

OXIDE DUST CONTROL SYSTEM

SYSTEM REMOVES OXIDE DUST
WITHOUT IMPACTING STRIP QUALITY



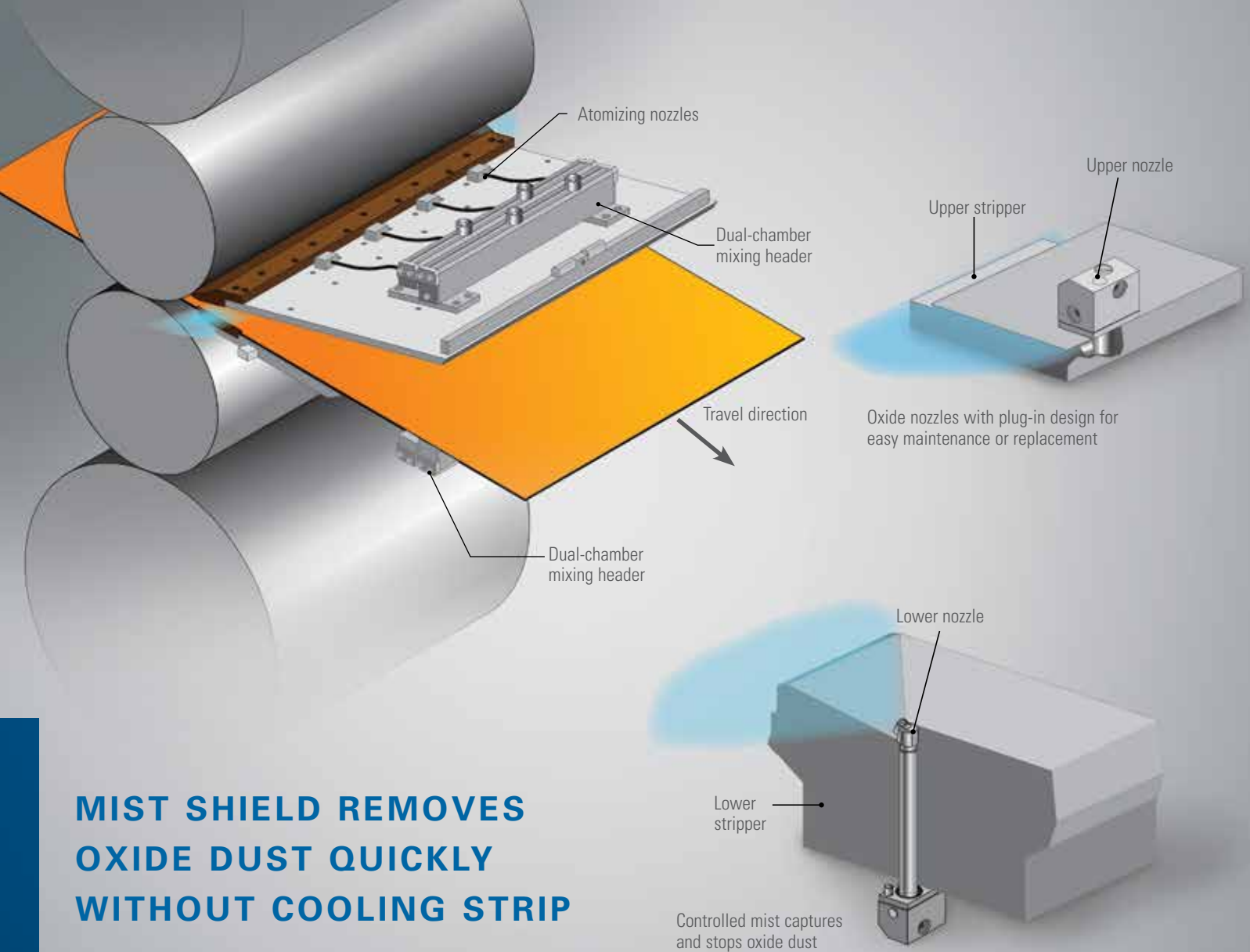
Spraying Systems Co.
Experts in Spray Technology



BEFORE OXIDE DUST CONTROL SYSTEM



AFTER OXIDE DUST CONTROL SYSTEM



MIST SHIELD REMOVES OXIDE DUST QUICKLY WITHOUT COOLING STRIP

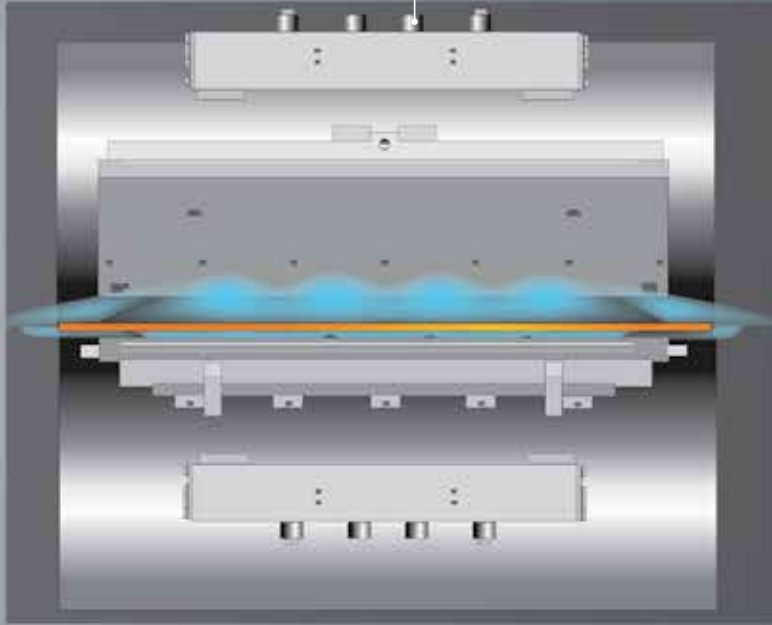
BENEFITS

- Oxide Dust Control System captures the dust by generating a mist shield of water and compressed air; no fume hoods or exhaust systems required
- The mist shield removes dust immediately upon creation without cooling of strip
- Oxide dust pick-up on work roll surfaces is greatly reduced and prevents dust from being rolled in on mill stands
- Install only in areas where dust is significant – such as silicon and high-carbon product or the last three to four finishing stands where dust is usually problematic
- Improves worker safety by eliminating a health hazard
- Minimal water use; can operate with normal roll cooling water
- Significantly reduces maintenance time required to clean and/or repair equipment, especially in difficult-to-reach areas like crane rails
- Removal of oxide dust can prevent damage to electrical equipment
- Low-maintenance system
- Retrofit on existing strippers

OXIDE DUST CONTROL SYSTEM OVERVIEW

- Dual-chamber header extends several feet across width of upper and lower stripper plates
- Mixers for atomizing nozzles are installed in the dual-chamber mixing header
- Atomizing nozzles are installed in the mill strippers so the mist shield is properly positioned for maximum effectiveness
- During system start up, air and water flows are increased until oxide dust is no longer visible
- Trouble-free performance. Visual inspection to detect plugging; headers can be flushed during maintenance if needed. Headers and nozzles are stainless steel to minimize internal scale build-up
- System usually runs continuously during production. Compressed air may remain on during non-production times to prevent scale from falling and plugging the nozzles in the lower stripper plate
- Controls:
 - Turn air and/or water on or off; monitors air and water pressures
 - Switches valves between exit and entry side systems for steckel mills
 - Maintenance mode: turn air and water on and off independently to determine maintenance requirements
 - Control options: manual control through local maintenance/control station or direct I/O integration with mill controls

Air and water connections



Headers and mist shield (strip delivery view)

SPECIFICATIONS:

Dual-chamber headers with atomizing nozzles; air and water flow rates are adjustable

Choice of manual or automatic controls; controls are easily integrated to mill control through discrete I/O

Fabricated to size

Materials: Stainless steel with Viton® gaskets and seals
Viton® is a registered trademark of DuPont Performance Elastomers

IDEAL FOR:

- Hot strip mills
- Steckel mills
- Plate mills
- Bar mills



OXIDE DUST CONTROL SYSTEM SPECIFICATION SHEET

Name: _____
Title: _____
Company: _____
Address: _____
City: _____ State/province: _____
Zip/postal code: _____ Country: _____
Telephone: _____ Fax: _____
Email: _____

Mill type: steckel roughing finishing, continuous _____ No. of stands _____
Strip width: Min _____ in or mm Max _____ in or mm
Work roll face length: _____ in or mm Inside mill posts width: _____ in or mm
Work roll dia.: Min _____ in or mm Max _____ in or mm
Vertical distance (pass line to upper stripper contact with work roll): _____ in or mm
Vertical distance (pass line to lower stripper contact with work roll): _____ in or mm
Top replaceable stripper tip? yes no Allowable wear on stripper or tip: _____ in or mm
Bottom replaceable stripper tip? yes no Allowable wear on stripper or tip: _____ in or mm
Lower stripper: one solid plate or segmented into several plates across the width of the stripper _____ No. of plates _____
Stripper retract/remove method for roll change (describe top and bottom): _____

Air available: _____ (psi or kPa) Current filtration: _____
Water available: _____ (psi or kPa) Current filtration: _____
Water source: _____
Describe water and air source pressure stability: _____
Spare stripper set available for machining and pre-mounting? yes no
Previous methods tried for oxide dust control and level of success: _____



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