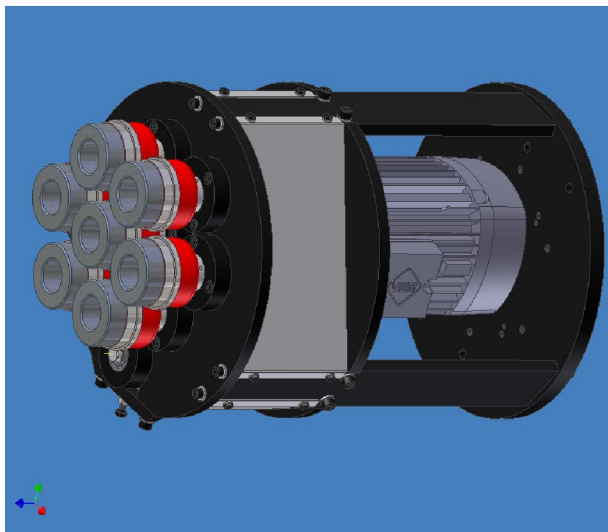


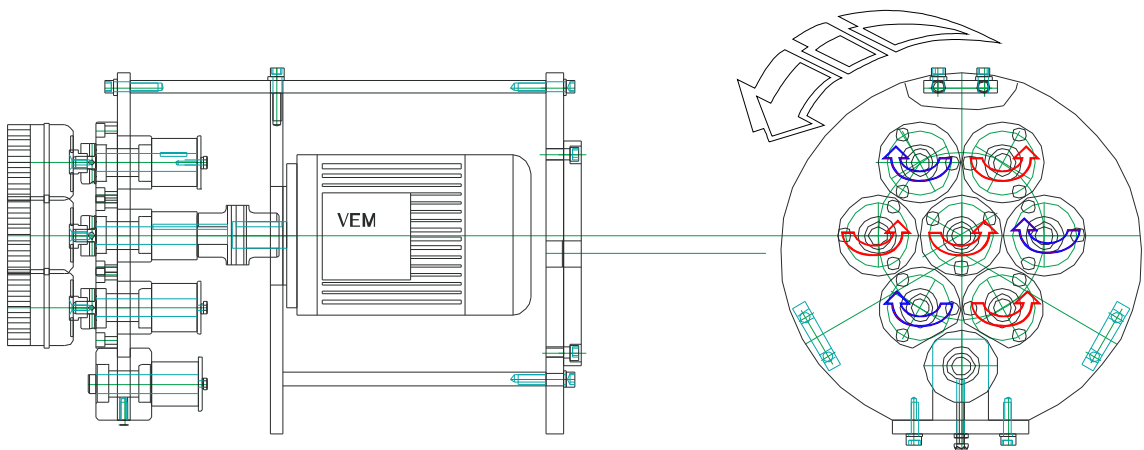


Version of the illustrated deburring unit

- Prismatic guide unit
- Integrated suction unit
- Machine wheels



Brush – Concept - Structure





# SPONTAN

TRENN- UND ENTGRATTECHNIK

## Planomat ZR

Semi automatic orbital  
deburring machine

### Technical data in Standard version

Material geometry:	independent	
Drive:	2,2 (3,0) kW	Brush drive
	0,37 kW	Rotation
Brush diameter:	90 mm	(7x)
Minimal length:	30 mm (manual infeed)	
Maximal length:	random	
Minimal diameter:	20 mm	
Maximal diameter:	220 mm	

### Semi-automatic orbital deburring machine Type PLANOMAT "Z-R"

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

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 0,37 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.

The machine at its front is designed in a way that is possible to add different infeed systems.

The deburring machine is designed for the special deburring of profiles and other not twistingly goods. The working area is between the diameters of 20 – approx.220 mm and their related profile dimensions. Flat and special profiles out of steel and aluminum can be deburred optimally.

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 structure

The deburring process will come from 5 – 7 especially structured and driven surface brushes. All brushes are directly powered and will rotate counteractive to one another. The whole brush head will rotate eccentrically around the workpiece. The surface brushes will be equipped with support rings to react against the centrifugal force.

The whole deburring machine will be covered with an electrical saved hood to ensure a safe process.

## 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
- Suction-OFF
- Emergency stop button
- Safety hood switch



(Option Suction unit)  
(Option Suction unit)

## 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

### Accessories / Options

#### Operating brushes (1 Set = 7 piece)

WC 2906 0,35mm steel wire – cup brush Ø90	Art.-No. 71.63-0029/06
WC 2907 0,50mm steel wire – cup brush Ø90	Art.-No. 71.63-0029/07
WC 2901 0,15mm V2A stainless steel wire– cup brush Ø90	Art.-No. 71.63-0029/01
WC 2902 0,20mm V2A stainless steel wire – cup brush Ø90	Art.-No. 71.63-0029/02
WC 2903 0,35mm V2A stainless steel wire – cup brush Ø90	Art.-No. 71.63-0029/03

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:

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.



# SPONTAN

TRENN- UND ENTGRATTECHNIK

## Planomat ZR

Semi automatic orbital  
deburring machine

### 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

Um die Maschine ohne Hubwagen oder Gabelstapler zu bewegen, kann die Anlage mit einem speziellen Rollensystem ausgestattet werden.  
(Integriertes System ohne herausragende Elemente)

### Dedusting system

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**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**



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

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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.**

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### 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)**



# SPONTAN

TRENN- UND ENTGRATTECHNIK

## Planomat ZR

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### 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

1.800 Bm<sup>3</sup> / h  
3,0 kW  
2.100 Pa  
120 Liter  
187 mm  
autom. via float switch  
82 dB

Dimension width x height x depth  
weight

**835x1825x760 mm**  
250 kg



Abscheider mit elektromagnetischer  
Füllstandsregulierung

