



## > **DEBURRING AND FLEXIBLE ROUNDING ON DEMAND**

The EM 5N II represents the 3rd generation of wet deburring technology from ERNST. Configured to process a mix of steel, non-ferrous alloys and coated materials this model sets the standard for state of the art, economical deburring technology.

### >> 1. Working Module: The Highly Flexible ERNST Deburring Drum

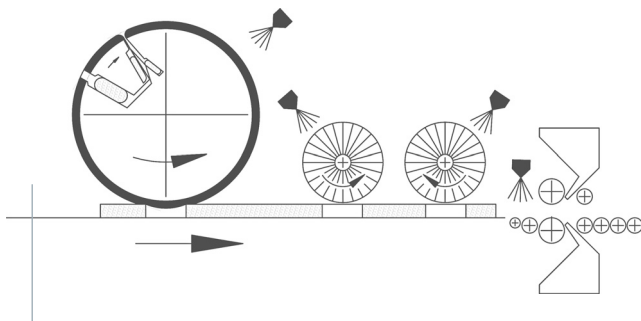
The literarily flexible deburring drum removes any burr or dross after laser cutting and/or punching / shearing. The soft foam coating easily adapts to large deviations in material thickness and distortion. Material is mainly removed within a narrow distance from the contoured edges. The point pressure of the abrasive on the solid surface is so low, that coated materials can be processed as well as materials with forms and stampings. Consumables cost compared to wide belt is reduced to approximately 50% due to simple rectangular sheets of abrasives and the targeted removal of material from the edges only. Even extreme dross is reliably removed in a single pass. The deburring drum interacts with the material by it's own weight and is designed to freely float on top of the material. The drum oscillates with over 50 strokes per minute. This guarantees a very even usage of the abrasive. The abrasive is pneumatically tensioned and can be changed in less than 4 minutes. The abrasives have above average lifespan as the consumption is proportional to material removal.

### >> 2. + 3. Module: Stainless Steel Wire Brush Rollers

Two counter rotating heavy duty stainless steel wire brush rollers break any sharpness of the parts with their tips hammering against the edges. The risk of cuts is practically eliminated. Wire brushes are known for their longevity as they do not work abrasively but just displace material by forming. If more rounding is required abrasive brush rollers are available as well.

### >> 4. + 5. Module: Washing and Drying Station

At the exit of the machine a washing and drying station cleans the parts with high volume filtered emulsion sprayed onto the parts. A high pressure air venturi system in combination with a grooved squeegee roll dries the parts efficiently.



# EM 5N II



**PAUL ERNST  
MASCHINENFABRIK GMBH**

Alte Meckesheimer Straße  
74927 Eschelbronn /Germany

Tel.: +49(0)6226-9504 – 0  
Fax: +49(0)6226-9504 – 41

www.ernst-maschinen.de  
email: info@ernst-maschinen.de

## >> Accessories and Special Executions

Small ferrous parts down to credit card size (40 cm<sup>2</sup>) can be processed with the optional magnetic track. The track covers 300 mm width.

Non magnetic parts such as stainless steel or aluminum can be processed with a vacuum system with a minimum requirement of 100 cm<sup>2</sup> for the size of small parts

The machine is available in 900 mm, 1400 mm and 1540 mm working width.

## >> Other Options

Very oily parts cause premature deterioration of the emulsion and we recommend an oil separator.

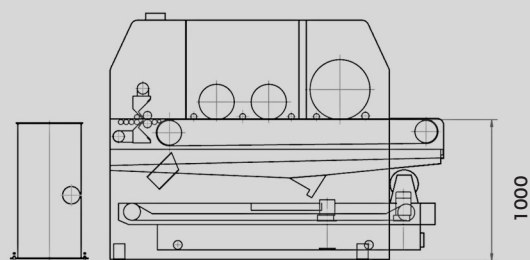
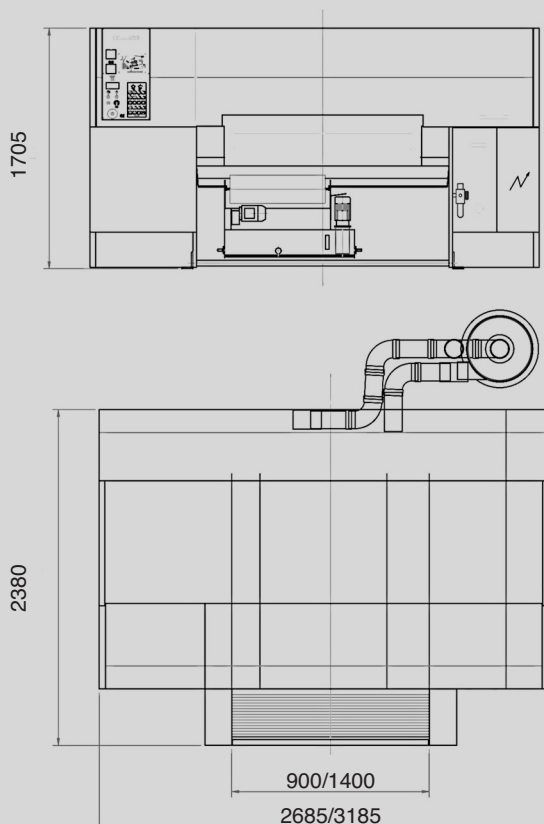
Additionally the machine can be equipped with a pair for spring steel brush heads. These heads are intended to remove laser oxide from the cutting edges of laser cut parts up to maximum material thickness of 25 mm. The execution in this version is named EM 5N II + 2F. See brochure BM2M/F.

For customers primarily processing aluminum a reaction container is available to maintain the integrity of the emulsion and remove even small aluminum particles.

We reserve the right to make design changes at any time without prior notice.

www.cddesign.cc 1500/092008/8015

## > TECHNICAL SPECIFICATIONS



## EM 5N II

Working Width (Standard)	900 mm	1400 mm
Weight	3800 kg	4000 kg
Power	27 kW	35 kW
Amperage	57 A	74 A
Air	10 NI / 5 bar	10 NI / 5 bar
Abrasive Dimensions	900 x1540 mm	1400 x1540 mm