

High Speed Laying Head



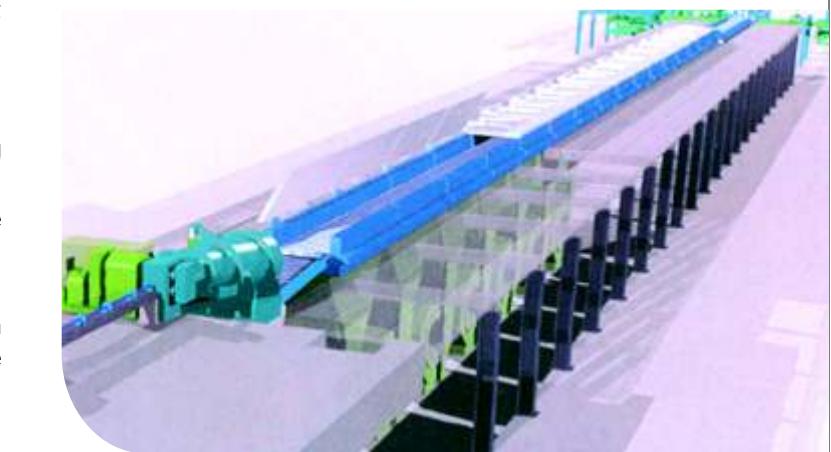
High Speed Laying Head

Characteristics of advanced wire rod mills

- Production speeds up to 120 m/s
- Utilization factor up to 90 % and more
- Yield of material over 96 %
- Good tolerances and minimum surface scratching to achieve best prices in the markets
- Temperature control system throughout the mill to achieve repeatable and uniform material properties :
 - Rolling within closed temperature ranges meeting the particular material demands
 - Low temperature rolling
 - Controlled cooling process used as in-line heat treatment or for "pre-adjustment" of material properties
 - Low labour cost due to high degree of automation
 - Extensive program system for both the rolling process and subsequent rod treatment
 - Developed and improved continuously, including the experience and expertise gained from many
 - Rolling mills delivered by Rana Udyog
 - An effective tool to save costs in downstream processes and achieve an optimal product structure and specific Physical properties

Ring conveyor with air cooling

- Adjustable speed to influence package compactness by varying ring overlapping patterns
- Steps within the conveyor and provision for change of roller groups speed to change overlap position
- Suitable for retarded and accelerated cooling
- Consisting of three sections
 - Ring laying section
 - Secondary cooling train for controlled cooling
 - Delivery section to reforming tub



Intermediate cooling upstream the rod mill block

- Maintain the desired temperature field by regulating the water pressure
- Temperature controlled rolling possible
- Improved grain size(fine) of rolled material
- Quick-acting valves for higher speeds and small-diameter rod to shut off the water flow while the rod head end enters the cooling pipes.
- Cooling line also suitable for other products
- High strength values:
 - Yield point : 500 N/mm²
 - Tensile strength: 560 N/mm²
 - Elongation percentage grade: 12%
- Other data:
 - Final rolling temperature: 950-1050°C
 - Equalizing temperature at laying head: 650°C
 - Water pressure, max: 1.6 Mpa
 - Max product speed, approx: 80 m/s

Controlled cooling section

- Retarded cooling for cooling rates of less than 0.3 K/s
- Accelerated cooling for cooling rates of more than 25 K/s
- Air flow rates at the loops of more than 50 m/s

