Robbi cylindrical grinders UK.

The competitive advantages of a grinding machines within the machining of the roller industry includes;

- Grinding speed
- Increased amount of material removal
- Superior surface finish and increased part accuracy

2 product lines are available:

In the Omicron range there are 2 product Travelling wheelhead lines, the **MSG 60** and the **MSG 80**, whose main features can be summarized by the following table.

Product Line:	Maximum Grinding Lengths	Maximum diameter:	Maximum weight:
ROBBI Omicron MSG 60	3–4-5-6–7-8-9 & 10 metres	695 mm	2000 kg
ROBBI Omicron MSG 80	3–4-5-6–7-8-9 & 10 metres	995 mm	8000 kg

A traditional lathe, mounted with a grinding toolpost is offered by some manufacturers, however, this arrangement has several flaws including, a slow and inaccurate process where today's engineers are demanding improved surface finishes and part accuracy.

A Robbi travelling wheelhead grinding machine can maximise production and replace several lathes reducing costly labour, floorspace and energy overheads. Furthermore, you will also see a superior quality finished component using a reduced amount of electricity.

Grooving Attachment:

The grooves in the rolls are performed by rotating the wheelhead electro-spindle by 90˚ in relation to the main grinding wheel. The ROBBI Group has designed this grooving attachment that utilises electric motors that are able to cope with most popular types of groove.

Human Machine Interface (HMI)

The machine operator has the ability to control the machine with an intuitive, easy to operate, and Robbi designed machine interface. This allows a faster machine set-up for the efficient grinding of roller profiles including complex grooving cycles.

Mechanical Precision

Base.

The rigid machine base structure is manufactured from normalised cast iron. A stabilised process ensures the guides will not deform over the life of the machine.

Wheelhead Carriage.

The wheelhead carriage is manufactured from normalised cast iron and designed to dampen any grinding vibration and provides optimal rigidity for increased surface finish.

The finished ground face of the wheelhead, is equipped with two high precision, linear guide rails to which 5 pairs of linear guide roller bearings ensure the maximum precision and rigidity of the carriage over the longitudinal travel (Z-axis). The axis travel is carried out via a rack and pinion transmission.

In the transverse axis (X-axis), the carriage runs on linear guide rails with roller guide bearings and travel is controlled by a ballscrew with a 0.1µ, closed loop linear encoder.

High precision, linear roller bearings and guide rails provides minimal friction between moving parts especially at lower feedrates. Optimal linear machine motion across the full machine axes travels.

Wheelhead.

The external grinding wheelhead hydrodynamic spindle rotates on anti-friction metal bushes ensuring a high precision surface finish.

Wheel head rotation is undertaken manually, and on request, automatic wheelhead rotation can be offered.

Workhead

A normalised, stabilised cast iron workhead is equipped with a high precision spindle bearings providing maximum rigidity and high performance. The workhead can easily be locked for grinding between dead centres.

On request, the workhead rotation can be controlled with a C Axis to allow the grinding of grooves etc.

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