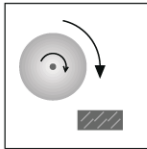


# METACUT 350®

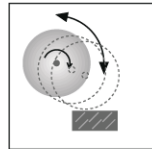
Micro Star 2000, inc.

Micro Star's large capacity chop cutting machine METACUT 350® is the ideal abrasive cut-off machine for metallographic samples, offering perfect solutions for efficient, versatile and reproducible high quality cutting. It is available in manual (METACUT-M 350) and automatic (METACUT-A 350) versions.

- Compact and powerful ...
- Fully automatic operation ...
- Microprocessor controlled ...
- Pulse cutting technique ...



Chop-Cutting



Chop-Cutting, pulsed



## Design

METACUT 350® is designed for wet cutting of large and small, regular or irregular shaped workpieces of metallic, ceramic or composite materials. METACUT 350® can accommodate Ø350/Ø400mm cutting wheels. The cutting capacity of METACUT 350® is 120/140mm. The side access port permits the sectioning of extra-long workpieces, as well. The machine is equipped with a powerful motor, driving the cut-off wheel towards the workpiece. The bottom part of the machine is a large robust alloy base casting. The cutting table is provided with T-Slots increasing the versatility so that different clamping sets can be mounted. All clamping devices are made of stainless steel and can be attached to the cutters T-Slot beds easily for fast, positive clamping of parts having virtually any configuration. The quickclamping devices are removable to permit the installation of conventional clamping tools to hold larger or more intricate workpieces. The cutting chamber inside is illuminated with two 12-Volt sealed lamps. The protective hood is secured with an interlocking switch.

A recirculating cooling unit is a standard part of the machine. The cutting surface is cooled by spray nozzles and water jets hit both the cutting wheel and the specimen. This provides an efficient cooling of the sample and prevents the overheating of the surface structure.

## Automatic Operation

A sophisticated hydro-pneumatic system and microprocessor technology controls the automatic operation. Clamp the sample in the vices, set the recommended cutting force and feed rate, then press the "Auto-Cut" button. The motor starts, coolant flows, the cutting wheel advances and cuts through the section then returns to its initial position and stops.

The electronic-brake system, which is a standard feature, brings the cutter to a quick full stop in seconds after it has been switched off. Controlling cutting force and the cutter feed creates reproducible cutting conditions which results in superior surfaces consistently.



When sectioning complex specimens, the controlled cutting force allows the cutting rate to vary according to the thickness being cut, resulting in evenly cut surfaces. The motor current is monitored with an "Overload Display" (LED bar graph) on the front panel. Pulse cutting mode, selectable from the front panel is specially designed to section "hard to cut" materials.



### METACUT-M 350®

Abrasive Cutting Machine, 7.5 HP compact motor, electronic brake system, cutting capacity up to 120/140mm solid stock, for cut-off wheels up to Ø350/Ø400mm, large T-slotted clamping table 370x350mm made of stainless steel, bottom part a rugged alloy base casting, 90 lt. recirculating cooling unit with connection hoses integrated base cabinet.

Without clamping devices.

220/440 V, 3 ph., 60 Hz. (specify voltage)

Order No: 58 0000

### METACUT-A 350®

Automatic Abrasive Cutting Machine, Microprocessor controlled, hydro-pneumatic drive system, adjustable feed rate, adjustable cutting force, pulse cutting mode, LED bar graph overload display, 7.5 HP compact motor, electronic brake system, cutting capacity up to 120/140mm solid stock, for cut-off wheels up to Ø350/Ø400mm, large T-slotted clamping table 370x350mm made of stainless steel, bottom part as rugged alloy base casting, 90 lt recirculating cooling unit with connection hoses, integrated base cabinet. (Requires air supply)

Without clamping devices.

220/440 V, 3 ph., 60 Hz. (specify voltage)

Order No: 59 0000

## Technical Data

Order No	Cutter	Cutting Cap. Ø, mm	Cutting Cap. Ø, mm	Motor Power HP	Wheel Dia. mm	T-Slotted Table, mm	Operation	Cooling Unit, lt.	Air Supply	Chop Cutting	Pulse Cutting	Mains*
58 0000	METACUT-M 350	120/140	85/190	7.5	350/400	370x350	Manual	90	-	Yes	-	3ph, 220/440V, 60Hz
59 0000	METACUT-A 350	120/140	85/190	7.5	350/400	370x350	Automatic	90	6 bar	Yes	Yes	3ph, 220/440V, 60Hz

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



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