



TECHNICAL SUPPORT

Supply of Rolls

Problems:

1. Damage of backup rolls leading to chipping of their surface
2. Damage and failure of work rolls leading to fracture of theirs
3. Insufficient cooling of rolls
4. Production of waved strips
5. Production of invalid cross profile of strips
6. High temperature / high wear of rolls

Solutions:

1. Damage of backup rolls leading to chipping of their surface
 - ✓ Designing of optimal chamfers (unloading) on border parts of rolls
 - ✓ Designing of suitable work and backup rolls grinding
 - ✓ Analysing of inter-roll pressure and contact stress for various bending forces and strip/plate widths
2. Damage and failure of work rolls leading to fracture of theirs
 - ✓ Analysing of loading of rolls by contact load between product and work roll and between work roll and backup roll
3. Insufficient cooling of rolls
 - ✓ Design of new cooling headers.
 - ✓ Computer simulation of temperature field in rolls
 - ✓ Complete design and realization of cooling systems of rolls
 - ✓ Measurements of HTC nozzles and delivery of control system for roll cooling (zone cooling included)
4. Production of waved strips
 - ✓ Designing of an optimal backup and work roll grinding
 - ✓ Analysing of bending forces
 - ✓ Modifications of the control system for optimal use of bending forces
 - ✓ Control system for section cooling of work rolls
5. Production of invalid cross profile of strips
 - ✓ Designing of a proper work and backup roll grinding to ensure required strip cross profile (crown)