

metkon
Technology behind Specimen

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METALLOGRAPHY

SAMPLE PREPARATION

Metallography is the science of revealing and evaluating the internal structures of metarials.

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TECHNOLOGY BEHIND SPECIMEN





METALLOGRAPHY

Metallography is the science of revealing and evaluating the internal structures of metarials. It is one of the most important methods of materials research today, indispensable to the scientist as well as to the enginneer.



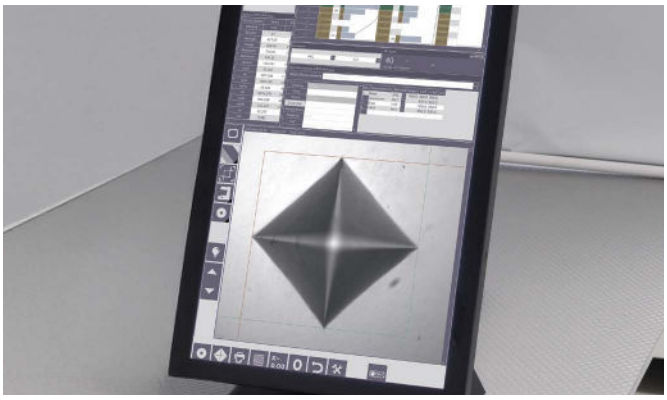


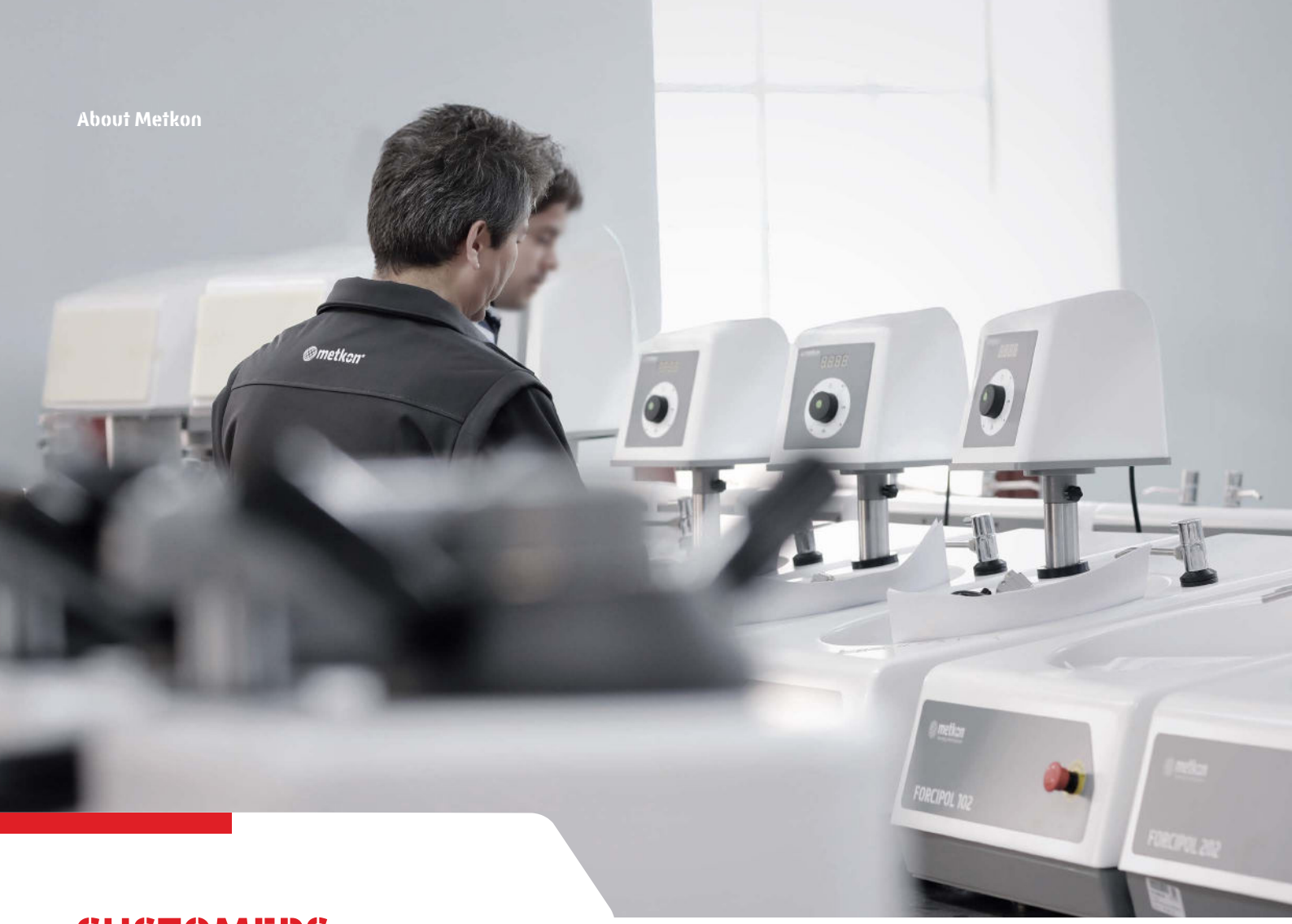


More recently, advanced materials such as high tech metal alloys, ceramics, composites and polymers have appeared which made metallography become an increasingly vital part of modern industry. Through a process of cutting, mounting, grinding and polishing, a smooth surface is obtained to reach the materials true structure. In order to achieve high preparation quality and reproducible results; a combination of "Right equipment, Correct preparation method and Right consumables" which we call "Total Preparation Solution" is required.

METKON brings total preparation solutions in metallography. We cover the complete range of instruments and consumables for Metallographic Sample Preparation, from manual machines to sophisticated microprocessor controlled preparation systems.

Our systems are used in research laboratories and on production lines, in quality control and in education, in large government installations, automotive companies and small independent laboratories. Materials scientists, designers, engineers and QC managers use METKON products to evaluate the mechanical properties of materials, components and structures.





CUSTOMERS

Since 1992, METKON as a young and dynamic company, had delivered more than 30,000 instruments globally. Our customer list covers the spectrum from small to large international companies and laboratories in many different industries, including: Automotive, Aerospace, Bearing industry, Electronics, Universities and other industries.

Together with our distributors in more than 35 countries, dedicated aftersales support includes trained service and support personnel, application laboratories, customer training courses, and mobile laboratories featuring a hands-on experience with METKON products and specialists.

METKON is proud to be a partner in providing quality products to a variety of customers including; Tesla, Apple, Catl, SK Battery, Jtekt, Bosch, Eaton, Faurecia, Lufthansa, Mercedes Benz, Motorola, Pirelli, Schneider, Seagate, SKF, Sony, Toyota,TRW, Yamaha and others. Our primary goal and the greatest motivation for us is to have you as a satisfied METKON customer.

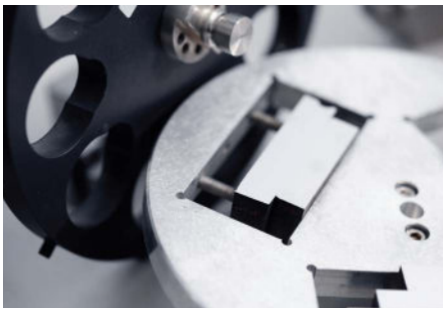






DISTRIBUTORS

A Strong Global Network.
Reliable sales and service across continents.

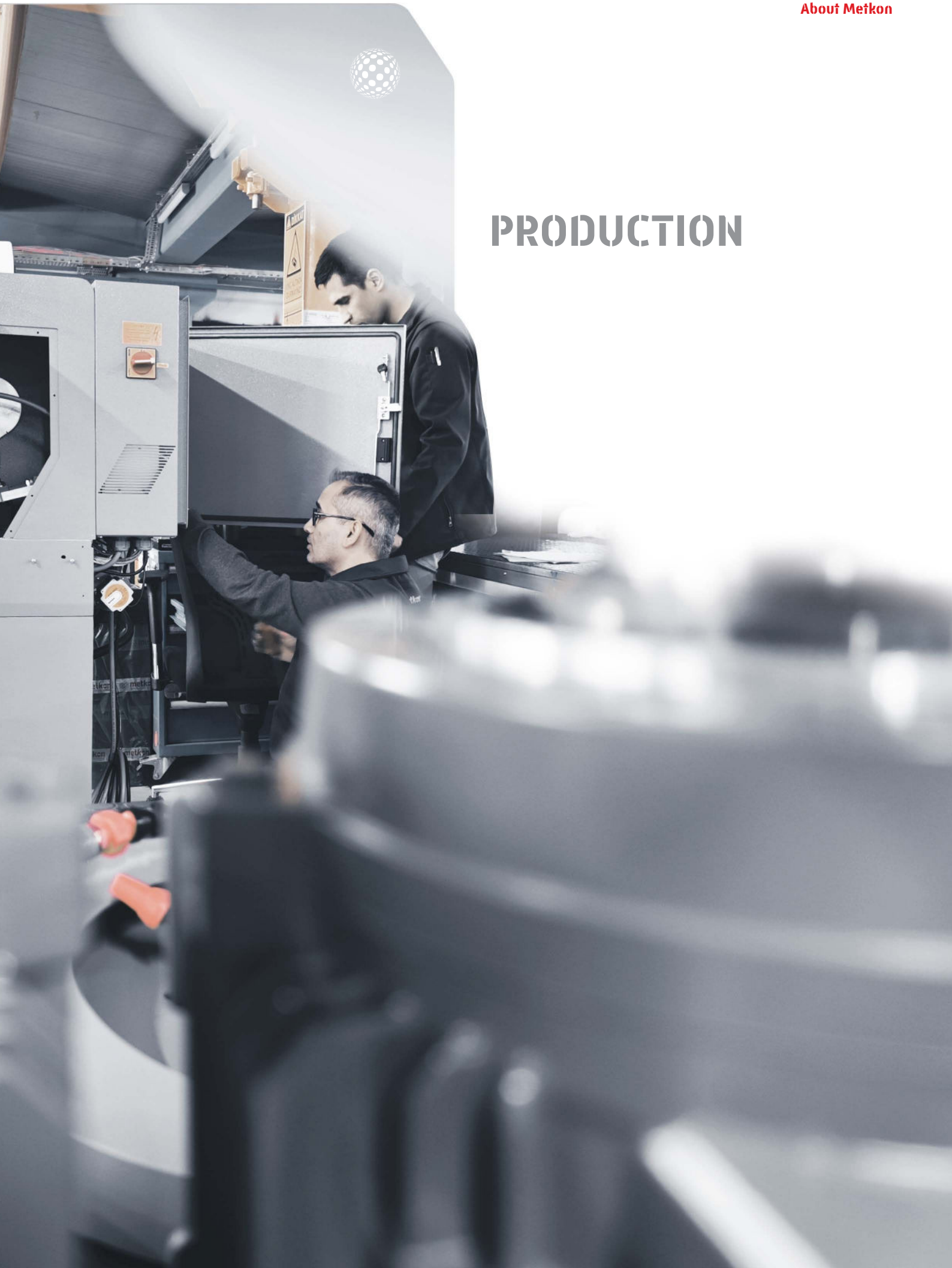


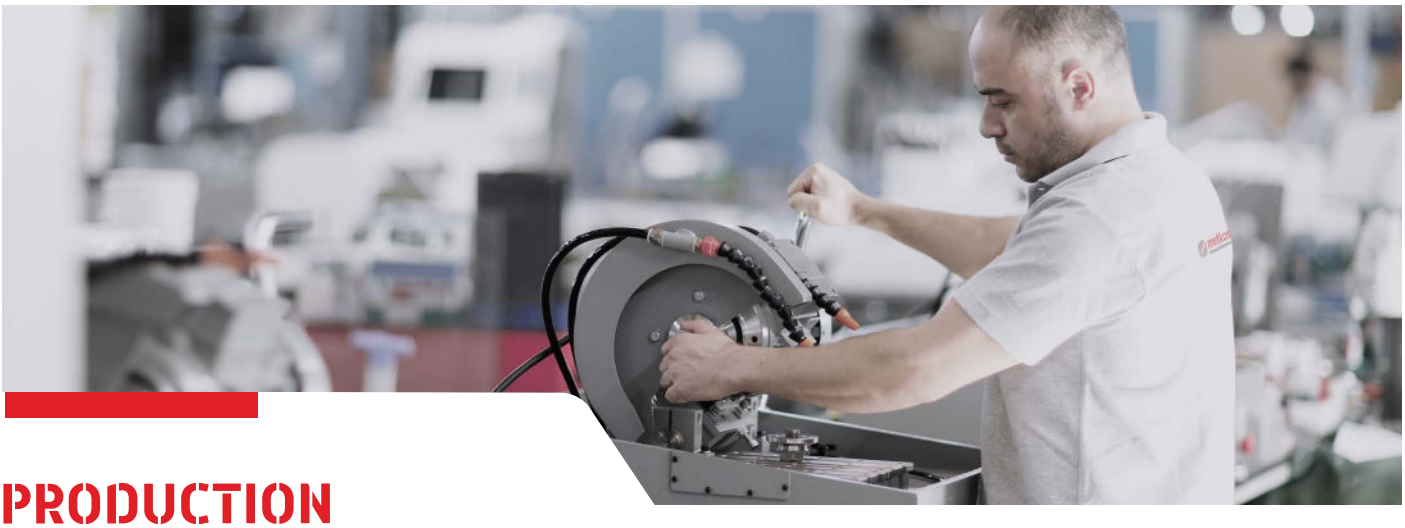






PRODUCTION





PRODUCTION

Founded in 1993 as a 3-man-enterprise, METKON today employs over 120 people. Customers around the world have trusted METKON to deliver technologically advanced solutions. Our state-of-the-art Engineering and Product Development center includes teams of engineers working together to create and test ideas that will be incorporated into instruments designed to meet customer needs.

At our in-house manufacturing facility, quality drives production. From sheet metal parts to complex mechanical assemblies, METKON produces most of the components needed in our products, allowing strict control over the entire manufacturing process in accordance with the quality standards of ISO-9001. As a
final check before shipping, instruments are thoroughly tested to assure quality and functionality.









QUALITY POLICY





METKON's Quality Policy is based on three fundemantal principles:

- Quality is defined as conformance to requirements.
- Total Quality Management is our business philosophy.
- The benchmark for quality comprises our performance goals which are continuously measured.

QUALITY POLICY

Being an ISO 9001-2000 certified firm, our Quality Policy is that all products and services meet the requirements of our customers. Our objective is to justify your trust in our firm by providing quality products and services that are comprehensive and available to you when and wherever you need it.







EQUIPMENT



SERVOCUT SERIES

SERVOCUT is the perfect chocie for a broad range of heavy duty cutting applications. It is available in three main sizes and in automatic and/for manual version.

SERVOCUT consists of a cast aluminium base on which the motor and the working space are provided in the from of two separate housings. A large window of Lexan and a sealed LED lamp in the cutting chamber allow precise observation of the cutting process at an optimum degree of safety. A large, T-slotted feed table located in the cutter's generous work area can accommodate a variety of different clamping devices which need to be selected.

Abrasive Cutting

SERVOCUT automatic models have advanced techniques and software with programmable HMI touch screen controls increasing the productivity, sample consistency and operator comfort.

SERVOCUT has X-Y-Z triple axes cutting capability:
Z-axis Chop Cutting: The specimen is clamped and the cut-off wheel approaches the specimen.

Y-axis Table-feed Cutting: Feeding the clamped specimen into a rotating cut-off wheel using a T-slotted feed table.

X-axis Parallel Cutting (optional): Parallel serial sectioning in the x-axis with optional movable x-bed.



SERVOCUT 302

Medium Size: Cutting capacity 85/110 mm
with cut-off wheel dia. of 250/300 mm



SERVOCUT 402

Large Size: Cutting capacity 130/150 mm
with cut-off wheel dia. of 350/400 mm



SERVOCUT 502

Very Large Size: Cutting capacity 130/180 mm
with cut-off wheel dia. of 400/500 mm



SERVOCUT 602

Extremely Large Size: Cutting capacity 225 mm
with cut-off wheel dia. of 500/600 mm

METACUT SERIES

METKON chop cutting machine METACUT 302 is designed for wet cutting of large and small, regularly or irregularly shaped workpieces of metalic, ceramic or composite materials.

METACUT 302 has the capacity to cut solid sections up to 115 mm in diameter. The side access port permits the sectioning of extra-long workpieces, as well.

METACUT 302 has the highest safety standards. The interlocking safety device does not allow the motor to be started unless the hood is closed. The hood can not be opened before the motor is stopped.

Abrasive Cutting



METACUT 302

Manual Chop Cutting: Cutting capacity 90/115 mm with cut-off wheel dia. of 250/300 mm

MICRACUT SERIES

MICRACUT precision cutters are used for precise and deformation-free cutting of "Metals, Ceramics, Electronic Components, Crystals, Composites, Biomaterials, Sintered Carbides, Minerals, etc.

Manual/Motorized drive mechanism positions the specimen head in X-direction with high accuracy. Automatically adjusted feed rate and cutting force allows even the most delicate samples to be cut without deformation. Powerful cutting motor has variable cut-off wheel speeds in different ranges allowing both high speed and low speed cutting.

Precision Cutting



MICRACUT 152

Low Speed Precision Cutting
Max. disc size 175 mm, Speed Range 50-1500 rpm.



MICRACUT 200-S

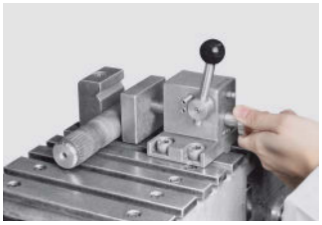
Automatic High Speed Precision Cutter
Max. disc size 200 mm, Speed range 100-5000 rpm.



MICRACUT 202

Automatic High Speed Precision Cutter
Max. disc size 200 mm, Speed Range 100-5000 rpm.

ACCESSORIES



Quik Acting Clamping Vise Assembly Left (Stainless Steel)

GR 0030 for SERVOCUT 402
GR 0013 for METACUT 302
GR 0122 for SERVOCUT 502
GR 0170 for SERVOCUT 302
GR 0548 for MICRACUT 202



Quick Acting Clamping Vise Assembly Right (Stainless Steel)

GR 0029 for METACUT 302 & SERVOCUT 402
GR 0012 for METACUT 302
GR 0121 for SERVOCUT 502
GR 0172 for SERVOCUT 302



Compact Vise Assembly, Spring Loaded (Stainless Steel)

GR 0154 for METACUT 302 & SERVOCUT 402
GR 0151 for METACUT 302 & SERVOCUT 302



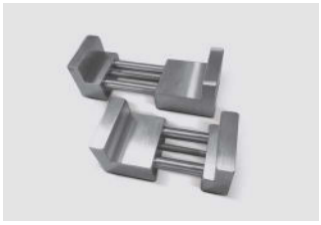
Vertical Clamping Device With Clamping Shoe

15 02 for METACUT 302 & SRC 402/502
15 01 for METACUT 302 & SERVOCUT 302
15 05 for MICRACUT 202 & GEOCUT 302
15 06 for SERVOCUT 602



Height Block

15 03 for MTC 302/SRC 302
15 04 for MTC 302/SRC 402/502
15 07 for SERVOCUT 602



Fastener Vise For Longitudinal Sectioning of Screws, Ball Joint, Tubes

GR 0310 for MTC 302/SRC 302/402
GR 0312 for MTC 302/SRC 402



Fastener Vise For Longitudinal Sectioning of Screws, Fasteners Tubes

GR 0453 for MIC 152/202/SRC 302/MTC 302



Cabinet For Floor Model

GR 0939 for METACUT 302
GR 1681 for SRC 302/GEOCUT 302



Fumefilter Centrifugal Separator

GR 1682 for SRC 302/402/GEOCUT 302
GR 1554 for SRC 502
GR 0134 for SRC 602



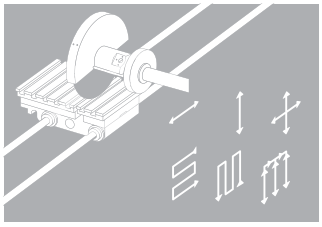
Laser Allignment Unit (for MA & AA models) (To be ordered simultaneously together with the machine order)

GR 0125 for MIC 202/SRC 302/402/502
GR 0135 for SERVOCUT 602



Flange Set With Larger Diamete

GR 0993-01 for SERVOCUT 502, Ø166 mm
GR 0992-01 for SERVOCUT 402, Ø133 mm
GR 0991-01 for SERVOCUT 302, Ø100 mm
GR 0410 for MICRACUT 202/152, Ø75 mm
GR 0411 for MICRACUT 202, Ø100 mm



Software Package for Optional Cutting Methods; Diagonal Cut, Step Cut, Segment Cut (for AA models)

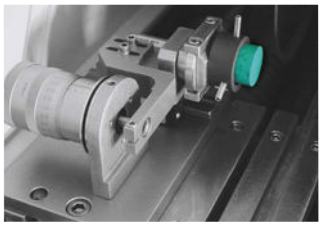
GR 0925 for SERVOCUT 302/402/502/602



Bandcool Band Filter Unit

GR 1561 for SERVOCUT 302

ACCESSORIES



Manual X-axis Positioning Unit for Specimen Vises With Dovetail Plates

GR 0825 for MICRACUT 202



Stand With Rotation for Specimen Vises With Dovetail Plates

GR 0826 for MICRACUT 202



Stand for Specimen Vises With Dovetail Plates

GR 0547 for MICRACUT 202



Clamping Tools

GR 0548 for MICRACUT 202
GR 0551 for MICRACUT 202
15 05 for MICRACUT 202 & GEOCUT 302



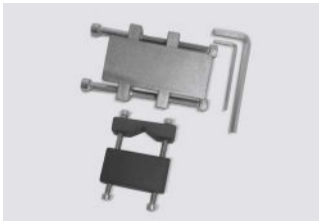
Cutting Table Attachment for Manual Cutting of Extra Flat Specimens & PCB's

GR 0213 for MICRACUT 152



Dressing Unit

GR 0409 for MICRACUT 152
GR 0412 for MICRACUT 202



Universal Specimen Vise

GR 0210 for MICRACUT 202/200-S/152
GR 0400 for MICRACUT 202/200-S/152



Specimen Vise With Double Parallel Vice for Long Specimens

GR 0401 for MICRACUT 202/200-S/152



Specimen Vise (Teardrop shape)

GR 0430 for MICRACUT 202/200-S/152
GR 0431 for MICRACUT 202/200-S/152



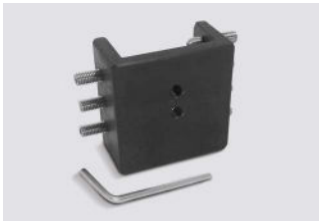
Fastener Vise for Longitudinal Sectioning of Screws, Fasteners, Tubes, Etc From 12 to 45 mm in length

GR 0453 for MICRACUT 202/200-S/152



Specimen Vise for Round, Cylindrical and Mounted Specimens

GR 0402 for MICRACUT 202/200-S/152
GR 0434 for MICRACUT 202/200-S/152



Specimen Vise for Irregular Shaped Specimens

GR 0403 for MICRACUT 202/200-S/152



Specimen Vise for Adhering Specimens

GR 0404 for MICRACUT 202/200-S/152



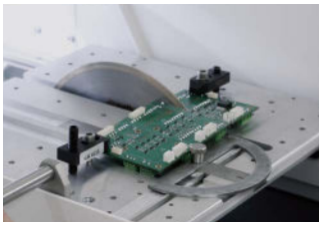
Specimen Vise for Biomedical Samples

GR 0405 for MICRACUT 202/200-S/152



Mechanical Glass Slide Holder

GR 407 for MICRACUT 200-S



Movable or Fixed Cutting Table Attachment

GR 0215 for MICRACUT 200-S
GR 0216 for MICRACUT 200-S

ECOPRESS SERIES

Programmable Automatic Mounting Press 7" HMI touch screen control, with Siemens PLC control unit, programmable with colored LCD display, program based mounting sequences, electro hydraulic pressure (requires no air), pressure up to 300 bar, temperature up to 200 C, operation time up to 35:00 minutes, short cycle time, thermostatically controlled heating power of 1650W, automatic cooling cycle with three modes of cooling rates(standard cooling, slow cooling and based on time), programmable preheating and preloading, stand-by temperature, selectable mould sizes from 25 mm to 50 mm, easy to close bayonet closure, audible warning signal, ready for operation.
230 V, 1-phase, 50/60 Hz.

Programmable Automatic Mounting Press with dual cylinders 7" HMI touch screen control, with Siemens PLC control unit, programmable with colored LCD display, program based mounting sequences, electro hydraulic pressure (requires no air), pressure up to 300 bar, temperature up to 200 C, operation time up to 35:00 minutes, short cycle time, thermostatically controlled heating power of 2X1650W, automatic cooling cycle with three modes of cooling rates(standard cooling, slow cooling and based on time), programmable preheating and preloading, stand-by temperature, selectable mould sizes from 25 mm to 50 mm, easy to close bayonet closure, audible warning signal, ready for operation.
230 V, 1-phase, 50/60 Hz.

VACUMET

Vacuum Impregnation Unit for cold mounting. Especially designed for embedding and impregnation of porous materials under vacuum. In addition, glueing of specimens to glass slides for thin section analysis is possible. Vacumet is very simple to operate and ensures efficient impregnation.

Hot Mounting



ECOPRESS 102



ECOPRESS 202

Cold Mounting



VACUMET 52

ACCESSORIES



Mould assembly, with intermediate ram

26 01-03 for ECOPRESS 52/102/202
26 02-03 for ECOPRESS 52/102/202
26 03-03 for ECOPRESS 52/102/202
26 07-03 for ECOPRESS 52/102/202
26 04-03 for ECOPRESS 52/102/202
26 05-03 for ECOPRESS 52/102/202
26 06-03 for ECOPRESS 52/102/202
26 08-03 for ECOPRESS 52/102/202



Recirculating Coolant System

GR 1363 for ECOPRESS 52/102/202



Water Filtering and Pressure Regulator System

GR 1397-00 for ECOPRESS 52/102/202,
FORCIPOL 102/202/TS,
ACCURA 102, ELOPREP 102,
GEOCUT 302, GEOFORM 302,
SPECTRAL AG 102/PG 52



Spare Siliphos Cartridge Filter

YM 3824-00 for ECOPRESS 52/102/202,
FORCIPOL 102/202/TS,
ACCURA 102, ELOPREP 102,
GEOCUT 302, GEOFORM 302,
SPECTRAL AG 102/PG 52

MODULAR UNITS – BASE UNITS

FORCIPOL Series of grinding and polishing machines offer practical and economical solutions to your metallographic sample preparation needs.

All materials testing laboratories in the industry, research or educational field have a demand for sample preparation. Whether your requirements call for individual components or basic sample preparation, FORCIPOL family of instruments will meet your needs. FORCIPOL Series of instruments are available as Single wheel (FORCIPOL 102) and Dual wheel (FORCIPOL 202) Units. Both single and double wheel versions are suitable with Ø200, Ø250 and Ø300 mm wheels. The working wheel is powered by a high torque 1.0 HP electric motor with both clockwise and counterclockwise wheel rotation possibility. The state of the art frequency converter allows smooth speed variation (50-600 rpm) of the grinding wheel with soft start and soft stop. This allows the setting of the optimum speed for each individual preparation process. It is perfect choice for laboratories preparing a wide range of different materials from very small to very large.

Grinding & Polishing

The stylish and functional housing is corrosion free and easy to clean. Molded wheel bowls and drains eliminate leaks and the build-up of residue is prevented by constant flushing of the bowl. The drive elements are fixed on heavy duty aluminium alloy casting. The wheels are mounted on ball bearings allowing the application of high pressures to prepare even large specimens. Ball bearings used provide quite and vibration free operation. Water inlet and flexible water outlets with control valves for wet grinding are standard features. FORCIPOL instruments can be used for grinding, lapping and polishing with magnetic backed discs and cloths or by quick and simple exchange of wheels.

FORCIPOL instruments are designed to modular configuration for manual, semi-automatic and programmable automatic equipment. When only manual preparation is required, FORCIPOL Control Unit can be fitted on the FORCIPOL grinder / polisher. If automatic operation is required in the future, one of the FORCIMAT automatic heads can be installed at any time.



FORCIPOL 102



FORCIPOL 202

MODULAR UNITS – HEAD UNITS

The FORCIPOL Control Unit is ergonomically placed on the equipment. Modern touch pad controls with ergonomic turn knob allows fast and easy setting of parameters and increases productivity. Wheel speed, operation time, motor on/off and water on/off functions can be set in seconds. Cooling water is automatically activated and deactivated at the beginning and end of operation. The actual wheel speed and operation time are digitally displayed. All parameters can be changed during operation. The last parameter settings are always retained in the memory. An audible signal notifies the operator when the process is completed.

The FORCIMAT 52 Automatic Head is mounted on a rigid hardened post which is fixed to the base of the FORCIPOL grinder/polisher. It can be adapted to all FORCIPOL series grinder/polishers and is easily and rapidly positioned by means of a quick-locking clamping mechanism. The sample holder can prepare 6 samples simultaneously and it is driven by a 100 Watt DC motor at 50-150 RPM. The pneumatically applied individual force is adjustable between 5 N (1.1 lb.) and 60 N (13.5 lb.) from the front panel and is displayed on a gauge.

FORCIMAT 102 Programmable Automatic Head is coloured HMI touch screen controlled and with the Base Unit, thus creating automatic preparation system. It is used to prepare high volumes of metallographic, ceramic and mineralogical specimens with consistent reproducible quality. The Automatic Head can apply both "Central" and /or "Individual" forces. It can accommodate single samples as well as multi - sample holders thus offering a perfect solution for all levels of sample throughput requirements. The Automatic Head is mounted to a hardened steel post which is affixed to the cast base of the FORCIPOL grinder/polisher. It can be adapted to all FORCIPOL series grinder/polishers and is easily and rapidly positioned by means of a quick-locking clamping mechanism.



Forcipol Control Unit



FORCIMAT 52



FORCIMAT 102

MODULAR UNITS – PERISTALTIC FLUID DISPENSERS

DOSIMAT Peristaltic Dispenser is an optional accessory for the FORCIMAT 52 and FORCIMAT 102 systems. It is an automatic fluid dispensing instrument used in combination to obtain consistent specimens and to save time and consumables. DOSIMAT can feed both diamond suspensions / lubricants and aluminium oxide suspensions.

Automatic dosing of consumables is applied precisely for perfect sample surfaces. Efficiency is further increased with high quality peristaltic pumps that guarantee exactly the same dosing every time for automation and control of consumable consumption. The liquid is dosed exactly to where the operator wants it on the polishing cloth. No vaporization or spray mist occurs.

It is possible to clean all the tubes with a single button at the end of preparation steps to eliminate the risk of clogged tubes.

Three different DOSIMAT Peristaltic Fluid Dispensers are available for FORCIMAT 52 and FORCIMAT 102:

DOSIMAT 12 has one peristaltic and non-misting pump for diamond suspensions, alumina suspensions, lubricant or 2 in 1 suspensions and can be matched with Forcimat 52 and Forcimat 102 Automatic Heads. DOSIMAT 52 has 5 peristaltic pumps for diamond suspensions / lubricant and 1 pump for aluminium oxide suspension or 2 in 1 suspensions and can be matched with Forcimat 52 Automatic Head. DOSIMAT 102 has 5 peristaltic pumps for diamond suspensions / lubricant and 1 pump for aluminium oxide suspension or 2 in 1 suspensions and can be matched with Forcimat 102 Automatic Head.



DOSIMAT 12



DOSIMAT 52



DOSIMAT 102

ADVANCED UNITS

ACCURA 102 Advanced high end grinding and polishing system, robust construction on dual columns for applications requiring extremely flat specimen surfaces. Suitable for both 250 mm and 300 mm applications. Motorized positioning of the Head in vertical (Z) and horizontal (X) axes with memory function. Precise control of the force applied. Combined Z-axis material removal control system. Ability to store and recall preparation programs on the LCD screen. Efficient control of consumable consumption by integrated Peristaltic Dispensing Unit. Transparent cover for improved safety and working area.



ACCURA 102

Grinding & Polishing

ACCURA 102 can accommodate 250 mm diameter wheel as well as 300 mm diameter wheels. The robust construction on dual columns ensures extremely flat surfaces. The working wheel is powered by a high torque 1,5 HP electric motor. The state of the art frequency converter allows smooth speed variation (50-750 rpm) of the grinding wheel with soft start and soft stop. Powerful enough to planar grinding of large and multiple specimens. Suitable for a very wide range of applications from very coarse grinding to very fine grinding and polishing. Automatic disc cleaning & drying function can be activated with a single button to obtain perfectly cleaned disc surfaces in seconds. The specimen holder is equipped with variable speed 50-150 rpm as well.



ACCURA 102

HIGH-VOLUME PREPARATION SYSTEMS

FORCIPLAN 352 Automatic Planar Grinder is designed for first step initial planar grinding of very large specimens or a high volume of specimens in specimen holders. It is fast and efficient in providing high quality flat specimen surface thus saving time on the subsequent fine grinding and polishing steps. FORCIPOL 352 is designed for grinding and polishing of very large specimens or a high volume of specimens in specimen holders. It reduces total preparation time for high-volume sample throughput. Uses the same sample holders with FORCIPLAN 352 Planar Grinder. Therefore, it can be combined with FORCIPLAN 352 to increase sample throughput.

Both FORCIPLAN 352 and FORCIPOL 352 can accomodate sample holders up to Ø220 mm. 8 pieces of Ø50 mm samples or 10 pcs of Ø40 mm samples can be prepared at the same time. As well as irregular shaped or larger size samples can also be prepared. Special sample holders can be designed by Metkon according to application requirements.



FORCIPLAN 352

FORCIPLAN 352 has Ø350 mm flat grinding stone. Comparing with traditional SiC papers, the flat grinding stone offers faster preparation times and higher removal rates. With extremely high material removal performance and reducing several grinding steps without changing paper, the FORCIPLAN 352 increases the productivity and total sample preparation time reduces significantly.

FORCIPOL 352 is equipped with a Fully automatic sample cleaning and
drying station is able to make:
- Pressurized water cleaning
- Ethanol cleaning
- Fast drying with filtered air

It can be programmed for each grinding/polishing steps with same or different parameters. After grinding or polishing step is completed, operator only needs to change grinding or polishing disc for the next step. No need to remove to clean the sample holder, it is already cleaned automatically.



FORCIPOL 352

HIGH-VOLUME PREPARATION SYSTEMS

VELOX 102 Fully Automatic Programmable Grinding/Polishing System is developed for operator free sample preparation for high volume sample throughput starting from Planar Grinding to Fine Grinding/Polishing/Fine Polishing/Cleaning and Drying. You only need to place the sample holders in the auto-feed system, select the program number for your specific application and depress the "Start" button.

That's it! Your samples will be ready for analysis fully automatically. Possibility to queue up to 6 sample holders during operation for non-stop sample preparation.



VELOX 102

VELOX 102-JR Fully Automatic Programmable Grinding/Polishing System is developed for operator free sample preparation for high volume sample throughput starting from Coarse Grinding to Fine Grinding/Polishing/Fine Polishing/Cleaning and Drying. You only need to place the sample holders, select the program number for your specific application and depress the "Start" button. That's it! Your samples will be ready for analysis fully automatically.



VELOX 102-JR



Recirculation Cooling Tank, 60 lt

GR 1988 for FORCIPLAN 352



Fine filter sheets for recirculation cooling tank

YM 8813 for GR 0018/0019/1675/1945/1988



Coolant level sensor for recirculation cooling tank Informs operator when coolant level is insufficient.

GR 1559 for Recirculation Coolant Tanks



Magnetic collector rod for recirculation cooling tank

GR 1540 for Recirculation Coolant Tanks



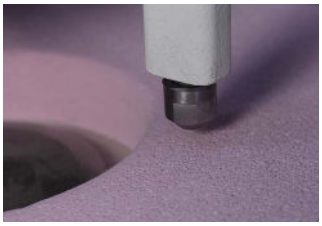
3-lights warning beacon with audible signal

GR 0140 for FORCIPLAN 352
SERVOCUT 402/502/602



Barcode Scanner for easy loading correct programs for different samples

GR 0665 for FORCIPLAN 352/ACCURA 102



Diamond Tip for Dressing Unit

YM 10781-00 for FORCIPLAN 352



PVC wheel for Grinder/Polishers

31 01 for FORCIPOL 102 & FORCIPOL 202
31 21 for FORCIPOL 102 & FORCIPOL 202
31 31 for FORCIPOL TS



Aluminium wheel for Grinder/Polishers

31 02 for FORCIPOL 102 & FORCIPOL 202
31 22 for FRC 102/202
31 42 for ACCURA 102/VELOX 402
31 52 for ACCURA 102/VELOX 402
31 32 for FRC TS



Splash guard for Grinder/Polishers

31 53 for FORCIPOL 102 & FORCIPOL 202
31 63 for FORCIPOL 102/202
31 64 for ACCURA 102
31 73 for FRC TS,ACCURA 102
31 82/83/93 for FORCIMAT



Paper ring for Grinder/Polishers

31 04 for FORCIPOL 102 & FORCIPOL 202
31 24 for FORCIPOL 102 & FORCIPOL 202
31 34 for FORCIPOL TS



Cover for Grinder/Polishers

31 06 for FORCIPOL 102 & FORCIPOL 202
31 36 for FORCIPOL TS



Special Plexyglass Protection Cover

31 13 for FORCIPOL 102/TS
31 14 for ACCURA 102



Air filtering and lubricating unit

GR 0440 for FORCIMAT, FORCIMAT-TS
ACCURA 102



Dosing Modules for ACCURA 102

GR 1016 with 6 micro peristaltic pumps



Z-axis material removal with depth control

GR 0872 for FORCIMAT 102
GR 0871 for ACCURA 102



Cabinet for floor model

GR 1693 for ACCURA 102
GR 0830 for FRC 102/TS



Recirculating Cooling Tank

GR 1394-00 for GEOCUT 302, SPECTRAL PG SPECTRAL AG
GR 1383-00 for GEOFORM 102



ENVIRO Recirculating Filtering System

GR 0865 for FORCIPOL's, ACCURA 102 & VELOX 102



Set of insert rings

33 02 for 30 mm
33 03 for 25 mm or 1"
33 04 for 1 1/4"
33 05 for 1 1/2"



Specimen Loading Fixture For Central Force Application

45 60 for FORCIPLAN 352, FORCIMAT 102, ACCURA 102 (LEVOMAT)



Central Force Specimen Holders(Rectangular) for FORCIMAT 102, ACCURA 102, FORCIPLAN 352

46 44 4 x (25 X 35 mm.), Ø 130 mm.
46 45 3 x (40 X 70 mm.), Ø 130 mm.



Central Force Specimen Holders (Teardrop) for FORCIMAT 102, ACCURA 102, FORCIPLAN 352

46 88 for 6 x 32 - 25 mm. , Ø130 mm.
46 89 for 6 x 42-25 mm., Ø160 mm.
46 73 for 10 x 40-25 mm., Ø210 mm.
46 74 for 8 x 50-25 mm., Ø210 mm.
46 71 for 6 x 40-25 mm., Ø160 mm.
46 72 for 4 x 52-25 mm., Ø160 mm.



Specimen Loading Plate

45 10 for Ø130 mm Specimen Holders
45 50 for Ø160 mm Specimen Holders
45 40 for Ø210 mm Specimen Holders



Universal specimen holder for large and irregular shaped specimens

46 77 for FORCIPLAN 352 / ACCURA 102 / FORCIMAT 102
46 78 for FORCIPLAN 352
46 39 for FORCIPLAN 352,FORCIPOL 352



Individual Force Specimen Holders (for FORCIMAT 52/102/TS, ACCURA 102)

33 31 Individual force specimen holder, Ø145mm, for 6 x Ø25 mm specimens.
33 32 Individual force specimen holder, Ø145mm, for 6 x Ø30 mm specimens.
33 33 Individual force specimen holder, Ø145mm, for 6 x Ø40 mm specimens.
33 34 Individual force specimen holder, Ø155mm, for 3 x Ø50 mm specimens.
33 35 Individual force specimen holder, Ø145mm, for 6 x Ø1" specimens.
33 36 Individual force specimen holder, Ø145mm, for 6 x Ø1 1/4" specimens.
33 37 Individual force specimen holder, Ø145mm, for 6 x Ø1 1/2" specimens.
33 38 Individual force specimen holder, Ø155mm, for 3 x Ø2" specimens.
33 39 Individual force specimen holder, Ø145mm, Blank.



Specimen Holders for Central Force Application (for FORCIMAT 102, ACCURA 102, FORCIPLAN 352, FORCIPOL 352)

PORTABLE METALLOGRAPHY

Grinding & Polishing

Portable grinding/polishing & Electrolytic etching Contains maintenance-free batteries to work without stationary mains, consists of a control unit and a precision hand-guided grinding-polishing device with high performance micro motor. Output 36 V, adjustable in 5 steps
Hand-guided device: High Torque Brushless DC Motor Reduction Gear – Angle Piece 90° – Disk 30 mm diameter
Automatic Charger 12 V / 2,5 A
Optional Etching Pen
Dimensions: 104 x 54 x 160 mm, Weight 1 kg.



MOBIPREP

Portable Metallurgical Microscope
Basic Magnification: 100x - 800x
Eyepieces: WF10X/FN18, Dia 23.2
Objectives: 10x/0.25 (W.D. 7,3 mm), 50x/0.65 (W.D. 0.5mm)
C-mount adapter (for connecting C-mount cameras)
Mechanical tube length 160 mm
Coaxial coarse/fine focus system, range: 36mm
Polarizing Kits: Polarizer and Analyzer
Coaxial illumination, build-in LED rechargeable, brightness adjustable
Including portable aluminium case.



MOBISCOPE

ELECTROLYTICAL PREPARATION

Electrolytic Polishing & Etching System
Automatic and programmable electrolytic polishing and etching of metallographic specimens, with Siemens PLC control unit, user friendly colored 7" LCD touch screen controls, short polishing times and maximum reproducibility, separate polishing unit equipped with drain pipe and integrated cooling system, dual Polishing & Etching units operatable by the same control unit, optional external etching unit, 0-100 V output voltage for polishing, 0-25 V for etching and 0-25 V for external etching. Variable polishing time and current, with current limitation, built in safety features with continuous control of electrolyte, scanning function for easy determination of parameters, variable speed controlled pump with magnetic stirrer for electrolyte flow. Suitable for both normal and low temperature electrolytic polishing. Ready for operation. 230 V, 1-phase, 50/60 Hz. Includes 1 pc. of stainless steel cathode.



ELOPREP 102

ACCESSORIES



Etching-Pen for electrolytic etching

90 10 for MOBIPREP



Angle Piece

90 11 (90°) for MOBIPREP
90 12 (45°) for MOBIPREP



Straight quick release piece of, with 3-mm collet on

90 13 for MOBIPREP



Grinding and polishing carriers

90 14 for MOBIPREP



Shoulder bag, synthetic leather

90 15 for MOBIPREP



Magnet Stage

90 30 for MOBISCOPE



Objectives

90 31 (20x) for MOBISCOPE
90 32 (80x) for MOBISCOPE



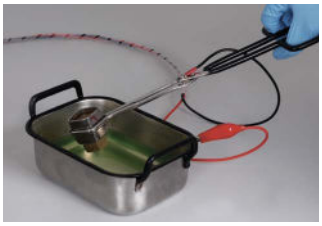
Cathodes

YM 6904-00 Stainless steel
YM 6937-00 Cupper
YM 6936-00 Titanium



Electrolyte container with lid External

46 11 for ELOPREP



External etching unit

46 10 for ELOPREP



Masks

46 12 0,5 cm^2
46 13 1 cm^2
46 14 2cm^2
46 15 5cm^2
46 16 without aperture
46 17 set of masks



Water Filtering and Pressure Regulator System

GR 1397-00 for ECOPRESS 52/102/202, FORCIPOL 102/202/TS, ACCURA 102, ELOPREP 102, GEOCUT 302, GEOFORM 302, SPECTRAL AG 102/PG 52



Spare Siliphos Cartridge Filter

YM 3824-00 for ECOPRESS 52/102/202, FORCIPOL 102/202/TS, ACCURA 102, ELOPREP 102, GEOCUT 302, GEOFORM 302, SPECTRAL AG 102/PG 52

MICROSCOPY

Inverted Metallurgical Microscope

Head: Trinocular, 45° inclined.
Eyepieces: WF10x/22mm.
Nosepiece: 5-positions.
Objectives: 5x/0.15, 10x/0.3, 20x/0.45, 50x/0.55.
Magnifications: 50x, 100x, 200x, 500x.
Focusing system: Coaxial coarse and fine.
Stage: 250x230mm; mechanical stage with lowered ergonomic coaxial controls.
X-Y range: 120x80mm.
Diaphragms: Field and aperture diaphragms (centrable)
Illumination:18W/4000K LED bulb in external case. Centrable bulb and brightnesscontrol.
Filters: Blue, polarizer & analyzer



UPM 902

Upright Metallurgical Microscope

Head: Trinocular, 30° inclined, 360° rotating.
Eyepieces: WF10x/22mm.
Nosepiece: 5-positions, reversed.
Objectives:
5x/0.15, 10x/0.3, 20x/0.45, 50x/0.55,100x/0.9 (dry).
Magnifications: 50x, 100x, 200x, 500x, 1000x.
Focusing system: Coaxial coarse and fine.
Stage: Double layer with mechanical sliding stage, 175x145 mm, moving range 76x52 mm.
Condenser: 0,7 N.A. swing-out type, with iris diaphgram, centrable and focusable.
Illumination: LED system. 50.000 hours life time. 6300K temperature. 3.6W low energy consumption, light intensity equivalent to a 50W halogen bulb. Brightness is adjustable.
Metallurgical Attachment: High-power white system with brightness control; field and aperture diaphragms (centrable). Simple sliding darkfield system.
Filters: Blue, polarizer & analyzer.



IMM 902

MICROSCOPY

Polarization Laboratory Microscope

Head: Trinocular, 30° inclined, 360° rotating
Eyepiece: WF10x/22mm
Bertrand lens: Swing-out type; centrable (for Conoscopy/Orthoscopy)
Polarizing attachment: Blue filter, 0°-90° rotating analysing filter, l slip (first class red), 1/4 l slip,quartz wedge
Nosepiece: 4-positions with centering mechanism for all objectives
Objectives: For transmitted and incident polarized light 5x/0.15, 10x/0.25, 20x/0.40, 50x/0.70
Magnifications: 50x, 100x, 200x, 500x Coaxial coarse and fine 160mm diameter; 360° rotating with stop knob and 0.1° vernier
Condenser: 0,9 N.A., with iris diaphragm, focusable and centrable. With rotating polarizing filter (swing-out type)
Illumination: Transmitted light: LED system.
Incident light: LED system polarizing attachment with built-in polarizer filter, aperture diaphragm and field diaphragm.



IPP 902



PST 902

Trinoculer Stereo Zoom Microscope

Optical System: Parallel Optics
Head: Binocular 30° inclined, 360° rotatable
Stand: Large stand, fixed arm type, with Led illumination, coaxial macro & micro focusing knobs
Eyepieces: WF10x/22mm, high-point
Objective: Zoom 0,8x ...6,4x
Working Distance: 80 mm.
Photo/Video Beam Splitter: 1 port
Illumination: Ring light led illuminator, with continuous and external brightness control.



PST 901-S

Trinoculer Stereo Zoom Microscopy

Basic Magnifications: 6.5x - 45x
Eyepieces: WF 10x, paried
Objectives: 6.5x - 45x
Stage: Trinocular zoom head and Post Stand Fluoresence ring illuminator
Focusing: Rack and pinion system, with antistatic PVC dust cover

IMAGE ANALYSIS

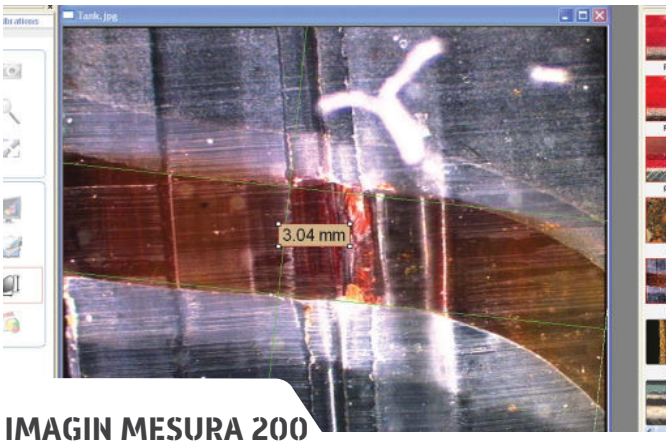
IMAGIN MESURA 200 allows you to view the live microscope image, compare it with stored images and if necessary save it to the system. Several databases can be created according to the customers, projects, metarials or specimens.

IMAGIN MESURA 200 has several measurement tools for performing manual measurements of lines, curves, angles, areas etc. after which they can be saved and archived. Many application areas exists like " Weld Assesments, Macro analysis, PCB component measurements etc.

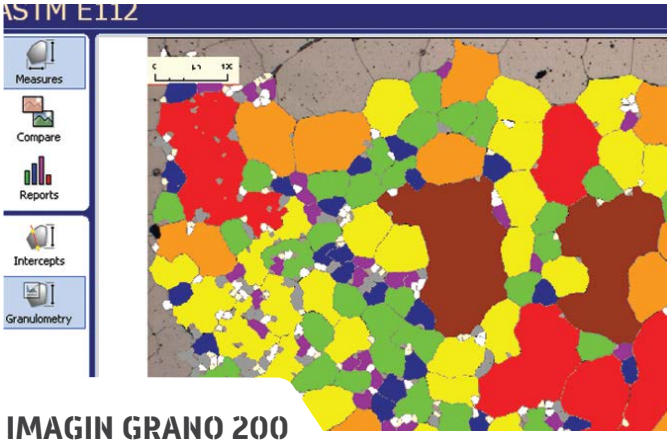
IMAGIN GRANO 200 module has been designed for automatic measurement of grain size according to ASTM E112 and EN ISO 643. Firstly, the grain boundaries are detected after which the grain size can be calculated in different ways; "Intercept Method" counts the number of ntersection in each field and the grain size is calculated by Abrams 3 - circle or Linear Equations. "Area Method" determines the size of each individual grain by area after which the grains are categorized for the calculation of fractions.

Microscopy & Image Analysis

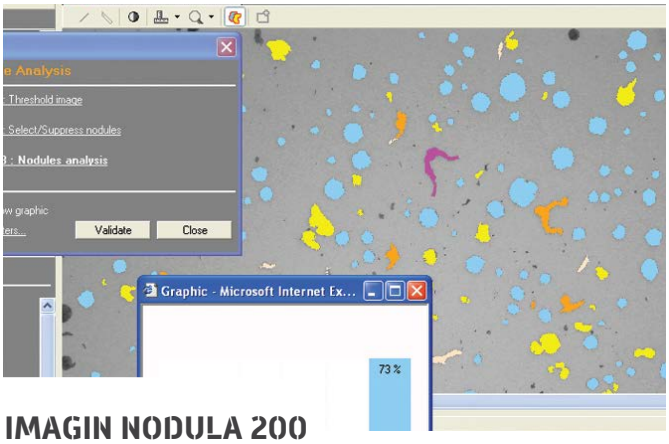
IMAGIN NODULA 200 module is designed for the analysis of graphite in cast irons especially in Ductile and Gray Iron Foundries and Quality Control Labs. Nodularity assesment is made bypercent count and nodules proportion. It is also possible to measure " Area percent ferrite, Area percent graphite and Area percent Pearlite". Archiving of all images with calibration and generating Reports creates an additional advantage to increase productivity and repeatability.



IMAGIN MESURA 200



IMAGIN GRANO 200

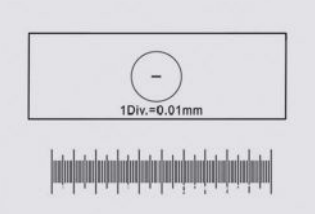


IMAGIN NODULA 200



Eyepiece

62 42 for IMM 902/UPM 902/IPP 902
62 41 for UPM 902
62 71 for PST 902
62 72 for PST 902
62 75 for PST 901-S
62 76 for PST 901-S



Micrometric slide

60 22 for IMM 901
60 23 for PST 901
60 41 for IMM 902/UPM 902/IPP 902



Eyepiece, WF 10x, with ASTM Grain Size E112

GR 0415 for IMM 901



Objective

61 71 for PST 902
61 72 for PST 902
61 73 for PST 902
61 74 for PST 901-S
61 75 for PST 901-S
61 76 for PST 901-S



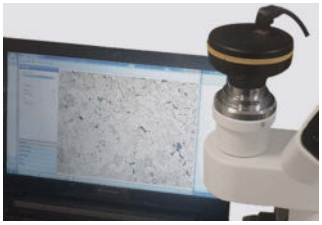
Eyepiece micrometer

60 12 for IMM 901
60 13 for PST 901
62 53 for IMM 902/UPM 902
62 43 for IPP 902
62 73 for PST 902
62 77 for PST 901-S



Mechanical Stage

60 43 for PST 901
60 45 for IMM 902



IMAGIN HARDWARE SET

66 10 for IMM 901,PST 902,901-S



Holder for metallurgical samples(15 mm hole)

60 25 for IMM 902



Photo Adapter for IMAGIN HARDWARE SET

60 75 for IMM 902
60 74 for UPM 902
60 76 for PST 902/IPP 902



Eyecup

62 60 for IPP 902



Special protective glass

60 67 for IMM 902
60 69 for PST 902
60 68 for IPP 902



Cleaning kit

60 66 for PST 902/IPP 902



Polarized filter

61 81 for IPP 902
61 82 for IPP 902
61 83 for IPP 902
61 84 for IPP 902

HARDNESS TESTING

Metkon Hardness Testers

DUROLINE Hardness Testers are ideal instruments for quality assurance, quality control, research and metallurgical departments to monitor the hardness during fabrication and after heat treatment or welding as well as for the performance analysis on metal parts and new alloys.

Typical applications are determining the Rockwell or Vickers micro- and macro-hardness of steel alloys and metal components, small precision parts, thin material or wire, coatings and performing case depth determinations (CHD, EHT, NHT) on cross sections.



DUROLINE M

Vickers/Knoop Micro-Hardness Tester
Force range: 0.01 kgf to 1 kgf (Deadweight)



DUROLINE LV

Vickers/Knoop Micro/Macro-Hardness Tester
Force range: 0.1 kgf to 10 kgf (Closed Loop Load Cell Controlled)



DUROLINE V

Vickers/Knoop Macro-Hardness Tester
Force range: 0.3 kgf to 30 kgf (Closed Loop Load Cell Controlled)



DUROLINE R

Rockwell/Superficial Rockwell Hardness Tester
Force range: 3 kgf to 250kgf (Closed Loop Load Cell Controlled)

Duroline

Automatic Test & Measurement
The METKON N-Sure software program features a flexible Windows based user interface that increases productivity and operator efficiency by automating the test & measurement process. Since the application and removal of the test loads and measurement are fully automatic, repeatability is excellent, testing time is reduced, and throughput is increased. As a result, costly and time-consuming rework is eliminated.

METKON N-Sure software program provides advanced database management of test results, report generation and printing fuctions. Saving and retrieving measurement data is an absolute requirement when it comes to testing hardness results of critical components in various industrial segments. The N-Sure program ensures that data is safely stored and presented in standard or customized reporting form.



Fine specimen holders

GR 2026 for Hardness Testing
GR 2027 for Hardness Testing
GR 2028 for Hardness Testing



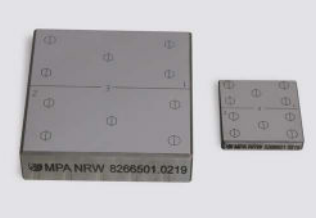
Object Lenses, 5X/10X/20X/40X

GR 2041 for Hardness Testing
GR 2042 for Hardness Testing
GR 2043 for Hardness Testing
GR 2044 for Hardness Testing



Vickers/Knoop Indenters

GR 2047 for Hardness Testing
GR 2048 for Hardness Testing



Certificated Standard Test Blocks

GR 2061 for Hardness Testing
...
GR 2069 for Hardness Testing
GR 2161 for Hardness Testing
...
GR 2164 for Hardness Testing



Precision vise (opening 43mm)

GR 2025 for Hardness Testing



Manual XY-Stages

GR 2023 for Hardness Testing
GR 2024 for Hardness Testing



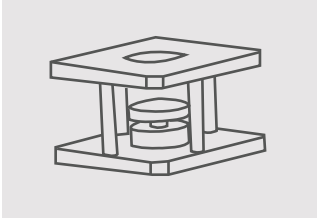
Flat and V-Anvils

GR 2021 for Hardness Testing
GR 2022 for Hardness Testing
GR 2121 for Hardness Testing
GR 2122 for Hardness Testing
GR 2123 for Hardness Testing



Certificated calibration scale glass

GR 2071 for Hardness Testing



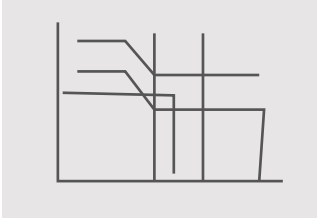
Specimen Holder for Mounted Samples

GR 2031 for Hardness Testing
GR 2032 for Hardness Testing
GR 2033 for Hardness Testing
GR 2034 for Hardness Testing



Multiple Specimen Holder for Multiple Mounted amples Ø25/30/40 mm

GR 2035 for Hardness Testing
GR 2036 for Hardness Testing
GR 2037 for Hardness Testing



Software Module for EHD, CHD Testing

GR 2081 for Hardness Testing



ISO/DaKKs Certificated Rockwell and Brinell Indenters

GR 2141 for Hardness Testing
...
GR 2148 for Hardness Testing

GEOLINE FOR PETROGRAPHY

GEOCUT 302-S consists of a cast aluminium base on which the motor and the working space are provided in the form of two separate housings. A large window of Lexan and a sealed 12V lamp in the cutting chamber allow precise observation of the cutting process at an optimum degree of safety. A large feed table located in the cutter's generous work area can accommodate a variety of different clamping devices which need to be selected. The feed table provides a long travel depth making the GEOCUT 302-S ideal for cutting long or deep samples in a single pass. Cross-feed table with digital read-out is available for parallel cutting.

Preparing thin sections requires highly precise instruments and knowhow. GEOFORM 102 has two parts: Cutting and Grinding. On the cutting module, the specimen is fixed on a holder with vacuum and re - sectioned upto a thickness of approx. 0,5mm.

The grinding module is designed for precision grinding. A universal vacuum holder accepts different sizes of glass slides by changing the location pins. A built-in digital micrometer ensures high precision and the specimen is ground with an accuarcy of 2 microns.

Petrography

FORCIPOL-TS is a strong grinding and polishing instrument with variable speed between 50-600 rpm and for 300 mm diameter wheels. By using appropriate working discs, it can carry the grinding, lapping and polishing processes very smoothly.

FORCIPOL, when coupled with FORCIMAT-TS becomes an automatic thin section preparation system. FORCIMAT-TS is an automatic head with low speed for thin section and petrographic sample preparation. The force is individually applied and adjustable from the front panel.



GEOCUT 302-S



GEOFORM 102



FORCIPOL-TS
FORCIMAT-TS

ACCESSORIES



Quick Clamping Device for round petrographic specimens

GR 1811 for GEOCUT-S



Universal vise for large specimens, rocks,etc.

GR 1812 for GEOCUT-S



KKP 040 Vertical Clamping Device, with clamp.shoe

15 05 for GEOCUT-S



Recirculating Cooling Tank

GR 1394-00 for GEOCUT 302, SPECTRAL PG
SPECTRAL AG
GR 1383-00 for GEOFORM 102



Accessories set for cutting large specimens, GEOFORM

GR 1815 for 1"x3"
GR 1817 for 2"x3"



Fixture for mounting specimens

45 61 for GEOFIX



Hot Plate for Geofix

45 65



LAP-TS with Boron Carbide stops for lapping of thin sections, 60 mm. Dia.

33 10 for FRC 300-1V/ Forcimat TS



POL-TS special specimen holder for polishing of thin sections, 60 mm. Dia.

33 11 for FRC 300-1V/ Forcimat TS



Cabinet for floor model

GR 0760 for GEOCUT-S



Water Filtering and Pressure Regulator System

GR 1397-00 for ECOPRESS 52/102/202,
FORCIPOL 102/202/TS,
ACCURA 102, ELOPREP 102,
GEOCUT 302-S, GEOFORM 302,
SPECTRAL AG 102/PG 52



Spare Siliphos Cartridge Filter

YM 3824-00 for ECOPRESS 52/102/202,
FORCIPOL 102/202/TS,
ACCURA 102, ELOPREP 102,
GEOCUT 302-S, GEOFORM 302,
SPECTRAL AG 102/PG 52

SPECTRAL SERIES

Sample Preparation for Spectroscopy

SPECTRAL 250 is a table-top portable surface grinder for the preparation of steel samples for spectroscopy. Its compact design with vibration free operation makes it a practical instrument to work with. Low noise and dust generation levels as well as standart outlet for dust exhauster are additional advantages.

SPECTRAL 350 Grindersis used to achieve excellent precision flat surfaces of iron and steel samples for spectroscopic analysis. The robust and vibration-free construction has been designed for continuous operation at high sample throught put.

SPECTRAL 350-2S has two grinding discs with dual speed as 1400 and 2800 rpm. It's the most unique grinder, especially for foundries or steel plants having variety of materials.

SPECTRAL PG 52 is a compact bench-top pendulum grinder for fast grinding of iron and steel samples for spectroscapic analysis. It has a simple and reliable design with low noise and dust generation levels. It is completely enclosed and dustproof with LED light.



SPECTRAL PG 52



SPECTRAL MM 102



SPECTRAL 250



SPECTRAL 350

SPECTRAL PG 52 is suitable for wet and dry grinding with minium maintenance required which is mainly cleaning. It is possible to attach an external dust exhauster to the standard outlet at the rear side. The grinding arm is placed just in front of the machine making it ergonomic and easy to handle.

SPECTRAL PG 52 is especially suitable to grind hard materials like white cast irons.

SPECTRAL MM 102 is an automatic milling machine for fast milling of non-ferrous samples for OES and X-ray spectrometer analysis. Automatic fine surface milling guarantees the highest level of reproducibility throught automatic processing of the specimen. SPECTRAL MM 102 has a robust and reliable design with low noise and emmission levels. It is completely enclosed and sound-insulated with LED-light. The front cover can completely opened for easy access to all ides. SPECTRAL MM 102 is equipped with automatic sample feed with fine speed control. All important parameters of the milling process like feedrate, milling depth, spindle speed are programmable with HMI touch screen controls.

ACCESSORIES — SAMPLE PREPARATION FOR SPECTROSCOPY



Sample Holder for round specimens, Magnetic type

GR 1804 for SPECTRAL 250
SPECTRAL 350-2S



Sample Holder for round specimens, Mechanical type

GR 1805 for SPECTRAL 250
SPECTRAL 350-2S



Mechanical clamping device for samples upto 60 mm.

GR 1801 for SPECTRAL MM 102
SPECTRAL PG 52



Permanent Magnetic Clamping Device, 100x150 mm.

GR 1942 for SPECTRAL PG 52



Electromagnetic clamping device

GR 1929 for SPECTRAL PG 52



Milling Head

GR 1835 63 mm for SPECTRAL MM 102
GR 1836 80 mm for SPECTRAL MM 102



Manual measuring tool for cutter positioning

GR 1810 for SPECTRAL MM



Mechanical Vice, 3-legged

GR 1943 for SPECTRAL PG 52
SPECTRAL MM 102



T-Slotted Table

GR 1816 for SPECTRAL MM



Air cooling system

GR 1909 for SPECTRAL MM 102



SPECTRAL Floor Cabinet

GR 1907 for SPECTRAL MM 102
SPECTRAL PG 52



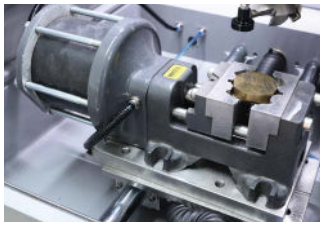
Recirculating coolant Tank

GR 1945 for SPECTRAL PG 52
SPECTRAL MM 102



Automatic Sample Height Measurement System for full cyclic operation

GR 1911 for SPECTRAL MM 102



Pneumatic Clamping Device with 3-Jaws

GR 1913 for SPECTRAL MM 102

CONSUMABLES FOR CUTTING



Sample preparation starts with cutting and good cutting means a good start

Selecting the right cut-off wheel ensures freedom from burn and distortion and is the best way to save time and consumables. Correct cutting produce specimens which are in perfect condition for the next preparation steps.

ABRASIVE CUT-OFF WHEELS

The most commonly used abrasives for the cutting of different materials are SiC and Al_2O_3

Silicon carbide is suitable for non-ferrous metals whereas aluminum oxide is preferred for ferrous metals. Hard wheels are used for cutting soft materials while soft wheels are recomended for cutting harder materials.

Metkon TRENO type wheels are used to obtain superior cut surfaces. Metkon CUTO series wheels are suitable for routine laboratory applications requiring a balance between wheel life and performance.



TRENO+PLUS

Series Abrasive Cut-off Wheels for use with METACUT & SERVOCUT

ORDER NO	CODE	DIAMETER mm.	ARBOR mm.	THICKNESS mm.	ABRASIVE TYPE	RECOMMENDED FOR CUTTING	QUANTITIES PER PACK
19-019/S	TRENO-Ti	250	32	1.6	SiC	Titanium and Very Ductile Materials	10
19-020/S	TRENO-NF	250	32	1.6	SiC	Non-ferrous materials	10
19-021/S	TRENO-H	250	32	1.6	Al_2O_3	Soft Steels and ferrous materials <23 HRC	10
19-022/S	TRENO-M	250	32	1.6	Al_2O_3	Medium Hard Steels and ferrous materials >20-35 HRC<	10
19-023/S	TRENO-S	250	32	1.6	Al_2O_3	Hard Steels and ferrous materials >35-55 HRC	10
19-024/S	TRENO-SS	250	32	1.6	Al_2O_3	Very Hard Steels and ferrous materials >55-70 HRC	10
19-040/S	TRENO-NF	300	32	2	SiC	Non-ferrous materials	10
19-041/S	TRENO-H	300	32	2	Al_2O_3	Soft Steels and ferrous materials <23 HRC	10
19-042/S	TRENO-M	300	32	2	Al_2O_3	Medium Hard Steels and ferrous materials >20-35 HRC<	10
19-043/S	TRENO-S	300	32	2	Al_2O_3	Hard Steels and ferrous materials >35-55 HRC	10
19-044/S	TRENO-SS	300	32	2	Al_2O_3	Very Hard Steels and ferrous materials >55-70 HRC	10
19-060/S	TRENO-NF	350	32	2.5	SiC	Non-ferrous materials	10
19-062/S	TRENO-M	350	32	2.5	Al_2O_3	Medium Hard Steels and ferrous materials >20-35 HRC<	10
19-063/S	TRENO-S	350	32	2.5	Al_2O_3	Hard Steels and ferrous materials >35-55 HRC	10
19-064/S	TRENO-SS	350	32	2.5	Al_2O_3	Very Hard Steels and ferrous materials >55-70 HRC	10
19-070/S	TRENO-NF	400	32	3	SiC	Non-ferrous materials	10
19-072/S	TRENO-M	400	32	3	Al_2O_3	Medium Hard Steels and ferrous materials >20-35HRC<	10
19-073/S	TRENO-S	400	32	3	Al_2O_3	Hard Steels and ferrous materials >35-55 HRC	10
19-074/S	TRENO-SS	400	32	3	Al_2O_3	Very Hard Steels and ferrous materials >55-70 HRC	10
19-090/S	TRENO-NF	500	32	3.6	SiC	Non-ferrous materials	10
19-092/S	TRENO-M	500	32	3.6	Al_2O_3	Medium Hard Steels and ferrous materials >20-35 HRC<	10
19-093/S	TRENO-S	500	32	3.6	Al_2O_3	Hard Steels and ferrous materials >35-55 HRC	10
19-097/S	TRENO-M	600	32	5	Al_2O_3	Medium Hard Steels and ferrous materials > 20-35 HRC <	5
19-098/S	TRENO-S	600	32	5	Al_2O_3	Hard Steels and ferrous materials >35-55 HRC	5

TRENO-DUR

Extremely Long Life Abrasive Cut-off Wheels for use with METACUT & SERVOCUT

ORDER NO	CODE	DIAMETER mm.	ARBOR mm.	THICKNESS mm.	RECOMMENDED FOR CUTTING	QUANTITIES PER PACK
19-026	TRENO-DUR	250	32	2	Extremely Low Consumption Rate with Optimum Surface Quality for High Volume Cutting Operations, Cut-Check Applications, etc...	10

TRENO-F

Fiber Reinforced Long Life & Durable Abrasive Cut-off Wheels for use with METACUT & SERVOCUT

ORDER NO	CODE	DIAMETER mm.	ARBOR mm.	THICKNESS mm.	RECOMMENDED FOR CUTTING	QUANTITIES PER PACK
19-027	TRENO-F	250	32	2.0	Medium & Hard Steels, Fiber Reinforced	10
19-028	TRENO-F	300	32	2.2	Medium & Hard Steels, Fiber Reinforced	10

TRENO-T

Ultra Thin Abrasive Cut-off Wheels for use with METACUT & SERVOCUT

ORDER NO	CODE	DIAMETER mm.	ARBOR mm.	THICKNESS mm.	RECOMMENDED FOR CUTTING	QUANTITIES PER PACK
19-031	TRENO-HT	250	32	1.0	Soft Steel and ferrous materials >20-35 HRC<	10
19-032	TRENO-MT	250	32	1.0	Medium Hard Steels and ferrous materials >38-58HRC<	10

CUTO

Series Abrasive Cut-off Wheels for use with METACUT & SERVOCUT

ORDER NO	CODE	DIAMETER mm.	ARBOR mm.	THICKNESS mm.	RECOMMENDED FOR CUTTING	QUANTITIES PER PACK
19-022/A	CUTO-M	250	32	1.5	Medium Hard Steels and ferrous materials >23-50 HRC<	10
19-023/A	CUTO-S	250	32	1.5	Hard Steels and ferrous materials>50-60 HRC	10
19-042/A	CUTO-M	300	32	2	Medium Hard Steels and ferrous materials >23-50 HRC<	10
19-043/A	CUTO-S	300	32	2	Hard Steels and ferrous materials>50-60 HRC	10

TRENO P

Abrasive Cutting Discs for use with MICRACUT Precision Cutters

ORDER NO	CODE	DIAMETER mm.	ARBOR mm.	THICKNESS mm.	RECOMMENDED FOR CUTTING	QUANTITIES PER PACK
18-150/S	TRENO-HP	150	12.7	0.8	Non-ferrous materials & stainless steels	10
18-151/S	TRENO-MP	150	12.7	0.8	Medium Hard & hardened Steels & ferrous materials>35-55 HRC<	10
18-200/S	TRENO-HP	200	12.7	1	Non-ferrous materials & stainless steels	10
18-201/S	TRENO-MP	200	12.7	1	Medium Hard & hardened Steels & ferrous materials>35-55 HRC<	10

*All cut-off wheels are resin bonded.

DIMOS

Diamond Cutting Discs for use with SERVOCUT & METACUT

ORDER NO	DIAMETER mm.	DIAMETER mm.	ARBOR mm.	THICKNESS mm.	DIAMOND LAYER'S DEP. (X) mm.	DIAMOND SIZE/ CONCENTRATION	GRAIN SIZE (MESH)	RECOMMENDED FOR CUTTING
19-250	254	Metal bonded	32	1.52	10	Coarse/High	60/80	For general usage
19-251	254	Resin bonded	32	1.52	6.35	Medium/High	100	For hard, delicate or brittle materials
19-300	305	Metal bonded	32	2.08	10	Coarse/High	60/80	For general usage
19-301	305	Resin bonded	32	1.65	6.35	Medium/High	100	For hard, delicate or brittle materials
19-400	406	Metal bonded	32	2.00	10	Coarse/High	60/80	For general usage
19-401	406	Resin bonded	32	2.41	6.35	Medium/High	100	For hard, delicate or brittle materials

COLD MOUNTING

MOUNTING MATERIALS	CURING TIME	COMPOUNDS	MIXING RATIO VOLUME	MIXING TIME	PEAK TEMPERATURE	COLOR
EPOCOLD	8 Hour	Two Liquids	Resin: 5 Part; Hardener: 1 Part	3 Min.	40-60°C	Clear, Transparent
DMT 20	10 Min.	Powder/Liquid	Resin: 2 Part; Hardener: 1 Part	4-5 Min.	80-87°C	Semi Transparent
DMT 35	5 Min.	Powder/Liquid	Resin: 2 Part; Hardener: 1 Part	2-3 Min.	75-80°C	Light Green, Black
DMT CON	18 Min.	Powder/Liquid	Resin: 1 Part; Hardener: 1 Part	5 Min.	100-106°C	Black
DMT ACE	6 Min.	Powder/Liquid	Resin: 2 Part; Hardener: 1 Part	6 Min.	82-88°C	Green, Transparent

DMT

Acrylic Cold Mounting Resins

ORDER NO	CODE	COLD MOUNTING RESINS	TYPE	QUANTITY
29-501	DMT 35	Powder	Acrylic	1000 gr
29-502	DMT 35	Fluid	Acrylic	500 ml
29-511	DMT 20	Powder (Transparent)	Acrylic	1000 gr
29-512	DMT 20	Fluid (Transparent)	Acrylic	500 ml
29-513	DMT CON	Powder	Acrylic	500 gr
29-514	DMT CON	Fluid	Acrylic	500 ml
29-515	DMT ACE	Powder	Acrylic	1000 gr
29-516	DMT ACE	Fluid	Acrylic	500 ml

ACCESSORIES

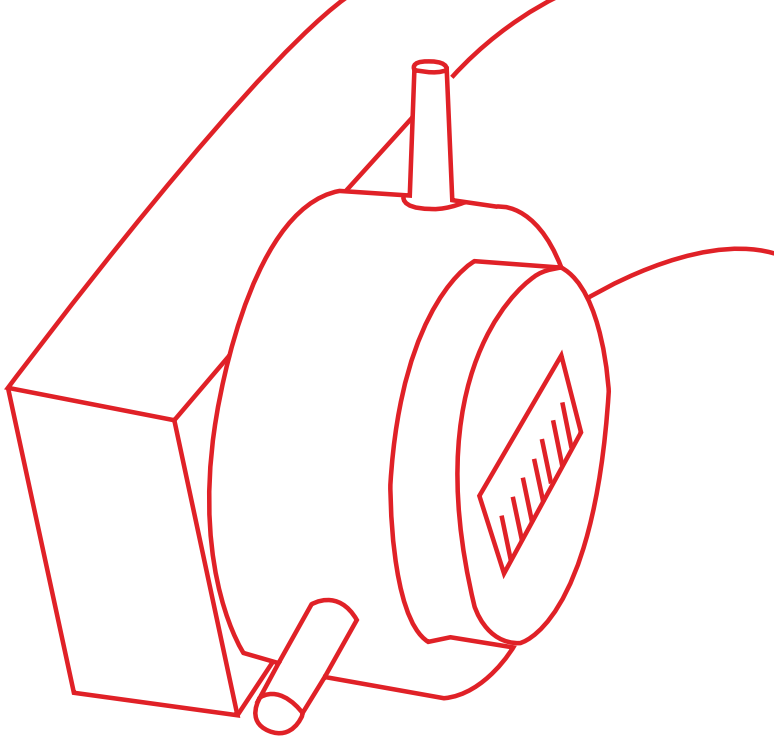
ORDER NO	DESCRIPTIONS FLUID
29-551	Spatulas, (100 pcs)
29-552	Mixing Beakers, (10 pcs)
29-553-01	Embedding Form, ø 25 mm (5 pcs)
29-554-01	Embedding Form, ø 30 mm (5 pcs)
29-555-01	Embedding Form, ø 40 mm (5 pcs)
29-556-01	Embedding Form, ø 50 mm (5 pcs)
29-601	Stainless steel clips (100 pcs)
29-602	Plastic clips (100 pcs)
29-603	Plastic multi-clips for 5 specimens (50 pcs)

EPOCOLD

Epoxy Cold Mounting Resins

ORDER NO	CODE	COLD MOUNTING RESINS
29-506	EPOCOLD -H	Epoxy Hardener (200 gr)
29-505	EPOCOLD -R	Epoxy Resin (2x500 gr)

DIAMOND CUT-OFF WHEELS



Metal bonded wheels are used for cutting brittle materials, such as ceramics or minerals, while resin bonded wheels are used for more ductile materials, such as sintered carbides or composites containing predominantly hard phases.

Several factors are important for choosing the appropriate wafering blade.These include: diamond concentration (low and high), diamond bond (metal plate), diamond size (fine or medium), blade diameter and blade thickness. The diamond concentration is important because it directly affects the load which is applied during cutting. For example, brittle materials such as ceramics require higher effective loads to section, whereas ductile materials such as metals require more cutting points.The result is that low concentration blades are recommended for sectioning hard brittle materials such as ceramics and high concentration blades are recommended for ductile materials containing a large fraction of metal or plastic.



DIMOS

Diamond Cutting Wheels for use with MICRACUT

ORDER NO	DIAMETER mm.	DIAMETER mm.	ARBOR mm.	THICKNESS mm.	DIAMOND LAYER'S DEP. (X) mm.	DIAMOND SIZE/ CONCENTRATION	GRAIN SIZE (MESH)	RECOMMENDED FOR CUTTING
19-100	101.1	Metal bonded	12.7	0.35	4	Medium/High	150	•For general use with ferrous and non-ferrous alloys; copper, aluminium, metal matrix composites, PCB boards, thermal spray coatings and titanium alloy.
19-125	127	Metal bonded	12.7	0.4	4	Medium/High	150	•For general use with ferrous and non-ferrous alloys; copper, aluminium, metal matrix composites, PCB boards, thermal spray coatings and titanium alloy.
19-130	127	Metal bonded	12.7	0.4	4	Fine/Low	220	•For use with hard brittle materials structural ceramics, boron carbide, boron nitride and silicon carbide.
19-126	127	Resin bonded	12.7	0.5	5	Medium/High	150	•Hard, delicate materials or brittle materials(cannot be used at low speeds. High speed only 950 RPM's or higher.)
19-150	152	Metal bonded	12.7	0.5	4	Medium/High	150	•For general use with ferrous and non-ferrous alloys; copper, aluminium, metal matrix composites, PCB boards, thermal spray coatings and titanium alloy.
19-157	152	Metal bonded	12.7	0.5	4	Fine/Low	220	•For use with hard brittle materials structural ceramics, carbide, boron nitride and silicon carbide.
19-151	152	Resin bonded	12.7	0.5	5	Medium/High	150	•For hard, delicate materials or brittle materials (cannot be used at low speeds. High speed only 950 RPM's or higher.)
19-200	203	Metal bonded	12.7	0.81	5	Medium/High	150	•For general use with ferrous and non-ferrous alloys; copper, aluminium, metal matrix composites, PCB boards, thermal spray coatings and titanium alloy.
19-205	203	Metal bonded	12.7	0.81	5	Fine/High	220	•For use with hard brittle materials structural ceramics, carbide, boron nitride and silicon carbide
19-201	203	Resin bonded	12.7	0.88	5	Medium/High	150	•For hard, delicate materials or brittle materials (cannot be used at low speeds. High speed only 950 RPM's or higher.)

CBN

CBN Cutting Discs for use with MICRACUT

ORDER NO	DIAMETER mm.	DIAMETER mm.	ARBOR mm.	THICKNESS mm.	DIAMOND LAYER'S DEP. (X) mm.	DIAMOND SIZE/ CONCENTRATION	GRAIN SIZE (MESH)	RECOMMENDED FOR CUTTING
19-127	125	Metal bonded	12.7	0.4	5	Medium/high	150	Hard metals, iron, steel, lead & titanium, ferrous materials
19-152	150	Metal bonded	12.7	0.5	5	Medium/high	150	Hard metals, iron, steel, lead & titanium, ferrous materials
19-202	200	Metal bonded	12.7	0.9	5	Medium/high	120	Hard metals, iron, steel, lead & titanium, ferrous materials

COOLING FLUIDS

ORDER NO	CODE	DESCRIPTION	RECOMMENDED FOR CUTTING	QUANTITY	FOR USE WITH
19-902	METCOOL	Nature Friendly Soluble Oil	Water-based	5 lt.	METACUT & SERVOCUT
19-905	METCOOL II	Nature Friendly Soluble Oil	Water-based	1 lt.	MICRACUT 152/202
19-906	METCOOL NF	Nature Friendly Soluble Oil Perfect corrosion protection for reactive metals like copper, brass, cobalt, aluminum, tungsten carbide, etc...	Water-based	5 lt.	METACUT & SERVOCUT

*Recommended mix ratio is 3% Metcool to 97% water.

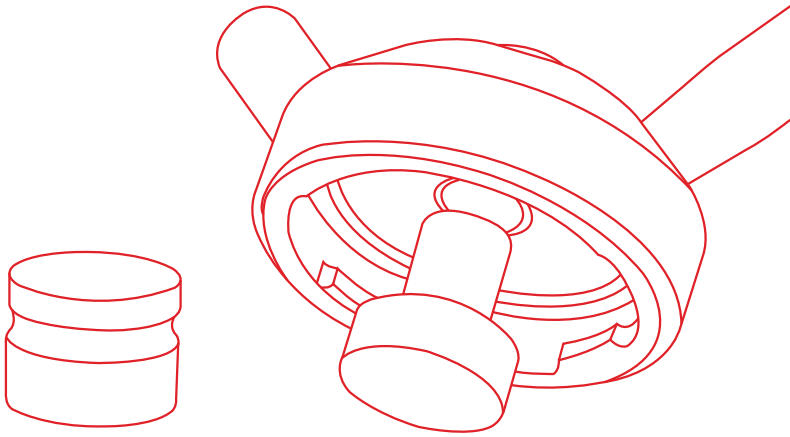
CONSUMABLES FOR MOUNTING



After cutting the specimen the next step is mounting. The aim of mounting is to handle small or odd shaped specimens and to protect fragile materials, thin layers or coating during preparation as well as to provide good edge retention.

Mounting produces speciemens with uniform size so that it is easier to handle in automatic holders for further preparation steps.

HOT MOUNTING



The most important properties of a hot mounting compound are; Hardness, Shrinkage and Viscosity.

The Hardness of the compound should match the hardness of the specimen in order to avoid uneven abrasion during grinding. If the shrinkage during curing is large, a gap between the specimen and the mount will occur and edge will not be adequately protected. Viscosity is important to reach to all areas.



HOT MOUNTING RESINS

ORDER NO	CODE	HOT MOUNTING RESINS	QUANTITY	COLOR	COMMENTS
29-001	BAK-B	Black Phenolic Powder	1 kg		Standart examination of all materals Low shrinkage Heating: upto 180 C
29-001/10	BAK-B	Black Phenolic Powder	10 kgs		Standart examination of all materals Low shrinkage Heating: upto 180 C
29-001/20	BAK-B	Black Phenolic Powder	20 kgs		Standart examination of all materals Low shrinkage Heating: upto 180 C
29-002	BAK-R	Red Phenolic Powder	1 kg		Standart examination of all materals Low shrinkage Heating: upto 180 C
29-002/10	BAK-R	Red Phenolic Powder	10 kgs		Standart examination of all materals Low shrinkage Heating: upto 180 C
29-002/20	BAK-R	Red Phenolic Powder	20 kgs		Standart examination of all materals Low shrinkage Heating: upto 180 C
29-010	NET	Transparent Acrylic Powder	1 kg		Standart examination of all materals. Perfectly transparent
29-010/10	NET	Transparent Acrylic Powder	10 kgs		Standart examination of all materals. Perfectly transparent
29-011	EPO	Epoxy, Hard	1 kg		Examination of edges surface. Hard with very low shrinkage
29-011/10	EPO	Epoxy, Hard	10 kgs		Examination of edges surface. Hard with very low shrinkage
29-012	DAP	Diallyphtalat	1 kg		Examination of edges surface. (Coating, deposits, thermal, treatment)
29-012/10	DAP	Diallyphtalat	10 kgs		Examination of edges surface. (Coating, deposits, thermal, treatment)
29-013	CON	Conductive Bakelite powder	0.5 kg		SEM examination of all materials
29-099	SMOOTH	Mould Release Spray Can	400 ml		-

COLD MOUNTING

Cold mounting is preferred for samples which are sensitive to damage from heat and pressure (like coatings, PCB, etc.) Cold mounting resins are easy to use.

DMT Acrylic cold mounting resins

- Very fast cure time
- It requires mixing in the ratio 2:1, powder to liquid.The mix is then poured into a mould and allowed to set.

EPOCOLD Epoxy cold mounting resins

- Better results in good edge protection.
- Low shrinkage and moderate hardness.



CONSUMABLES FOR GRINDING & POLISHING



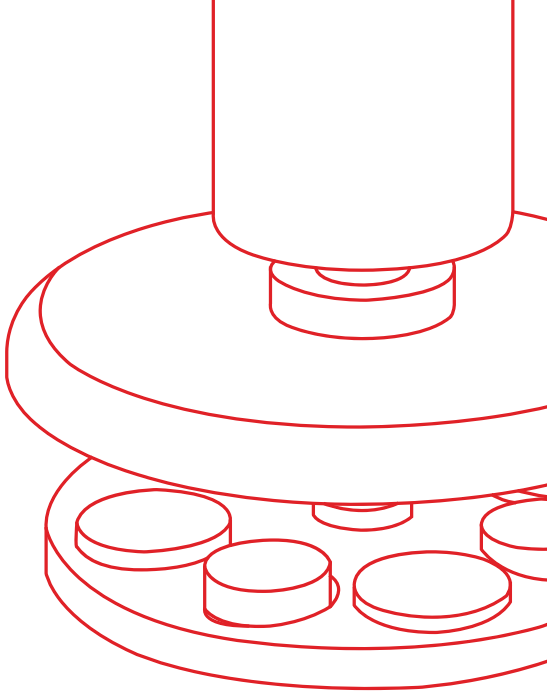
In order to obtain scratch free surfaces without deformation, successive material removal by abrasives is necessary. Grinding is the next stage after sectioning.

To remove deformation from fine grinding and obtain a surface that is highly reflective, the specimens must be polished before they can be examined under the microscope.

METKON PLANAR GRINDING STONE

If you want to be fast and efficient in providing high-quality flat specimen surfaces and saving time, you can use a planar grinding stone in sample preparation steps.PGS planar grinding stones for FORCIPLAN 352/VELOX 102, with many advantages;

- Extremly Short grinding time
- Excellent planarity for all materials
- Extremly high material removal performance
- Reduces total sample preparation time.
- Comparing with traditional SiC grinding papers, the flat grinding stone can prepare hundreds of times more samples.
- Reduces several grinding steps without changing grinding paper.
- Ability to grind mounted specimen with specimen holders as well as irregular shaped unmounted samples.
- Primary material control with high sample throughput

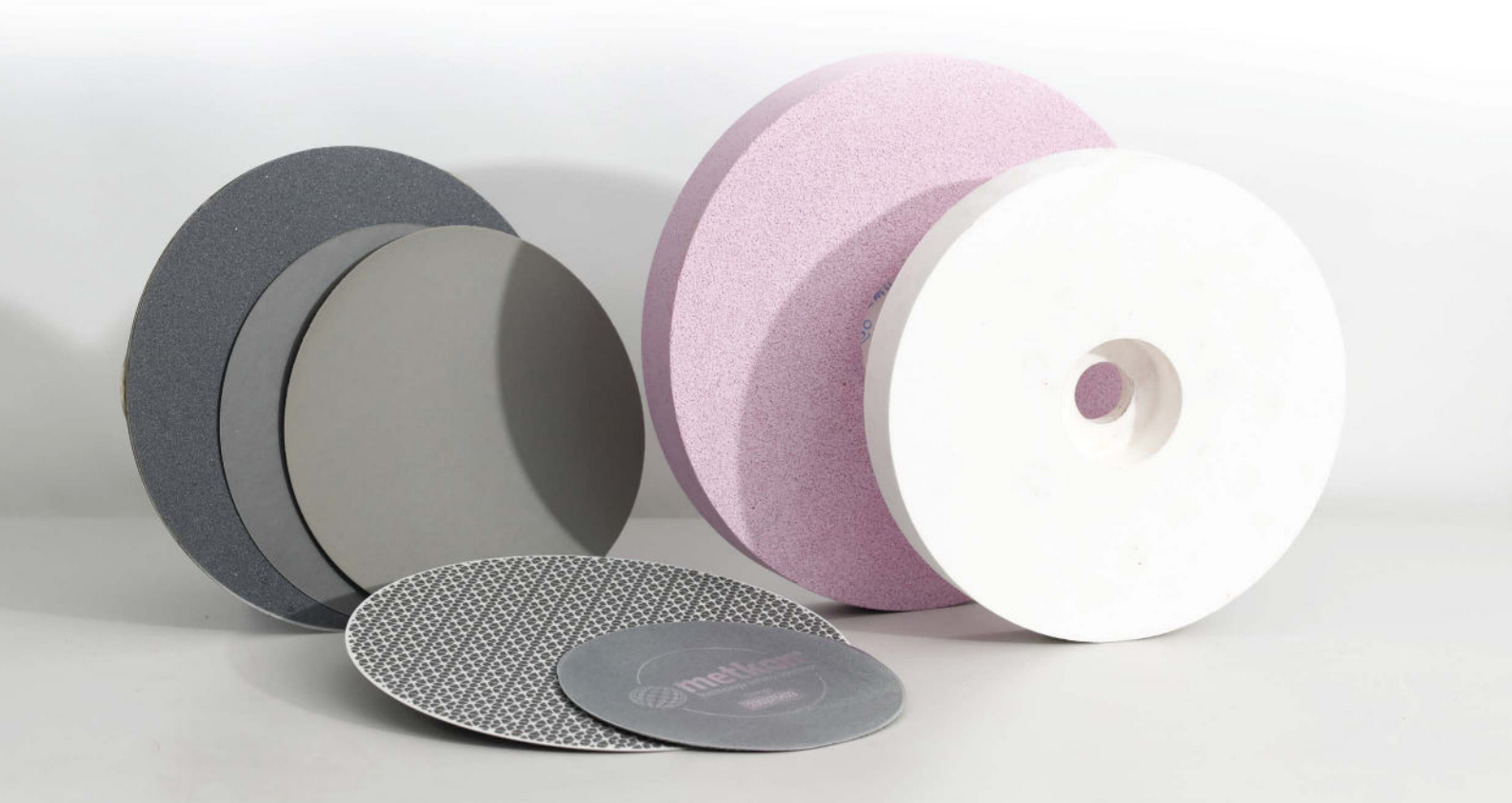


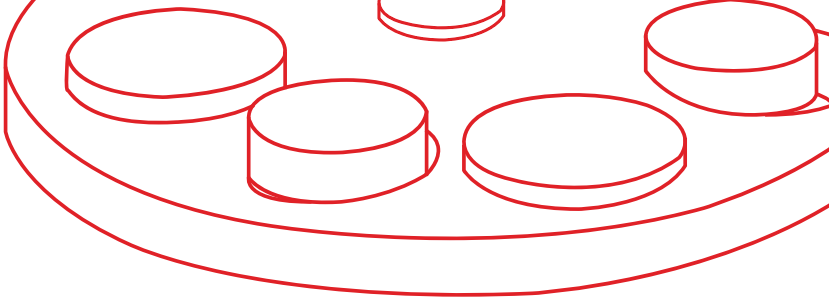


PLANAR GRINDING STONES

for FORCIPLAN 352/VELOX 102 (1 Pc)

ORDER NO	CODE	DESCRIPTION	EQUIPMENT
PGS-NF	80-350	Ø350 mm, Planar Grinding Stone, 120 grit, for non-ferrous materials	FORCIPLAN 352
PGS-M	80-351	Ø350 mm, Planar Grinding Stone, 120 grit, for medium hard steels & cast irons	FORCIPLAN 352
PGS-H	80-352	Ø350 mm, Planar Grinding Stone, 120 grit, for hard steels & cast irons	FORCIPLAN 352
PGS-NF	80-300	Ø300 mm, Planar Grinding Stone, 120 grit, for non-ferrous materials	VELOX 102
PGS-M	80-301	Ø300 mm, Planar Grinding Stone, 120 grit, for medium hard steels & cast irons	VELOX 102
PGS-H	80-302	Ø300 mm, Planar Grinding Stone, 120 grit, for hard steels & cast irons	VELOX 102





METKON MAGNETIC SYSTEM

Magnetic Preparation with METKON Magnetic System is simply and advanced way to grind and polish specimens. It reduces your operating costs and increases specimen quality. Place your SMF Special Magnetic Foil, which is self-adhesive for once and permanently on your existing working wheel (Aluminum or PVC).

Place the Cloth (or MAGNETO) on the TMP Thin Metal Plate which you can than use as a magnetic unit to put on and remove from your disc. After the grinding or polishing operation you may remove it (non-destructively) and then place it again whenever you need. Without any material destruction!



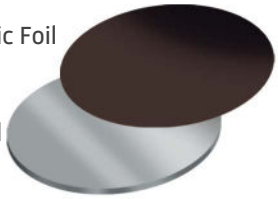
QUICK MAGNETIC SYSTEM for MAGNETO

MAGNETO
Diamond
Grinding Disc



SMF Special Magnetic Foil

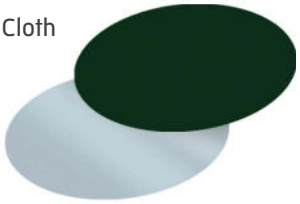
Existing Machine Wheel
(Alum. or PVC)



QUICK MAGNETIC SYSTEM for PSA POLISHING CLOTH

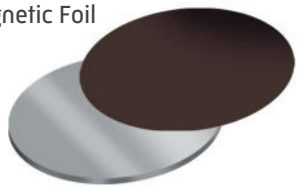
PSA Polishing Cloth

TMP Thin Metal Plate



SMF Special Magnetic Foil

Existing Machine Wheel
(Alum. or PVC)



ABRASIVE GRADE SYSTEM

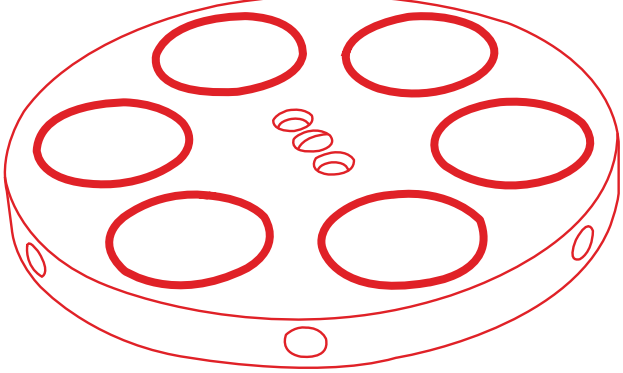
FEPA P (Europe)	P60	P120	P180	P240	P320	P400	P600	P800	P1000	P1200	P2000
ANSI/CAMI (US)	60	120	180	240	280	320	360	400	500	600	1000
Gain size (Average)	250µ	125µ	82µ	60µ	46µ	35µ	26µ	22µ	18µ	15µ	10µ

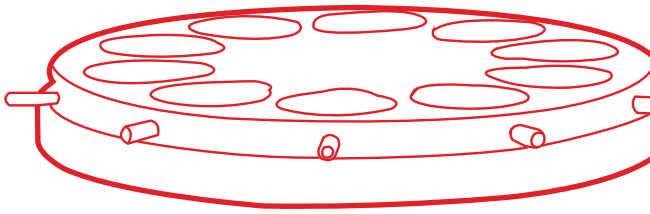
*All Metkon grinding papers are classified according to FEPA Standarts.

*The above Abrasive Grading Chart is a general overwiev only.

MAGNETIC SYSTEM

ORDER NO	CODE	MAGNETIC SYSTEM ACCESSORIES
39-003-200	SMF	Special Magnetic Foil, Ø200
39-003-250	SMF	Special Magnetic Foil, Ø250
39-003-300	SMF	Special Magnetic Foil, Ø300
39-003-350	SMF	Special Magnetic Foil, Ø350
39-093-200	TMP	Thin Metal Plate, Ø200 (5 pcs)
39-093-250	TMP	Thin Metal Plate, Ø250 (5 pcs)
39-093-300	TMP	Thin Metal Plate, Ø300 (5 pcs)
39-093-350	TMP	Thin Metal Plate, Ø350 (5 pcs)





MAGNETO DIAMOND GRINDING DISCS

(Total Grinding Time 2 Minutes!) MAGNETO Diamond Grinding Discs for planar grinding, fine grinding and extra fine grinding offer wonderful advantages:

- Only water is needed (No additional diamond suspensions or lubricant).
- The same disc can be used for grinding hard as well as soft materials.
- Very clean working environment.
- Very high edge sharpness and scratch free surface.
- Excellent planarity and flatness.
- Very short preparation time.

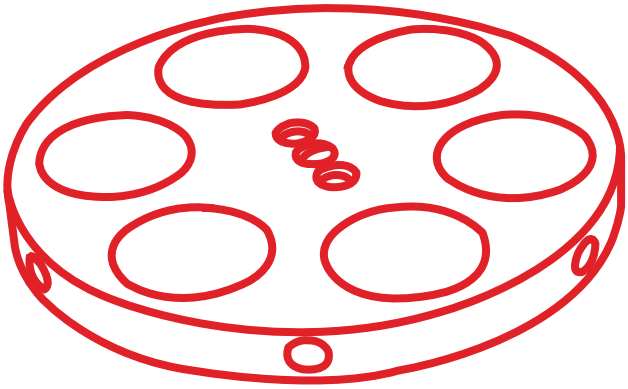


MAGNETO

MAGNETO Diamond Fine Grinding Disc

ORDER NO	CODE	DIAMETER	GRIT SIZE	RECOMMENDED FOR
38-020-125	MAGNETO 125	200	125	Planar Grinding
38-040-125	MAGNETO 125	250	125	Planar Grinding
38-050-125	MAGNETO 125	300	125	Planar Grinding
38-020-075	MAGNETO 75	200	75	Planar Grinding
38-040-075	MAGNETO 75	250	75	Planar Grinding
38-050-075	MAGNETO 75	300	75	Planar Grinding
38-060-075	MAGNETO 75	350	75	Planar Grinding
38-020-054	MAGNETO 54	200	54	Planar Grinding
38-040-054	MAGNETO 54	250	54	Planar Grinding
38-050-054	MAGNETO 54	300	54	Planar Grinding
38-060-054	MAGNETO 54	350	54	Planar Grinding
38-020-018	MAGNETO 18	200	18	Fine Grinding
38-040-018	MAGNETO 18	250	18	Fine Grinding
38-050-018	MAGNETO 18	300	18	Fine Grinding
38-060-018	MAGNETO 18	350	18	Fine Grinding
38-020-006	MAGNETO 6	200	6	Extra Fine Grinding
38-040-006	MAGNETO 6	250	6	Extra Fine Grinding
38-050-006	MAGNETO 6	300	6	Extra Fine Grinding
38-020-003	MAGNETO 3	200	3	Extra Fine Grinding
38-040-003	MAGNETO 3	250	3	Extra Fine Grinding
38-050-003	MAGNETO 3	300	3	Extra Fine Grinding

MAGNETO-S SILICON CARBIDE GRINDING DISCS



MAGNETO-S Silicon Carbide Grinding Discs are developed to provide excellent specimen surfaces. It can be used for any material that SiC papers are used. It is the most modern and the best alternative of SiC papers with many advantages:

- Very cost effective. One MAGNETO-S is equal to 100 pcs of SiC grinding papers. (depending on the sample hardness and size)
- Only water is needed (No additional diamond suspensions or lubricant).
- Suitable for both ferrous and non-ferrous materials
- Very clean working environment.
- Very high edge sharpness and scratch free surface.
- Excellent planarity and flatness.
- Superior specimen surfaces.



MAGNETO-S

MAGNETO-S Silicon Carbide Grinding Disc

ORDER NO	CODE	DIAMETER	GRIT SIZE	RECOMMENDED FOR
38-021-120	MAGNETO-S-120	200	120	Planar Grinding
38-041-120	MAGNETO-S-120	250	120	Planar Grinding
38-051-120	MAGNETO-S-120	300	120	Planar Grinding
38-021-220	MAGNETO-S-220	200	220	Planar Grinding
38-041-220	MAGNETO-S-220	250	220	Planar Grinding
38-051-220	MAGNETO-S-220	300	220	Planar Grinding
38-021-500	MAGNETO-S-500	200	500	Fine Grinding
38-041-500	MAGNETO-S-500	250	500	Fine Grinding
38-051-500	MAGNETO-S-500	300	500	Fine Grinding
38-021-800	MAGNETO-S-800	200	800	Fine Grinding
38-041-800	MAGNETO-S-800	250	800	Fine Grinding
38-051-800	MAGNETO-S-800	300	800	Fine Grinding
38-021-1200	MAGNETO-S-1200	200	1200	Extra Fine Grinding
38-041-1200	MAGNETO-S-1200	250	1200	Extra Fine Grinding
38-051-1200	MAGNETO-S-1200	300	1200	Extra Fine Grinding

METKON CATCHY SYSTEM

CATCHY system has a high friction foil which makes the new SiC Foil back grinding papers stick very well and at the same time very easy to remove again.

Traditional PSA back and self adhesive grinding papers are difficult to apply, difficult to remove. The Foil back papers are removed easily, without leaving any trace of adhesive.

Water does not affect the shape of the foil at all. So it does not curl as traditional SiC Paper and stays flat and ready for immediate or later re-use



SiC PAPER GRINDING DISCS

Foil Back, CATCHY SYSTEM

ORDER NO	CODE	TYPE	DIAMETER	GRIT SIZE	QUANTITY /PACK
38-020-60F	DEMPAX-F	Foil Back	200	60	2x50
38-020-120F	DEMPAX-F	Foil Back	200	120	100
38-020-180F	DEMPAX-F	Foil Back	200	180	100
38-020-240F	DEMPAX-F	Foil Back	200	240	100
38-020-320F	DEMPAX-F	Foil Back	200	320	100
38-020-400F	DEMPAX-F	Foil Back	200	400	100
38-020-600F	DEMPAX-F	Foil Back	200	600	100
38-020-800F	DEMPAX-F	Foil Back	200	800	100
38-020-1000F	DEMPAX-F	Foil Back	200	1000	100
38-020-1200F	DEMPAX-F	Foil Back	200	1200	100
38-020-2500F	DEMPAX-F	Foil Back	200	2500	100
38-020-SF	DEMPAX-F	Foil Back	200	Mix(120-2500)	100
38-040-60F	DEMPAX-F	Foil Back	250	60	2x50
38-040-120F	DEMPAX-F	Foil Back	250	120	100
38-040-180F	DEMPAX-F	Foil Back	250	180	100
38-040-240F	DEMPAX-F	Foil Back	250	240	100
38-040-320F	DEMPAX-F	Foil Back	250	320	100
38-040-400F	DEMPAX-F	Foil Back	250	400	100
38-040-600F	DEMPAX-F	Foil Back	250	600	100
38-040-800F	DEMPAX-F	Foil Back	250	800	100
38-040-1000F	DEMPAX-F	Foil Back	250	1000	100
38-040-1200F	DEMPAX-F	Foil Back	250	1200	100
38-040-2500F	DEMPAX-F	Foil Back	250	2500	100
38-040-SF	DEMPAX-F	Foil Back	250	Mix(120-2500)	100
38-050-060F	DEMPAX-F	Foil Back	300	60	2x50
38-050-120F	DEMPAX-F	Foil Back	300	120	100
38-050-180F	DEMPAX-F	Foil Back	300	180	100
38-050-240F	DEMPAX-F	Foil Back	300	240	100
38-050-320F	DEMPAX-F	Foil Back	300	320	100
38-050-400F	DEMPAX-F	Foil Back	300	400	100
38-050-600F	DEMPAX-F	Foil Back	300	600	100
38-050-800F	DEMPAX-F	Foil Back	300	800	100
38-050-1000F	DEMPAX-F	Foil Back	300	1000	100
38-050-1200F	DEMPAX-F	Foil Back	300	1200	100
38-050-2500F	DEMPAX-F	Foil Back	300	2500	100
38-050-SF	DEMPAX-F	Foil Back	300	Mix(120-2500)	100

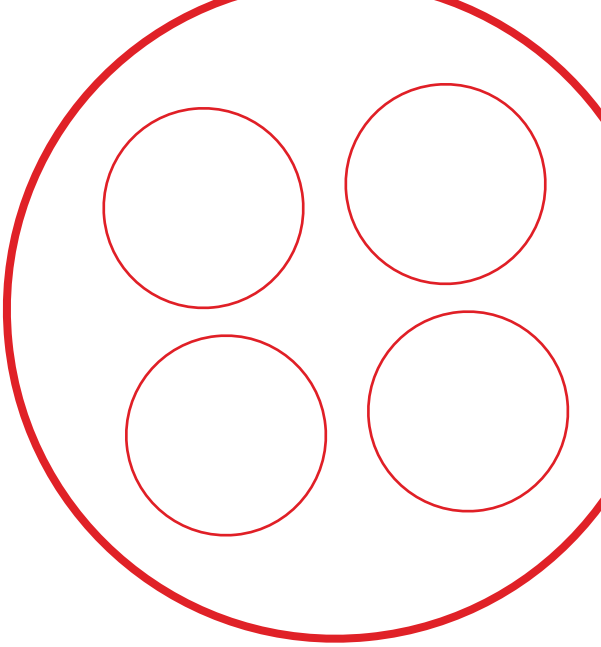
CATCHY FIX PLATE

ORDER NO	CODE	DESCRIPTION
CFP	39-083-200	Ø 200 mm, Catchy Fix Plate (1 pc)
CFP	39-083-250	Ø 250 mm, Catchy Fix Plate (1 pc)
CFP	39-083-300	Ø 300 mm, Catchy Fix Plate (1 pc)

PAPER GRINDING DISCS

PLAIN BACK

Coarse paper discs (up to 120 grit) are used for planar grinding. Fine grinding removes the deformations resulting from coarse grinding to make the surface ready for polishing which is the final stage. Metkon paper grinding discs are available as “Plain back” and “Foil Back” for CATCHY System.





SiC PAPER GRINDING DISCS

Plain Back

ORDER NO	CODE	TYPE	DIAMETER	GRIT SIZE	QUANTITY /PACK
38-020-60	DEMPAX	Plain Back	200	60	2x50
38-020-120	DEMPAX	Plain Back	200	120	100
38-020-180	DEMPAX	Plain Back	200	180	100
38-020-240	DEMPAX	Plain Back	200	240	100
38-020-320	DEMPAX	Plain Back	200	320	100
38-020-400	DEMPAX	Plain Back	200	400	100
38-020-600	DEMPAX	Plain Back	200	600	100
38-020-800	DEMPAX	Plain Back	200	800	100
38-020-1000	DEMPAX	Plain Back	200	1000	100
38-020-1200	DEMPAX	Plain Back	200	1200	100
38-020-2500	DEMPAX	Plain Back	200	2500	100
38-020-S	DEMPAX	Plain Back	200	Mix(120-2500)	100
38-040-60	DEMPAX	Plain Back	250	60	2x50
38-040-120	DEMPAX	Plain Back	250	120	100
38-040-180	DEMPAX	Plain Back	250	180	100
38-040-240	DEMPAX	Plain Back	250	240	100
38-040-320	DEMPAX	Plain Back	250	320	100
38-040-400	DEMPAX	Plain Back	250	400	100
38-040-600	DEMPAX	Plain Back	250	600	100
38-040-800	DEMPAX	Plain Back	250	800	100
38-040-1000	DEMPAX	Plain Back	250	1000	100
38-040-1200	DEMPAX	Plain Back	250	1200	100
38-040-2500	DEMPAX	Plain Back	250	2500	100
38-040-S	DEMPAX	Plain Back	250	Mix(120-2500)	100
38-050-060	DEMPAX	Plain Back	300	60	100
38-050-120	DEMPAX	Plain Back	300	120	2x50
38-050-180	DEMPAX	Plain Back	300	180	100
38-050-240	DEMPAX	Plain Back	300	240	100
38-050-320	DEMPAX	Plain Back	300	320	100
38-050-400	DEMPAX	Plain Back	300	400	100
38-050-600	DEMPAX	Plain Back	300	600	100
38-050-800	DEMPAX	Plain Back	300	800	100
38-050-1000	DEMPAX	Plain Back	300	1000	100
38-050-1200	DEMPAX	Plain Back	300	1200	100
38-050-2500	DEMPAX	Plain Back	300	2500	100
38-050-S	DEMPAX	Plain Back	300	Mix(120-2500)	100

POLISHING CLOTHS

There are three types of polishing cloths; Woven, Non-Woven and Flocked.

•Woven cloths offer 'hard surface' polishing properties and guarantee flat pre-polishing, without deterioration of the edges.
•Non-woven cloths, are used on very hard materials for highprecision surface finishing such as glass, quartz, sapphire and semi-conductors.
•The Flocked cloths, guarantee a super-polished finish.
•The polishing duration must be as short as possible, to avoid inclusions from being extracted.



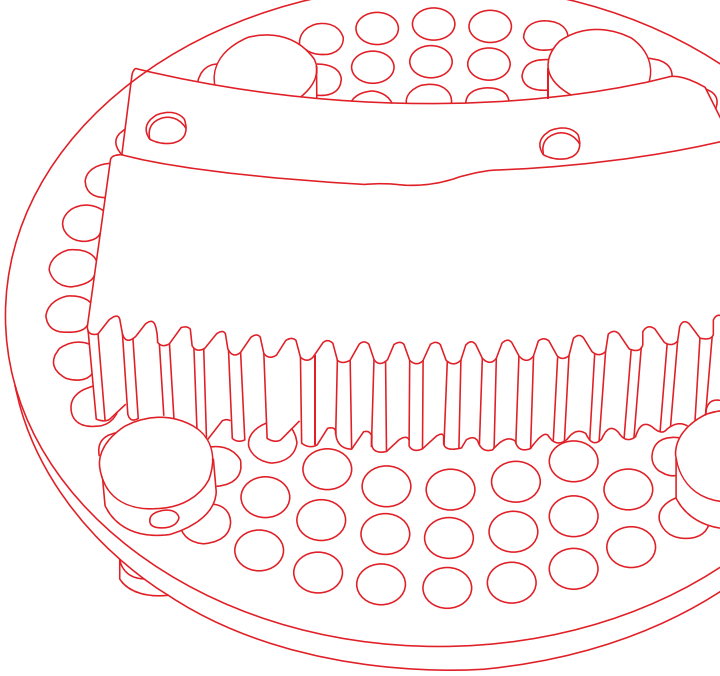
POLISHING CLOTHS

Self Adhesive Back

ORDER NO	CODE	TYPE	DIAMETER	GRIT SIZE	QUANTITY /PACK	COLOR
39-013-	METAPO-P	Woven	Fine Woven Cloth mounted on a Composite (metal/plastic) semi rigid PSA backing. High wear resistance.	Diamond 9-6 µm	Coarse polishing of hard and semihard metallographic sections and different metarials. Good flatness.	
39-033-	METAPO-B	Woven	Fine woven synhetic satin cloth munted on a composite (mela/plastic) semi rigid PSA backing.	Diamond 3-1 µm	Final polishing of hard and semi-hard metallographic sections and different materials. Good edge retention on surface treated materials.	
39-043-	METAPO-V	Woven	Fine Woven Cloth mounted on a Composite (metal/plastic) semi rigid PSA backing. High wear resistance.	Diamond 1-0,1 µm Fine Alum	Final Polishing with extra smooth abrasion; good flatness optiocal finish of hard materials.	
39-015-	FEDO-6J	Flocked	Synhetic fibre flock to a PVC backing.	Diamond 6 µm	Rough polishing of most materials.	
39-025-	FEDO-3	Flocked	Soft synhetic flock bound to a woven cotton PSA backing. To be used with water based suspensions and lubricants only.	Diamond 3 µm	Intermediate polishing of most materials.	
39-066-	FEDO-1S	Flocked	Soft synhetic flock bound to a woven cotton PSA backing. To be used with water based suspensions and lubricants only.	Diamond 1 µm	Fine polishing of most materials.	
39-055-	FEDO-1N	Flocked	Very soft low nap felt bound to a PSA backing. To be used with water-based suspensione and lubricants only.	Diamond 0,25 µm	Fine polishing of most materials.	
39-095-	WOOL	Woven	%100 wool cloth, PSA backed.	Diamond 6-3 µm	For polishing optics and metals.	
39-085-	COLLO	Chemo-Textile	Recomended cloth for Chemo-mechanical polishing operations. PSA backed.	Colloidal silica	For use with a chemical mechanical polishing precess with colloidal silica suspension. Espacially for non ferrous materials as well as Aluminium, Brass...	

POLISHING CLOTHS

ORDER NO	CODE	DIAMETER	COLOR	TYPE	QUANTITY /PACK
39-005-200	METAPO-P	200		Self Adhesive Back	10
39-013-200	METAPO-B	200		Self Adhesive Back	10
39-033-200	METAPO-V	200		Self Adhesive Back	10
39-043-200	FEDO-6J	200		Self Adhesive Back	10
39-015-200	FEDO-3	200		Self Adhesive Back	10
39-025-200	FEDO-1S	200		Self Adhesive Back	10
39-066-200	FEDO-1N	200		Self Adhesive Back	10
39-067-200	WOOL	200		Self Adhesive Back	10
39-055-200	COLLO	200		Self Adhesive Back	10
39-200-SPC	MIX	200		Self Adhesive Back	5
39-005-250	METAPO-P	250		Self Adhesive Back	10
39-013-250	METAPO-B	250		Self Adhesive Back	10
39-033-250	METAPO-V	250		Self Adhesive Back	10
39-043-250	FEDO-6J	250		Self Adhesive Back	10
39-015-250	FEDO-3	250		Self Adhesive Back	10
39-025-250	FEDO-1S	250		Self Adhesive Back	10
39-066-250	FEDO-1N	250		Self Adhesive Back	10
39-067-250	WOOL	250		Self Adhesive Back	10
39-055-250	COLLO	250		Self Adhesive Back	10
39-250-SPC	MIX	250		Self Adhesive Back	5
39-005-300	METAPO-P	300		Self Adhesive Back	10
39-013-300	METAPO-B	300		Self Adhesive Back	10
39-033-300	METAPO-V	300		Self Adhesive Back	10
39-043-300	FEDO-6J	300		Self Adhesive Back	10
39-015-300	FEDO-3	300		Self Adhesive Back	10
39-025-300	FEDO-1S	300		Self Adhesive Back	10
39-066-300	FEDO-1N	300		Self Adhesive Back	10
39-067-300	WOOL	300		Self Adhesive Back	10
39-055-300	COLLO	300		Self Adhesive Back	10
39-300-SPC	MIX	300		Self Adhesive Back	5
39-013-350	METAPO-P	350		Self Adhesive Back	10
39-033-350	METAPO-B	350		Self Adhesive Back	10
39-015-350	FEDO-6J	350		Self Adhesive Back	10
39-025-350	FEDO-3	350		Self Adhesive Back	10
39-066-350	FEDO-1S	350		Self Adhesive Back	10
39-055-350	FEDO-1N	350		Self Adhesive Back	10
39-085-350	COLLO	350		Self Adhesive Back	10
39-350-SPC	MIX	350		Self Adhesive Back	5



MAGNETIC POLISHING CLOTHS

Magnetic Polishing Cloths offer a fast and easy way to switch between cloths during the polishing process. There's no need for peeling or sticking.

- Minimizes cloth change-over time, enhancing productivity and eliminating unnecessary delays.
- No adhesives or other required.
- Magnetic polishing cloths are ready to use straight out of the box.



MAGNETIC POLISHING CLOTHS

ORDER NO	CODE	DIAMETER	COLOR	TYPE	QUANTITY /PACK
40-013-200	METAMAG-P	200		Metal Backed	5
40-033-200	METAMAG-B	200		Metal Backed	5
40-043-200	METAMAG-V	200		Metal Backed	5
40-015-200	FEDOMAG-6J	200		Metal Backed	5
40-025-200	FEDOMAG-3	200		Metal Backed	5
40-066-200	FEDOMAG-1S	200		Metal Backed	5
40-055-200	FEDOMAG-1N	200		Metal Backed	5
40-200-SPC	MIX	200		Metal Backed	5
40-013-250	METAMAG-P	250		Metal Backed	5
40-033-250	METAMAG-B	250		Metal Backed	5
40-043-250	METAMAG-V	250		Metal Backed	5
40-015-250	FEDOMAG-6J	250		Metal Backed	5
40-025-250	FEDOMAG-3	250		Metal Backed	5
40-066-250	FEDOMAG-1S	250		Metal Backed	5
40-055-250	FEDOMAG-1N	250		Metal Backed	5
40-250-SPC	MIX	250		Metal Backed	5
40-013-300	METAMAG-P	300		Metal Backed	5
40-033-300	METAMAG-B	300		Metal Backed	5
40-043-300	METAMAG-V	300		Metal Backed	5
40-015-300	FEDOMAG-6J	300		Metal Backed	5
40-025-300	FEDOMAG-3	300		Metal Backed	5
40-055-300	FEDOMAG-1S	300		Metal Backed	5
40-066-300	FEDOMAG-1N	300		Metal Backed	5
40-300-SPC	MIX	300		Metal Backed	5

DIAMOND PRODUCTS

Diamond, due to its exceptional hardness and cutting capacity, has become the first choice abrasive in metallographic polishing.

Diamonds for metallographic grinding and polishing are available in two different crystalline shapes: Polycrystalline (P) and Monocrystalline (M). Polycrystalline diamonds provide vast numbers of small cutting edges. In the metallographic preparation process these edges result in high material removal, while producing only a shallow scratch depth.

Monocrystalline diamonds are more block-shaped and provide few cutting edges. These diamonds give high material removal with a more variable scratch pattern. For high requirements, the (P)-type diamonds are chosen. The (M) type diamonds are best suited for all-purpose polishing.

METKON offers diamond products in three forms; diamond paste, diamond suspension and two in one products; a perfect mixture of diamond suspension & lubricant.

DIAMOND PASTES — Monocrystalline

ORDER NO	CODE	TYPE	DIAMOND MICRON	QUANTITY
39-301-M	DIAPAT-M	Water-Based	0,25 Micron	10 gr. syringe
39-311-M	DIAPAT-M	Water-Based	1 Micron	10 gr. syringe
39-321-M	DIAPAT-M	Water-Based	3 Micron	10 gr. syringe
39-331-M	DIAPAT-M	Water-Based	6 Micron	10 gr. syringe
39-341-M	DIAPAT-M	Water-Based	9 Micron	10 gr. syringe

DIAMOND PASTES — Polycrystalline

ORDER NO	CODE	TYPE	DIAMOND MICRON	QUANTITY
39-301-P	DIAPAT-P	Water-Based	0,25 Micron	10 gr. syringe
39-311-P	DIAPAT-P	Water-Based	1 Micron	10 gr. syringe
39-321-P	DIAPAT-P	Water-Based	3 Micron	10 gr. syringe
39-331-P	DIAPAT-P	Water-Based	6 Micron	10 gr. syringe
39-341-P	DIAPAT-P	Water-Based	9 Micron	10 gr. syringe

DIAMOND SUSPENSIONS

Monocrystalline

ORDER NO	CODE	TYPE	DIAMOND MICRON	QUANTITY
39-400-M	DIAPAT-M	Water-Based	0,25 Micron	250 ml. pump bottle
39-410-M	DIAPAT-M	Water-Based	1 Micron	250 ml. pump bottle
39-420-M	DIAPAT-M	Water-Based	3 Micron	250 ml. pump bottle
39-430-M	DIAPAT-M	Water-Based	6 Micron	250 ml. pump bottle
39-440-M	DIAPAT-M	Water-Based	9 Micron	250 ml. pump bottle
39-411-M	DIAPAT-M	Water-Based	1 Micron	1 lt. bottle
39-421-M	DIAPAT-M	Water-Based	3 Micron	1 lt. bottle
39-431-M	DIAPAT-M	Water-Based	6 Micron	1 lt. bottle
39-441-M	DIAPAT-M	Water-Based	9 Micron	1 lt. bottle
39-415-M	DIAPAT-M	Water-Based	1 Micron	5 lt. bottle
39-425-M	DIAPAT-M	Water-Based	3 Micron	5 lt. bottle
39-435-M	DIAPAT-M	Water-Based	6 Micron	5 lt. bottle
39-445-M	DIAPAT-M	Water-Based	9 Micron	5 lt. bottle

DIAMOND SUSPENSIONS

Polycrystalline

ORDER NO	CODE	TYPE	DIAMOND MICRON	QUANTITY
39-400-P	DIAPAT-P	Water-Based	0,25 Micron	250 ml. pump bottle
39-410-P	DIAPAT-P	Water-Based	1 Micron	250 ml. pump bottle
39-420-P	DIAPAT-P	Water-Based	3 Micron	250 ml. pump bottle
39-430-P	DIAPAT-P	Water-Based	6 Micron	250 ml. pump bottle
39-440-P	DIAPAT-P	Water-Based	9 Micron	250 ml. pump bottle
39-411-P	DIAPAT-P	Water-Based	1 Micron	1 lt. bottle
39-421-P	DIAPAT-P	Water-Based	3 Micron	1 lt. bottle
39-431-P	DIAPAT-P	Water-Based	6 Micron	1 lt. bottle
39-441-P	DIAPAT-P	Water-Based	9 Micron	1 lt. bottle

HIGH CONCENTRATION DIAMOND SUSPENSIONS

•Faster and Higher Material Removal.
•Better Surface Quality with the Shortest Sample Preparation.

DIAPLUS HIGH CONCENTRATION Diamond Suspensions — Monocrystalline

ORDER NO	CODE	TYPE	DIAMOND MICRON	QUANTITY
39-610-HM	DIAPLUS-M	Water-Based	1 Micron	250 ml. pump bottle
39-620-HM	DIAPLUS-M	Water-Based	3 Micron	250 ml. pump bottle
39-630-HM	DIAPLUS-M	Water-Based	6 Micron	250 ml. pump bottle
39-611-HM	DIAPLUS-M	Water-Based	1 Micron	1 lt. bottle
39-621-HM	DIAPLUS-M	Water-Based	3 Micron	1 lt. bottle
39-631-HM	DIAPLUS-M	Water-Based	6 Micron	1 lt. bottle

DIAPLUS HIGH CONCENTRATION Diamond Suspensions — Polycrystalline

ORDER NO	CODE	TYPE	DIAMOND MICRON	QUANTITY
39-610-HP	DIAPLUS-P	Water-Based	1 Micron	250 ml. pump bottle
39-620-HP	DIAPLUS-P	Water-Based	3 Micron	250 ml. pump bottle
39-630-HP	DIAPLUS-P	Water-Based	6 Micron	250 ml. pump bottle
39-611-HP	DIAPLUS-P	Water-Based	1 Micron	1 lt. bottle
39-621-HP	DIAPLUS-P	Water-Based	3 Micron	1 lt. bottle
39-631-HP	DIAPLUS-P	Water-Based	6 Micron	1 lt. bottle

DIAMOND 2 IN 1 PRODUCT

Monocrystalline

ORDER NO	CODE	TYPE	DIAMOND MICRON	QUANTITY
39-510-M	DUOPAT-M	Water-Based	1 Micron	500 ml. bottle
39-520-M	DUOPAT-M	Water-Based	3 Micron	500 ml. bottle
39-530-M	DUOPAT-M	Water-Based	6 Micron	500 ml. bottle
39-540-M	DUOPAT-M	Water-Based	9 Micron	500 ml. bottle
39-511-M	DUOPAT-M	Water-Based	1 Micron	2.5 lt. bottle
39-521-M	DUOPAT-M	Water-Based	3 Micron	2.5 lt. bottle
39-531-M	DUOPAT-M	Water-Based	6 Micron	2.5 lt. bottle
39-541-M	DUOPAT-M	Water-Based	9 Micron	2.5 lt. bottle

DIAMOND 2 IN 1 PRODUCT

Polycrystalline

ORDER NO	CODE	TYPE	DIAMOND MICRON	QUANTITY
39-510-P	DUOPAT-P	Water-Based	1 Micron	500 ml. bottle
39-520-P	DUOPAT-P	Water-Based	3 Micron	500 ml. bottle
39-530-P	DUOPAT-P	Water-Based	6 Micron	500 ml. bottle
39-540-P	DUOPAT-P	Water-Based	9 Micron	500 ml. bottle

DIAMOND LUBRICANT

ORDER NO	CODE	TYPE	QUANTITY
39-502	DIAPAT	Water-Based	1.0 lt. bottle

ALUMINA & COLLOIDAL SILICA

ALU-MIK is a deagglomerated alumina polishing powder and it produces a fine surface quickly due to the lack of aggregates. ALU-MIK alumina suspensions have been developed to give the operator easy to use pre-prepared polishing media. It requires no dilution with water and can be dispensed with COL-K(NC)

Colloidal silica suspension is able to produce the ultimate in high quality mirror polishes on polishing machine. A part abrasive, part chemical polishing action makes colloidal silica well suited to polishing difficult materials such as Aluminium, Stelitte and Cobalt Chrome. automating dispensing units, like DOSIMAT.

ALUMINA & COLLOIDAL SILICA

Suspensions & Powders

ORDER NO	CODE	ALUMINA PRODUCT
39-200	ALU-MIK	Alumina Suspansion 0.05 Mic. 1.0 lt. bottle
39-210	ALU-MIK	Alumina Suspansion 0.3 Mic. 1.0 lt. bottle
39-220	ALU-MIK	Alumina Suspansion 1.0 Mic. 1.0 lt. bottle
39-100	ALU-MIK	Alumina Powder 0.05 Mic. 500 gr.
39-110	ALU-MIK	Alumina Powder 0.3 Mic. 500 gr.
39-120	ALU-MIK	Alumina Powder 1.0 Mic. 500 gr.
39-600	COL-K(NC)	Colloidal Silica (1 lt.) Bottle

PORTABLE METALLOGRAPHY

In-situ/Field metallography is widely used for microstructure analysis on large parts (samples) that cannot be easily carried or where destructive preparation is permissible such as storage tanks, piping system, power plants, etc.

In-situ Metallography allows for quick on-site evaluation of a component. There are numerous advantages in using in-situ/field metallography.





PAPER GRINDING DISCS

Self-Adhesive Back

ORDER NO	CODE	TYPE	DIAMETER	GRIT SIZE	QUANTITY /PACK
90 20	DEMPAX-P	Self-Adhesive Back	30	80	250
90 21	DEMPAX-P	Self-Adhesive Back	30	120	250
90 22	DEMPAX-P	Self-Adhesive Back	30	320	250
90 23	DEMPAX-P	Self-Adhesive Back	30	500	250
90 24	DEMPAX-P	Self-Adhesive Back	30	800	250
90 25	DEMPAX-P	Self-Adhesive Back	30	1200	250

POLISHING CLOTHS

Self-Adhesive Back

ORDER NO	CODE	TYPE	DIAMETER	GRIT SIZE	QUANTITY /PACK
90 36	PORTO	Self-Adhesive Back	30	0.25-1-3	50
90 27	RADO	Self-Adhesive Back	30	6-9	50

DIAMOND PASTES

Monocrystalline

ORDER NO	CODE	TYPE	DIAMETER	QUANTITY /PACK
39-301-M	DIAPAT-M	Water-Based	0.25 µ	10 gr. Syringe
39-311-M	DIAPAT-M	Water-Based	1 µ	10 gr. Syringe
39-321-M	DIAPAT-M	Water-Based	3 µ	10 gr. Syringe
39-331-M	DIAPAT-M	Water-Based	6 µ	10 gr. Syringe
39-341-M	DIAPAT-M	Water-Based	9 µ	10 gr. Syringe

DIAMOND LUBRICANT

ORDER NO	CODE	TYPE	QUANTITY /PACK
39-502	DIAPAT	Water-Based	1.0 lt. bottle

REPLICA SET & ETCHING

ORDER NO	CODE
90 28	Cotton rolls (100 pcs) for electrolytic etching
90 40	Replica foil 35 microns thick, to be used with acetone
90 41	Microscope slide glasses

CONSUMABLES FOR PETROGRAPHY



For minerological specimens, the surface is prepared for examination with a reflected light microscope and the preparation procedure is basically similar to the preparation of metallographic specimens.

Preparing thin sections, on the other hand, requires highly specialized equipment and skills because the specimen is extremely thin, generally around 30 microns for observations with transmitted light microscope.

SILCA

Silicon Carbide Powder for Lapping

ORDER NO	CODE	GRIT SIZE	QUANTITY /PACK
40-0120	SILCA	120	500 gr.
40-0320	SILCA	320	500 gr.
40-0400	SILCA	400	500 gr.
40-0600	SILCA	600	500 gr.
40-1000	SILCA	1000	500 gr.

DIMOS

Diamond Cut-off Wheels for GEOFORM 102 & GEOCUT 302

ORDER NO	CODE	TYPE	DIAMETER mm.	ARBOR mm.	DESCRIPTION	QUANTITY /PACK	QUANTITY /PACK
19-203	DIMOS	Continuous Blade	200	12.7	Rock, minerals, ceramics, glass, etc.	1	GEOFORM 102
19-252	DIMOS	Continuous Blade	250	32	For Hard Petrographic Applications	1	GEOFORM 102/GEOCUT 302-S
19-302	DIMOS	Continuous Blade	300	32	For Hard Petrographic Applications	1	GEOCUT 302-S

CUPO

Diamond Cup Grinding Wheels for Thin Sectioning (GEOFORM 102)

ORDER NO	CODE	DESCRIPTION	QUANTITY /PACK
19-155	CUPO	Ø175 Diamond cup grinding wheel, 65 mic	1
19-156	CUPO	Ø175 Diamond cup grinding wheel, 35 mic	1

ACCESSORIES

For Thin Sectioning

ORDER NO	DESCRIPTION
40 40	Special Box for Slides
40 41	Standart Slides 27x46x1.27, 144 pcs.



CONSUMABLES FOR SPECTROSCOPIC SAMPLE PREPARATION

Sample preparation of metals and materials have become more and more important because of the rapid development and improvement of both software as well as OES and XRF-devices during the past few years that shifts the detection limit for trace analyses.

It is crucial to have the sample properly prepared. The sample needs to be both representative, homogeneous and with an even surface in order to eliminate factors that can influence the results.

DEMPAX

Paper Grinding Disc for SPECTRAL 250 & 350

ORDER NO	CODE	TYPE	DIAMETER	GRIT SIZE	QUANTITY /PACK
37-040-060-22	DEMPAX-S	Corundum	250	60	20
37-065-060-40	DEMPAX-S	Corundum	350	60	20
36-040-060-22	DEMPAX-SZ	Zirconium oxide	250	60	20
36-065-060-40	DEMPAX-SZ	Zirconium oxide	350	60	20

GRINDING STONES

for SPECTRAL PG 52/AG 102

ORDER NO	CODE	TYPE	GRIT SIZE	QUANTITY /PACK
80-150	GSW 60	Al_2O_3Grinding Stone for medium hard steels	60	1
80-151	GSR 60	Al_2O_3Grinding Stone for cast iron and hard steels	60	1
80-155	GSW 36	Al_2O_3Grinding Stone for medium hard steels	36	1
80-156	GSR 36	Al_2O_3Grinding Stone for cast iron and hard steels	36	1

TIPO

Milling Tips for SPECTRAL MM 102

ORDER NO	CODE	DESCRIPTION	QUANTITY /PACK
80-204	TIPO	Milling tips for non-ferrous materials	(1 set = 10 pcs.)
80-205	TIPO	Milling tips for cast irons	(1 set = 10 pcs.)
80-206	TIPO	Milling tips for medium hard and hard steels materials	(1 set = 10 pcs.)
80-207	TIPO	Ceramic Milling tips for cast iron & steel materials (GR 1838 &GR 1839)	(1 set=10 pcs.)

metkon
Technology behind Specimen

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