# **AUTOMATIC BRUSH SHOWER**

AFFORDABLY AUTOMATE SHOWER CLEANING & REDUCE NOZZLE PLUGGING



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**STEP 1** Remove the handwheel from your existing brush shower.

STEP 2 Install the Smart Motor and Geared Drive Unit.

## AUTOMATIC BRUSH SHOWERS SAVE TIME, IMPROVE QUALITY & BOOST PRODUCTIVITY

#### STEP 3

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

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

**If you have manual brush-type showers,** our new motor/control package offers an economical way to eliminate the need for operator intervention to rotate the brushes. Retrofitting brush-type showers is fast and easy. In less than 10 minutes, the motor can be installed on the shower 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 showers, our Automatic Brush Shower 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.

#### **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
- 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
- Virtually maintenance free. Aside from gear lubrication once a year, the Automatic Brush Shower requires no maintenance
- 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



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

INTERNAL ROTATING BRUSH ASSEMBLY Brush-type shower with staggered brush sections installed at 120° intervals

FLUSH VALVE ASSEMBLY

GEARED

SMART MOTOR

IP 55 AC motor and cable mounted onto a gear drive

SHOWERJET NOZZLES



#### A CLOSER LOOK AT THE AUTOMATIC BRUSH SHOWER

An internal rotating brush assembly scrubs the interior wall of the shower 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 Shower. A lock ring on the shower holds the nozzles in place. ShowerJet nozzles that produce a flat spray pattern have stainless steel orifices. Solid stream versions are available with ceramic or synthetic ruby orifices for longer wear life.

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:  $32 \sim 140^{\circ}$ F (0 ~ 60°C)

Cabinet dimension: 16" W x 20" H x 8" D (41 W × 51 H × 20 D cm)

## **BRUSH SHOWER**

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

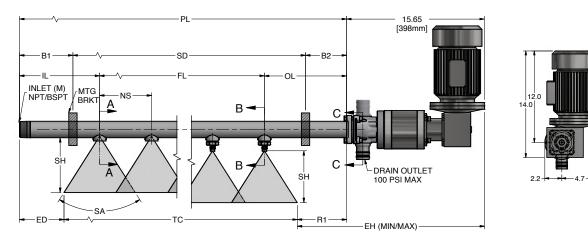
IP level: IP54

PLC choice: Allen-Bradley<sup>™</sup> with Ethernet IP for easy integration or Siemens<sup>®</sup>

Standard control panels available to handle either 1, 2, 3 or 4 automatic brush showers. Custom control panels are available up to 54 automatic brush showers

## AUTOMATIC BRUSH SHOWER SPECIFICATION WORKSHEET

To obtain a no obligation quotation on our new Automatic Brush Shower, please review the worksheet that follows and give us a call to discuss the specifications of your application. **Download the entire worksheet at spray.com/specsheets** 



First to last (FL):

Pipe material\*: \_\_\_\_

Liquid sprayed: \_

#### **SHOWER INFORMATION**

Qty. showers required:
(in./mm/degrees)
Pipe length (PL)*:
Theoretical coverage (TC)*:
Support distance (SD)*:
Bracket inlet (B1)*:
Bracket outlet (B2)*:
Shower 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):

#### **CONTROLLER INFORMATION**

One Control Panel wi Brush Header <sup>*</sup> (1, 2, 3	
PLC Brand (Allen-Bradley™ w/ Et	
Power*	

(480VAC/3 phase/60 Hz)

(\*Required)

	(
Inlet type/size (M)*: _	
	or BSPT) (1.5, 2.0, 2.5, 3)
Outlet type/size:	
<i>,</i> .	(Hose barb) / (1.5/2)
AutoBrush Mounting	
	(tending or drive side)
Oscillating stroke len	igth*:
	(in. or mm)
Only applies if in	tegrated with oscillator
	-
Spray coverage:	
	(single or double)
	-
Qty. of nozzles:	
PROCESS CONDITIO	INS
Operating pressure*:	
	bar) or 580 psi (40 bar))
(iiiax 120 psi (o.o	ual) ul pou hei (40 ual))
Total flow*:	
	(gpm or lpm)
Operating temperature	
	(°F or °C)
	(151 0)

INTERNAL BRUSH ROD GASKET/-FLAT FAN NOZZLE

(316LSS or 304LSS)



SECTION A-A STANDARD BRUSH SHOWER

SECTION C-C OA-OUTLET ANGLE END VIEW

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/3 phase/60 Hz	
Control Panel Mat'l: Painted Steel	
Control Method: Auto Timer & Manual	

Allen-Bradley is a trademark of Rockwell Automation, Inc. Siemens is a registered trademark of Siemens AG.



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