



MORGAN WATER BOXES FOR EFFICIENT IN-LINE PRODUCT TEMPERATURE CONTROL

Morgan Water Boxes can be installed at various locations in a bar or wire rod mill to offer maximum control of the mill temperature profile and therefore control of the mechanical and metallurgical properties. The water box system can be configured for plain carbon products, specialty steel grades, or quench and tempered concrete reinforcement products. The split nozzle design allows an operator to open nozzles quickly and easily for inspection and cleaning. Options are available for changing of nozzle sizes in a set with interchangeable headers or changing of an entire line with side-shifting boxes.

FIELD OF APPLICATION

Long rolling mills

MAIN BENEFITS

The Morgan Water Boxes provide efficient cooling with elements that are easy to handle and maintain. Stainless steel nozzles provide long service life and have replaceable wear parts within the nozzle body. Headers are designed to ensure excellent nozzle alignment to minimize the risk of cobbles when changing product sizes. The complementary Primetals Technologies LR Enhanced Temperature Control System provides monitoring and control of stock temperature to guarantee the correct properties throughout the process.



Traversing water box



Split-style nozzles

PRODUCT FEATURES

Sturdy water box construction

Interior of nozzles easily accessible for inspection

Replaceable wear parts within the nozzles

Proven piping and valve stand design

Traversing option for short change times

TECHNICAL DATA

Product size range	4.5 - 63 mm
Typical lengths	2.9, 4.7 & 6.1 m
Cooling capacity	50 - 200° C per box up to 500°C for arrangement
Nozzle bore sizes, wire rod mill	10.5 - 40.0 mm standard
Nozzle bore sizes, bar mill	Up to 90.0 mm standard
Minimum on/off time	200 ms

SERVICES

- Integration engineering - customized solutions
- Erection advising - planning and supervision of installation ensures system performance
- Commissioning - expertise provided for start-up and training on system operation
- Maintenance - services available, but little required
- Spare parts - customized program minimizes inventory and controls cash flow

OTHER RELATED PRODUCTS

- Primetals Technologies EA LR Enhanced Temperature Control System
- Morgan Vee No-Twist® Mill
- Morgan Vee Mini-Block
- Morgan Intelligent Pinch Roll
- Morgan High Speed Laying Head
- Morgan Stelmor® controlled cooling conveyor

Primetals Technologies USA LLC
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