Rana Udyog

Rolling Mill for High-Grade Steels





Services

Project

Rolling Mill for High-Grade Steels

Starting stock

50 x 100 x 10,000 mm 125 x 125 x 11,400 mm Billets

Finished product

- Rod 5.5 13.5 mm dia.
- Bars 11 57 mm dia.
- Flads 22 120 mm, 5 12 mm thick

Bundle/stack length

■ 3 - 8.5 m

Bundle/stack weight

• 0.5 - 3 (5) t

Furnace capacity

up to 60 t/h

Material grades

- High-grade structural steels 34 Cr 4, 60 SiMn7, 42 CrMo4
- Antifriction bearing steels 100 Cr 6, 100 Cr 2, 100 CrMo 7 3

Material grades

Tool steels:

X 210 Cr 12, X 38 CrMoV 5 1, 55 CrNiMoVS 4 2 4

- Acid-resistant and heat-resistant steels: X 5 CrNiMo 18 11, X 2 CrNiMo 19 13, X 20 CrNiSi 25 4
- High-speed steels:
- X 79 Wco 18 5, X 82 W Mo 6 5 5 Special alloys: X 55 CrMnNiN 20, X 45 CrSi 9 3, X 3 CrNiMoNbN 23 17
- The complete range of steel grades includes approx. 300 different grades

Furnace group

· Charging grate, cross transfers, weighscale, descaler (2x), heatholding tunnel

- Single strand, H/V arrangement
- Roughing train: PSW and 6 x Model 440
- Intermediate train: 4 x Model 440, 2 x Model 340
- Finishing train: 4 x Model 340
- Kocks-block
- 8-stand wire rod block for high grade steels 3 x 215 / 5 x 170
- Associated shears
- Loopers: 7 x vertical, 1 x horizontal

Cooling bed group

- Water cooling line, pinch roll unit
- Cooling bed shear
- Cooling bed 57 x 5 m
- Continuous finishing shop:
- Abrasive cutting machine
- Piling and stacking facilities (non-magnet type)
- Tying machines: 1 x fixed, 1 x movable
- various associated equipment, e.g. stoppers, chain transfers, roller tables etc.

- Rod finishing equipmentWater cooling and equalizing sections, pinch roll unit, laying head
- Ring conveyor for retarded and accelerated cooling
- Pallet-type coil handling system, compacting & tying units, weighscale, unloading station

- Water cooling and equalizing sections,
- Pinch roll units,
- Bar reels: 2 x,
- Transfer equipment to pallet-type coil handling

