Rp1,021,000
612194	24	Rp1,080,000
621588	26	Rp1,080,000
621589	27	Rp1,080,000
621590	28	Rp1,193,000
621591	30	Rp1,338,000
621592	32	Rp1,338,000

### 180/1MS





Set of offset ring wrenches on metal stand







### Set of insulated single offset ring wrench in carton box

Code	Size	IDR
612677	10-24/10	Rp7,626,000
180/2VDEDP	(10, 11, 12, 13,	14, 15, 17,
19, 22, 24)		

### 184/7





### Slogging ring wrench

Code	Size	IDR
620494	24	Rp765,000
620495	27	Rp857,000
620496	30	Rp1,016,000
620497	32	Rp1,083,000
620498	36	Rp1,367,000
620499	41	Rp1,779,000
620500	46	Rp1,978,000
620501	50	Rp2,221,000
620502	55	Rp2,493,000
620503	60	Rp2,691,000
620504	65	Rp3,483,000
620505	70	Rp3,971,000
620506	75	Rp4,177,000
620507	80	Rp5,728,000
620508	85	Rp6,982,000

620509	90	Rp8,446,000
620510	95	Rp9,430,000
620511	100	Rp10,296,000
620512	105	Rp19,005,000
620513	110	Rp19,360,000
620514	115	Rp25,517,000
620515	120	Rp26,855,000
620516	125	Rp28,468,000
620517	130	Rp36,210,000
620518	135	Rp39,350,000
620519	140	Rp40,465,000
620520	145	Rp54,412,000
620521	150	Rp57,583,000
620522	1.1/16"	Rp901,000
620523	1.1/8"	Rp901,000
620525	1.1/4"	Rp1,137,000
620526	1.5/16"	Rp1,435,000
620527	1.3/8"	Rp1,435,000
620528	1.7/16"	Rp1,435,000
620529	1.1/2"	Rp1,868,000
620530	1.5/8"	Rp1,868,000
620531	1.11/16"	Rp1,868,000
620532	1.3/4"	Rp2,076,000
620533	1.13/16"	Rp2,076,000
620534	1.7/8"	Rp2,332,000
620535	2"	Rp2,332,000
620536	2.1/16"	Rp2,617,000
620537	2.1/8"	Rp2,617,000
620538	2.3/16"	Rp2,617,000
620539	2.1/4"	Rp2,826,000
620540	2.5/16"	Rp2,826,000
620541	2.3/8"	Rp2,826,000
620542	2.1/2"	Rp3,380,000
620543	2.9/16"	Rp3,492,000
620544	2.5/8"	Rp4,119,000
620545	2.3/4"	Rp4,352,000
620546	2.15/16"	Rp5,028,000
620547	3"	Rp5,185,000
620548	3.1/8"	Rp7,228,000
620549	3.3/8"	Rp9.093.000
620550	3.1/2"	Rp11.245.000
620551	3.3/4"	Rp9.792.000
620552	3.7/8"	Rp13.361.000
620553	4"	Rp15.459.000
620554	4.1/8"	Rp13.862.000
620555	4.1/2"	Rp17.056.000



### 185/2



### 186.4/2A









Spark plug wrench

Code	Size	IDR
600771	16 x 145	Rp216,000
607956	19 x 115	Rp227,000
600772	21 x 115	Rp226,000
600773	21 x 180	Rp243,000

Spark plug socket 3/8"

Code	Size	IDR
622513	14	358.000

14-3/8 © UNIOR\*186.4/2A









186.4/2









Hex Socket 1/4"

Code	Size	IDR
625741	2,5	58.000
607898	3	92.000
607899	4	92.000
607900	5	92.000
607901	6	92.000

Spark plug socket 3/8"

Code	Size	IDR
620819	13	Rp87.000
603193	16	Rp179,000
620820	18	Rp192,000
603192	19	Rp207,000
600776	21	Rp330,000





### Reversible ratchet 1/4"

Code	Size	IDR
611901	1/4" × 157	Rp1,238,000

188.2/2BI	188.2/2BI
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### Swivel handle 1/4"

Code	Size	IDR
611902	1/4" x 150	Rp543,000



### Sliding T - handle 1/4"

Code	Size	IDR
600830	1/4" x 120	Rp268,000





### Extension bar 1/4"

Code	Size	IDR
600826	1/4" × 55	Rp209,000
625393	1/4" × 100	Rp285,000
600827	1/4" x 150	Rp230,000







### Universal joint 1/4"

Code	Size	IDR
607821	1/4"	Rp265,000

188.7/2







### Adaptor 1/4"

Code	Size	IDR
607976	1/4" - 3/8"	Rp121,000



188/2 6p



188/2 12p





Socket 1/4"

Code Size **IDR** 618682 3.2 Rp65,000 600815 4 Rp65,000 600816 4.5 Rp65,000 600817 5 Rp65,000 600818 5.5 Rp65,000 600819 6 Rp65,000 600820 7 Rp65,000 600821 8 Rp68,000 600822 9 Rp68,000 10 600823 Rp73,000 600824 11 Rp74,000 603130 12 Rp77,000 600825 13 Rp78,000 603131 14 Rp78,000 618683 3/16" Rp65,000 618684 7/32" Rp65,000 618685 1/4" Rp65,000 618686 9/32" Rp65,000 618687 5/16" Rp72,000 618688 11/32" Rp78,000 618689 3/8" Rp81,000 618690 13/32" Rp75,000 618691 7/16" Rp73,000 1/2" 618692 Rp90,000 618693 9/16" Rp90,000

Socket 1/4", 12 point

Code	Size	IDR
616857	4	Rp65,000
616858	4.5	Rp65,000
616859	5	Rp65,000
616860	5.5	Rp65,000
616861	6	Rp65,000
616862	7	Rp65,000
616863	8	Rp65,000
616864	9	Rp65,000
616865	10	Rp73,000
616866	11	Rp74,000
616867	12	Rp77,000
616868	13	Rp78,000
616869	14	Rp78,000
616870	3/16"	Rp65,000
616871	7/32"	Rp65,000
616872	1/4"	Rp65,000
616873	9/32"	Rp65,000
616874	5/16"	Rp72,000
616875	11/32"	Rp78,000
616876	3/8"	Rp81,000
616877	13/32"	Rp75,000
616878	7/16"	Rp73,000
616879	1/2"	Rp90,000
616880	9/16"	Rp90,000

188/2 12p

1/4"







### 188BI





### Socket set 1/4" in metal box

Code	Size	IDR
611996	4 - 13/16	Rp3,911,000
180/2 6p	(4, 4.5, 5, 5.5, 6, 7	, 8, 9, 10,
11, 13), <b>18</b>	<b>8.1/1ABI</b> (1/4"),	188.2/2ABI
(1/4"), <b>18</b>	<b>88.3/2</b> (1/4"), <b>188</b>	3.4/2
(1/4"x55, 1,	/4"x150)	

### 190/1 6p









### Socket 1/2"

Code	Size	IDR
605307	8	Rp145,000
610155	9	Rp145,000
600851	10	Rp145,000
600852	11	Rp145,000
600853	12	Rp145,000
600854	13	Rp145,000
600855	14	Rp145,000
600856	15	Rp145,000
600857	16	Rp145,000
600858	17	Rp187,000
600859	18	Rp187,000
600860	19	Rp187,000
600861	20	Rp195,000
600862	21	Rp195,000
600863	22	Rp198,000

600864	23	Rp220,000
600865	24	Rp220,000
600866	25	Rp220,000
600867	26	Rp223,000
600868	27	Rp243,000
600869	28	Rp243,000
610156	29	Rp263,000
600871	30	Rp271,000
600872	32	Rp271,000
610105	5/16"	Rp153,000
610106	3/8"	Rp153,000
610107	7/16"	Rp153,000
610108	1/2"	Rp153,000
610109	9/16"	Rp153,000
610110	5/8"	Rp153,000
610111	11/16"	Rp196,000
610112	3/4"	Rp196,000
610113	13/16"	Rp205,000
610114	7/8"	Rp205,000
610115	15/16"	Rp232,000
610116	1"	Rp235,000
610117	1.1/16"	Rp254,000
610118	1.1/8"	Rp254,000
610119	1.3/16"	Rp275,000
610120	1.1/4"	Rp275,000

### 190/1 12p









### Socket 1/2", 12 point

Code	Size	IDR
603812	10	Rp145,000
603813	11	Rp145,000
603814	12	Rp145,000
603815	13	Rp145,000
603816	14	Rp145,000
603817	15	Rp145,000
603818	16	Rp145,000
603819	17	Rp187,000
603820	18	Rp187,000



607001	10	D 107.000
603821	19	Rp187,000
603822	20	Rp195,000
603823	21	Rp195,000
603824	22	Rp198,000
603825	23	Rp220,000
603826	24	Rp220,000
603827	27	Rp243,000
603828	30	Rp271,000
603829	32	Rp271,000
621722	36	Rp405,000
609366	3/8"	Rp161,000
609367	7/16"	Rp161,000
609368	1/2"	Rp174,000
609369	9/16"	Rp174,000
609370	19/32"	Rp179,000
609371	5/8"	Rp179,000
609372	11/16"	Rp179,000
609373	3/4"	Rp201,000
609374	25/32"	Rp240,000
609375	13/16"	Rp240,000
609376	7/8"	Rp216,000
609377	15/16"	Rp232,000
609378	1"	Rp243,000
609379	1.1/16"	Rp264,000
609380	1.1/8"	Rp292,000
609381	1.3/16"	Rp311,000
609382	1.1/4"	Rp325,000

610768	16	Rp309,000
610769	17	Rp318,000
610770	18	Rp318,000
610771	19	Rp318,000
610772	20	Rp332,000
610773	21	Rp332,000
610774	22	Rp338,000
610775	23	Rp376,000
610776	24	Rp376,000
610777	27	Rp506,000
610778	30	Rp545,000
610779	32	Rp545,000
610780	3/8"	Rp149.000
610781	7/16"	Rp149.000
610784	19/32"	Rp165.000
610785	5/8"	Rp165.000
610786	11/16"	Rp165.000
610788	25/32"	Rp221.000
610789	13/16"	Rp221.000
610790	7/8"	Rp199.000
610791	15/16"	Rp213.000
610792	1"	Rp224.000
610793	1.1/16"	Rp243.000
610794	1.1/8"	Rp269.000
610795	1.3/16"	Rp287.000
610796	1.1/4"	Rp300.000

190/1L12p





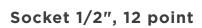












Code	Size	IDR
610762	10	Rp309,000
610763	11	Rp309,000
610764	12	Rp309,000
610765	13	Rp309,000
610766	14	Rp309,000
610767	15	Rp309,000

### Reversible ratchet 1/2"

Code	Size	IDR
611782	1/2" x 260	<del>Rp1.420.000</del>
	Revisi harga	Rp 2,075,000



### 190.2/1BI



607955	1/2" x 75	Rp301,000
600874	1/2" x 125	Rp392,000
600875	1/2" x 250	Rp506,000



### 190.4/2







### Swivel handle 1/2"

190.3/1

Code	Size	IDR
611899	1/2" x 380	Rp1,189,000
611900	1/2" x 450	Rp1,273,000

### Extension bar 1/2"

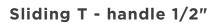


Code	Size	IDR
612565	1/2" × 600	Rp1,027,000









Code	Size	IDR
600876	1/2" x 300	Rp484,000



Offset handle 1/2"













190.6/2







### Extension bar 1/2"









### Universal joint 1/2"

Code	Size	IDR
600873	1/2"	Rp618,000













### Adaptor 1/2"

Code	Size	IDR
603334	1/2" × 3/8"	Rp161,000
607975	1/2" x 3/4"	Rp364,000

### 190BI6P24











### Socket set 1/2" in metal box

Code	Size	IDR
611939	10 - 32/24	Rp9,602,000
190/1 6p	(10, 11, 12, 13, 14, 15,	16, 17,
18, 19, 20, 2	l, 22, 23, 24, 27, 30,	32),
190.1/1ABI	(1/2"), <b>190.2/1</b>	ВІ
(1/2"x380),	<b>190.3/1</b> (1/2")	, 190.4/1
(1/2"x125, 1/	<sup>'</sup> 2"x250), <b>190</b>	<b>.6/2</b> (1/2")

#### 190VDE6P11A





### Insulated socket set 1/2" in metal box

Code	Size	IDR
612678	10 - 24/11	Rp14,374,000
190/2VDE	<b>OP</b> (10, 11, 12, 13,	14, 17, 19,
22, 24),	<b>190.1AVDEDP</b> (1	/2"),
190.4/2VDEDP (1/2" x 125)		

### 192/2HX









### Hexagonal screwdriver socket 1/2"

Code	Size	IDR
600978	4	Rp239,000
603420	5	Rp239,000
603421	6	Rp239,000
603422	7	Rp246,000
603423	8	Rp246,000
605923	9	Rp255,000
603424	10	Rp255,000
603425	12	Rp263,000
624033	13	Rp328,000
603426	14	Rp341,000
624034	15	Rp366,000
603427	17	Rp374,000
603428	19	Rp397,000
623141	22	Rp448,000



24	Rp457,000
	кр457,000
3/16"	Rp239,000
7/32"	Rp239,000
1/4"	Rp239,000
3/8"	Rp255,000
1/2"	Rp255,000
9/16"	Rp263,000
5/8"	Rp341,000
3/4"	Rp397,000
	7/32" 1/4" 3/8" 1/2" 9/16" 5/8"

### Ball-end screwdriver socket, long type 1/2"

Code	Size	IDR
618705	6 x 220	Rp288.000
619811	7 x 127	Rp254.000
618706	8 x 220	Rp314.000
618707	10 x 220	Rp347.000

192/2HXL















### Long hexagonal screwdriver Crosstip screwdriver socket 1/2"

Code	Size	IDR
605557	PH3	Rp235.000
605558	PH4	Rp262.000

### socket 1/2"

Code	Size	IDR
603380	5 x 100	Rp284,000
603381	6 x 100	Rp284,000
619805	6 x 183	Rp303,000
603383	7 x 100	Rp293,000
603384	8 x 100	Rp293,000
619806	8 x143	Rp316,000
603386	10 x 100	Rp304,000
619807	10 x 163	Rp356,000
603455	12 x 100	Rp304,000
619415	14 x 100	Rp306,000
619809	14 x 163	Rp320.000









192/2HXSL



**Double - crosstip screwdriver** socket 1/2"



Code	Size	IDR
605560	PZ 3	Rp242.000
605561	PZ 4	Rp303.000





### 192/2SL



#### **193HXCB**





### Slotted screwdriver socket 1/2"

Code	Size	IDR
605551	1.2 x 8	Rp232.000
605552	1.6 x 10	Rp245.000
605553	2 x 12	Rp251.000
605554	2.5 x 14	Rp315.000
605555	2.5 x 16	Rp398.000

### Set of hexagonal head screwdrivers with T-handle in carton box

Code	e Size	IDR
608879	2.5 - 10	Rp2,383,000
193HX	(2.5, 3, 3.5, 4, 4.5, 5, 6	, 7, 8, 10)









UNIOR



Code	Size	IDR
623238	2	Rp148,000
607161	2.5	Rp148,000
607162	3	Rp152,000
607163	3.5	Rp155,000
607164	4	Rp194,000
607165	4.5	Rp196,000
607166	5	Rp217,000
607167	6	Rp236,000
607168	7	Rp319,000
607169	8	Rp334,000
607170	10	Rp436,000

### Socket wrench with T-handle

Code	Size	IDR
608283	5.5	Rp360,000
608284	6	Rp360,000
608285	7	Rp373,000
608286	8	Rp376,000
608287	9	Rp385,000
608288	10	Rp398,000
608289	11	Rp500,000
608290	12	Rp511,000
608291	13	Rp520,000
608292	14	Rp538,000
608293	15	Rp572,000
608294	16	Rp323.000
608295	17	Rp598,000







### TX profile screwdriver with T-handle

Code	Size	IDR
607171	TX 6	Rp312,000
607172	TX 7	Rp312,000
607173	TX 8	Rp314,000
607174	TX 9	Rp314,000
607175	TX 10	Rp315,000
607176	TX 15	Rp361,000
607177	TX 20	Rp392,000
607178	TX 25	Rp413,000
607179	TX 27	Rp440,000
607180	TX 30	Rp507,000
607181	TX 40	Rp525,000
607182	TX 45	Rp624,000

### **193TXCB**



### Set of TX profile screwdrivers with T handle in carton box

Code	Size	IDR
608880	TX 6 - TX 45	Rp4,200,000
193TX	(TX 6, TX 8, TX 10, TX 1	5, TX 20,
TX 25, TX 27, TX 30, TX 40, TX 45)		45)

### 196/2



### Socket wrench with T-handle

Code	Size	IDR
602075	8	Rp476,000
602076	10	Rp404.000
605000	11	Rp432.000
605001	12	Rp445.000
602077	13	Rp642,000
605002	14	Rp543.000
602078	17	Rp905,000

### 196/1A1





### Socket wrench with T-handle

Code	Size	IDR
608122	6	Rp198.000
608125	9	Rp198.000
608127	11	Rp221.000
608130	14	Rp245.000
608131	15	Rp245.000
608132	16	Rp253.000
608133	17	Rp276.000
608134	18	Rp273.000
608136	20	Rp310.000
608137	21	Rp310.000
608138	22	Rp316.000
608139	24	Rp342.000





197/1 6p





### Socket 3/4"

Code	Size	IDR
619698	19	Rp430,000
602723	22	Rp439,000
602724	23	Rp439,000
602725	24	Rp464,000
602726	26	Rp478,000
602727	27	Rp500,000
602728	28	Rp511,000
619702	29	Rp526,000
602729	30	Rp530,000
602730	32	Rp560,000
602731	34	Rp588,000
619701	35	Rp603,000
602732	36	Rp630,000
602733	38	Rp692,000
602734	41	Rp757,000
602735	46	Rp924,000
602736	50	Rp1,167,000
617527	55	Rp1,262,000
603135	60	Rp1,434,000
609383	7/8"	Rp477,000
609384	15/16"	Rp486,000
609385	1"	Rp562,000
609386	1.1/16"	Rp520,000
609387	1.1/8"	Rp568,000
609388	1.1/4"	Rp581,000
609389	1.5/16"	Rp630,000
609390	1.3/8"	Rp651,000
609391	1.7/16"	Rp669,000
609392	1.1/2"	Rp772,000
609393	1.5/8"	Rp821,000
609394	1.11/16"	Rp914,000
609395	1.13/16"	Rp1,028,000

609396	1.7/8"	Rp1,054,000
609397	2"	Rp1,145,000
609398	2.1/16"	Rp1,420,000

197/1 12p









Socket 3/4", 12 point

Code	Size	IDR
618666	22	Rp439,000
618667	23	Rp439,000
618668	24	Rp464,000
618669	26	Rp478,000
618670	27	Rp500,000
618671	28	Rp511,000
619703	29	Rp526,000
618672	30	Rp530,000
618673	32	Rp560,000
618674	34	Rp588,000
618675	36	Rp630,000
618676	38	Rp692,000
618677	41	Rp757,000
618678	46	Rp924,000
618679	50	Rp1,167,000
618680	55	Rp1,262,000
618681	60	Rp1,434,000

197/1L6p













### Socket 3/4", long type

Code	Size	IDR
610798	23	Rp406.000
610800	26	Rp433.000
610805	34	Rp554.000
610807	38	Rp626.000
618700	55	Rp1.155.000
610811	60	Rp1.401.000
610812	7/8"	Rp431.000
610813	15/16"	Rp440.000
610814	1"	Rp509.000
610815	1.1/16"	Rp469.000
610816	1.1/8"	Rp514.000
610817	1.1/4"	Rp526.000
610818	1.5/16"	Rp570.000
610819	1.3/8"	Rp590.000
610820	1.7/16"	Rp606.000
610821	1.1/2"	Rp699.000
610822	1.5/8"	Rp743.000
610823	1.11/16"	Rp827.000
610824	1.13/16"	Rp930.000
610825	1.7/8"	Rp954.000
610826	2"	Rp1.036.000
610827	2.1/16"	Rp1.286.000





### Sliding T-handle 3/4"

Code	Size	IDR
602738	3/4"	Rp1,641,000



### 197.1/1



#### Code Size **IDR** 602740 3/4" x 200 Rp981,000 602739 3/4" x 400 Rp1,668,000



### 197.6/1

Extension bar 3/4"







### Reversible ratchet 3/4"

Code	Size	IDR
602737	3/4" x 500	Rp5,812,000



Universal joint 3/4"

Code	Size	IDR
617657	3/4"	Rp1,970,000



Size

46

50

55

60

65

70

75

80



### 197.7/1









### Adaptor 3/4"

Code	Size	IDR
602741	3/4" - 1/2"	Rp758,000
610695	3/4" - 1"	Rp1,023,000

Socket 1"

Code

603096

603097

603098

603099

603100

603101

603102

603103



**IDR** 

Rp1,314,000

Rp1,390,000

Rp1,708,000

Rp1,944,000

Rp2,478,000

Rp2,698,000

Rp3,188,000

Rp3,606,000

















Socket set 3/4" in metal box

Code	Size	IDR
602742	22 - 46/14	Rp20,202,000
197/1 6p	(22, 24, 27, 30, 32, 36	5, 38, 41,
46), <b>197.</b>	<b>1/1</b> (3/4"x500), <b>19</b> 3	<b>7.3/1</b> (3/4"),
197.4/1 (	3/4"x400, 3/4"x200)	, 197.7/1
(3/4" - 1/2	2")	

### 199/1 12p









### Socket 1", 12 point

Code	Size	IDR
618699	65	Rp3,317,000

199.1/1





#### 199/1 6p







### Reversible ratchet 1"

Code	Size	IDR
603104	1" x 665	Rp8,343,000







### 199.7/1











### Sliding T-handle 1"

Code	Size	IDR
603105	1" x 560	Rp3,706,000

### Adaptor 1"

Code	Size	IDR
619905	1" - 3/4"	Rp1,239,000





















#### Extension bar 1"

Code	Size	IDR
603107	1" × 200	Rp2,231,000
603106	1" x 400	Rp3,631,000



### Socket set 1" in metal box

Code	Size	IDR
603095	46 - 80/12	Rp40,100,000
199/1 6p	(46, 50, 55, 60, 65, 7	0, 75, 80),
199.1/1 (	1"), <b>199.3/1</b> (1"), <b>199</b>	<b>9.4/1</b> (1" ×
400, 1" x 2	200)	

199.6/1









### Universal joint 1"

	Code	Size	IDR
28	617658	141	Rp3,180,000

### 200/2



Starter and block wrench



Code	Size	IDR
600671	11 x 13	Rp352,000
600672	13 x 17	Rp396,000
600673	14 x 17	Rp396,000
600674	15 x 16	Rp396,000
600675	15 x 17	Rp354.000
600676	19 x 22	Rp508,000

### 206/2



### 200/2CB

### Chain wrench



Code	Size	IDR
601025	60 - 140	Rp1,183,000

### Set of starter and block wrenches in carton box

212/2	$\cup$

Cod	e Size	IDR
600677	11 - 22/5	Rp2,046,000
200/2	(11 x 13, 13 x 17, 14 x	17, 15 x 16, 19
x 22)		

Wheel nut wrench

2	Cunion win

Code	Size	IDR
600785	17	Rp780.000
600786	19	Rp816.000
600788	24	Rp1,226,000
600789	27	Rp1,372,000
600790	30	Rp1,511,000
600791	32	Rp1,789,000

### Strap wrench

205/2



Code	Size	IDR
601024	60 - 140	Rp614,000



215/2



Code	Size	IDR
600696	6 x 7	Rp166,000
600697	8 x 9	Rp184,000
600698	8 x 10	Rp191,000
600699	10 x 11	Rp214,000
600700	12 x 13	Rp231,000
600717	13 x 17	Rp270,000
600701	14 x 15	Rp251,000
600718	14 x 17	Rp270,000
600702	16 x 17	Rp270,000
600719	17 x 19	Rp323,000
600703	18 x 19	Rp323,000
605044	19 x 22	Rp365,000
607960	19 x 24	Rp358,000
600705	20 x 22	Rp365,000
600706	21 x 23	Rp409,000
607962	22 x 24	Rp443,000
600707	24 x 26	Rp443,000
600723	24 x 27	Rp443,000
600708	25 x 28	Rp557,000
617633	27 x 30	Rp529.000
600709	27 x 32	Rp614,000
602557	30 x 32	Rp614,000
603128	30 x 36	Rp758,000
603129	36 x 41	Rp940,000
618575	41 x 46	Rp1,666,000
618576	46 x 50	Rp1.876.000
618577	50 x 55	Rp2,154,000

601036	3	Rp10,000
601037	4	Rp13,000
601038	5	Rp20,000
601040	6	Rp32,000
601041	7	Rp47,000
601042	8	Rp56,000
601044	10	Rp98,000
601045	12	Rp127,000
601046	14	Rp205,000
601047	17	Rp382,000
601048	19	Rp581,000
616967	3/64"	Rp6,000
616966	1/20"	Rp5,000
611905	1/16"	Rp7,000

### 220/3PB



### Set of hexagon wrenches in plastic wallet

Code	Size	IDR
601057	3 - 10/6	Rp270,000
220/3	(3, 4, 5, 6, 8, 10)	
601059	3 - 14/8	Rp581,000
220/3	(3, 4, 5, 6, 8, 10, 12, 14)	
601061	3 - 19/10	Rp1,593,000
220/3	(3, 4, 5, 6, 8, 10, 12, 14, 17	, 19)

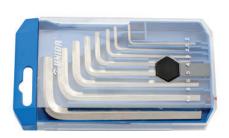
### 220/3



### **Hex wrench**

Code	Size	IDR
607823	1.5	Rp6,000
607824	2	Rp6,000
607825	2.5	Rp6,000

### 220/3PB1







### Set of hexagon wrenches in plastic box

Code	Size	IDR
610914	2 - 10/8	Rp427,000
220/3	(2, 2.5, 3, 4, 5, 6, 8, 10)	
612161	5/64" - 3/8"/8	Rp427,000
220/3	(5/64", 3/32", 1/8", 5/32	2", 3/16",
1/4", 5/16	5", 3/8")	

Code	Size	IDR
610986	2.5 - 10/7	Rp607,000
220/3	(2.5, 3, 4, 5, 6, 8, 10)	





### 220/3PH



### Set of hexagon wrenches on plastic clip

Code	Size	IDR
607852	1.5 - 10/9	Rp331,000
220/3	(1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)	
617079	1.5 - 12/10	Rp451,000
220/3	(1.5, 2, 2.5, 3, 4, 5, 6, 8, 10,	12)

### Set of hexagon wrenches in folding holder

Code	Size	IDR
617146	2.5 - 10/7	Rp934,000
220/3	(2.5, 3, 4, 5, 6, 8, 10)	
617148	3/32 - 5/16/6	Rp424.000
<b>220/3</b> 5/16")	(3/32", 1/8", 5/32", 3/16	", 1/4",
617149	3/32 - 3/8/7	Rp934,000
<b>220/3</b> 5/16", 3/	(3/32", 1/8", 5/32", 3/16 8")	", 1/4",

### 220/3MH



### Set of hexagon wrenches in metal folding holder

### 220/3L



#### Hex wrench, long type

Code	Size	IDR
608510	1.5	Rp24,000
608511	2	Rp24,000
608512	2.5	Rp28,000
608513	3	Rp31,000



608514	4	Rp45,000
608515	5	Rp66,000
608516	6	Rp66,000
608517	7	Rp105,000
608518	8	Rp106,000
608519	10	Rp162,000
608520	12	Rp254,000
608521	14	Rp416,000
608522	17	Rp705,000
608523	19	Rp1,087,000
616975	1/16"	Rp21,000
616976	5/64"	Rp21,000
616977	3/32"	Rp27,000
616978	1/8"	Rp29,000
616979	9/64"	Rp35,000
616980	5/32"	Rp41,000
616981	3/16"	Rp49,000
616982	7/32"	Rp54,000
616983	1/4"	Rp60,000
616984	5/16"	Rp98,000
616985	3/8"	Rp154,000
616986	7/16"	Rp228,000
616987	1/2"	Rp291,000
616988	9/16"	Rp384,000
616989	5/8"	Rp668,000
616990	3/4"	Rp1,087,000







### Set of hexagon wrenches, long type on plastic clip

Code	Size	IDR
608533	1.5 - 10/9	Rp620,000
220/3L	(2, 2.5, 3, 4, 5, 6, 8, 10	)
617080	1.5 - 12/10	Rp846,000
220/3L	(1.5, 2, 2.5, 3, 4, 5, 6, 8	3, 10, 12)
617082	1/16" - 3/8"/9	Rp788,000
220/3L	(1/16", 5/64", 3/32", 1/	/8",
5/32", 3/1	6", 1/4", 5/16", 3/8")	







### 220/3LPB2



### Set of hexagon wrenches, long type in plastic box

Code	Size	IDR
610915	2 - 10/8	Rp809,000
220/3L	(2, 2.5, 3, 4, 5, 6, 8, 10)	

### Ball-end hexagon wrench

Code	Size	IDR
607826	1.5	Rp25,000
607827	2	Rp25,000
607828	2.5	Rp28,000
607829	3	Rp32,000
607830	4	Rp49,000
607831	5	Rp54,000
607832	6	Rp83,000
607834	8	Rp143,000
607835	10	Rp249,000



### **2 UNIOR**®

# 220/3SFH 257

### Set of ball-end hexagon wrenches in folding holder

Code	Size	IDR
617147	2.5 - 10/7	Rp1,237,000
220/3S	(2.5, 3, 4, 5, 6, 8, 10)	

### Set of ball-end hexagon wrenches on plastic clip

Code	Size	IDR
607853	1.5 - 10/9	Rp749,000
220/3S	(1.5, 2, 2.5, 3, 4, 5, 6, 8, 1	0)







### 220/3SPB1





### Set of ball-end hexagon wrenches in plastic box

Code	Size	IDR
610916	2 - 10/8	Rp814,000
220/3S	(2, 2.5, 3, 4, 5, 6, 8, 10)	

### Ball-end hex wrench, long type

Code	Size	IDR
608524	1.5	Rp28,000
608525	2	Rp31,000
608526	2.5	Rp36,000
608527	3	Rp40,000
608528	4	Rp58,000
608529	5	Rp69,000
608530	6	Rp101,000
608531	8	Rp177,000
608532	10	Rp318,000

### 220/3SLPB2











Set of ball-end hexagon wrenches, long type in plastic box





Code	Size	IDR
610917	2 - 10/8	Rp1,113,000
220/3SL	(2, 2.5, 3, 4, 5, 6, 8,	10)







### Set of ball-end hexagon wrenches, long type on plastic clip

Code	Size	IDR
608534	1.5 - 10 / 9	Rp911,000
220/3SL	(1.5, 2, 2.5, 3, 4, 5, 6,	8, 10)

220/7TX





### Wrench with TX profile and hole

Code	Size	IDR
616296	TR 9	Rp229,000
609173	TR 10	Rp229,000
609174	TR 15	Rp229,000
609175	TR 20	Rp235,000
609176	TR 25	Rp240,000
609177	TR 27	Rp261,000
609178	TR 30	Rp265,000
609179	TR 40	Rp297,000





### Set of wrenches with TX profile in metal folding holder

Code	Size	IDR
610987	TR 9 - TR 40/8	Rp1.425.000
220/7TX	(TR 9, TR 10, TR 15,	TR 20,
TR 25, TR	27, TR 30, TR 40)	

### 220/7TXPH





### Set of wrenches with TX profile in plastic clip

Code	Size	IDR
613089	TR 9 - TR 40/8	Rp2,034,000
220/7TX	(TR 9, TR 10, TR 15,	TR 20,
TR 25, TR 27, TR 30, TR 40)		

### 220/7TXN









### Wrench with TX profile

Code	Size	IDR
616991	TX 6	Rp154,000
616992	TX 7	Rp154,000
616993	TX 8	Rp154,000
616994	TX 9	Rp138,000
616995	TX 10	Rp142,000
616996	TX 15	Rp142,000
616997	TX 20	Rp143,000
616998	TX 25	Rp147,000
616999	TX 27	Rp157,000
617000	TX 30	Rp157,000
617001	TX 40	Rp177,000
617002	TX 45	Rp167.000
617003	TX 50	Rp185.000
617004	TX 55	Rp320,000

### Set of wrenches with TX profile in plastic clip

Code	Size	IDR
617077	9 - 40/8	Rp1,250,000
220/7TXN	(TX 9, TX 10, TX	. 15, TX 20,
TX 25, TX 27, TX 30, TX 40)		

231/4 6p







### 220/7TXNFH





### Impact socket 1/2", 6 point

Code	Size	IDR
603962	10	Rp254,000
603963	11	Rp254,000
603964	12	Rp254,000
603965	13	Rp254,000
603966	14	Rp262,000
603967	15	Rp290,000
603968	16	Rp295,000
603969	17	Rp295,000
609399	18	Rp333,000
603970	19	Rp333,000
603971	21	Rp382,000
603972	22	Rp382,000
603973	23	Rp394,000
603974	24	Rp412,000
603975	27	Rp510,000
609400	28	Rp558,000
603976	30	Rp577,000
605548	32	Rp625,000
618709	5/16"	Rp89.000
618710	3/8"	Rp98.000
618711	7/16"	Rp89.000
618712	1/2"	Rp98.000
618713	9/16"	Rp98.000

5/8"

### Set of wrenches with TX profile in folding holder

Code	Size	IDR
617150	9 - 40/8	Rp1,451,000
<b>220/7TXN</b> (TX 9, TX 10, TX 15, TX 20,		
TX 25, TX 27, TX 30, TX 40)		





618714



Rp113.000



618715	11/16"	Rp116.000
618716	3/4"	Rp116.000
618717	13/16"	Rp133.000
618718	7/8"	Rp133.000
618719	15/16"	Rp144.000
618720	1"	Rp151.000
618721	1.1/16"	Rp177.000
618722	1.1/8"	Rp194.000
618723	1.3/16"	Rp201.000
618724	1.1/4"	Rp218.000
618725	1.5/16"	Rp221.000
618726	1.3/8"	Rp225.000
618727	1.7/16"	Rp239.000
618728	1.1/2"	Rp258.000

Code	Size	IDR
609460	1/2"	Rp1,227,000

231.7/4









### Impact adaptor 1/2"

1/2" 1/2"

Code	Size	IDR
603979	1/2" - 3/4"	Rp672,000
612120	1/2" - 3/8"	Rp610,000



232/4 6p

603988





#### Impact extension bar 1/2"

231.4/4

Code	Size	IDR
603978	1/2" x 75	Rp524,000
603977	1/2" x 125	Rp631.000



Rp947,000







231.6/4

1/2"	1/2"



33

Impact universal joint 1/2"





603989	36	Rp970,000
603990	41	Rp1,208,000
603991	46	Rp1,549,000

### Impact adaptor 3/4"

Code	Size	IDR
603995	3/4" - 1/2"	Rp1,093,000
618708	3/4" - 1"	Rp1,138,000















Impact extension bar 3/4"

Code	Size	IDR
603993	3/4" x 175	Rp1,762,000
603992	3/4" x 250	Rp2,089,000

Hexagonal screwdriver socket 3/8"

Code	Size	IDR
612082	4	Rp276,000
612083	5	Rp276,000
612084	6	Rp276,000
612085	8	Rp276,000
612086	10	Rp290,000
617662	1/8"	Rp267,000
617663	9/64"	Rp267,000
617664	5/32"	Rp267,000
617665	3/16"	Rp267,000
617666	7/32"	Rp267,000
617667	1/4"	Rp267,000
617668	5/16"	Rp267,000
617669	3/8"	Rp280,000

232.6/4







Impact universal joint 3/4"

Code	Size	IDR
603994	3/4" - 90	Rp2,685,000

236/2HXL







232.7/4















Code	Size	IDR
612087	4	Rp326,000
612088	5	Rp326,000
612089	6	Rp326,000
612090	8	Rp326,000
612091	10	Rp343,000

238/1 12p









238/1 6p







⑤ ♠ **③** Socket 3/8", 12 point



So		k۵	+	3	<b>/</b> 2	"
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Code	Size	IDR
605322	6	Rp111,000
605323	7	Rp111,000
605324	8	Rp111,000
605325	9	Rp111,000
605326	10	Rp111,000
605327	11	Rp111,000
605328	12	Rp111,000
605329	13	Rp111,000
605330	14	Rp120,000
605331	15	Rp138,000
605332	16	Rp142,000
605333	17	Rp157,000
605334	18	Rp157,000
605335	19	Rp157,000
605336	20	Rp178,000
605337	21	Rp183,000
605338	22	Rp197,000

Code	Size	IDR
617122	6	Rp111,000
616905	7	Rp111,000
616906	8	Rp111,000
616907	9	Rp111,000
616908	10	Rp111,000
616909	11	Rp111,000
616910	12	Rp111,000
616911	13	Rp111,000
616912	14	Rp120,000
616913	15	Rp138,000
616914	16	Rp142,000
616915	17	Rp157,000
616916	18	Rp157,000
616917	19	Rp157,000
616918	20	Rp178,000
616919	21	Rp183,000
616920	22	Rp197,000
616921	23	Rp213,000
616922	24	Rp289,000
616923	1/4"	Rp91,000
616924	5/16"	Rp91,000
616925	3/8"	Rp91,000
616926	7/16"	Rp91,000
616927	1/2"	Rp91,000
616928	9/16"	Rp102,000
616929	5/8"	Rp113,000
616930	11/16"	Rp127,000
616931	3/4"	Rp172,000
616932	13/16"	Rp225,000
616933	7/8"	Rp248,000
616934	15/16"	Rp262,000
616935	1"	Rp341,000



# **2 UNIOR**®

# 238.1/1ABI



### 238.4/2











#### Reversible ratchet 3/8"

Code	Size	IDR
612501	3/8" x 200	Rp1,899,000

#### Extension bar 3/8"

Code	Size	IDR
600777	3/8" x 45	Rp215,000
600778	3/8" x 75	Rp323,000

















#### Swivel handle 3/8"

Code	Size	IDR
612502	3/8" x 210	Rp677,000

#### Extension bar 3/8"

Code	Size	IDR
605343	3/8" x 125	Rp389,000
605342	3/8" x 250	Rp443,000

238.3/1



238.6/1









#### Sliding T-handle 3/8"

Code	Size	IDR
605341	3/8"	Rp379,000

Universal joint 3/8"



Code	Size	IDR
605344	3/8"	Rp343,000



238.7/1











#### Adjustable wrench

Code	Size	IDR
611917	100	Rp771,000
611918	150	Rp827,000
601016	200	Rp939,000
601017	250	Rp1,164,000
601018	300	Rp1,574,000
601019	380	Rp2,816,000
605113	450	Rp4,488,000
615148	600	Rp9.581.000

#### Adaptor 3/8"

Code	Size	IDR
607977	3/8" - 1/4"	Rp109,000
605345	3/8" - 1/2"	Rp137,000

239A





















#### Socket set 3/8" in metal box

Code	e Size	IDR
612509	6 - 22/24	Rp7,924,000
238/1 6p	(6, 7, 8, 9, 10, 11, 12, 13	, 14, 15, 16,
17, 18, 19,	20, 21, 22), <b>238.3/1</b>	(3/8"),
238.4/1	(3/8"x250, 3/8"x125),	238.6/1
(3/8"),	<b>238.1/1ABI</b> (3/8"), <b>2</b>	38.2/1BI
(3/8"),	<b>238.7/1</b> (3/8" - 1/2")	

#### Insulated adjustable wrench

Code	Size	IDR
621917	150	Rp1,281,000
616849	200	Rp1,584,000
616850	250	Rp1,921,000
616851	300	Rp2,418,000
622065	380	Rp4,321,000









Code	Size	IDR
615485	1/4" / 2 -24Nm	Rp3,777,000
615486	3/8" / 5 - 110Nm	Rp3,777,000
615487	1/2" / 28 - 210Nm	Rp3,777,000
615488	1/2" / 35 - 350Nm	Rp5,776,000
615489	3/4" / 70 - 560Nm	Rp10,959,000
615490	3/4" / 140 - 700Nm	Rp19,993,000
615491	1" / 140 - 980Nm	Rp23,695,000

#### **Hook wrench**

Code	Size	IDR
613050	12 - 14	Rp206,000
613051	16 - 20	Rp206,000
613052	25 - 28	Rp213,000
613053	30 - 32	Rp213,000
613054	34 - 36	Rp284,000
613055	40 - 42	Rp284,000
613056	45 - 50	Rp347,000
613057	52 - 55	Rp347,000
613058	58 - 62	Rp458,000
613059	68 - 75	Rp458,000
613060	80 - 90	Rp619,000
613061	95 - 100	Rp619,000
613062	110 - 115	Rp1,029,000
613063	120 - 130	Rp1,029,000







#### Digital vernier

Code	Size	IDR
619881	0 - 150	Rp2,566,000

271

264







#### Click type torque wrench

#### Vernier

Code	Size	IDR
612035	0 - 150	Rp1,329,000





# Tyre lever

Code	Size	IDR
617661	200	Rp352,000
601755	300	Rp489,000
601756	400	Rp592,000
601757	500	Rp700,000

# 300/6B



#### Carpenter's lever

Code	Size	IDR
608815	500	Rp645,000
608816	600	Rp688,000
608817	800	Rp821,000
608821	1000	Rp1,126,000

# 355/6



# **Tube flaring tools**

Code	Size	IDR
601100	4,75 - 14	Rp3.083.000

# 358/6



#### **Tube cutter**

Code	Size	IDR
601101	3 - 16	Rp647.000

# 360/6



#### **Tube cutter**

Code	Size	IDR
601104	3 - 32	Rp2.109.000
602080	6 - 67	Rp3.536.000





#### **Tube cutter**

Code	Size	IDR
601108	1/8" - 2"	Rp3.706.000



Tube cutting and flaring set in plastic box

Code	Size	IDR
601099	/2	Rp6.885.000
355/6, 360/6	(3 - 32)	



 Code
 Size
 IDR

 610925
 0.2 - 6
 Rp1,570,000





# Cable stripper with straight knife

Code	Size	IDR
610931	4 - 28	Rp705,000

385H



### Cable stripper with hook knife

Code	Size	IDR
610930	4 - 28	Rp705,000









405/1BI







#### Insulated knife

Code	Size	IDR
619101	180	Rp935,000

# **Combination pliers**

Code	Size	IDR
607867	160	Rp649,000
607868	180	Rp700,000
607869	200	Rp753,000

385BVDE











# D.



#### **Insulated knife**

Code	Size	IDR
619102	180	Rp3,040,000

#### **Combination pliers**

Code	Size	IDR
607870	160	Rp612,000
607871	180	Rp644,000
607872	200	Rp710,000
608354	220	Rp838,000

385VDEDP





#### **Insulated knife**

Code	Size	IDR
615494	180	Rp909,000





# 406/1VDEBI



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#### Linemen's pliers

Code	Size	IDR
607873	180	Rp914,000

420/1VDEBI



#### **Combination pliers**

Code	Size	IDR
610421	160	Rp918,000
610422	180	Rp957,000
610423	200	Rp1,030,000
610424	220	Rp1,217,000



### Linemen's pliers

Code	Size	IDR
610425	180	Rp1,407,000

# 406/1VDEDP





# 420/1VDEDP





#### **Combination pliers**

Code	Size	IDR
619177	140	Rp1,145,000
619178	160	Rp1,120,000
619179	180	Rp1,150,000
619180	200	Rp1,184,000
619181	220	Rp1,301,000

#### Linemen's pliers

Code	Size	IDR
619176	180	Rp1,208,000

420/1BI



425/4A







#### **Crimping pliers**

Code	Size	IDR
601136	1.5 - 6 x 240	Rp862,000

#### Crimp grip pliers

Code	Size	IDR
621550	180	Rp9,030,000

425/4AB



427/4CG



#### **Crimping pliers**

Code	Size	IDR
605806	1.5 - 6 x 240	Rp923,000

#### Crimp grip pliers

Code	Size	IDR
621552	378	Rp989,000

425/4B



427/4DG



#### **Crimping pliers**

Code	Size	IDR
601137	1.5 - 6 x 240	Rp831,000

#### Modular crimping pliers

Code	Size	IDR
621553	401	Rp1,564,000

427/4AG



428/4







#### **Crimp lever pliers**

Code	Size	IDR
602327	0.5 - 6	Rp2,835,000











#### **Brake spring pliers**

Code	Size	IDR
601554	325	Rp934,000

#### **Universal lock - grip pliers**

Code	Size	IDR
613101	175	Rp799,000
605206	250	Rp888,000
613102	300	Rp1,377,000







#### 430/3



# Double groove joint pliers

Code	Size	IDR
607885	180	Rp697,000
620557	240	Rp917,000
607887	300	Rp1,129,000

#### **Grip pliers**

Code	Size	IDR
601551	175	Rp773,000
601552	250	Rp867,000
601553	300	Rp1,343,000

447/1HPP







Waterpump pliers





Code	Size	IDR
620172	240	Rp1,369,000

#### End cutting nippers

Code	Size	IDR
609192	160	Rp928,000







461/1VDEBI







#### Waterpump box joint pliers

Code	Size	IDR
607348	175	Rp529,000
603160	240	Rp706,000
605006	300	Rp999,000

#### Diagonal cutting nippers

Code	Size	IDR
607883	140	Rp637,000
607884	160	Rp664,000









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# Insulated waterpump box joint pliers

Code	Size	IDR
611993	240	Rp1,510,000

# Diagonal cutting nippers

Code	Size	IDR
610426	140	Rp893,000
610427	160	Rp925,000

455/1BI







# **461/1VDEDP**





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# Heavy duty diagonal cutting nippers

Code	Size	IDR
610428	180	Rp1,403,000
611756	200	Rp1,592,000



#### Diagonal cutting nippers

Code	Size	IDR
619193	140	Rp957,000
619194	160	Rp1,037,000









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#### 466/1BI



Heavy duty diagonal cutting nippers

Code	Size	IDR
619195	180	Rp1,272,000
619196	200	Rp1,446,000

# Heavy duty diagonal cutting nippers

Code	Size	IDR
617686	160	Rp884,000
608850	180	Rp1,050,000
608837	200	Rp1,207,000

472/1BI



# 466/1VDEBI







### Long flat nose pliers

Code	Size	IDR
607878	140	Rp702,000
607879	160	Rp760,000









607880	140	Rp664,000
607881	160	Rp718,000





#### Long flat nose pliers

Code	Size	IDR
610430	160	Rp964,000



# 472/1VDEDP









# Long round nose pliers

Code	Size	IDR
610431	140	Rp860,000
610432	160	Rp933,000











#### Long flat nose pliers

Code	Size	IDR
619182	140	Rp1,030,000
619183	160	Rp1.077.000



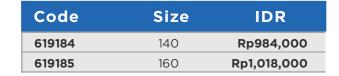






# 476/1BI







#### Long round nose pliers

Code Size IDR	
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#### Wire stripping pliers

Code	Size	IDR
607882	160	Rp901,000









#### Wire stripping pliers

Code	Size	IDR
610433	160	Rp1,121,000











#### Wire stripping pliers

Code	Size	IDR
619186	160	Rp1,473,000

480/6



#### Pipe wrench 90°, Swedish pattern

Code	Size	IDR
601481	1	Rp1,234,000
601482	1.1/2"	Rp1,651,000
601483	2	Rp2,721,000
601484	3	Rp4,455,000
605125	4	Rp6,470,000

481/6



# Pipe wrench 45°, Swedish pattern

Code	Size	IDR
601495	1/2"	Rp1,084,000
601496	1	Rp1,317,000
601497	1.1/2"	Rp1,716,000
601498	2	Rp2,849,000
601499	3	Rp4,947,000

482/6



Pipe wrench 45°, Swedish pattern, S - form

Code	Size	IDR



601510	1/2"	Rp1,112,000
601511	1	Rp1,330,000
601512	1.1/2"	Rp1,755,000
601513	2	Rp2,901,000
601514	3	Rp5,189,000

601549	36	Rp5,749,000
618894	48	Rp6,734,000









#### Long nose pliers with side cutter

Code	Size	IDR
607874	140	Rp627,000
607875	160	Rp673,000

### Chain pipe wrenches

Code	Size	IDR
601530	4	Rp8,370,000
601531	6	Rp12,965,000
601532	8	Rp18,646,000
601533	12	Rp24,272,000









#### 492/6



# Long nose pliers with side cutter

Code	Size	IDR
610434	140	Rp867,000
610435	160	Rp975,000

#### Heavy duty pipe wrench

Code	Size	IDR
601544	8	Rp621,000
601545	10	Rp856,000
618893	12	Rp954,000
601546	14	Rp1,027,000
601547	18	Rp1,432,000
601548	24	Rp2,273,000













508/1BI

#### Long nose pliers with side cutter

Code	Size	IDR
619187	140	Rp1,044,000
619188	160	Rp1,036,000





# Long nose pliers with side cutter and pipe grip, straight

Code	Size	IDR
607876	170	Rp763,000
607877	200	Rp790,000









# Long nose pliers with side cutter and pipe grip, straight

Code	Size	IDR
610436	170	Rp1,273,000
610437	200	Rp1,326,000







# Long nose pliers with side cutter and pipe grip, straight

Code	Size	IDR
619189	170	Rp1,228,000
619190	200	Rp1,278,000









# Long nose pliers with side cutter and pipe grip, bent

Code	Size	IDR
607966	170	Rp956,000
607967	200	Rp998,000

# 512/1VDEBI









# Long nose pliers with side cutter and pipe grip, bent

Code	Size	IDR
610438	170	Rp1,251,000
610439	200	Rp1,312,000





# 512/1VDEDP







#### **Tower pincers**

	1	TIMIDE 2150B ADP 577	
******			
		1100000 € 08	

Code	Size	IDR
601372	190	Rp445,000
601373	224	Rp541,000
601374	250	Rp604,000
601375	280	Rp694,000

# Long nose pliers with side cutter and pipe grip, bent

Code	Size	IDR
619191	170	Rp1,150,000
619192	200	Rp1,217,000







530/4



# External lock rings pliers, straight

Code	Size	IDR
621187	140 x 3 - 10	Rp704,000
621188	140 x 10 - 25	Rp704,000
621189	180 x 19 - 60	Rp757,000
621190	220 x 40 - 100	Rp894,000



#### Carpenters' pincers

Code	Size	IDR
601342	180	Rp424,000
601343	200	Rp445,000
607860	225	Rp519,000
601344	250	Rp649,000











#### External lock rings pliers, bent

Code	Size	IDR
621195	140 x 3 -10	Rp723,000
621196	140 x 10 - 25	Rp723,000
621197	180 x 19 - 60	Rp768,000
621198	220 x 40 - 100	Rp913,000

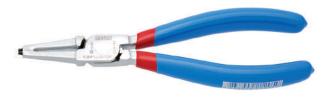
# 539PLUS/1DPCT





# 536PLUS/1DP





#### Internal lock rings pliers, straight

Code	Size	IDR
621203	140 x 8 - 13	Rp660,000
621204	140 x 12 - 25	Rp660,000
621205	180 x 19 - 60	Rp679,000
621206	220 x 40 - 100	Rp828,000

# 538PLUS/1DP





#### Internal lock rings pliers, bent

Code	Size	IDR
621211	140 x 8 - 13	Rp688,000
621212	140 x 12 - 25	Rp688,000
621213	180 x 19 - 60	Rp765,000
621214	220 x 40 - 100	Rp840,000

# Set of lock rings pliers PLUS in bag

Code	Size	IDR
<b>621623</b> 14	0 (3 - 13mm) / 4	Rp3,163,000
532PLUS/1DP	(140 x 3 - 10),	
534PLUS/1DP	(140 x 3 - 10),	
536PLUS/1DP	(140 x 8 - 13),	
538PLUS/1DP	(140 x 8 - 13)	
<b>621624</b> 40	) (10 - 25mm) / 4	Rp3,163,000
532PLUS/1DP	(140 x 10 - 25),	
534PLUS/1DP	(140 x 10 - 25),	
536PLUS/1DP	(140 x 12 - 25)	,
538PLUS/1DP	(140 x 12 - 25)	
<b>621625</b> 80	(19 - 60mm) / 4	Rp3,375,000
532PLUS/1DP	(180 x 19 - 60),	
534PLUS/1DP	(180 x 19 - 60),	
536PLUS/1DP	(180 x 19-60),	
538PLUS/1DP	(180 x 19 - 60)	
<b>621626</b> O	(40 - 100mm) / 4	Rp3,904,000
532PLUS/1DP	(220 x 40 - 100),	
534PLUS/1DP	(220 x 40 - 100)	,
536PLUS/1DP	(220 x 40 - 100)	,
538PLUS/1DP	(220 x 40 - 100)	



#### 542/4PR



#### 556A







#### **Pruning shears**

Code	Size	IDR
601578	220	Rp764,000

# **Utility knife**

Code	Size	IDR
627548	130/9	Rp123,000
616853	160/18	Rp166,000
627549	190/25	Rp252,000





558/5P





Code	Size	IDR
601580	215	Rp469,000

Revolving punch pliers with

Code	Size	IDR
601557	220	Rp807,000

#### 550/3PR



563L/7PR

6 punches

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#### **Anvil pruner**



#### Universal tin snips

Code	Size	IDR
615038	280	Rp1,079,000







Code	Size	IDR
609238	170	Rp1,405,000
609239	230	Rp1,604,000







Code	Size	IDR
615037	280	Rp1,079,000



573/7P



#### **Cable shears**

Code	Size	IDR
610440	170	Rp1,833,000
610441	230	Rp2,091,000

### Tin snips straight

Code	Size	IDR
615158	175	Rp591,000
615159	200	Rp618,000
615160	250	Rp696,000
615161	300	Rp945,000
615162	350	Rp1,195,000









#### Cable shears

582/3P

Code	Size	IDR
619197	170	Rp1,366,000
619198	230	Rp1,541,000







Cable shears







**X X** 



Code	Size	IDR
601127	145	Rp815,000

Code	Size	IDR
608775	260	Rp1.055.000













#### **PVC** pipe cutter

Code	Size	IDR
605418	195	Rp2,515,000
609405	210	Rp3,112,000

#### **Bolt cutter**

Code	Size	IDR
610963	300	Rp1,670,000
610964	350	Rp1,857,000
610965	450	Rp2,929,000
610966	600	Rp3,829,000
610967	750	Rp5,020,000
610968	900	Rp6,807,000
612984	1050	Rp7,828,000







#### Lever tin snips "pelican" type

Code	Size	IDR
608776	260	Rp1.055.000



# 591R/3G



# Flat screwdriver TBI with hexagon bolster

Code	Size	IDR
611680	1.0 x 5.5 x 100	Rp246,000
611681	1.2 x 6.5 x 125	Rp322,000
611682	1.2 x 8.0 x 150	Rp386,000
611683	1.6 x 10.0 x 175	Rp429,000



602TBI

603VDETBI







#### Flat electrician's screwdriver TBI

Code	Size	IDR
612797	0.4 x 2.5 x 60	Rp136,000
612798	0.4 x 2.5 x 75	Rp138,000
611684	0.5 x 3.0 x 100	Rp141,000
612799	0.5 x 3.0 x 150	Rp160,000
612800	0.6 x 3.5 x 100	Rp170,000
612801	0.8 x 4.0 x 100	Rp172,000
611685	0.8 x 4.0 x 125	Rp177,000
612802	0.8 x 4.0 x 150	Rp183,000
612803	0.8 x 4.0 x 250	Rp218,000
612804	1.0 x 5.5 x 125	Rp235,000
611686	1.0 x 5.5 x 280	Rp238,000
616843	1.0 x 5.5 x 150	Rp338,000
612805	1.2 x 6.5 x 150	Rp287,000
616844	1.2 x 6.5 x 280	Rp394,000
612806	1.2 x 8.0 x 175	Rp345,000

# Electrician's screwdriver with insulated blade, VDE TBI

Code	Size	IDR
616436	0.4 x 2.5 x 75	Rp171,000
616437	0.5 x 3.0 x 100	Rp174,000
616438	0.6 x 3.5 x 100	Rp195,000
616439	0.8 x 4.0 x 100	Rp203,000
621247	1.0 x 4.5 x 125	Rp257,000
616440	1.0 x 5.5 x 125	Rp258,000
616441	1.2 x 6.5 x 150	Rp309,000
616442	1.2 x 8.0 x 175	Rp348,000
621248	1.6 x 10.0 x 200	Rp467,000

605TBI

#### 603CS6AVT





#### Flat screwdriver TBI

Code	Size	IDR
612810	0.4 x 2.5 x 60	Rp136,000
611687	0.4 x 2.5 x 75	Rp136,000
611688	0.5 x 3.0 x 80	Rp138,000
612811	0.5 x 3.0 x 100	Rp140,000
611689	0.5 x 3.0 x 125	Rp148,000
612812	0.5 x 3.0 x 150	Rp158,000
612813	0.6 x 3.5 x 75	Rp158,000
611690	0.6 x 3.5 x 100	Rp161,000
611691	0.6 x 3.5 x 125	Rp163,000

#### Set of screwdrivers VDE TBI

Code	Size	IDR
617653	/6	Rp1,293,000
603VDETBI	(0.4 x 2.5x75, 0.5	ΣX
3.0x100, 0.8 x 4.0x100, 1.0 x 5.5x125),		
613VDETBI	(PH1 x 80, PH2 x 1	00)



611692	0.8 x 4.0 x 100	Rp165,000
612814	0.8 x 4.0 x 125	Rp173,000
611693	0.8 x 4.0 x 150	Rp190,000
612815	0.8 x 4.0 x 200	Rp214,000
612816	1.0 x 5.5 x 100	Rp216,000
611694	1.0 x 5.5 x 125	Rp216,000
611695	1.0 x 5.5 x 150	Rp218,000
612817	1.2 x 6.5 x 100	Rp266,000
612818	1.2 x 6.5 x 125	Rp271,000
611696	1.2 x 6.5 x 150	Rp268,000
611697	1.2 x 6.5 x 200	Rp315,000
611698	1.2 x 8.0 x 175	Rp319,000
612819	1.6 x 8.0 x 175	Rp331,000
611699	1.6 x 10.0 x 200	Rp374,000
611700	2.0 x 12.0 x 250	Rp507,000

Code	Size	IDR
616443	PH0 x 60	Rp171,000
616444	PH1 x 80	Rp220,000
616445	PH2 x 100	Rp269,000
616446	PH3 x 150	Rp354,000
616447	PH4 x 200	Rp437,000







#### 607CS7TBI



#### Crosstip (PH) screwdriver TBI



Code	Size	IDR
611701	PH 0 x 60	Rp134,000
611702	PH 1 x 80	Rp190,000
611703	PH 1 x 200	Rp233,000
611704	PH 2 x 100	Rp252,000
611705	PH 2 x 150	Rp264,000
611706	PH 2 x 200	Rp317,000
611707	PH 3 x 150	Rp327,000
611709	DH 4 × 200	Pn/156 000

#### Set of screwdrivers TBI

Code	Size	IDR
611986	/7	Rp1,545,000
605STBI	(0.5 x 3.0x80, 0.8	x 4.0x100,
1.0 x 5.5x125, 1.2 x 6.5x150, 1.2 x		
8.0x175),	<b>615TBI</b> (PH 1 x 80	0, PH 2 x 100)

616TBI



613VDETBI







Crosstip (PH) screwdriver TBI with hexagon bolster





Code	Size	IDR
611709	PH 1 x 80	Rp229,000
611710	PH 2 x 100	Rp286,000
611711	PH 3 x 150	Rp404,000











#### 616W



# Hex screwdriver with insulated blade VDE TBI

Code	Size	IDR
616448	2.5	Rp329,000
616449	3	Rp364,000
616450	4	Rp405,000
616451	5	Rp486,000
616452	6	Rp563,000
616453	8	Rp772,000

# Crosstip (PH) screwdriver with hexagon bolster

Code	Size	IDR
602818	PH 3 x 150	Rp170.000

# 620/1CR









#### Ball-end hex screwdriver TBI

Code	Size	IDR
611715	2	Rp174,000
611716	2.5	Rp174,000
611717	3	Rp194,000
611718	4	Rp257,000
611719	5	Rp302,000
611720	6	Rp341,000
611721	8	Rp404,000

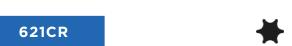
#### Hex screwdriver CR

Code	Size	IDR
617128	2	Rp123,000
617129	2.5	Rp133,000
617130	3	Rp145,000
617133	6	Rp101.000
617134	8	Rp107.000
617135	3/32"	Rp59.000
617136	7/64"	Rp59.000
617137	1/8"	Rp62.000
617138	9/64"	Rp69.000
617139	5/32"	Rp69.000
617140	3/16"	Rp80.000
617141	7/32"	Rp82.000



617142	1/4"	Rp89.000
617143	5/16"	Rp107.000
617144	3/8"	Rp161.000





611725	TX 9	Rp159,000
611726	TX 10	Rp159,000
611727	TX 15	Rp174,000
611728	TX 20	Rp183,000
611729	TX 25	Rp224,000
611730	TX 27	Rp245,000
611731	TX 30	Rp287,000
611732	TX 40	Rp350,000
611733	TX 45	Rp369,000









Code	Size	IDR
616379	TX 6	Rp129,000
616380	TX 7	Rp129,000
616381	TX 8	Rp129,000
616382	TX 9	Rp129,000
616383	TX 10	Rp129,000
616384	TX 15	Rp134,000
616385	TX 20	Rp146,000
616386	TX 25	Rp157,000
616387	TX 27	Rp190,000
616388	TX 30	Rp206,000
616389	TX 40	Rp273,000



# Screwdriver with insulated blade **VDE TBI with TX profile**

Code	Size	IDR
616454	TX 10	Rp283,000
616455	TX 15	Rp311,000
616456	TX 20	Rp328,000
616457	TX 25	Rp400,000
616458	TX 27	Rp441,000
616459	TX 30	Rp521,000











#### Screwdriver TBI with TX profile

Code	Size	IDR
611722	TX 6	Rp159,000
611723	TX 7	Rp159,000
611724	TX 8	Rp159,000

Double-crosstip (PZ) screwdriver **TBI** 



Code	Size	IDR
611741	PZ 0 x 60	Rp138,000
611742	PZ 1 x 80	Rp190,000
611743	PZ 2 x 100	Rp241,000
611744	PZ 3 x 150	Rp311,000







#### Socket wrench with TBI handle



#### Stubby crosstip (PH) screwdriver TBI

Code	Size	IDR
617086	PH 0 x 35	Rp90.000
612830	PH 1 x 25	Rp159,000
612831	PH 2 x 25	Rp164,000
617088	PH 2 x 35	Rp164,000

Code	Size	IDR
611746	5	Rp409,000
612672	5.5	Rp409,000
611747	6	Rp409,000
611748	7	Rp461,000
611749	8	Rp465,000
611750	9	Rp470,000
611751	10	Rp482,000
611752	11	Rp530,000
611753	12	Rp578,000
611754	13	Rp598,000
612825	14	Rp315.000
612826	15	Rp331.000
612827	16	Rp339.000

627TBI











Code	Size	IDR
612832	0.6 x 3.5 x 25	Rp159,000
612833	0.8 x 4.0 x 25	Rp162,000
612834	1.0 x 5.5 x 25	Rp164,000
612835	1.2 x 6.5 x 25	Rp165,000
617092	1.2 x 6.5 x 25	Rp166,000





Voltage tester 220 - 250 V

Code	Size	IDR
617659	0.5 x 3.0 x 140 (with clip)	Rp110,000
617660	0.6 x 3.5 x 180	Rp149,000







Code	Size	IDR
615049	PH2 x PH3	Rp270,000
636. 1A, 630	6.2A, 636PH	(PH2 x PH3),
<b>636PL</b> (0.	8x4.0-1.2x7.0)	

Car light tester 6 - 12/24 V

Code	Size	IDR
601688	6 - 12	Rp244,000
601689	6 - 24	Rp244,000



# 636



# **Drift punch**

Code	Size	IDR
601702	1	Rp136,000
601703	2	Rp136,000
601704	3	Rp136,000
601705	4	Rp136,000
601706	5	Rp136,000
601707	6	Rp136,000
602665	7	Rp146,000
601708	8	Rp146,000
601709	10	Rp146,000

# Reversible screwdriver

Code	Size	IDR
608922	1.0 x 6.0 x PH2	Rp161,000



#### Reversible screwdriver







645



#### Pin punch

Code	Size	IDR
601711	2	Rp178,000
601712	3	Rp178,000
601713	4	Rp178,000
601714	5	Rp178,000
601715	6	Rp178,000
601716	7	Rp178,000
601717	8	Rp200,000
601719	10	Rp200,000

Chisel and punch set

Code	Size	IDR
601739	/6	Rp1,456,000
<b>640/6</b> (2,4,6),	<b>642/6</b> (3),	<b>660/6A</b> (125),
<b>670/6A</b> (125)		

646

642/6



The state of the s

# **Drift and centre punch set**

Cod	e S	ize	IDR
601737		/6	Rp1,083,000
640/6	(2, 3, 4, 5, 6),	642/6	(3)

#### Centre punch

Code	Size	IDR
601724	3	Rp127,000
601725	4	Rp136,000
601726	5	Rp149,000

647



Pin punch set



Code	Size	IDR
601738	2 - 8/6	Rp1,367,000
<b>641/6</b> (2, 3, 4	, 5, 6, 8)	

660/6AHS



660/6



Mason's chisel with guard

Code	Size	IDR
608497	250	Rp637,000
608498	300	Rp746,000
608499	350	Rp827,000

#### Flat chisel

Code	Size	IDR
604267	100	Rp277,000
601732	150	Rp317,000
604242	175	Rp387,000
601733	200	Rp426,000
601734	250	Rp502,000

660/6HS



660/6A



Code	Size	IDR
608484	250	Rp725,000

Mason's chisel

Code	Size	IDR
608554	125	Rp264,000
608492	250	Rp454,000
608493	300	Rp558,000
608494	350	Rp637,000
608495	400	Rp792,000
608496	500	Rp973,000

670/6



**Cross chisel** 





Code	Size	IDR
601747	150	Rp387,000
601748	200	Rp491,000
601749	250	Rp587,000



# 670/6HS



Puller with two sliding arms

Code	Size	IDR
601765	300	Rp5,788,000
601766	400	Rp10,438,000

# Cross chisel with guard

Code	Size	IDR
608485	250	Rp799,000



# 680/2



# Puller with two adjustable arms

Code	Size	IDR
612603	0 x 90 x 90	Rp1,707,000
601762	1 x 160 x 130	Rp2,321,000
601763	2 x 230 x 190	Rp4,026,000
601764	3 x 300 x 250	Rp5,473,000





#### Puller with two sliding arms



Code	Size	IDR
615076	60	Rp2,503,000
615077	90	Rp2,682,000
615078	130	Rp3,558,000
615079	180	Rp4,325,000
615080	250	Rp6,699,000
615081	350	Rp7,533,000

#### Puller with three adjustable arms

Code	Size	IDR
612604	0 x 90 x 90	Rp2,256,000
601767	1 x 160 x 130	Rp2,780,000
601768	2 x 230 x 190	Rp4,636,000
601769	3 x 300 x 250	Rp6,810,000

# 683/2MS



# 682/2MS



# Set of pullers with two sliding arms

Code	Size	IDR
615082	/6	Rp23.447.000
<b>683/2</b> (60, 90,	130, 180, 250, 3	550),
<b>980P2S</b> (240 >	( 250 x 430)	

# Set of pullers with three adjustable arms

Code	Size	IDE	2
622805	90 - 250/4	Rp17.56	51.000
<b>682/2</b> (0 x 9	90 x 90, 1 x 160 x	130, 2 x	
230 x 190, 3 x	300 x 250),	980P3A	(283
x 329 x 428)			

#### 701



683/2



# Feeler gauges



Code	Size	IDR
601896	0.05 - 0.5 x 8	Rp224,000
601897	0.05 - 1 x 13	Rp326,000
601898	0.05 - 1 x 20	Rp508,000





#### 701A



# Thread pitch gauge

Code	Size	IDR
616706	52	Rp383,000

# 702/2MH





#### Joiner's clamp

Code	Size	IDR
608433	120	Rp814.000
608434	160	Rp886.000
608435	200	Rp1.065.000
608436	250	Rp1.290.000
608360	300	Rp1.586.000
608437	400	Rp1.870.000
608438	500	Rp2.003.000
608439	600	Rp2.124.000
608441	1000	Rp2.875.000

# 710P

# Measuring tape

Code	Size	IDR
612131	2m	Rp157,000
612132	3m	Rp194,000
612133	5m	Rp303,000
612134	8m	Rp578,000
612135	10 m	Rp715,000

# 710W



# Folding rule

Code	Size	IDR
609365	2m	Rp239,000

#### 714



# Long measuring tape

Code	Size	IDR
621525	50m	Rp1,497,000











Code	Size	IDR
609424	330	Rp678,000

#### 753P



# IRONGATOR engineer's vice

Code	Size	IDR
621564	80	Rp5,083,000
621481	125	Rp9,315,000
621567	150	Rp14,674,000
621570	200	Rp19,746,000

#### Saw

Code	Size	IDR
612164	150	Rp449,000

#### **750**



#### **753VDP**





#### **Hacksaw frame**

Code	Size	IDR
601890	407	Rp1.296.000

#### **Insulated saw**

Code	Size	IDR
615502	150	Rp2,378,000

#### **752**



**760HB** 







Code	Size	IDR
619291	100	Rp242,000
619292	150	Rp252,000
612992	200	Rp291,000
612993	250	Rp354,000
612994	300	Rp474,000

619467		150 - 15	0/5	Rp1,3	325,000
760HB	(150),	761HB	(150),	763HB	(150),
764HB	(150),	765HB	(150)		
612929		200 - 20	00/5	Rp1,4	112,000
760HB	(200),	761HB	(200),	763HI	В
(200),	764HB	(200),	765HB	(200)	)
612930		250 - 25	50/5	Rp1,7	71,000
760HB	(250),	761HB	(250),	763HB	3
(250),	764HB	(250),	765HB	(250)	









# Half-round file with handle, bastard

Code	Size	IDR
619303	100	Rp258,000
619304	150	Rp303,000
613002	200	Rp348,000
613003	250	Rp407,000
613004	300	Rp550,000

#### Round file with handle, bastard

Code	Size	IDR
619315	100	Rp228,000
619316	150	Rp233,000
613011	200	Rp265,000
613012	250	Rp340,000
613013	300	Rp462,000

762/5B





764HB



Set of files, bastard in carton box

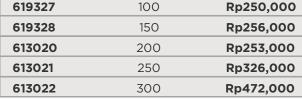
Code Size IDR

Three-square file with handle, bastard

Code	Size	IDR



619327	100	Rp250,000
619328	150	Rp256,000
613020	200	Rp253,000
613021	250	Rp326,000
613022	300	Rp472,000





#### 765HB



		2 UNIDII C

Code	Size	IDR
601824	550	Rp1,223,000

# Square file with handle, bastard

 80	6	
90	U	





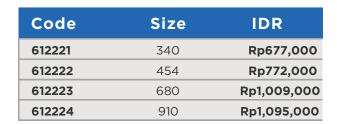


Code	Size	IDR
619339	100	Rp223,000
619340	150	Rp247,000
613029	200	Rp256,000
613030	250	Rp346,000
613031	300	Rp449,000



### Ball-pein hammer

# 778/4PB





Screw extractors set

Code	Size	IDR
616820	1-5/5	Rp814,000
<b>778/4</b> (1, 2, 3, 4	l, 5)	
616821	1-6/6	Rp1,109,000
<b>778/4</b> (1, 2, 3, 4	1, 5, 6)	
616822	1-8/8	Rp2,672,000
<b>778/4</b> (1, 2, 3, 4	, 5, 6, 7, 8)	



Masons' hammer



Code	Size	IDR
601825	650	Rp1,187,000

601809	1500	Rp1,330,000
601810	2000	Rp1,426,000





Code	Size	IDR
601826	700	Rp686.000





# Locksmiths' hammer

Code	Size	IDR
601796	100	Rp356,000
601797	150	Rp379,000
601799	200	Rp395,000
601801	250	Rp433,000
601802	300	Rp465,000
601803	400	Rp518,000
601804	500	Rp558,000
601805	600	Rp672,000
601806	800	Rp786,000
601807	1000	Rp951,000
601808	1250	Rp886.000





#### Sledge hammer

Code	Size	IDR
601812	3000	Rp2,025,000
601813	4000	Rp2,254,000
601814	5000	Rp2,619,000
601816	8000	Rp3,980,000





#### Club hammer

Code	Size	IDR
601840	1000	Rp813,000
601841	1250	Rp929,000
601842	1500	Rp1,095,000
601843	2000	Rp1,325,000











#### Sledge hammer

Code	Size	IDR
601844	3000	Rp1,769,000
601845	4000	Rp1,875,000
601847	5000	Rp2,130,000
601848	6000	Rp2,528,000
601849	8000	Rp2,983,000
601850	10000	Rp3,898,000







#### **Bumping hammer**

Code	Size	IDR
615034	45	Rp1,255,000







#### **Bumping hammer**

Code	Size	IDR
601832	22	Rp364,000
601833	27	Rp426,000
601834	32	Rp563,000
601835	40	Rp818,000
601836	50	Rp1,259,000
601837	60	Rp1.232.000









#### **Bumping hammer**

Code	Size	IDR
605491	22	Rp353,000
605492	27	Rp408,000
605493	32	Rp529,000
605494	40	Rp836,000
605495	50	Rp1,110,000
605496	60	Rp1.155.000









Code	Size	IDR
601838	300	Rp717.000

2 MANUAL EST-SECTION S





# 905VDEBI





#### Tool set VDE BI in bag

Code	Size	IDR
617571	/13	Rp9,827,000
406/1VDEBI	(180), <b>461/1VDEB</b>	<b>I</b> (160),
478/1VDEBI	(160), <b>472/1VDEB</b>	<b>I</b> (160),
753VDEDP	(150), <b>385VDEDP</b>	(180),
603VDETBI	(0.4 x 2.5 x 75, 0.8	x 4.0 x
100, 1.0 x 5.5	x 125), <b>613VDETE</b>	BI (PH1
x80, PH2 x 10	00), <b>710P</b> (3m),	630VDE
(0.5 x 3.0 x 1	40)	

#### **Tool box - 1 compartment**

Code	Size	IDR
601910	560 x 210 x 175	Rp1,539,000

## 912/3



**Tool box - 3 compartments** 

Code	Size	IDR
601911	560 x 210 x 175	Rp2,366,000

#### 911/5



**Tool box - 5 compartments** 

Code	Size	IDR
601909	460 x 210 x 220	Rp2,567,000

#### 912/5



**Tool box - 5 compartments** 

Code	Size	IDR
601912	560 x 210 x 225	Rp2,959,000

#### 912/1





#### **920PLUS1**



#### **Tool carriage Europlus**

Code	Size	IDR
617100	810 x 510 x 945	Rp66,785,000

930



#### Tool set with tool box 912/5

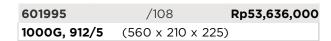
Code	Size	IDR
601996	/76	Rp42,030,000
1000K, 912/5	(560 x 210 x 22	25)

931



Tool set with tool box 912/5

Code	Size	IDR



932



#### Tool set with tool box 912/5

Code	Size	IDR
601994	/136	Rp62,449,000
1000E, 912/5	(560 x 210 x 22	25)

939/5E



# Tool chest Eurostyle - 5 compartments

Code	Size	IDR
611784	685 x 300 x 535	Rp25,859,000

940E1



**Tool carriage Eurostyle** 



Code	Size	IDR
608542	770 x 440 x 895	Rp33,195,000

Code	Size	IDR
615510	1182 x 640 x 955	Rp76,046,000

#### 940E3



**Tool carriage Eurostyle** 

Code	Size	IDR
608544	770 x 440 x 895	Rp38,302,000

946AC



Work bench with cabinet

Code	Size	IDR
612220	1500 x 750 x 1665	Rp99,795,000

940E4



**Tool carriage Eurostyle** 

Code	Size	IDR
608545	770 x 440 x 895	Rp39,911,000

948E1



**Tool cabinet** 

Code	Size	IDR
612215	700 x 300 x 900	Rp25,098,000

940H1



**Tool carriage Hercules** 

#### 948E1.1



**Accessories for 948E1** 



Code	Size	IDR
612908		Rp8,454,000

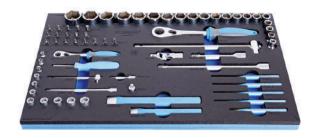
# 964/46SOS



# Set of wrenches and screwdrivers in SOS tool tray

Code	Size	IDR
623987	/36	Rp8,704,000
<b>120/1</b> (6, 7, 8, 9,	10, 11, 12, 13, 14	, 15, 16, 17,
18, 19, 21, 22, 24),	605TBI (	0.4 x 2.5 x 75,
0.5 x 3.0 x 80, 0.	6 x 3.5 x 100,	0.8 x 4.0
x 100, 1.2 x 6.5 x	150, 1.2 x 8.0 x	175),
<b>615TBI</b> (PH 1 x 8	30, PH 2 x 100)	), <b>627TBI</b>
(1.0 x 5.5 x 25),	<b>626TBI</b> (PI	H 2 x 25),
VL964/46SOS	(564 x 364 x	30)

## 964/47SOS



Set of socket wrenches in SOS tool tray

Code	Size	IDR
623988	/67	Rp16,518,000
188/2 6p	(5, 5.5, 6, 7, 8, 9, 10,	11, 12, 13,
14), <b>187/2</b>	<b>2HX</b> (3, 4, 5, 6, 7),	<b>187/2PH</b> (PH
1, PH 2),	<b>187/2SL</b> (0.8 x 4, 1,0	0 x 5,5, 1,2 x
7), <b>187/2</b> 1	<b>TX</b> (TX 8, TX 10, TX	15, TX 20,
TX 25, TX	27, TX 30, TX 40),	188.1/1ABI
(1/4"), <b>18</b>	<b>88.3/2</b> (1/4"), <b>188.4</b>	<b>/2</b> (1/4"x150,
1/4"x55),	<b>188.6/2</b> (1/4"), <b>18</b>	<b>8.8</b> (1/4"),
190/1 6p	(10, 11, 12, 13, 14, 15, 16	6, 17, 18, 19,
20, 21, 22,	23, 24, 26, 27, 28, 30,	32),
190.1/1AB	I (1/2"), <b>190.3/1</b> (	1/2"),
190.4/15	(1/2" x 125, 1/2" x 25	0), <b>190.6/2</b>
(1/2"), 64	<b>41/6</b> (3, 4, 5, 6), <b>6</b> 4	<b>42/6</b> (5),
<b>660/6</b> (1	50, 200), vl964/47	'SOS (564 x
364 x 30)		

# 964/48SOS



# Set of BI pliers and hammer in SOS tool tray

Code	Size	IDR
623989	/11	Rp11,326,000
<b>405/1BI</b> (180)	, <b>430/3</b> (250),	447/1HPP
(240), <b>466/1</b> B	BI (180), <b>508/1</b> E	<b>BI</b> (170),
532PLUS/1DP	(180 x 19 - 60),	
534PLUS/1DP	(180 x 19 - 60)	,
536PLUS/1DP	(180 x 19 - 60)	,
538PLUS/1DP	(180 x 19 - 60),	582/3P
(145), <b>819A</b> (4	45), <b>VL964/48S</b> (	os
(564x364x30)		



# 964/49SOS



#### Set of tools in SOS tool tray

Code	Size	IDR
623990	/13	Rp6,332,000
<b>300/2C</b> (320),	<b>556A</b> (160),	<b>701</b> (0.05 - 1
x 20), <b>710P</b> (3)	m), <b>753P</b> (150	)), <b>760H1/2S</b>
(200), <b>761H1</b> /2	2S (200), <b>812</b>	(400), <b>820A</b>
(32), 2035 , 208	<b>87</b> (1), <b>VL964</b>	/49SOS
(564 X 364 X 30)	)	

# 964/54SOS



#### Set of tools in SOS tool tray

Code	Size	IDR
623994	/18	Rp9,710,000
<b>215/2</b> (8 x 10,	13 x 17, 19 x 22,	24 x 27),
<b>183/2</b> (8 x 10,	10 x 11, 11 x 13, 12	2 x 14, 16 x
18, 17 x 19, 19 x	22, 22 x 24, 24	x 27, 30 x
32), <b>206/2</b> (	60 - 140), <b>631</b>	<b>B</b> (6 - 24),
<b>480/6</b> (1.1/2")	<b>,710P</b> (5m),	vl964/54SOS
(564 x 364 x 3	0)	

# 964/53SOS



# Set of socket wrenches in SOS tool tray

Code	Size	IDR
623995	/22	Rp23,056,000
1	x 500), <b>197.3/1</b> x 200, 3/4" x 400	
- ·	30, 32, 36, 38, 41, (14, 17, 19, 22),	
1	190.7/2 (1/2" x 1 (1), VL964/53SOS	



## 1000A



#### **Tool set**

Code	Size	IDR
608140	/166	Rp72,860,000
<b>120/1</b> (6, 7, 8, 9	9, 10, 11, 12, 13, 14	4, 15, 16, 17,
18, 19, 20, 21, 22,	23, 24, 25, 26,	27, 28,
29, 30, 32), <b>18</b>		
(1/4"), <b>188/2 6</b>		
10, 11, 13), <b>188.3</b>		
55, 1/4" x 150),		
15, 16, 17, 18, 19, 2		
32), <b>190.1/1ABI</b>		
380), <b>190.3/1</b>		
1/2" x 250), <b>19</b>		
8, 10), <b>192/2TX</b>		
(2.5, 4, 5, 8),		
17, 15 x 16, 19 x 2		
<b>220/3</b> (1.5, 2, 2		
<b>220/3S</b> (1.5, 2,		
<b>238.7/1</b> (3/8" -		
<b>406/1BI</b> (180),		
(240), <b>461/1BI</b>		
<b>512/1BI</b> (170),		
532PLUS/1DP 534PLUS/1DP		
536PLUS/1DP		
538PLUS/1DP		
(280), <b>605TBI</b>		
x 100, 1.0 x 5.5 x		
8.0 x 175, 1.6 x 10		
0 x 60, PH 1 x 80		
150), <b>621TBI</b> (	TX 27, TX 30,	TX 40),
<b>625TBI</b> (PZ 2 x		
25), <b>627TBI</b> (1	.2 x 6.5 x 25),	<b>631</b> (6 - 12),
<b>640/6</b> (2, 4, 6,	8), <b>641/6</b> (	2, 4, 6, 8, 10),
<b>642/6</b> (5), <b>66</b>	<b>0/6</b> (150, 250	), 670/6
(150), <b>682/2</b> (	2 x 190 x 230)	, <b>701</b> (0.05 -
1 x 13), <b>750</b> (4	07), <b>812</b> (300	0, 500, 1000),

820 (22), 6480C8 (1.2 x 6.5 x 41, 1.6 x 8.0 x 41, 2.0 x 12.0 x 41), 6483C8 (PH 2, PH 3), 6484C8 (PH 4), 6489C8 (5,6), 6492C8 (TX 20, TX 25, TX 30, TX 40), 6762.1 (1/2" x 144), 6762.2 (1/2" - 5/16")

#### 1000AC



#### **Tool set**

Code	Size	IDR
604577	/21	Rp10,533,000
<b>385H</b> (4 - 28),	406/1VDEBI	(180),
461/1VDEBI	(160), <b>472/1VDE</b>	<b>EBI</b> (160),
478/1VDEBI	(160), <b>508/1VD</b> I	<b>EBI</b> (200),
603VDETBI	(0.4 x 2.5 x 75, 0	.6 x 3.5 x
100, 1.0 x 5.5 x	125, 1.2 x 6.5 x 150	0),
<b>605CR</b> (1.0 x	5.5x125, 1.2 x 6.5x	(150),
613VDETBI (	PH1 x 80, PH 2 x	100),
<b>630VDE</b> (0.5	x 3.0 x 140),	<b>660/6</b> (200),
<b>665/6A</b> (250	x 11), <b>710P</b> (3)	), <b>753W</b>
(150), <b>761HB</b>	(200), <b>812</b> (30	00)

# 1000AD



**Tool set** 

Cod	le	Size	IDR





611884 Rp22,809,000 /62 **188/2 6p** (4, 4.5, 5, 5.5, 6, 7, 8, 9, 10, 11, 13), **188.1/1ABI** (1/4"), **188.2/2BI** (1/4"). **188.3/2** (1/4"), **188.4/2** (1/4" x 55, 1/4" x 150), **193HX** (2.5, 4), **193TX** (TX 6, TX 9, TX 20, TX 25), **220/3** (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10), **220/3SL** (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10), **250/1** (200), **385H** (4-28), **406/1VDEBI** (180), **461/1VDEBI 466/1VDEBI** (180), **478/1VDEBI** (160), **508/1VDEBI** (200), **512/1VDEBI** (200), **580/1VDEBI** (170), **603VDETBI** (0.4 x 2.5 x 75, 0.5 x 3.0 x 100, 0.6 x 3.5 x 100, 0.8 x 4.0 x 100, 1.0 x 5.5 x 125, 1.2 x 6.5 x 150), **613VDETBI** (PH1 x 80, PH 2 x 100), **630VDE** (0.5 x 3.0 x 140), **665/6A** (250 x 11), **710P** (5), **750** (407), **812** (300)

#### 1000B



#### **Tool set**

Code	Size	IDR
608141	/185	Rp99,182,000
<b>110/1</b> (6 x 7, 8	3 x 9, 10x 11, 12 x 1	13, 14 x 15,
16 x 17, 18 x 19,	20 x 22, 21 x 23,	24 x 26,
25 x 28, 27 x 3	(2) <b>, 125/1</b> (6,	7, 8, 9, 10, 11,
12, 13, 14, 15, 16,	, 17, 18, 19, 20, 21,	22) <b>, 180/1</b>
(6 x 7, 8 x 9, 10	O x 11, 12 x 13, 14 >	x 15, 16 x
17, 18 x 19, 20x	22, 21 x 23, 24 x	26, 25 x
28, 27 x 32) <b>,</b>	<b>188/2 6p</b> (4, 4	.5, 5, 5.5, 6, 7,
8, 9, 10, 11, 13),	188.1/1 ABI (	(1/4"),
188.2/2BI (1/4	4"), <b>188.3/2</b> (1/	/4"), <b>188.4/2</b>
(1/4" x 55, 1/4"	′ x 150), <b>190</b> /	<b>/1 6p</b> (10, 11, 12,
13,14, 15, 16, 17,	18, 19, 20, 21, 22,	23, 24,
27, 30, 32), 1	190.1/1ABI	
(1/2"), <b>190.2/</b>	<b>1BI</b> (1/2" x 380)	), <b>190.3/1</b>
(1/2"), <b>190.4/</b>	<b>1</b> (112" x 125, 1/2	2" x 250),
<b>190.6/2</b> (1/2"	), <b>192/2HX</b> (6	,8), <b>192/2TX</b>
(TX 20, TX 25,	TX 27, TX 30, T	X 40, TX
45, TX 50, TX	55, TX 60),	<b>200/2</b> (11 x 13,
13 x 17, 14 x 17,	$15 \times 16$ , $19 \times 22$ ),	206/2

(60 - 140), **212/2** (17, 19), **215/2** (10 x 11, 12 x 13), **220/3** (3, 4, 5, 6, 8, 10, 12, 14, 17, 19), **250/1** (250), **300/2** (400), **406/1BI** (180), **430/3** (175, 250), **431/2** (325), 445/1BI (180, 240), 455/1BI (160), **466/1BI** (180), **481/6** (1.1/2"), **514/1BI** (160), **532PLUS/1DP** (180 x 19 -60), **534PLU5/1DP** (180 x 19 - 60), **536PLUS/1DP** (180 x 19 - 60), **538PLUS/1DP** (180x 19 - 60), 563R/7PR (280), **605TBI** (0.4 x 2.5 x 75, 0.5 x 3.0 x 80, 0.8 x 4.0 x 100, 1.0 x 5.5 x 125, 1.2 x 6.5 x 150, 1.2 x 8.0 x 175, 1.6 x 10.0 x 200), **615TBI** (PH 1 x 80, PH 2 x 100, PH 3 x 150, PH 4 x 200), **626TBI** (PH 2 x 25), **627TBI** (0.8 x 4.0x 25), **629TBI** (6, 8, 10, 12, 13), **630VDE** (0.6 x 3.5 x 180), 631 (6 - 12), **631B** (6 - 24), **640/6** (2, 3, 5, 6, 8, 10), **642/6** (5), **660/6** (200, 250), **670/6** (150), **680/2** (2 x 230 x 190), **681/2** (300), **682/2** (2 x 190 x 230), **686/2** (16 x 260), **701** (0.05 - 1 x 13), **750** (407), **812** (300, 500, 1000), **820** (22), **6480C8** (1.2 x 6.5 x 41, 1.6 x 8.0 x 41, 2.0 x 12.0 x 41), **6483C8** (PH 2, PH 3), **6484C8** (PH 4), **6489C8** (5, 6), **6492C8** (TX 20, TX 25, TX 30, TX 40), 6762. 1 (1/2" x 144), **6762.2** (1/2" - 5/16')

#### 1000D



**Tool set** 

IDR



608143 /143 Rp62,925,000 **110/1** (6 x 7, 8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 17, 18 x 19, 20 x 22, 21 x 23, 24 x 26, 25 x 28, 27 x 32), **125/1** (6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22), 180/1 (6 x 7.8 x 9. 10 x 11. 12 x 13. 14 x 15. 16 x 17, 18 x 19, 20 x 22, 21 x 23, 24 x 26, 25 x 28, 27 x 32), **188/2 6p** (4, 4.5, 5, 5.5, 6, 7, 8, 9, 10, 11, 13), **188.1/1ABI** (1/4"), 188.2/2BI (1/4"), 188.3/2 (1/4"), 188.4/2  $(1/4" \times 150, 1/4" \times 55),$ **190/1 6p** (10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27, 30, 32), **190.1/IABI** (1/2"), **190.2/1BI** (1/2" x 380), **190.3/1** (1/2"), **190.4/1** (1/2" 190.6/2 (1/2"), 200/2 x 125, 1/2" x 250),  $(11 \times 13, 13 \times 17, 14 \times 17, 15 \times 16, 19 \times 22),$ **205/2** (60 - 140), **212/2** (24), **220/3** (3, 4, 5, 6, 8, 10, 12, 14, 17, 19), **300/2** (400), **405/1BI** (180), **425/4A** (1.5 - 6 x 240), 430/3 (175), 431/2 (325), 447/1HPP (240), 455/181 (160), 514/181 (160), **532PLUS/1DP** (180 x 19 - 60), 534PLUS/1DP (180x 19 - 60), 536PLUS/1DP (180x 19 - 60), **538PLUS/1DP** (180 x 19 - 60), 563R/7PR (280), **600TBI** (1.0 x 5.5 x 100, 1.2 x 6.5 x 125. 1.2 x 8.0 x 150), **605TBI** (0.5 x 3.0 x  $80,0.8 \times 4.0 \times 100, 1.0 \times 5.5 \times 125, 1.2 \times 6.5$  $\times$  150, 1.2  $\times$  8.0  $\times$  175, 1.6  $\times$  10.0  $\times$  200), **615TBI** (PH 1 x 80, PH 2 x 100, PH 3 x 150, PH 4 x 200), **626TBI** (PH 2 x 25), **627TBI** (0.8 x 4.0 x 25), **631** (6 - 12), **640/6** (2, 3, 4, 5, 6), **642/6** (4), **660/6** (200, 250), **670/6** (150), **701** (0.05 - 1 x 13), **750** (407) , **812** (300, 500, 1000) , **820** (22)

## 1000F



Code Size **IDR** 608145 /129 Rp47.649.000 **110/1** (6 x 7, 8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 17, 18 x 19, 20 x 22, 21 x 23, 24 x 26, 25 x 28, 27 x 32), **125/1** (6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22), 180/1 (6 x 7, 8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 17. 18 x 19. 20 x 22. 21 x 23. 24 x 26. 25 x 28,27 x 32), **185/2** (16 x 145), **190/1 6p** (10,11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27, 30, 32), **190.1/1ABI** (1/2"). **190.2/1BI** (1/2" x 380), **190.3/1** (1/2"), **190.4/1** (1/2" x 125, 1/2" x 250), (1/2"), **197/1 6p** (22, 24, 27, 30, 32, 36, 38, 41,46), **197.1/1** (3/4" x500), **197.3/1** (3/4"), **197.4/1**  $(3/4" \times 400, 314" \times 200)$ , **197.7/1** (3/4" - 1/2'), **220/3** (3, 4, 5, 6,8, 10, 12, 14, 17, 19), **250/1** (250), **406/1BI** (180), **425/4A** (1.5 - 6 x 240), 430/3 (175), **447/6** (240), **455/18BI** (160), **461/1BI** (160), **514/1BI** (160), **532PLUS/1DP** (180 x 19 - 60), **536PLUS/1DP** (180 x 19 - 60), (280), **580/1BI** (170), **600TBI** (1.2 x 6.5 x 125, 1.2 x 8.0 x 150), **605TBI** (0.5 x 3.0 x 80, 0.8 x 4.0 x 100, 1.0 x 5.5 x 125, 1.2 x  $6.5 \times 150$ , 1.2 x 8.0 x 175), **615TBI** (PH 1 x80, PH 2 x **630VDE** (0.6 x 3.5 x 100, PH 3 x 150), 180), **631** (6 - 12), **640/6** (3, 4), **641/6** (2, 3, 4, 5, 6), **642/6** (4), **660/6** (150, 200), **670/6** (150, 200), **750** (407), **812** (500),

#### 1000G

**820** (40)



**Tool set** 

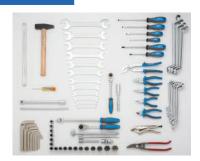
Code Size IDR





608146 /108 Rp33.106.000 **110/1** (6 x 7,8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 17, 18 x 19, 20 x 22, 21 x 23, 24 x 26, 25 x 28, 27 x 32), **125/1** (6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22), **180/1** (6 x 7, 8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 17, 18 x 19, 20 x 22, 21 x 23, 24 x 26, 25 x 28, 27 x 32), **190/1 6p** (10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27, 30, 32), **190.1/1ABI** (1/2"), **190.2/1BI** (1/2"  $\times$  380), **190.3/1** (1/2"), **190.4/1** (1/2"  $\times$  125, 1/2" x 250), **190.6/2** (1/2"), **200/2** (11 x 13, 13 x 17, 14 x 17, 15 x 16, 19 x 22), 220/3 (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10, 12), 300/2 (400), **406/1BI** (180), **425/4A** (1.5 - 6 x 240), **430/3** (17S), **445/1BI** (240), **447/1HPP** (240), **461/1BI** (160), **514/1BI** (160), **572R/7PR** (280), **605TBI** (0.8 x  $4.0 \times 100$ ,  $1.0 \times 5.5 \times 125$ ,  $1.2 \times 6.5 \times 150$ , 1.2 x 8.0 x 175), **615TBI** (PH 1 x 80, PH 2x 100, PH 4 x 200), **626TBI** (PH2 x 25), **627TBI** (0.8 x 4.0 x 25), **631** (6 - 12), **640/6** (2, 3, 4), **642/6** (3), **660/6** (150, 200), **670/6** (150), **812** (500)

#### 1000K



#### **Tool set**

Code	3126	IDK
608148	/76	Rp26.140.000
<b>110/1</b> (6 x 7,8 x	9, 10 x 11, 12 x 13	3, 14 x 15,
16 x 17, 18 x 19,2	0 x 22, 21 x 23,2	4 x 26,
25 x 28, 27 x 32	), <b>180/1</b> (6 x	7,8 x 9, 10 x
11, 12 x 13, 14 x 15	5, 16 x 17, 18 x 19,	20 x 22,
21 x 23, 24 x 26,	25 x 28, 27 x 32	2), 190/1
<b>6p</b> (10, 11, 12, 13,	14, 15, 16, 17, 18,	19, 20, 21,
22, 23, 24, 27, 3	0, 32), <b>190.1</b>	<b>/1ABI</b> (1/2"),
<b>190.2/1BI</b> (1/2/	′ x 380), <b>190.</b> 4	<b>4/1</b> (1/2" x
125, 1/2" x 250),	<b>190.3/1</b> (1/2	2"), <b>190.6/2</b>
(1/2"), <b>212/2</b> (	19), <b>220/3</b> (3,	4, 5, 6, 8, 10,

Siza

12, 14, 17, 19), 300/2 (400), 405/1BI (180), 430/3 (175), 447/1HPP (240), 461/1BI (160), 506/1BI (140), 514/1BI (160), 572R/7PR (280), 605TBI (0.8 x 4.0 x 100, 1.0 x 5.5 x 125, 1.2 x 6.5 x 150, 1.2 x 8.0 x 175), 615TBI (PH 2 x100,PH 3 x150), 631 (6 - 12), 812 (500)

#### 1000S



Tool set

Size	IDR
/51	Rp20,033,000
0, 11, 12, 13, 14,	15, 16, 17,
4), <b>220/3</b> 9	<b>5</b> (1.5, 2, 2.5,
<b>250/1</b> (200	), 190/1 6p
190. 1/1AB	SI (1/2"),
5), <b>190.6/2</b>	(1/2"),
<b>447/1HPP</b> (2	240), <b>461/1BI</b>
200), <b>514/1B</b>	I (160),
0 x 100, 1.0 x	5.5 x 125,
<b>615TBI</b> (PH	1 x 80, PH 2 x
Z 2 x 100),	<b>626TBI</b> (PH 2
.2 x 6.5 x 25),	<b>710P</b> (2),
	/51 20, 11, 12, 13, 14, 4), 220/38 250/1 (200 190. 1/1AB 5), 190.6/2 447/1HPP (2 200), 514/1B 0 × 100, 1.0 × 1 615TBI (PH

#### 1250



Alu - spirit level





Code	Size	IDR
610716	300	Rp618,000
610717	400	Rp705,000
610718	500	Rp804,000
610719	600	Rp834,000
610720	800	Rp968,000
610721	1000	Rp1,102,000
610722	1200	Rp1,320,000
610723	1500	Rp1,575,000
610724	2000	Rp1,984,000

Code	Size	IDR
610730	125	Rp579,000
610731	150	Rp680,000
610732	200	Rp727,000
610733	250	Rp927,000
610734	300	Rp1,027,000

# 1300/6

1252



### Alu - spirit level with magnet

Code	Size	IDR
610725	400	Rp1,212,000
610726	500	Rp1,290,000
610727	600	Rp1,411,000
610728	800	Rp1,466,000
610729	1000	Rp2,169,000

#### Alu - spirit level with magnet

Code	е	Size	IDR
615454	3/32", 1/8	", 5/32", 3/16"	Rp1,183,000
1300/1	(2,4 x 6),	<b>1300.1</b> (3,2	x6), <b>1300.1</b>
(4,0 x 6	i), <b>1300.1</b>	(4,8x6), <b>13</b>	<b>00/6</b> (2.4,
3.2, 4.0,	4.8)		

1516













Try square



#### Pneumatic die grinder

Code	Size	IDR
617731	155	Rp4,483,000





**1517S** 











#### Code Size IDR Rp8.956.000 615514 /14 **1541** (3/8"), **230.4/4** (3/8" x 75, 3/8 x 125), **230.8/4** (6 - 12, 13 - 21), **230/4 6p** (8, 10, 11, 12, 13, 14, 15, 17), **1374** (50 ml)



#### 67

		_	-	
62	_	-		



#### Pneumatic angle sander

Code	Size	IDR
617729	375	Rp8,410,000

1541















#### Impact screwdriver set

Code	Size	IDR
605061	/14	Rp3,400,000
6480C8 (	1.2 x 6.5 x 41, 1.6 x 8.0	0 x 41, 2.0
x 12.0 x 41)	, <b>6483C8</b> (PH 2, F	PH 3),
6484C8 (	PH 4), <b>6489C8</b> (5,	6), <b>6492C8</b>
(TX 25, TX	30, TX 40, TX 20),	6762.1
(1/2"x144),	<b>6762.2</b> (1/2" - 5/1	6")

#### Impact wrench

Code	Size	IDR
615320	3/8" / 271 Nm	Rp9,875,000

1545











Pneumatic hammer and socket set 3/8" in plastic box

# CODE INDEX 2023



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