

No.	SPECIFICATION	
1	Outside Diameter finished ring	600~4500mm
2	Height of finished of ring blank for Mandrel diameter Ø220mm	100 ~ 750mm
3	Tolerance measures on hot workpiece	±2 mm
4	Height of ring blank	max. 8,000kg (approx.)
5	Ring weight	3,300mm max. 1,800mm min.
6	Horizontal Rolling force Vertical Rolling force	max. 280ton max. 180ton
7	Rolling speed	max. 1.5m/sec (approx.)
8	Taper cone angle	32°



H/280/V180-Ø4500 RING MILL

1. Ring Rolling Mill

The horizontal / vertical ring rolling mill is provided for rolling seamless rings at forging temperature.

2. Working Range

- Outside Diameter of finished ring	600 ~ 4500 mm
- Height of finished of ring blank for Mandrel diameter Ø220mm	100 ~ 750 mm
- Height of ring blank	max. 800mm
- Ratio of wall thickness to height	max. approx. 3 : 1
- Ring weight	max. approx. 8000 kg

The max. possible ring weight as well as the obtainable ratio "wall thickness to height" is dependent on the cross section of the ring, the ring profile and the ring material, its deformation resistance depending on temperature, and on deformation speed.

3. Main Characteristics

3-1. Horizontal Stand

- Rolling force	max. 280 ton
- Main roll diameter	Ø1000 mm
- No. of revolution of main roll	max. 29.5 rpm
- Rolling speed	max. approx. 1.5 m/sec
- Horizontal stroke of mandrel	600 mm

3-2. Vertical Stand

- Rolling force	max. 180 ton
- Length of taper rolls theoretical stand	750 mm
- Taper cone angle	32°
- Horizontal stroke of vertical stand	4500 mm
- Vertical stroke of upper taper roll	750mm
- Max. distance between the taper rolls	800mm

4. Driving Unit

4-1 Driving Unit of Main roll

4-1-1 Driving motor(DC-Electro motor)

- Nominal power 500KW
- Armature voltage 440V

4-1-2 Driving gear reducer

- Nominal power 500KW
- Ratio of Reducer 1/40

4-2 Driving Unit of Taper roll

4-2-1 Driving motor(DC-Electro motor)

- Nominal power 500KW
- Armature voltage 440V

4-2-2 Driving gear reducer

- Nominal power 500KW
- Ratio of Reducer 1/12

5. Driving Units for Hydraulic Power Unit

5-1 Driving Motor for Hydraulic Pumps

5-1-1 Ac-Electro-motor for main Pump

- Nominal Power 75kw 4set
- Nominal Speed 1000 rpm

5-1-2 Ac-Electro-motor for Oil Cooler

- Nominal Power 3.7kw 2set
- Nominal Speed 1500 rpm

5-2 Hydraulic Pumps

5-2-1 Main Pump A7V-160 4set
- Delivery 4-180 l/min

5-2-2 Pump for Oil Cooler PVV2-055 2set

5-2-3 Operation Pressure 250 kg/cm²

6. Grease Lubrication Unit

(for lubrication of the moveable machine components)

- Grease Pump 2set

7. Cooling of Roll tools(The roll tools are cooled by water)

- Pressure 0.2kg/cm²

4500 R/M



4500 R/M

