Planomat ZII-FU
Semi automatic orbital deburring machine
Technical data in Standard version

<table>
<thead>
<tr>
<th>Material geometry:</th>
<th>independent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive:</td>
<td>3.00 kW Brush drive</td>
</tr>
<tr>
<td></td>
<td>0.55 kW Rotation</td>
</tr>
<tr>
<td>Brush diameter:</td>
<td>max. 250 mm</td>
</tr>
<tr>
<td>Brush width:</td>
<td>55 – 165 mm (max. 180 mm)</td>
</tr>
<tr>
<td>Location hole:</td>
<td>Ø50.8 with keyway</td>
</tr>
<tr>
<td>Rotational speed:</td>
<td>1500 – 3000 rpm</td>
</tr>
<tr>
<td></td>
<td>continuous 0 – max. 3000 rpm (Option)</td>
</tr>
</tbody>
</table>

Workpiece data

| Length:                  | from 30mm – random (manual infeed) |
| Profile diameter:        | from 6 – 120 mm |

Dimensions:

| Width / height / depth   | 580 x 1400 x 1100 mm |

Semi-automatic orbital deburring machine Type PLANOMAT “ZII-250”

Because of steady perfecting and constant advancements, the present Planomat ZII-250 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 6 - approx. 120 mm 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 3.0 kW drive power (directly powered) and one the other hand the rotation drive (low rotation speed) of the brush unit with 0.55 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 (via handwheel and clamping lever at the reverse side of the machine) will be installed.

A suction unit can be integrated, for incidental chips and dust, inside the unit.

Die Entgratungsanlage ist mit einer mechanisch gesicherten Abdeckhaube versehen.

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-ZII-250. That will ensure a quick and cost-saving changeover on each diameter.
Brush flange / brush change

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

The brush change will come by loosen of a central clamping nut (SW 60 left-hand thread) with flange.

Brush change: approx. 2 - 3 min.

Standard Equipment / operating elements

Main switch
- Emergency stop button
- Knobs for rotational speed 0-3000 rpm
- Stop button (red) and Start button (green)
- Brush wear adjustment with clamping lever

At the reverse side of the machine

Painting:

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

Standard accessoires:

- Operating tools
- 1piece Operating instruction with service manual
**Planomat ZII-FU**  
Semi automatic orbital deburring machine

**Type**

*spontan Planomat ZII-250*
inklusive  
- Substructure with integrated chips tray  
- Brush wear infeed  
- Prismatic guide unit  
- 2 rotational speeds (1500 / 300 rpm)

Version according to description with standard accessories  
Art.-No.: 91.530-001/00

*spontan Planomat ZII-250 –FU.* (frequency converted brush drive)  
inklusive  
- Substructure with integrated chips tray  
- Brush wear infeed  
- Prismatic guide unit  
- Continuous brush speed from 0 – 3000 rpm via frequency converter

The rotational speed can be changed at any time via a knob (scaling 0 – 10) to match the handling for different materials.  
(e.g. aluminum approx. 1400 rpm, steel/stainless steel approx. 2750 rpm)

Matching of the cutting speed at reduced brush diameter (brush wear) or immediate matching of the deburring result

Version according to description with standard accessories  
Art.-No.: 91.530-000/00

**Accessory / Options**

**Working brush  Ø250mm**

WC 1001  
Ø250 x 80mm, stock 0,35 mm ASD corrugated  
Art.-No. 71.62-0011/00

WC 1800  
Ø250 x 55mm, stock 0,20 mm ASD corrugated  
Art.-No. 71.62-0018/00

WC 1850  
Ø250 x 55mm, stock 0,35 mm ASD corrugated  
Art.-No. 71.62-0018/50

WC 1900  
Ø250 x 55mm, stock 0,50 mm ASD corrugated  
Art.-No. 71.62-0019/00

WC 1910  
Ø250 x 55mm, stock 0,20 mm V2A corrugated  
Art.-No. 71.62-0019/10

WC 1920  
Ø250 x 55mm, stock 0,35 mm V2A corrugated  
Art.-No. 71.62-0019/20

Operating brushes in 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.

Adapter plate with front fairing:

Eine stabile Grundplatte mit einer speziellen Frontmaske zur Entgratung von kurzen Rohrbögen etc.

Durch die Ausführung der Frontmaske (Bohrungsdurchmesser nach Anwendungsprofil) lassen sich Rohrab schnitte bei Rohrbögen oder T-Stücken von unter 10mm Länge einfach und sicher entgraten.

Machine wheels

It is possible to equip the unit with a wheel system for moving the machine without using a lift- or forklift truck.

1 Set machine wheels 91.530-900/02
2x fixed castors & 2x swivel castors with brake and already mounted up on rails

Dedusting systems

Stationary short dust extractor

Type OMF 10, with integrated spark pre-separator tray

Air volume: 1000 m³ / h
max. vacuum: 1400 Pa
Drive motor: 0.55 kW 230V / 50 Hz
Suction piece diameter: 100 mm
Length X width X height 550 x 550 x 1220 mm
Painting: RAL 7012
Planomat ZII-FU
Semi automatic orbital deburring machine

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
Installations of piping
Suction rail inside the brush unit
Suction vehicles
Electrical control

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pipe connection</td>
<td>from brush to extraction</td>
</tr>
<tr>
<td>Installation of piping</td>
<td>inside the brush unit</td>
</tr>
<tr>
<td>Suction rail inside the brush unit</td>
<td>Type Norfil NW 125</td>
</tr>
<tr>
<td>Suction vehicles</td>
<td>for travelling brush unit</td>
</tr>
<tr>
<td>Electrical control</td>
<td>integrated in main control cabinet</td>
</tr>
</tbody>
</table>

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

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<tr>
<th>Specification</th>
<th>Value</th>
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<tbody>
<tr>
<td>Air performance</td>
<td>1,800 Bm³ / h</td>
</tr>
<tr>
<td>Drive power Motor</td>
<td>3,0 kW</td>
</tr>
<tr>
<td>Total pressure</td>
<td>2,100 Pa</td>
</tr>
<tr>
<td>Mud bucket</td>
<td>120 Liter</td>
</tr>
<tr>
<td>Intake manifold</td>
<td>187 mm</td>
</tr>
<tr>
<td>Filling level regulation</td>
<td>autom. via float switch</td>
</tr>
<tr>
<td>Average Noise pressure level</td>
<td>82 dB</td>
</tr>
<tr>
<td>Dimension width x height x depth</td>
<td>835x1825x760 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>250 kg</td>
</tr>
</tbody>
</table>

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.

The customer is responsible for the safe handling of the unit during deburring of aluminum profiles.