Planomat Z
Semi automatic orbital deburring machine

Prismatic guide units machine wheels optional accessory
Technical data as standard version

| Material geometry: | independent |
| Drive: 4,0 kW | brush drive |
| 0,37 kW | rotation |
| Brush diameter: | 300/380/400 mm |
| Brush width: 20 - 130 mm |
| Minimal length: | 30 mm (manually infeed) |
| Maximal length: | random |
| Minimal diameter: | 10 mm |
| Maximal diameter: | 120 mm (brush from 380mm) |

The semi-automatic deburring machine PLANOMAT was already implemented in 1978. Because of steady perfecting and constant advancements, the present Planomat Z is the perfect deburring machine for straight, helical catted and bended tubes or hard twistingly goods.

The machine is particularly robust designed to handle difficulty deburring work. The working area is between the diameters of 10-approx.120mm and its relevant profile dimensions. Special profiles such as aluminum, steel up to stainless steel can be deburred optimally (with matched brush options).

The deburring unit got two drives:

On the one hand there is the brush drive (high rotation speed) with 4,0 kW drive power (directly powered) and one the other hand the rotation drive (low rotation speed) of the brush unit with 0,37 kW. The whole deburring machine is mounted on to a stable basic housing.

The brush wear will be compensated by a carriage. Therefore, a central adjustment (spindle unit) will be installed. A suction unit can be integrated, for incidental chips and dust, inside the unit. A chips tray will be present at machines without a suction unit, so it is possible to add one later.

With a “removable shape disc” it is possible to guide very short goods (from length 50mm) to the brush and deburr them safely. You can find further options about different infeed systems in the following offer.

The deburring unit will be matched with an electronical saved cover hood.

The handling with an open cover hood is not possible
Brush flange / brush change

Spontan developed the Fast Change System, consisting of a stable double-sided brush shaft bearing. Because of its robust, hardly bearing of the brush(-es), this system is even suitable for difficult deburring works.

Brush change: approx. 5 - 6 min.

Standard version / operating elements

- Main switch
- Switch-ON-button with signal lamp
- Switch-OFF-button
- ON-button with signal lamp
- OFF-button
- Failure lamp
- Suction-ON with signal lamp (Option Suction unit)
- Suction-OFF (Option Suction unit)
- Emergency stop button
- Safety hood switch

Coating:

RAL 7035 light grey, in combination with RAL 7016 anthracite grey.

Standard Accessoires:

- Operating tools
- 2piece operating instruction with service manual
- 1piece operating instruction on CD-ROM
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Accessories / Options

Operating brushes Ø380mm (1 Set = 2 piece)

WC 2384 / 85
0,35mm steel wire ASD – brush disc Ø380 x 26mm
Art.-No. 71.62-00 2/10

WC 2387
0,35mm stainless steel V2A – brush disc Ø380 x 26mm
Art.-No. 71.62-00 2/60

Operating brushes with abrasive grit – Stock, different brush qualities or Special editions will you get right after our customer-product related analysis.

Removable shape good-intake for round tubes:

A stable base with admission rings and clamping lever, which will be mounted to the deburring machine by guide pins. The synthetic adapter rings with random mounting diameters are easily and quickly removable.

Removable shape disc for square-cross sections:

They can be mounted at the front plate and are easily and quickly removable. The single shape discs will be manufactured individually to the related profile forms (via milling or laser cutting).

During the deburring process, the profile will be immersed into the shape plate till brush contact. Because of the matched shape, the shape disc is also helpful as a guidance for a safe deburring of the workpiece.

Brush drive “cutting speed“

The Planomat Z will be either delivered with 1400 1/min (e.g. for aluminum) or 2800 1/min (for steel or stainless steel). A continuous rotational speed setting via frequency converter is available as an option.
Prismatic Guide unit

The prismatic guide unit is provided continuously for diameter areas from 8 to 10 mm. By a quick-set mechanism it is possible to adjust the unit to the relevant diameter. The device will be mounted at the inlet side of the PLANOMAT™ Z. That will ensure a quick and cost-saving changeover on each diameter.

Machine wheels

It is possible to match the machine with fixed and swivel castors to move the machine without any pallet or forklift truck.
(integrated system without any protruding elements)

Dedusting system

Indication: The dust deposits inside the machine housing have to be cleaned in short intervals (daily) during the deburring of aluminum.

Aluminum dust is inflammable, fine particles < 500µm can create in combination with air, explosive mixtures

It is not allowed to aspirate mixed-dust (Steel and Aluminum)
Please observe the aluminum dust rules
Danger of Explosion!

As per BGR 109 Brush dust should be removed by dry aspiration with wet separator.

internal suction unit WA-07-P/Plano

The dust suction unit will be space-saving integrated in the substructure of the machine. An additional energy supply as well as an external piping is not needed.

(not suitable for aluminum dust, danger of explosion)
External wet suction unit Type HNA 3

The extraction unit consists of a sheet steel housing with revision cover, water tank, integrated fan, engine, droplet separator, intake manifold with funnel out of polypropylene (PP), movable mud bucket, fresh water supply, cleaning hose, management for water level regulation with related piping.

- **Pipe connection**
- **Installation of piping**
- **Suction rail inside the brush unit**
- **Suction vehicles**
- **Electrical control**

from brush to extraction inside the brush unit

Type Norfil NW 125

for travelling brush unit integrated in main control cabinet

- **Air performance**
- **Drive power Motor**
- **Total pressure**
- **Mud bucket**
- **Intake manifold**
- **Filling level regulation**
- **Average Noise pressure level**
- **Dimension width x height x depth**
- **weight**

1.800 Bm³ / h

3,0 kW

2.100 Pa

120 Liter

187 mm

autom. via float switch

82 dB

835x1825x760 mm

250 kg