




Solutions for industrial
technical cleaning



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01

BRUSHING EQUIPMENT
FOR CLEANING
OF ATEX AREAS



fortex^{Ex}
protub^{Ex}



Pneumatic brushing equipment for ducts in ATEX zones

The system uses compressed air to drive a powerful motor, housed in the end of a 30 meter long flexible hose. It is the most reliable and robust tool for duct cleaning in ATEX zones.

- **Powerful pneumatic motor [11.6 Nm max. torque] necessary to drag all types of grease and dirt.**
- **30 meters** of semi-rigid hose that allows working vertically [even from bot tom to top], horizontally, and making 90° bends.
- **100% stainless steel** motor for durability and maintenance-free operation.

fortex	ATEX Characteristics
ATEX category of the equipment:	II2/3G II2/3D
Equipment protection modes:	Ex h T135°C Db/Dc Ex h T4 Gb/Gc
Minimum ignition temperature of substances:	135°C

PNEUMATIC

For ducts up to **1000 mm**

Length of the flexible shaft

30 meters



Brushes
With different materials and sizes according to the need.

Carrying handle
Easy handling for transportation.

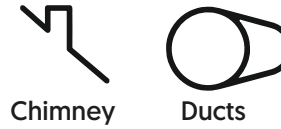
Double direction of rotation
Left | Right

Shaft protector
Facilitates collection and protects of equipment while on the move

11-600V - 30/60 Hz



APPLICATIONS ▼



Chimney

Ducts

ACCESSORIES INCLUDED ▼



COMPRESSED AIR HOSE

8 meters.

AC3303101

OPTIONAL ACCESSORIES ▼

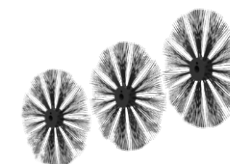


ATEX PNEUMATIC CENTERING DEVICE

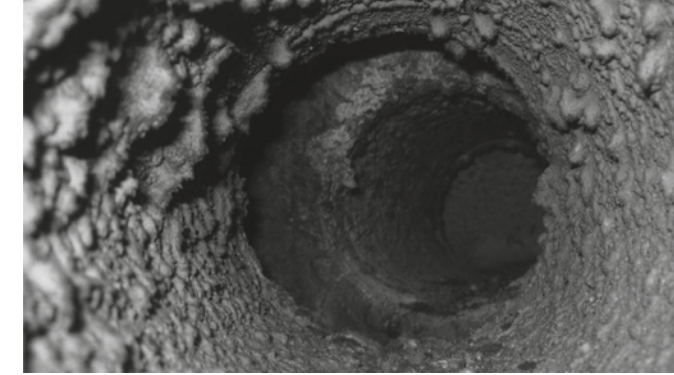
Ø 500mm a Ø 1000mm

AC3303134

FORTEX ANTISTATIC BRUSHES



- Ø 250 CP3000250
- Ø 300 CP3000300
- Ø 400 CP3000400
- Ø 600 CP3000600
- Ø 700 CP3000700
- Ø 800 CP3000800



TECHNICAL CHARACTERISTICS **fortex**


Motor power supply [Maximum power]:	Compressed air 300l/min-6,3bar// 10,6cfm-6,3 bar
No-load rotation speed:	500 rpm
Rotation speed at maximum power:	236,7 rpm
Torque at full power:	6,5 Nm // 57,5 lbf.in
Minimum starting torque:	8 Nm // 70,8 lbf.in
Par drowning:	11,6 Nm // 102,7 lbf.in
Sound level:	Less than 70 dB
Direction of rotation:	Right / Left
Control system:	Pneumatic
Control panel:	Valves
Dimensions: [L x W x H]	1162 x 430 x 1025 mm 48,98 x 16,93 x 40,35 inches
Weight:	67 kg // 147,71 lb
Hose length:	30 m // 98 ft
Structural material:	Stainless steel and HDPE



protub

Duct cleaning system in ATEX zones

Pneumatic brushing equipment. It incorporates a powerful stainless-steel engine that complies with ATEX regulations required when working in confined spaces. The action of the brushes removes dirt in ducts to 400 mm diameter, ensuring effective and safe cleaning in demanding environments.

protub 	ATEX Characteristics
ATEX category of the equipment:	II2/3G II2/3D
Equipment protection modes:	Ex h T135°C Db/Dc Ex h T4 Gb/Gc
Minimum ignition temperature of substances:	135°C

PNEUMATIC

For ducts up to

400 mm

Length of the flexible shaft

15 meter



*Requires compressed air.

APPLICATIONS ▼



Ducts

OPTIONAL ACCESSORIES ▼



AIR CONNECTION HOSE

8 m hose.

AC3303101



ROTARY SHAFT Ø 10 mm

For Ø10, 15 metre brushes

AC3303615



BAG FOR AXLE FLEXIBLE

Bag for protection and transport.

AC3101210



AIR CONNECTION HOSE

8 m hose.

AC3303112



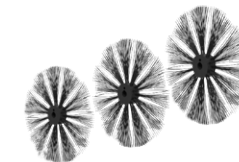
ROTARY SHAFT Ø 10 mm

For Ø10, 15 metre brushes

HE7300200

CONSUMABLES ▼

PROTUB ANTISTATIC BRUSHES



Ø 250 CP3000250
Ø 300 CP3000300
Ø 400 CP3000400



TECHNICAL FEATURES



Engine power [Maximum power]	Compressed air 220 l/m-6,3 bar // 7,77 cfm-6,3bar
Rotational speed in freewheeling operation:	762 rpm
Rotation speed at maximum power:	379,2 rpm
Torque at full power:	2,5 Nm // 22,13 lbf.in
Torque minimum start:	3,1 Nm // 27,44 lbf.in
Torque drowing:	5 Nm // 44,25 lbf.in
Noise level:	Less than 70 dB
Direction of rotation:	Right / Left
Control system:	Pneumatic
Control panel:	Valves
Dimensions [L x W x H]	399 x 221 x 457 mm 15,5 x 8,7 x 18 inches
Weight:	7,5 kg 16,5 lb
Hose length:	15 metros 50 ft
Structural material:	Stainless steel and HDPE



02

CLEANING OF
HEAT EXCHANGERS,
CHIMNEY SWEEPS
AND DRYER DUCTS



protub

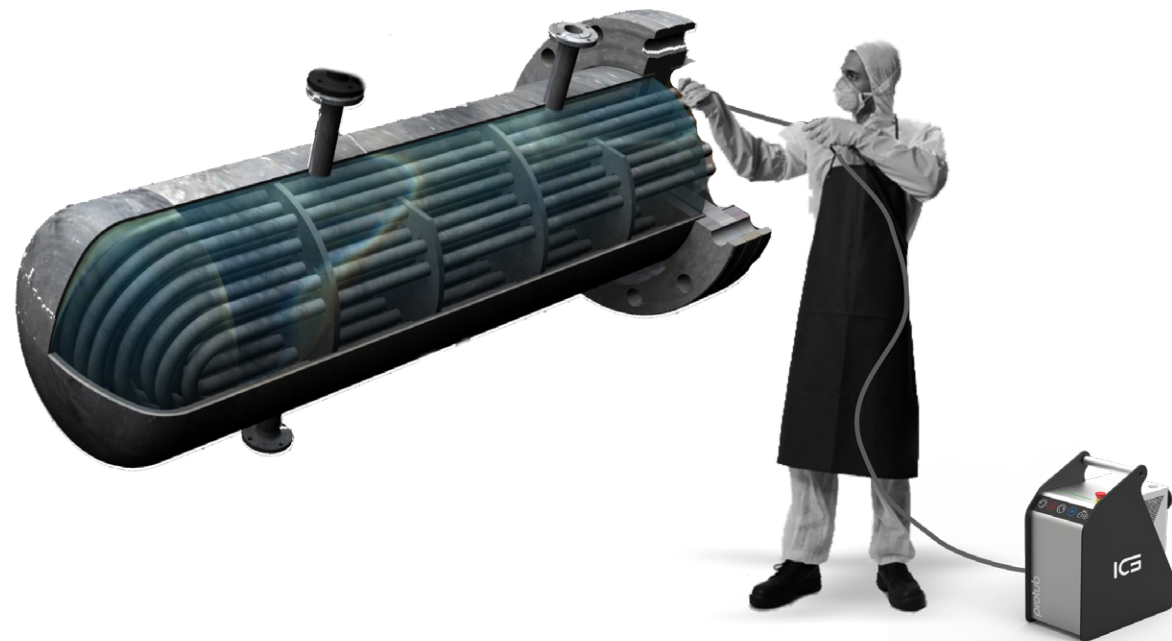
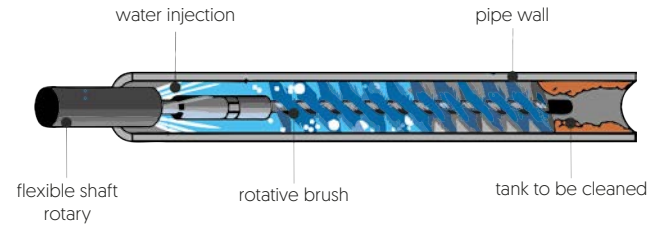


protub

Tube cleaning system for heat exchange equipment

A heat exchanger is designed to transfer heat between two tubular media, through which fluids pass, leaving behind incrustations of dirt. It is essential to keep the interior of these tubes clean for optimum performance and to avoid economic losses.

This mechanical brushing equipment by means of a flexible rotating shaft, has a brush rotation speed regulator. Very light and portable, with reduced dimensions to facilitate its transport with just one hand.



CHIMNEY CLEANING

Chimney cleaning system

It is the ideal chimney sweeping tool for the efficient and effortless removal of soot and solid particles produced during the combustion of pellets, wood or coal, thus preventing fires or carbon monoxide contamination. This mechanical brushing equipment by means of a flexible rotating shaft, has a brush rotation speed regulator. Portable and light, of small dimensions to carry in one hand.



sweepvac ▲
Soot vacuum cleaner in combustion chimneys.



DRYER DUCT CLEANING

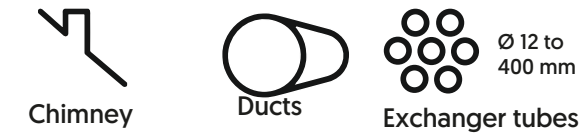
For evacuation tumble dryers

Often the cleaning of industrial dryer ducts is overlooked, thus worsening the efficiency of drying operations, increasing energy costs, reducing the life of the dryer, as well as considerably increasing the risk of fire due to the accumulation of lint in the ducting.

This mechanical brushing equipment allows the exhaustive cleaning of the dryer ducts, as it is portable and lightweight, and has a flexible rotating shaft, allowing it to reach even the most difficult to clean corners.



APPLICATIONS ▼



OPTIONAL ACCESSORIES ▼



WRIST REMOTE CONTROL.

AC3303605

ROTARY SHAFT Ø 10 mm

For brushes from Ø 30 to 400 mm

AC3303607

ROTARY SHAFT de Ø 6 mm

For brushes from Ø 12 to 20 mm

AC3303606

CONSUMABLES ▼

EXCHANGERS AND DRYERS



NYLON BRUSH PACK

Axis Ø 6 mm. Ø12, 14, 16, 18 y 20 mm

CP2080034

Axis Ø 10 mm. Ø30, 40, 50, 60, 70 y 80mm

CP2080037



STEEL BRUSH PACK

Axis Ø 6 mm. Ø12, 14, 16, 18 y 20 mm

CP2080036

Axis Ø 10 mm. Ø30, 40, 50, 60, 70 y 80mm

CP2080038

CHIMNEYS



NYLON BRUSH PACK

Axis Ø 10 mm: Ø100, 150, 200, 250, 300 y 400 mm

CP2080039



STEEL BRUSH PACK

Axis Ø 10 mm: Ø100, 150, 200, 250, 300 y 400 mm

CP2080040



TECHNICAL FEATURES

protub

Electrical power supply	230 V - 50 Hz 110 V - 60 Hz
Hydraulic power supply	Pressure mín. 2 bar Pressure mín. 29 psi
Maximum outlet pressure:	6 bar 87 psi
Engine power:	0,37 kW 0,5 HP
Engine rotation speed:	0 - 3000 r.p.m.
Engine operating speed:	0 - 500 r.p.m.
Direction of rotation:	Right / Left
Control panel:	Membrane keyboard
Control system:	Electric
Structural material:	Stainless steel and HDPE
Hose length:	15 metros 50 ft
Dimensions [L x W x H]	436 x 221 x 457 mm 17 x 8,7 x 17,9 inches
Weight:	17 kg 37,5 lb



03

MECHANISED CONVEYOR BELT CLEANING SYSTEM



beltnet

beltnet

Conveyor belt cleaning system

System for cleaning and disinfection of conveyor belts, by injecting saturated steam and simultaneous suction, leaving the belt dry after steam washing, eliminating the most persistent residues and disinfecting thanks to the 130°C thermal shock. The whole process is carried out while the belt is moving, resulting in a fast and automated cleaning process.

Composed of two modules:

- BN50, conveyor belt cleaning head.
- ST18, 18kW saturated generator.



EQUIPMENT ►





Connection to suction nozzle

Steam injection connection

Conveyor belt

BN50

Conveyor belt cleaning head

Fully stainless steel construction does not damage the belt. Washes, sanitizes and dries conveyor belts of any width, without operator. Easy to assemble. Thanks to the sliding system, it can be moved to cover the entire belt width. Can be applied on multiple belts, even if they differ in width. Total steam and residual water extraction, the belt comes out dry. Possibility to use only steam, or steam + water.

BN50 TECHNICAL CHARACTERISTICS

Saturated steam supply connection	Double pipe quick release
Suction connection	60 mm tube
Head settings	Height from 0 to 300 mm. Transverse movement up to 1500 mm
Construction	AISI 304 stainless steel
Working width	500 mm
Weight	12 Kg

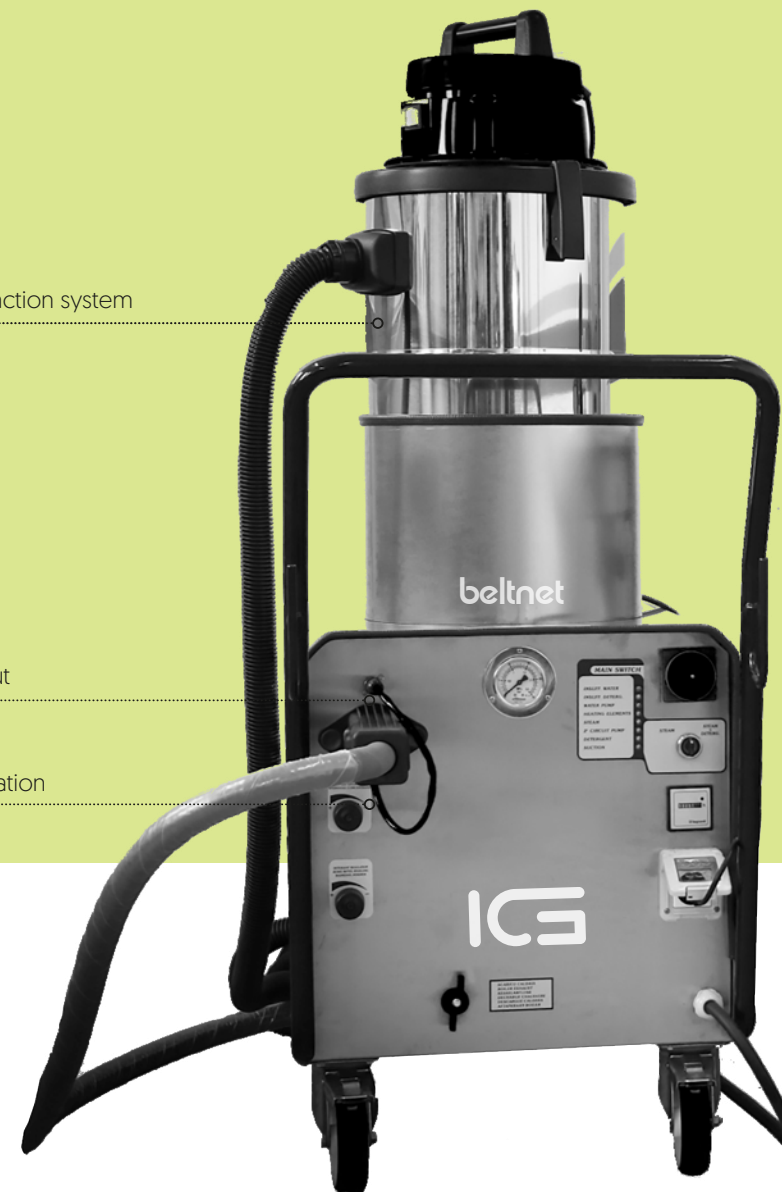
Price on request



ST18

18 kW saturated steam generator

- AISI 304 stainless steel frame and boiler
- Magnetic anti-limescale filter
- Two electronically controlled 9 kW electric boilers
- Digital handle with 6 selectable programmes
- Detergent mixture control
- Three-phase socket for suction, low voltage control panel [24 V] on the generator, low voltage controls on the handle [12 V].
- Ready for use in less than 4 minutes, 4 hours of autonomy with standard use.
- Steam pressure 12 bar, 188°C in boiler
- Steam production: 30 kg/h



ST18 TECHNICAL CHARACTERISTICS

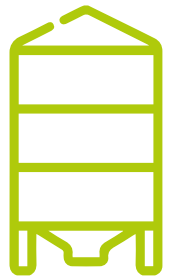
Power supply	400 V / 50 Jz 28 Amp.
Steam production	30 Kg/h, 180°C 12 bar pressure
Max. output pressure	8 bar / 116 psi
Control	Lack of detergent and water indicator
Heat output	18 kW
Water consumption	30 l/h
Detergent reservoir	10 litres
Water reservoir	100 litres 4 h. autonomy
Structural material	Stainless steel AISI 304
Dimensions [L x W x H]	1208 x 745 x 1020 mm
Weight	165 kg

Price on request



04

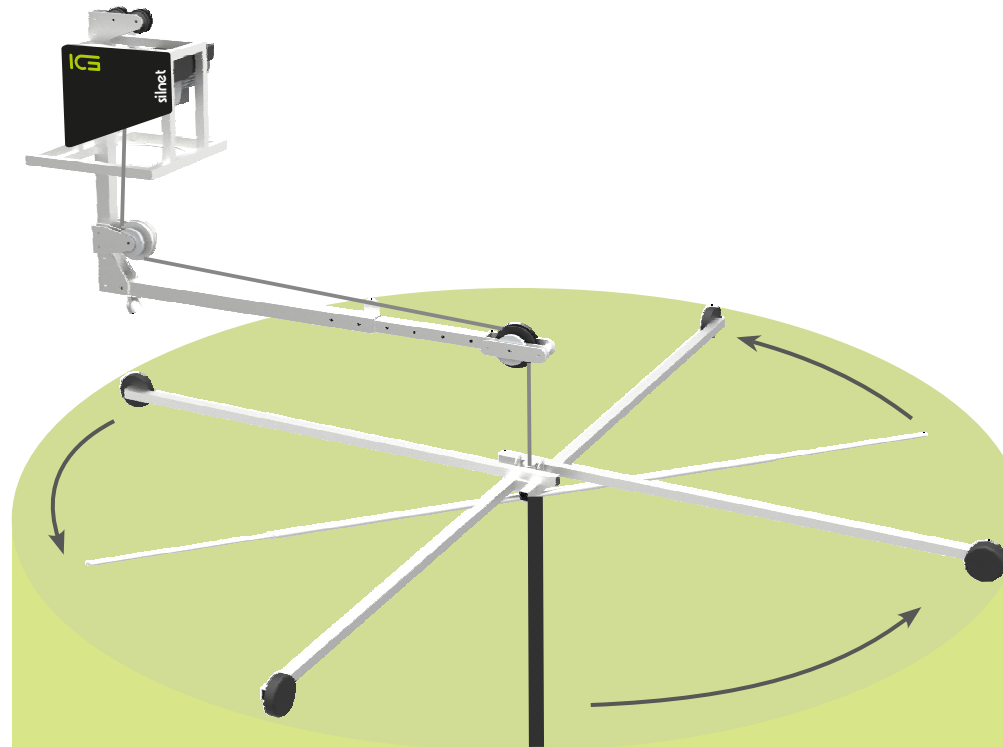
AUTOMATED CLEANING
SYSTEM FOR THE
INTERIOR OF SILOS



silnet



silnet



TECHNICAL CHARACTERISTICS

Engine:	Electric
Power:	High pressure water 500 bar
Maximum range:	Diameter from 2 to 4 metres and depth 20 metres
Elevator reel:	Self-rolling with electric rotor
Control hose:	30 metres
Minimum inlet:	350 mm
Dimensions:	108 x 50 x 48 cm [L x W x H]
Total weight:	80 kg.
Construction:	Aluminium structure

ADVANTAGES

It is not necessary to introduce operators inside the silo.
Adaptable to any silo shape and size.
ATEX technology for use in hazardous areas.
explosion risk areas.
Fully dismantlable modular system in aluminium.

CLEANING MODULES

Extendable hose and arm up to 20 metres
Inspection camera with monitor and digital video recorder
digital video recorder

Price on request



ST50

Automated system for cleaning
the inside of silos



silnet

ACCESSORIES INCLUDED ▼



VIDEO INSPECTION SYSTEM

AC3303605



ERGONOMIC REMOTE CONTROL

AC3303605

ST50 TECHNICAL CHARACTERISTICS

Supply required	Electric 230V
Engine	1800 w
Arm adjustments	Height from 0 to 20 metres Diameter up to 4000 mm
Construction	Reinforced aluminium
Extendable arm dimensions	Since 2000 to 4000 mm
Weight	36 kg

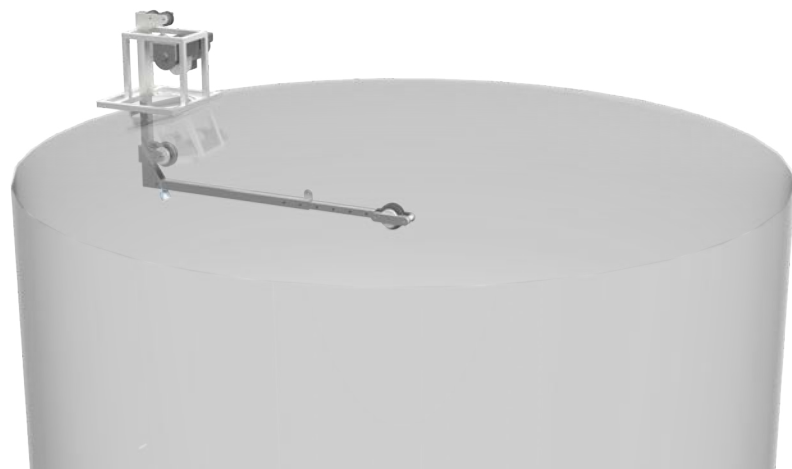
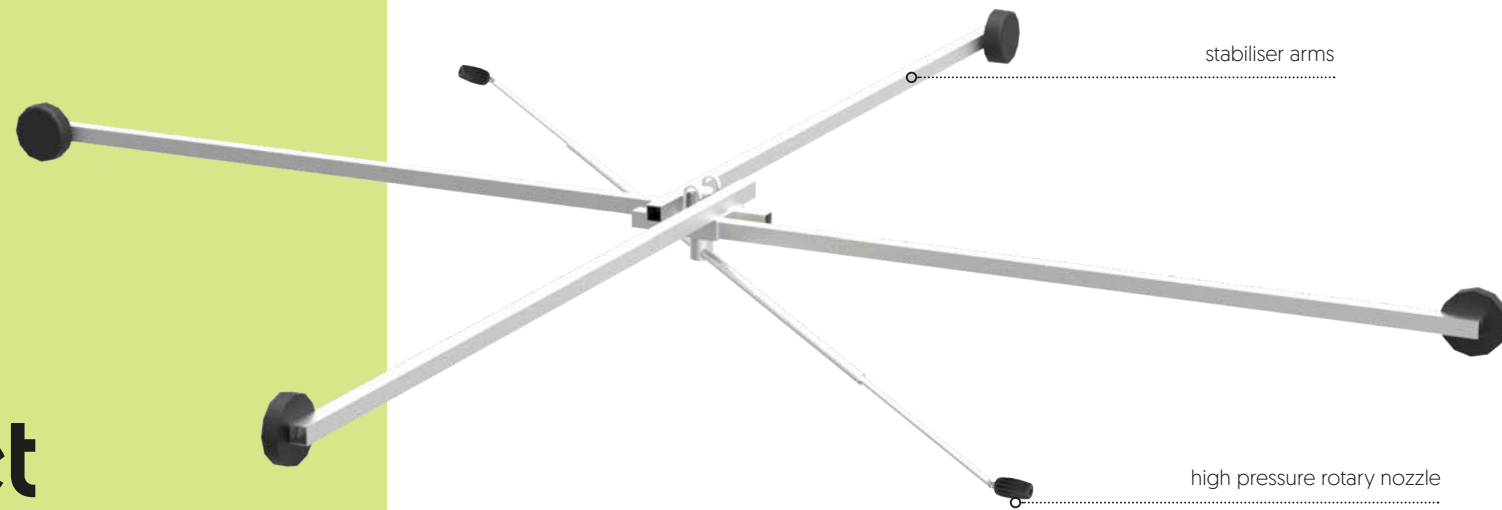
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Price on request



HP50

MODULE FOR CLEANING THE INSIDE OF SILOS
BY HIGH-PRESSURE HYDRO CLEANING

silnet



ACCESSORIES INCLUDED ▼



HIGH PRESSURE WATER HOSE

30 Meters in length
AC3303310



HYDROBRUSHING ROTARY NOZZLE

360° high pressure
AC3303310

HP50 TECHNICAL CHARACTERISTICS

Required supply	High pressure water 500 Bars
Rotation system	By means of high-pressure water nozzles
Centring device and injection nozzle adjustments	Height from 0 to 20 metres Diameter from 2000 to 4000 mm
Construction	Reinforced aluminium
Extendable arm dimensions	From 2000 to 4000 mm
Weight	38 kg

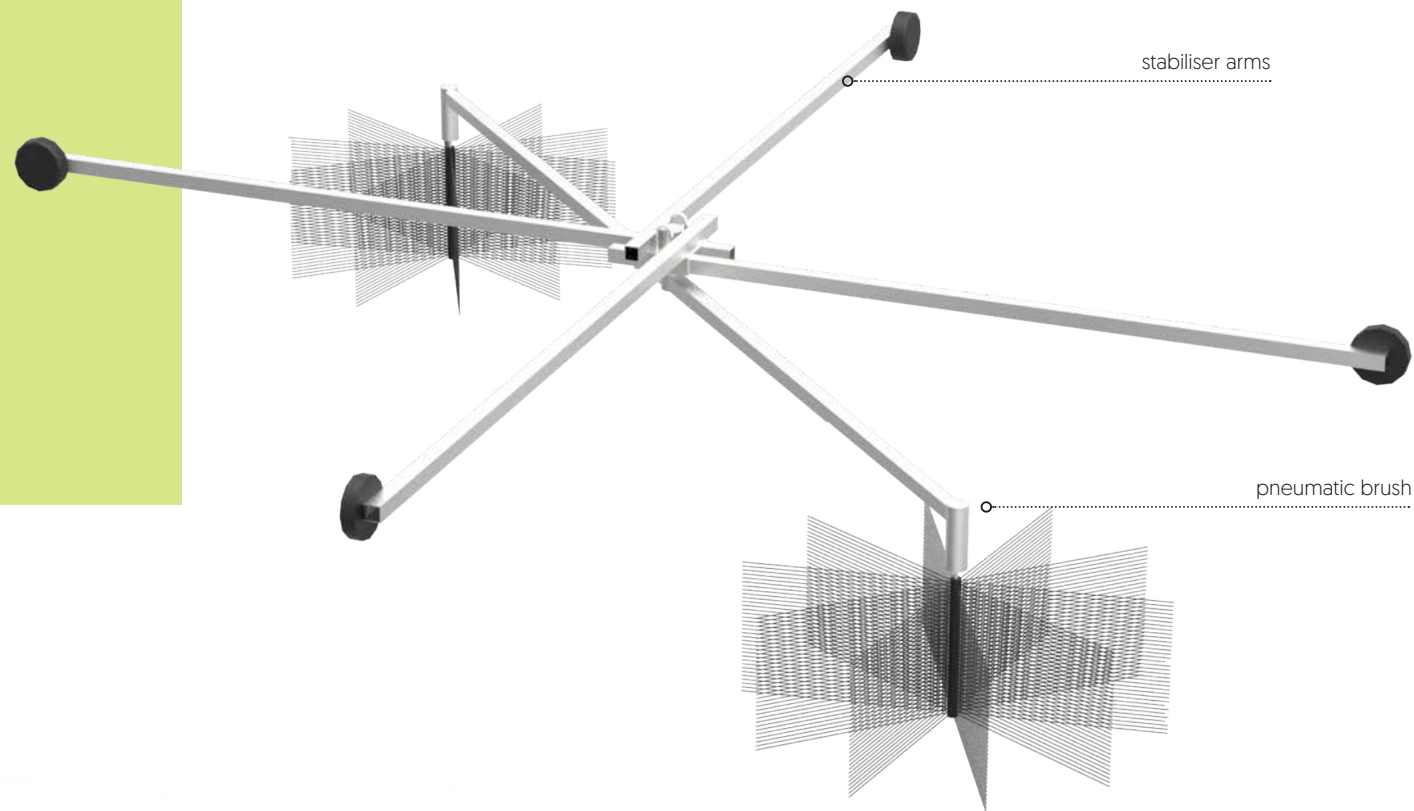
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Price on request



BR50

MODULE FOR CLEANING THE INSIDE OF SILOS
BY MECHANICAL BRUSHING

silnet



ACCESSORIES INCLUDED ▼



**HIGH PRESSURE
AIR HOSE**

30 Mts de longitud



NYLON BRUSHES

500 mm diameter

BR50

TECHNICAL CHARACTERISTICS

Supply required	Compressed air 600 l/min. at 8 bar
Rotation system	by pneumatic motors
Centring device and injection nozzle adjustments	Height from 0 to 20 metres Diameter from 2000 to 4000 mm
Construction	Reinforced aluminium
Extendable arm dimensions	from 2000 to 4000 mm
Weight	35 Kg

ICS300002
Price on request



AR100

COMPRESSED AIR COMPRESSOR
SCREW TECHNOLOGY

COMPRESSED AIR SUPPLY FOR THE BR50
MODULE OF THE SILNET SYSTEM



TECHNICAL CHARACTERISTICS

Electrical power supply	380 V / 50 - 60 Hz
Engine power	7kW [continuous service].
Working pressure	13 bar
Air flow rate	1300 l/min
Sound level	64 dB
Quantity of oil in compressor circuit	5 l
Refrigeration system	Air
Control panel	Membrane keyboard
Material of the structure	Stainless steel
Weight	126 kg / 278 lb
Dimensions [L x W x H]	580 x 480 x 800 mm 22.8 x 18.9 x 31.4 inch

CO3330800 [230V 3PH] Price on request
CO3330900 [380V 3PH] Price on request

HP500

HIGH PRESSURE WASHER

HIGH PRESSURE WATER SUPPLY FOR THE
HP50 MODULE OF THE SILNET SYSTEM



TECHNICAL CHARACTERISTICS

Electrical power supply	380 V / 50 - 60 Hz
Structural construction	Stainless steel
Max. outlet pressure	500 bar
Flow rate	8,5 l/min
Power cable length	5 m
Manguera de alta presión	Refuerzo de acero
Piston head material	Ceramics
Stock material	Brass
Dimensions [L x W x H]	460 x 280 x 260 mm 18 x 11 x 10.2 inch
Weight	85 kg / 39.6 lb

ICS300004
Price on request



TEINNOVA®
*Price list valid until 12/31/2023