

EG M / Rotation - Edge Rounding Comes Full Circle!

This entirely new concept, developed by ERNST, is able to give sensational results regarding the rounding of edges, which exactly meet the demanding standards of all sheet metal fabricators who are committed to delivering top quality products, such as commercial kitchen and food processing equipment, to industries requiring well rounded edges. After deburring with the proven ERNST grinding drum, 8 powerful abrasive brush heads homogeneously create a consistent radius along all edges, regardless of orientation.

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

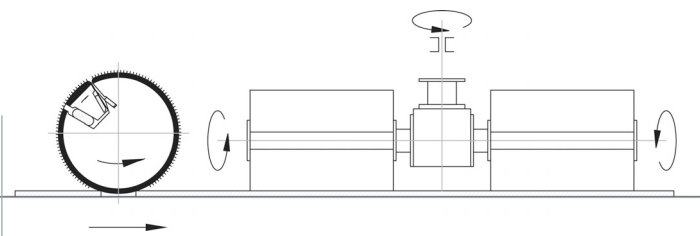
The extremely flexible deburring drum removes any slag, dross or burr after punching or laser cutting. The soft foam coating easily adapts to large deviations in material thickness and distortion and mainly removes material near the contoured edges. The point pressure of the abrasive on the solid surface is so low that even coated materials can be processed. The abrasive applied is in form of rectangular sheets and reduces consumables cost approximately 50% compared to wide belts. Even extreme dross is consistently removed in a single pass, and if a fiberglass reinforced sheet is placed between the soft foam and the abrasive, its effects on the edge are further amplified. The deburring drum interacts with the material by its own weight and is designed to freely float on top of the material, allowing for movement of more than 6mm (option) to compensate for distortion. The drum oscillates with over 50 strokes per minute guaranteeing a very even usage of the abrasive. The abrasives are pneumatically tensioned and can be changed in less than 4 minutes and have an above average lifespan as the consumption is proportional to material removal.

>> 2. Working Module: Rotation Unit

8 individual large diameter counter rotating abrasive strip brush heads, adding to a total of 3700 mm length, are mounted on a rotating disc frame. They remove any sharp edges, which occur even with the most perfect laser cuts. The configuration and motion of the rotation unit assures that the abrasive interacts with the edges, coming from all directions and thereby assuring the user homogeneous results on all outside and inside contours. Cuts from sharp edges are a past — Customer satisfaction is guaranteed!

>> 3. Additional benefits

The processing flexibility is maximized by applying variable speed drives to the control conveyor belt feed rates, in combination with the RPM of the brush heads as well as the rotating unit (Optional). Even feed rates over 2m/min (80in/min) achieve perfectly rounded edges. The rotating unit can also be stopped in the conveyor feed direction if the grain on brush finished parts has to be maintained.





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>> 4. Accessories and Special Executions

The machine comes standard equipped with a vacuum system securely holding parts down to post card size of 100 cm² surface without openings. (3" x 5")

Even smaller parts (down to credit card size (40 cm²)) can be processed with the optional magnetic track. The track covers 300 mm width.

The machine is available in 1400 mm and 1600 mm working width.

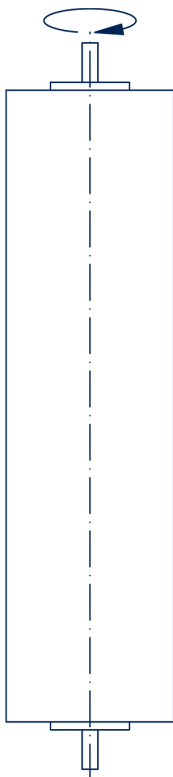
>> 5. Further Applications

The product range for ERNST deburring systems also includes a number of wet operating machines, allowing you to process a mix of alloys including Coated Steels, Stainless Steels and Aluminum. We offer laser oxide removal machines as well as heavy duty deslagging systems for flame and plasma cut parts.

Please contact us regarding peripheral equipment as well, such as dust extraction units and conveyor tables.

We reserve the right to change the design and engineering without notice.

> Highly Flexible ERNST Deburring Drum



> ERNST Rotation Unit

