

# TECHNICAL SPECIFICATION

## MG AR 140M Hydraulic Selection Ring Rolling Machine



The MG AR Line section rolls are available in a huge range of capacities from 60mm shaft diameter up to an enormous 540mm shaft diameter; this model AR530 weighs in at an incredible 297 tonnes and has the capacity to roll beams of up to 1000mm. These superb quality Italian built machines are of a double pre-bending design and feature three rolls individually driven by powerful hydraulic motors via planetary gearboxes. The universal rolls supplied can roll a whole spectrum of standard sections and profiles, while special tooling is available for tubes or specific profiles. A wide range of optional equipment is offered including special attachments for the rolling of spirals and a very user friendly touch screen NC control.

#### **Features**

- Double pre-bending design
- All three rolls driven for excellent traction
- Rolls driven by powerful hydraulic motors with planetary gearboxes
- Universal hardened rolls suitable to roll a wide range of profiles
- Smooth rolls ensure minimal material marking
- Permanent lubrication to main machine components during manufacture
- Double spherical roller bearings for rolls shafts in place of traditional bushes
- o Works in either horizontal or vertical orientation
- Hydraulic lateral guide rolls with movement in 3 axis
- Moveable control panel
- Digital read outs indicating both lower roll positions

### **Options**

- Special rolls for tubes and other profiles
- Special rolls in nylon for sensitive materials
- Traction and compression tooling
- Overhead support
- Spiral staircase device
- Coiling attachments
- Lateral guide roll extension for rolling small coils
- Digital read outs for lateral roll positions
- NC Control Unit
- o CNC Control Unit

## **Technical Specification**

| Flat Bar on Edge at 1800mm Ø           | mm              | 140 x 25       |
|--|-----------------|----------------|
| Flat Bar as Flat at 1600mm Ø           | mm              | 190 x 40       |
| Square Bar at 1200mm Ø                 | mm              | 80 x 80        |
| Round Bar at 1000mm Ø                  | mm              | 90             |
| Round Tube at 4000mm Ø                 | mm              | 141.3 x 6.5    |
| Rectangular Hollow Section at 2500mm Ø | mm m            | 140 x 70 x 5   |
| Square Hollow Section at 1000mm Ø      | mm              | 100 x 100 x 8  |
| Angle Iron Toe Out at 3600mm Ø         | mm              | 120 x 120 x 15 |
| Angle Iron Toe In at 3000mm Ø          | mm              | 100 x 100 x 12 |
| Tee Section Toe Out at 1250mm Ø        | mm              | 120 x 120 x 13 |
| Tee Section Toe In at 1250mm Ø         | mm              | 120 x 120 x 13 |
| Tee Section Toe Up/Down at 1250mm Ø    | mm              | 120 x 120 x 13 |
| Channel Legs Out at 1000mm Ø           | mm              | UPN 180        |
| Channel Legs In at 1000mm Ø            | mm              | UPN 180        |
| I Beam Flanges Vertical at 1800mm Ø    | mm              | IPE 180        |
| Maximum Section Modulus                | cm <sup>3</sup> | 310            |
| Shaft Diameter                         | mm              | 140            |
| Roll Diameter                          | mm              | 400            |
| Rolling Speed                          | m/min           | 5              |
| Motor Power                            | kW              | 15             |
| Length                                 | mm              | 1813           |
| Width                                  | mm              | 1646           |
| Height                                 | mm              | 1605           |
| Weight                                 | kg              | 4000           |