

ENGLISH

# MONTI



## Bristle Blaster<sup>®</sup> Industrial

## The key features of Bristle Blasting

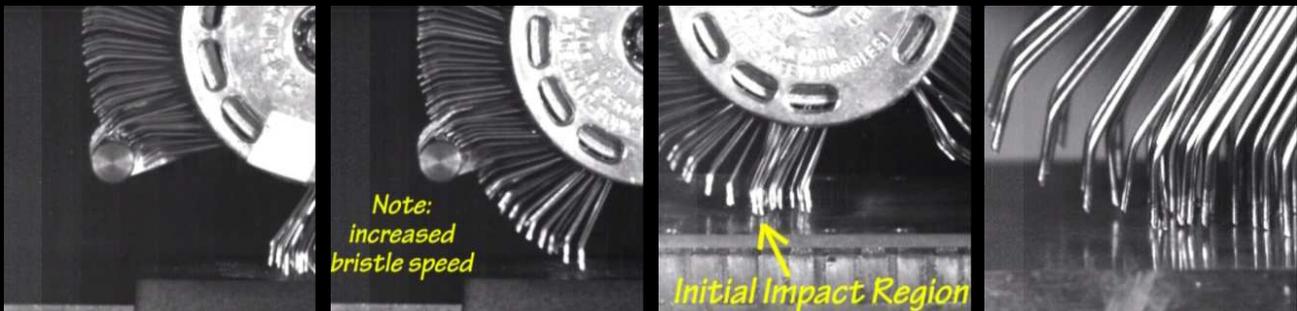
### What is the Bristle Blasting process?

Bristle Blasting is a new process that uses a specially designed rotary bristle tool for achieving both corrosion removal and an anchor profile.

### How does the tool perform blasting operations?

The bristle tips are designed to strike the corroded surface with kinetic energy that is equivalent to standard processes that use grit blast media. Immediately after the bristle tips strike the surface, they retract ("rebound") from the surface, which results in both corrosion removal and micro-indentation that exposes fresh surface.

Consequently, surfaces that have been treated by Bristle Blasting have a texture and visual cleanliness that mimics those obtained by traditional grit blasting processes.

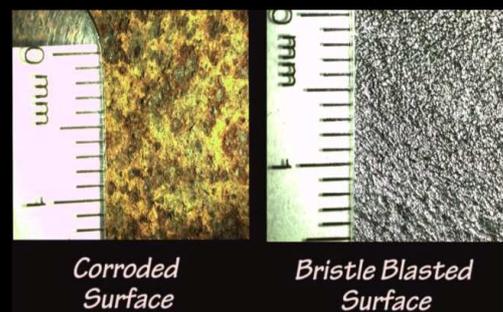


Bristle tips are detained, accelerated, ... they strike the surface with increased kinetic energy ... and immediately retract

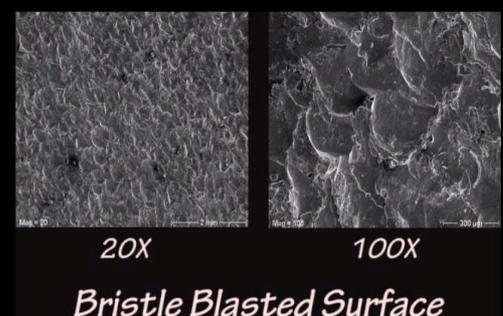
### Advantages:

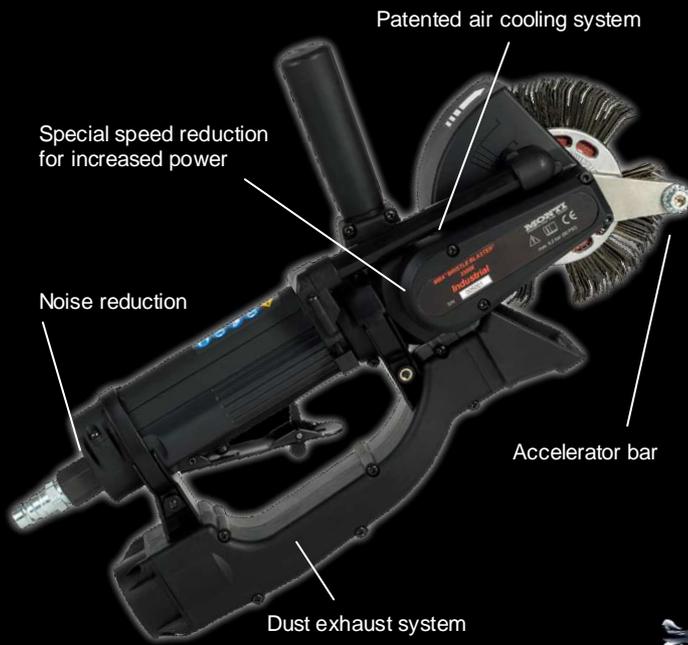
- visual cleanliness as achieved by grit blasting (near white metal or SSPC-SP 10 or SA 2.5)
- roughness capability from 40 - 120 microns  $R_z$
- hand held power tool, easy to operate and to transport (weight of Bristle Blaster<sup>®</sup> Pneumatic approx. 1.2 kg)
- no complex equipment, machinery or work preparation required – only compressed air or electric power supply
- ATEX approved for the use in zone 1 – potentially explosive atmospheres (for Bristle Blaster<sup>®</sup> Pneumatic)
- grit free process – no additional waste production
- no need for housing installations, no reprocessing or disposal of grit media needed
- ideal for spot-repair and touch-up jobs

Corroded surface before and after treatment by Bristle Blaster<sup>®</sup>



Scanning electron micrograph of bristle blast surface





### Bristle Blaster® 3500X - Pneumatic

Technical data	
Weight:	1.2 kg
Air pressure connection thread:	1/4 " PT
Required hose diameter:	3/8 " ID (9,5 mm)
Rotational speed:	0-3500 min <sup>-1</sup>
Required flow pressure:	6.2 bar / 90 psi
Average air consumption:	17.5 CFM (500 l/min)
Vibration (EN ISO 8662-1; 8662-4):	2 m/sec <sup>2</sup>
Sound pressure level (DIN 45635-21; ISO 3744):	83 dB

### Bristle Blaster® 3200X - Electric

Technical data	
Weight:	2.3 kg
Output:	550 W
Voltage: 3200 X	230 V (±10 %)
3200 XA	120 V (±10 %)
Rotational speed:	0-3200 min <sup>-1</sup>
Vibration (EN ISO 8662-1; 8662-4):	2.8 m/sec <sup>2</sup>
Sound pressure level (DIN 45635-21; ISO 3744):	82 dB

**Ex** II 2G c IIA T4 X

Bristle Blaster® 3500X Pneumatic was approved by ATEX for the use in zone 1 – potentially explosive atmospheres

## Performance of the Bristle Blaster® Technology

### Corrosion, Mill Scale, and Coating Removal

Restores surface to near white metal visual standard (or SA 2.5, NACE 2 or SSP-SP-10).

### Surface Texture / Anchor Profile

Roughness capability from 40 to 120 microns (R<sub>z</sub>) – depending on treated material. Also on weld seams

### Eco-friendly

„green“ surface treatment, does not use or produce hazardous materials

### Improved Integrity of Treated Surfaces

Generates compressive residual stress along the treated surface for crack growth resistance, improved fatigue life, and improved corrosion resistance.

### Negligible Heat Generation

Surface free of thermal damage/heat marking.

### Simple/Economical

Eliminates the need for complex and costly abrasive blast equipment.



Set consisting of:

- Drive unit Bristle Blaster® 3500X with air cooling, noise reduction, dust exhaust, special gear reduction
- Adaptor Systems for 23mm- and 11mm-belts
- Accelerator Bars for 23mm- and 11mm-belts
- Air Pressure Regulators for 23mm- and 11mm-belts, with couplings and nipples
- 5 Bristle Blaster® Belts, 23 mm
- 5 Bristle Blaster® Belts, 11 mm
- packed in a blow mould case

Art.No. SP-647-BMC

As Set for stainless steel or aluminum surface preparation:  
incl. stainless steel Belts and stainless steel Accelerator Bar

Art.No. SP-649-BMC



Set consisting of:

- Drive unit Bristle Blaster® 3200X (220V) with special gear reduction
- Adaptor System 23mm
- Accelerator Bar for 23mm-belts
- 10 Bristle Blaster® Belts, 23mm
- packed in a blow mould case

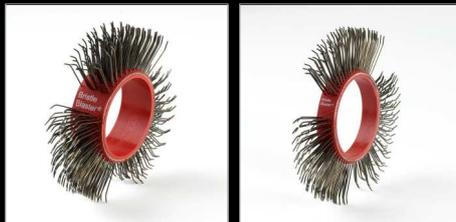
Art.No. SE-677-BMC

Set with drive unit Electric 110 V  
(Bristle Blaster® 3200XA)

Art.No. SE-667-BMC

As Set for stainless steel or aluminum surface preparation:  
incl. stainless steel Belts and stainless steel Accelerator Bar

Art.No. SE-678-BMC



Bristle Blaster® Belts, carbon spring steel

bristles: 0.7 mm carbon spring steel, angled, ground tips  
ring color: red

23mm:

Art.No. BU-610

11mm:

Art.No. BU-620

(packing unit of 10 belts)



Bristle Blaster® Belts, stainless steel

bristles: 0.7 mm stainless steel, angled, ground tips  
ring color: white

23mm:

Art.Nr. BU-662

11mm:

Art.Nr. BU-672

(packing unit of 10 belts)



Adaptor Systems

for 23mm-belts: Art.No. AS-009

for 11mm-belts: Art.No. AS-012



Quick Add®

for 23mm: Art.No. AS-015-23

for 11mm: Art.No. AS-015-11



Swivel Connector for air

supply Art.No. ZU-073



Air Pressure Regulators

Art.No. ZU-073

# MONTI