

$\frac{RON\text{-}MASTER^{^{TM}}}{the steady rests}$ for roundness correction

The metal milling rolls are the unique tools. Some of them could pass through 1000 regrinding cycles during their lifetime. The regular grinding is needed to refurbish roughness and geometrical accuracy lost in the milling process. The geometrical accuracy of the roll includes roundness, crown and coaxiality. The geometrical tolerances are being tightened year by year together with the tolerances of the end products and with the increased working speeds.

The modern rollgrinding machine is equipped with the CNC control usually. It provides the necessary crown and roughness tolerances of the roll without any serious troubles. The steady rests provides coaxiality automatically if they are employed for grinding. But the roundness improvement remains a serious problem.

They regrind the rolls in the rigid steady rests typically. It keeps coaxiality with the necks. But this technology has a serious disadvantage. The unround neck creates runout of its center during rotation of the roll. As result, the grinding operation copies the roundness imperfections from the roll necks to the reground surface.

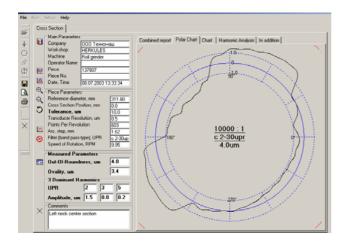
RON-MASTER[™] is the series of correcting steady rests which solve this problem easily.





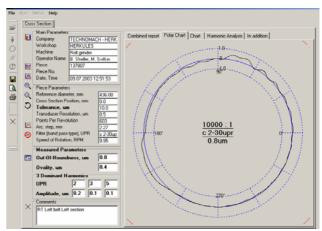
RON-MASTER[™] is equipped with the unique supporting shoe. It is based on the special theory of multi-point centering. Such supporting shoe can increase accuracy of rotation dramatically. It decreases the neck's center runout for 60–75% in comparison to the rigid steady rest. As result **RON-MASTER**[™] provides roundness of the ground surface in 2.5-4 times better than roundness of the neck was.

RON-MASTER[™] technology passed successfully a lot of tests in many companies, including MASCHINENFABRIK HERKULES (Siegen, Germany), the leading producer of rollgrinding machines. All tests confirmed the high performance and reliability of this solution.



Roundness of the neck 0.004mm





Roundness of the ground surface 0.001mm

(RON-MASTER[™] tested in Siegen with HERKULES MASCHINENFABRIK).

RON-MASTER[™] technology is easy to use. Not any additional training is needed for machine operator. Roundness is being improved automatically, without any operator participation.

RON-MASTER[™] can be used with the rollgrinding machines of any brand and any age. The old steadies can be upgraded with the **RON-MASTER**[™] supporting shoes frequently.





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