PEELING EVOLUTION IN SPECIAL ALLOYS

HOW THE PEELING PROCESS EVOLVE IN MODERN LINES MEETING CUSTOMERS REQUIREMENTS
MAIR Overview

- Capital Equipment designers and Manufacturers
- Specialize in Finishing processes of tube and bar
- All Equipment designed, produced and tested in our Schio Facilities
- 33 years history
Key Points

- Newest technology Integrated Peeling lines to remove surface defects from Hot rolled coils and bars before downstream processes

- Reduce the peeling processing cost through maximized machine availability

- Industrialized innovative design is the key to profitability
Basic Process
Decoiler and Manipulator

- Robust structure able to handle multiple coils
- Motorized decoiler mirrors peeling speed to avoid tangles
- Remote control of Robotized arm guarantee operator safety
- 3 Dimension movement of the manipulator head to allow prestraightening of coil head
Pre Straightening

- Two Straightening head: Horizontal and Vertical
- 9+9 Rolls each
- Straightening head flips automatically for scale discharging
Calibration Unit

- Improves material roundness
- Removes coil memory form
- Continuous control of calibration pressure
- Easy and quick roll changeover
Bar Loading Table

- Increases line flexibility
- Fully automatic unscrambling
- Endless line feeding
Peeling Machine

- New Machine Design
- Fully Automatic Machine setup
- Continuous process control and optimization
- Intelligent automation system
- Improved accessibility
- Reduced setup time
- Continuous diameter control through automation system
- Quick and automatic exit guide removal
- Continuous control of guides positioning and pressure
- Improved volume on chip evacuation area
Two-Roll straightener

- Rigidity guaranteed by a ring frame structure
- Torsion-stress absorbing system
- Continuous control of straightening pressure to reduce ‘Pear’ effect
- Optimized roll profile for wide diameter range
- Fully automatic set-up thanks to recipe system
Downstream process

- Cutting
- Chamfering
- Non destructive testing
- Marking
- Packaging
Automation and Electrics

- Fully automatic control of the line
- Remote control trough mobile interface
- Recipe System easy and quick machine setup
- Remote assistance from Mair headquarter
Conclusions

• Industrialized innovation leads to maximized machine availability

• Automatic control of machine parameters allows for safe on-the-fly machine adjustments

• Proving all equipment prior to shipping certifies the seamless installation