



PRECISION CUTTING

# MICRACUT 152





**metkon**  
Technology behind Specimen

  
QUARTER CENTURY OF  
EXPERIENCE

metkon 8888  
MICROCUT 152



# MICRACUT 152



MICRACUT 152 precision cutters are used for precise and deformation-free cutting of "Metals, Ceramics, Electronic Components, Crystals, Composites, Biomaterials, Sintered Carbides, Minerals, etc." MICRACUT 152 has its place in virtually any metallurgical, geological, electronics, research, biomedical or industrial laboratory. The applications are endless.

- Modern and sturdy design
- Easy to use control panel with ergonomic turn-knob
- Precise micrometer with digital readout
- Gravity feed system
- Automatic stop at the end of cut
- Transparent protection hood with magnetic safety switch
- Inbuilt recirculation coolant tank

## DESIGN

MICRACUT 152 accommodates diamond and abrasive wheels up to 175 mm (7") diameter and the speed range is between 50 and 1500 rpm. Modern-looking touch pad controls with ergonomic turn knob allows fast and easy setting of wheel speed and increases productivity. The gravity feed loading design minimizes sample deformation. The sliding weight arm with counterweight allows precise force application. The digital micrometer enables the operator to set the cutting width with a resolution of 1 micron. The digital micrometer is interchangeable and the customer can mount other types of micrometers if and whenever required. The coolant tray is removable from the instrument for easy cleaning. MICRACUT 152's cutting chamber is fully enclosed by a transparent hood. Blade dresser is optionally available. At the end of the cut, the motor automatically stops and an audible signal notifies the operator. Optional Cutting Table Attachment is available for manual cutting of extra flat large specimens and PCB's.

## Safety

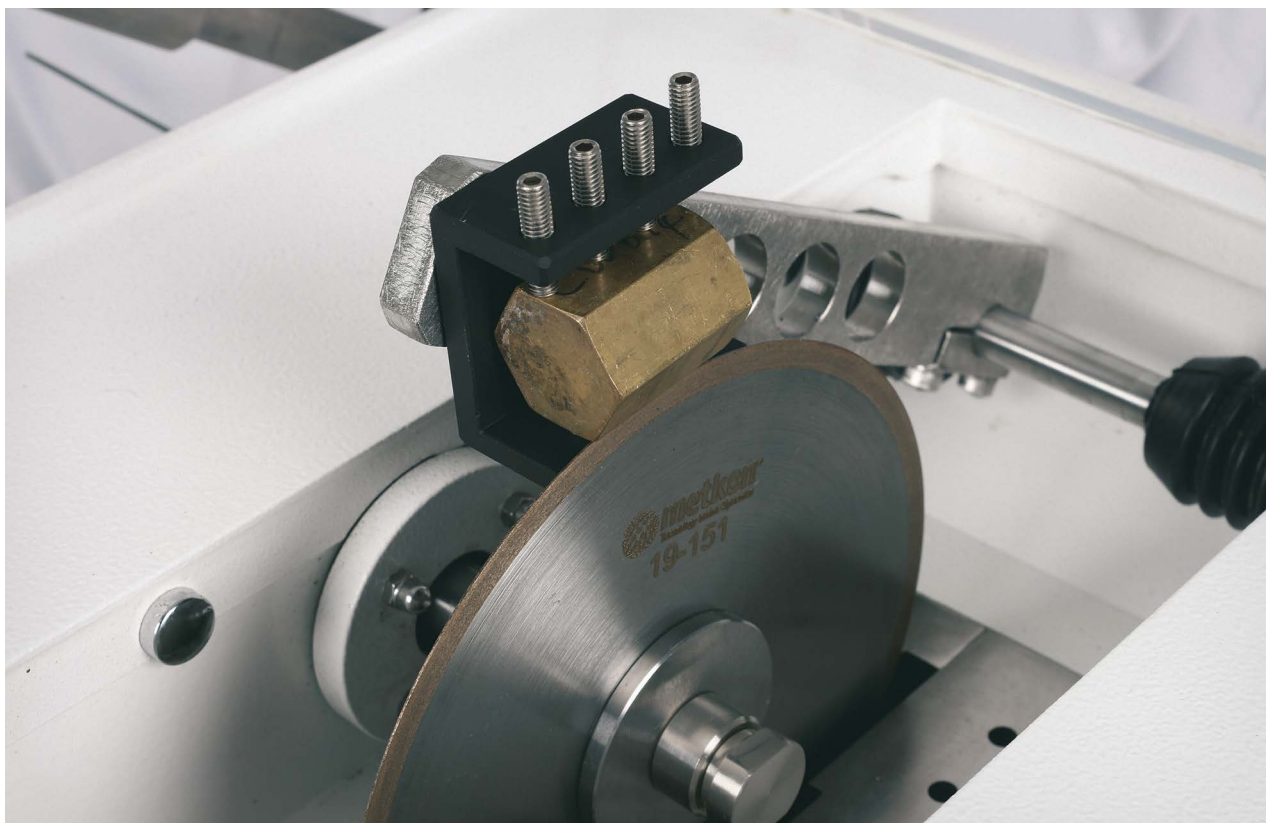
MICRACUT 152 precision cutters has the highest safety standards. The magnetic safety switch does not allow the motor to be started unless transparent hood is closed. If transparent hood is opened during cutting, the motor immediately stops automatically. Easily accessed and operated emergency stop button ensures immediate shut down. Soft closing feature of transparent hood protects fingers from risk of injury.





### Design

MICRACUT 152 precision cutters are capable of cutting most materials such as, brittle or ductile metals, hard or soft metals, composites, ceramics, rocks, biomaterials, laminates, etc. They are designed for cutting all types of materials with minimal structural deformation. The structural integrity of the sample is maintained through MICRACUT 152's design and operation. Additionally, low kerf-loss and sample holding versatility makes the MICRACUT 152 an essential part of the modern day laboratory. The cut surface is ready for microscopic examination with minimal polishing.







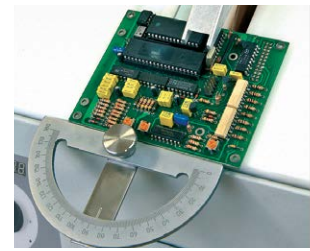
MICRACUT 152 digital display



Sliding weight arm conveniently placed

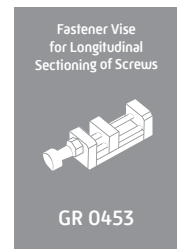
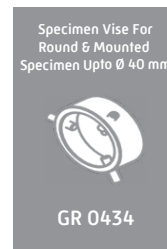
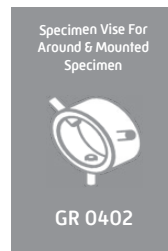
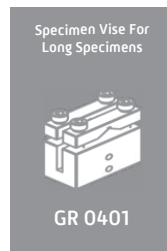
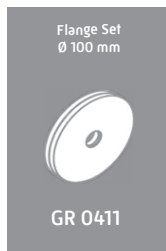
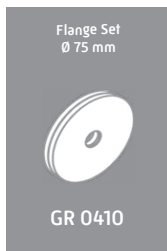


A variety of specimen vises are available for different applications



Cutting table attachment to cut flat specimens and PCB's

## SPECIMEN VISES & FLANGES



Many sample preparation applications require the sectioning of a specimen from a small or irregularly shaped sample or component part. The small size or irregular sample shape can create positioning and clamping difficulties for the operator. To overcome these difficulties,

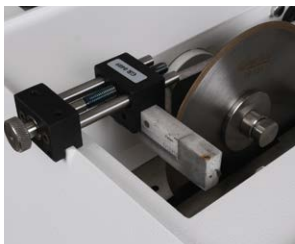
METKON offers a number of special clamping vises for use with MICRACUT 152 precision cutters. METKON 152 precision cutter is equipped with a stainless steel clamping arm. All clamping vises are made of corrosion resistant material and can be attached to the cutters clamping arm in seconds for fast and positive clamping of parts having virtually any configuration.



Ergonomic Turn Knob



Precise micrometer with digital readout



Dressing Unit



A variety of specimen vises are available for different applications

## SPECIFICATIONS

ORDER NO	16 05
MODEL NO	MICRACUT 152
Disc Diameter, mm	Up to Ø175 mm
Cutting Capacity, mm	Ø50 mm
Cutting Motor Power, W	100 W
Disc Speed, RPM	50 - 1500 RPM
Cutting Method	Chop
Parallel Cutting in X-Axis	Yes
X-Axis Positioning, mm	25 mm
Cooling Unit, lt	850 ml (integrated)
Dimensions, WxDxH, mm	510 x 430 x 340h mm
Weight, kgs	28 kgs

### 16 05 — MICRACUT 152

Precision Cutter Modern touch-pad controls with digital display, ergonomic turn knob for fast and easy setting of parameters, 100 W powerful DC cutting motor, variable speed 50-1500 rpm, with digital micrometer cross feed for specimen positioning, counterbalanced sliding weight system, removable cooling unit, automatic cut-off switch, transparent protection hood with magnetic safety switch, for cutting discs of up to 175 mm diameter. Ready for operation. Without specimen vises. 230 V, 50 Hz, AC.

**Includes a standard set of cutting consumables composed of;**

- 1 pc. Diamond cutting Disc 150 mm dia.
- 1 lt of METCOOL II cooling fluid.

#### Accessories for MICRACUT 152

- GR 0213** — Cutting Table Attachment for manual cutting of extra flat specimens and PCB's on MICRACUT 152
- GR 0409** — Dressing Unit for MICRACUT 152

#### Specimen Vises for MICRACUT 152

- GR 0400** — Universal Specimen Vise for MICRACUT 152
- GR 0401** — Specimen vise with double parallel vice for long specimens.
- GR 0402** — Specimen vise for round and mounted specimens, Ø32mm.
- GR 0403** — Specimen vise for irregular shaped specimens.
- GR 0404** — Specimen vise for adhering specimens.
- GR 0405** — Specimen vise for biomedical samples.
- GR 0430** — Specimen vise (teardrop shape) for specimens Ø18-40mm.
- GR 0431** — Specimen vise (teardrop shape) for specimens Ø5-20mm.
- GR 0434** — Specimen vise for round cylindrical specimens (max. up to 40 mm dia.)
- GR 0406** — Swivel arm unit for angular cutting.
- GR 0453** — Fastener vise for longitudinal sectioning of screws, fasteners tubes, etc. from 12 to 45 mm. in length

#### Optional Flange Sets for MICRACUT 152

- GR 0410** — Set of Flanges, Ø75 mm suitable for 12,7 mm. Arbor dia.

\* Other voltages and frequencies available upon request. Please state when ordering. All specifications are subject to change without notice.

