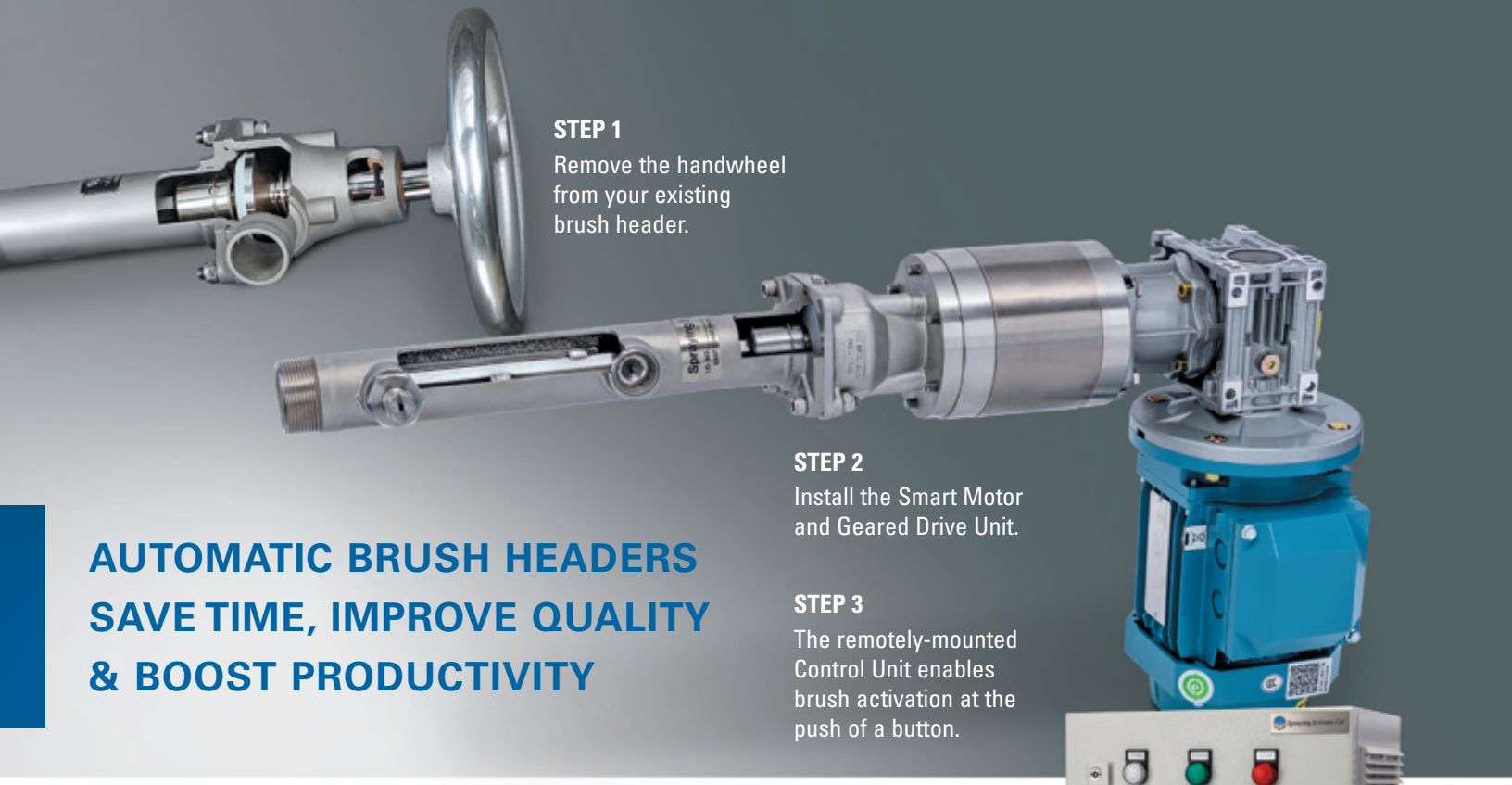
AUTOMATIC BRUSH HEADER

AFFORDABLY AUTOMATE HEADER
CLEANING & REDUCE NOZZLE PLUGGING

Spraying Systems Co.®
Experts in Spray Technology



STEP 1
Remove the handwheel from your existing brush header.

STEP 2
Install the Smart Motor and Geared Drive Unit.

STEP 3
The remotely-mounted Control Unit enables brush activation at the push of a button.

AUTOMATIC BRUSH HEADERS SAVE TIME, IMPROVE QUALITY & BOOST PRODUCTIVITY

ELIMINATE MANUAL BRUSH OPERATION IN EXISTING APPLICATIONS & MANUAL CLEANING ENTIRELY IN NEW APPLICATIONS

If you have manual brush-type headers, our new motor/control package offers an economical way to eliminate the need for operator intervention to rotate the brushes. Retrofitting brush-type headers is fast and easy. In less than 10 minutes, the motor can be installed on the header and the control unit mounted in a convenient location for operation. The unit can be set to clean at predetermined intervals, eliminating the need for any operator intervention. The unit can also be placed in manual mode, which enables the activation of individual brushes by an operator.

If you are experiencing nozzle plugging and haven't yet invested in brush-type headers, our Automatic Brush Header is an ideal solution. Maintenance time due to clogged nozzles can be eliminated. And, because the cleaning cycle occurs without interrupting operation, machine uptime is maximized.

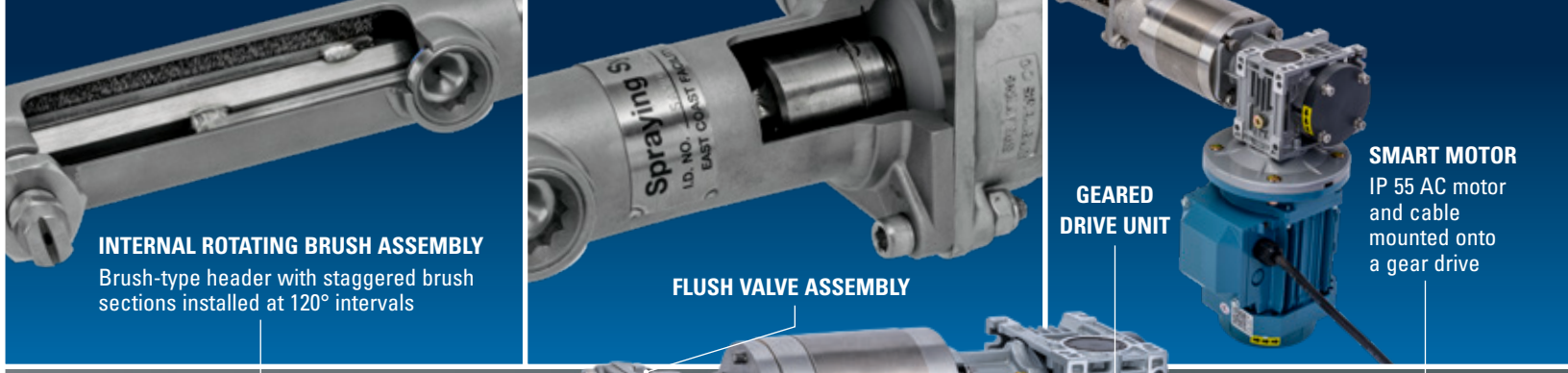
HIGH-PRESSURE AUTOMATIC BRUSH SHOWER
for operating pressures up to 580 psi (40 bar)

BENEFITS

- **Affordable, automated solution.** Operator intervention is minimized or eliminated. No need to have workers climbing machines or rotating handwheels
- **Suitable for use with all brush-type showers up to 3" in diameter**
- **Easy operation.** Cleaning cycles occur automatically when used with the programmable timer. If not, activation requires a simple push of a button. The brushes wipe the nozzles and the dirty water is flushed away
- **Easy installation.** A brush header can be retrofitted from a manual wheel to automatic operation with just four bolts and an insert adaptor pin
- **Virtually maintenance free.** Aside from gear lubrication once a year, the Automatic Brush Shower requires no maintenance
- **Control up to four showers with a single control unit.** Options are available for controlling more Automatic Brush Showers with a single control unit upon request – the control panel can be integrated with the mill's central control system via ethernet IP or used as a standalone control panel
- **Controller option to add add flow meter and pressure transducer monitoring to verify machine operation.** Sustainability and Preventive Maintenance screens included to track liquid usage and reminders for nozzles changeout.

IDEAL FOR:

- Continuous annealing and galvanizing lines
- Cooling in hot/cold annealing and pickling lines

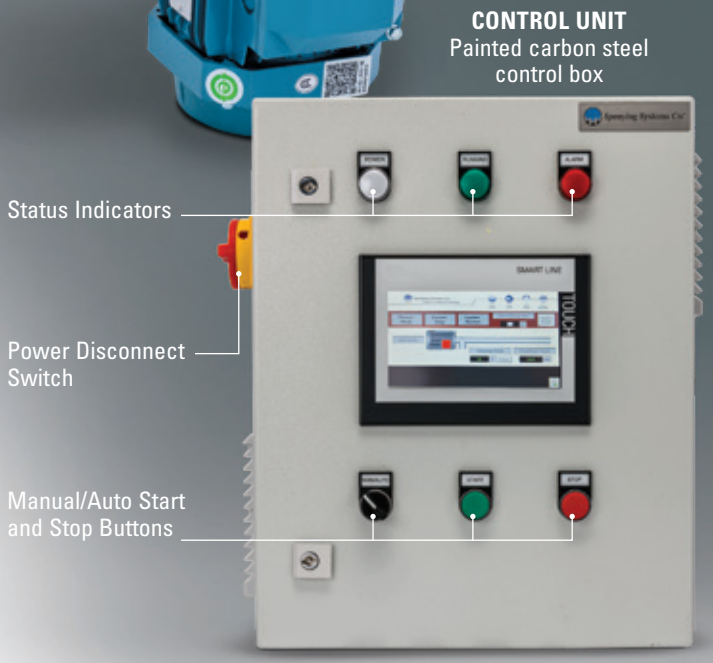


A CLOSER LOOK AT THE AUTOMATIC BRUSH HEADER

An internal rotating brush assembly scrubs the interior wall of the header as well as each disc-type shower nozzle orifice or strainer to prevent clogging and help ensure long nozzle wear life. In just a few seconds, debris is swept away through the flush-out valve, restoring full liquid flow to the system without contaminating the sprayed surface. If multiple units are installed, the system will then sequence to the next unit. And, there's no need to stop the system. The brushes operate without disruption to normal processes.

ShowerJet nozzles are most often used with our Automatic Brush Header. A lock ring on the header holds the nozzles in place. ShowerJet nozzles that produce a flat spray pattern have stainless steel orifices. VeeJet® flat spray nozzles with adapters are also commonly used.

The control unit includes a PLC with touchscreen for easy operation. It can be used as a standalone control device or can be integrated with a central control system.



SPECIFICATIONS

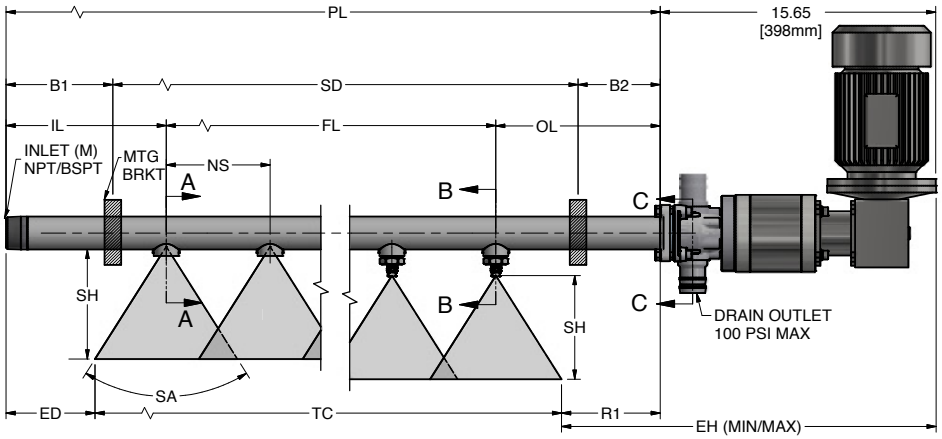
MOTOR
Power supply: 480 VAC/3 phase/60 Hz
Motor speed: 1340 r/min.
Reduction ratio: 1:60
IP level: IP55
Environment temperature: 32 ~140°F (0 ~ 60°C)
Cabinet dimension: 16" W x 20" H x 8" D (41 W × 51 H × 20 D cm)

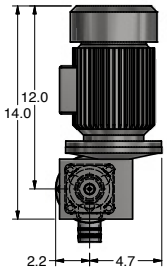
BRUSH HEADER
Max working pressure: 125 psi (8.6 bar) or 580 psi (40 bar)
Max pipe size: 3"
Max pipe length: 26 ft (7.9 m)
Frequency of cleaning range: 0.1 days – 7 days
Cleaning period: 15 seconds
Control methods: manual or automatic (timer)

CONTROL PANEL
Included: touchscreen, power supply, circuit breaker and motor protection circuit breaker
IP level: IP54
PLC choice: Allen-Bradley™ with Ethernet IP for easy integration or Siemens®
Standard control panels available to handle either 1, 2, 3 or 4 automatic brush headers. Custom control panels are available up to 54 automatic brush headers

AUTOMATIC BRUSH HEADER SPECIFICATION WORKSHEET

To obtain a no obligation quotation on our new Automatic Brush Header, please review the worksheet that follows and contact your local Spray Specialist to discuss the specifications of your application.





HEADER INFORMATION

Qty. headers required: _____
(in./mm/degrees)

Pipe length (PL)*: _____

Theoretical coverage (TC)*: _____

Support distance (SD)*: _____

Bracket inlet (B1)*: _____

Bracket outlet (B2)*: _____

Spray height (SH)*: _____

Spray angle (SA)*: _____
(0, 15, 30, 45, 60, or 75 degrees)

Outlet angle (OA)*: _____

End to edge (ED): _____

End to motor side (EH) – min./max.: _____

Nozzle spacing (NS): _____

Inlet to nozzle (IL): _____

Outlet to nozzle (OL): _____

First to last (FL): _____

Pipe material*: _____
(316LSS or 304LSS)

Inlet type/size (M)*: _____
(NPT or BSPT) (1.5, 2.0, 2.5, 3)

Outlet type/size: _____
(Hose barb) / (1.5/2)

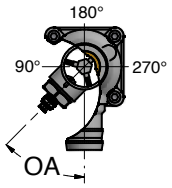
AutoBrush Mounting Side*: _____
(tending or drive side)

Oscillating stroke length*: _____
(in. or mm)
Only applies if integrated with oscillator

Spray coverage: _____
(single or double)

Qty. of nozzles: _____

SECTION A-A
STANDARD BRUSH HEADER



SECTION C-C
OA-OUTLET ANGLE
END VIEW

CONTROLLER INFORMATION

One Control Panel with _____
Brush Header* (1, 2, 3, 4 or custom)

PLC Brand _____ and Touchscreen*
(Allen-Bradley™ w/ Ethernet IP or Siemens®)

Power* _____
(480VAC/3 phase/60 Hz)

PROCESS CONDITIONS

Operating pressure*: _____
125 psi (8.6 bar) or 580 psi (40 bar)

Total flow*: _____
(gpm or lpm)

Operating temperature*: _____
(°F or °C)

Liquid sprayed: _____

Defaults	Minimums
IL: 4.0" (101.6 mm)	IL: 4.0" (101.6 mm)
SA: 60°	Pressure: 40 psi (2.8 bar)
Inlet: (M) NPT	Pipe size: 1-1/2"
Spray overlap: 1	NS: 2.0" (50.8 mm)
OA: 0 (zero)	
Materials: 316LSS	
Temp. < 100 F (38°C)	
Power Req'd: 480VAC/3ph/60Hz	
Control Panel Mat'l: Painted Steel	
Control Method: Auto Timer & Manual	

*(*Required)*

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