



# Rough Grinding and Cutting



## Purpose

The main goal of rough grinding and cutting off is to remove as much material (stock) as possible. Surface finish is of minor importance. This process involves leveling or smoothing edges and shaping cast, forged, or welded pieces. It can also involve removing material to form or enlarge a cavity. Typical tasks include fettling castings, trimming welding joints, or cutting off.



## Choosing the Tool

Several factors determine the choice of tool, including the type of grinding work, the workpiece material, shape, location, the abrasive used, and the power required. More power enables more material to be removed over time.



## Choosing Wheel Diameter and Thickness

Key considerations when choosing wheel diameter include ease of use, machine speed, and economy:

- Many operators prefer the smallest wheel possible as it is lighter and generates less torque.
- Machine speed (rpm) is crucial. Safety codes restrict maximum speeds; larger wheels have lower maximum speeds.
- Larger wheels provide more usable abrasive material at a lower additional cost.
- Wheel thickness is also a matter of cost-effectiveness. Thicker wheels offer more abrasive material for the same price, but thinner wheels may be necessary for precision control or confined spaces, despite requiring a heavier tool and higher air consumption.



## Technique

When using grinders, the material removal pattern is unpredictable, unlike stationary machines. Each grain on the abrasive acts as a tiny cutting tool, removing small chips of material. Over time, these grains become blunt, but the right abrasive will cause blunt grains to break off, exposing new, sharp grains, which is essential for effective grinding. Self-sharpening is crucial for effective grinding. Grinding with a rocking movement helps different parts of the abrasive touch the workpiece, aiding the self-sharpening process. When cutting off material, this rocking motion should follow the wheel's rotation direction.

## Edge processing for professionals: an excellent combination of power, design, durability and ergonomics. For stronger joints and rounded edges.

### Description

Discover our high-quality bevelling tools, designed for chamfering, deburring, and creating radius edges on mild steel and aluminum plates. These tools are perfect for milling contours and cut-outs in carbon steel and aluminum, with adjustable depth control for precision.

Our bevelling tools are perfectly suited for efficient work in various areas of manual edge-processing.

Featuring the unique milling head and guide bearing technology, our tools deliver enhanced performance, leading to greater effectiveness and productivity. Achieve strong welded joints and smooth, rounded edges for an excellent paint finish. Enhance your metalworking projects with our reliable and efficient bevelling tools, and experience the clear benefits for our customers.

### Features

- Modular design
- Lightweight and easy-to-handle design
- Integrated speed controlled governor
- Ergonomically designed support handle
- Integrated spindle lock
- Carbide inserts with eight cutting edges
- Milling head @45° made of special alloy

### Benefits

- Optimal process speed
- Highest productivity
- No grinding dust
- High level of operator safety and comfort
- Excellent accessibility



## Beveling Tools





Model	Max free speed r/min	Max bev- el width mm	Max radius mm	Max output kW	Weight kg	Max height over guide plate mm	Air consumption at max output l/s	Air consumption at free speed l/s	Rec hose size mm	Air inlet thread BSP in	Ordering No.
LSB39 S085	8500	8	4	1.8	2.6	111	29.5	16.3	13	3/8	8423 0133 10

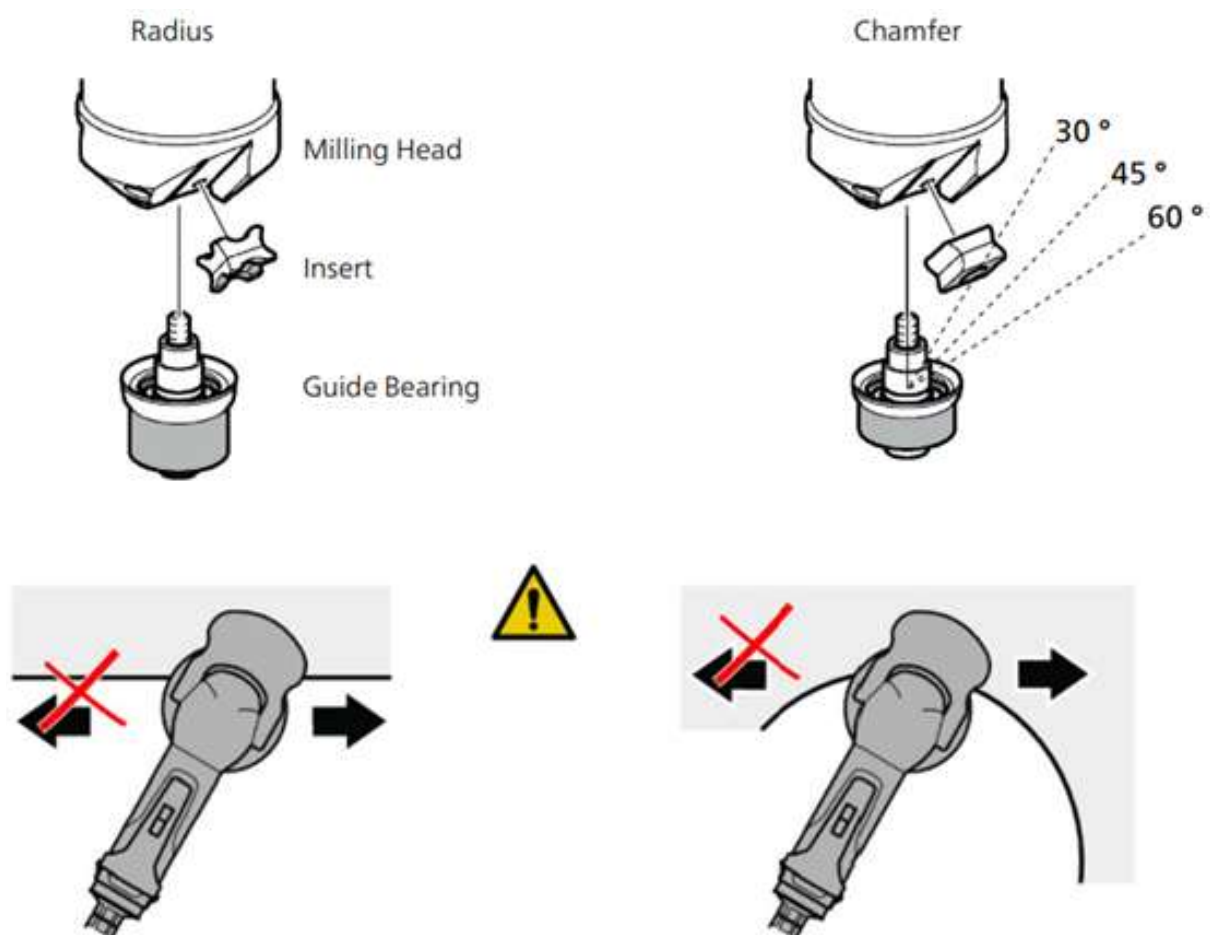
## Accessories

	Ordering No.
<b>Included</b>	
Milling head (Chamfer 45°)	4150 2240 90
Guide bearing (Chamfer 45°)	4150 2240 93
Insert (Chamfer 45°)	4150 2241 92
<b>Optional</b>	
Hose kit (Turbo 13; 13 mm (1/2"), L = 0.9m (L = 3 ft))	4150 1618 81
Hose (Soft type, Ø 38mm, L = 1 m)	4150 1314 02
Hose (HD type, Ø 42mm, L = 1 m)	4150 1532 01
Milling head (Radius 2mm, 3mm, 4mm)	4150 2240 90
Milling head (Chamfer 30°)	4150 2240 94
Milling head (Chamfer 35°)	4150 2240 98
Milling head (Chamfer 55°)	4150 2240 96
Milling head (Chamfer 60°)	4150 2241 04
Guide bearing (Radius 2mm)	4150 2240 80
Guide bearing (Radius 3mm)	4150 2240 91
Guide bearing (Radius 4mm)	4150 2240 92
Guide bearing (Chamfer 30°)	4150 2240 95

## Accessories

	Ordering No.
<b>Optional</b>	
Guide bearing (Chamfer 35°)	4150 2240 99
Guide bearing (Chamfer 55°)	4150 2240 97
Guide bearing (Chamfer 60°)	4150 2241 05
Insert (Radius 2mm)	4150 2241 93
Insert (Radius 3mm)	4150 2241 90
Insert (Radius 4mm)	4150 2241 91
Insert (Chamfer 30°, 35°, 55°, 60°)	4150 2241 92
MULTIFLEX-3/8 cover	8202 1350 42
MULTIFLEX-3/8-NPT (For North America)	8202 1350 28
MULTIFLEX-3/8	8202 1350 22
Productivity kit (MIDI-FRL-1/2-BSP EQ10-T13)	8202 0850 17

NOTE: Each type of inserts work with respective Guide bearing only



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