

ENGLISH

**MONTI**

YOUR SURFACE - OUR PASSION



**BRISTLE BLASTER®**

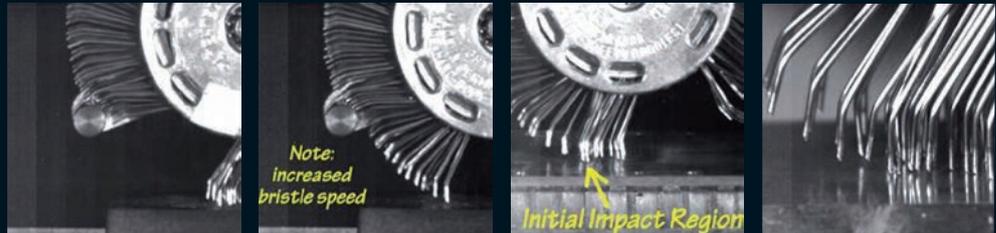
QUALITY MADE IN GERMANY SINCE 1987

# 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.

The bristles are obstructed (creating a tension), accelerated (released from the accelerator bar), impact the surface and retract from the surface.



Sequences from the high-speed-video, recorded with a frame rate of 30,000 frames/sec

Hub speed: 2,500 rpm

Impact duration: 0.0003 sec

## How Does the Tool Perform Blasting Operations?

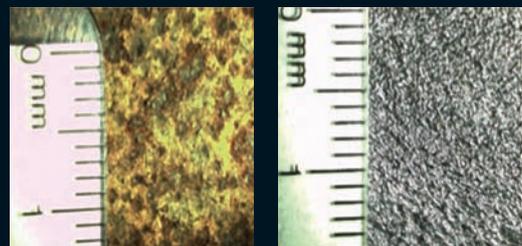
The bristle tips are designed to strike the corroded surface with kinetic energy that is equivalent to standard processes that use grit blast media. Immediately after the bristle tips strike the surface, they retract (“rebound”) from the surface, which results in both corrosion removal and micro-indentation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

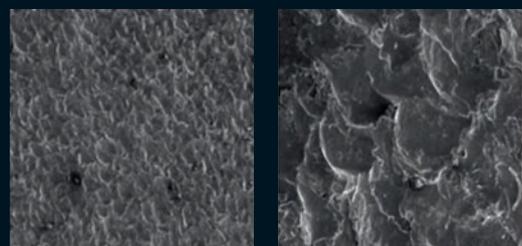
## Advantages

- visual cleanliness as achieved by grit blasting (near-white metal or SSPC-SP 10 or Sa 2½)
- roughness capability from 40-120  $\mu\text{m}$   $R_z$  (1.6-4.7 mils)
- hand held power tool, easy to operate and to transport (weight from 1.1 kg / 2.4 lbs)
- no complex equipment, machinery or work preparation required – only compressed air or electric power supply
- ATEX approval for use in Zone 1 (Ex II 2G c IIA T4 X) for Bristle Blaster® Pneumatic
- grit-free process – no additional waste production
- no need for containment, no reprocessing or disposal of used grit media
- ideal for spot repairs and touch-up work

Corroded surface before and after treatment by Bristle Blaster®

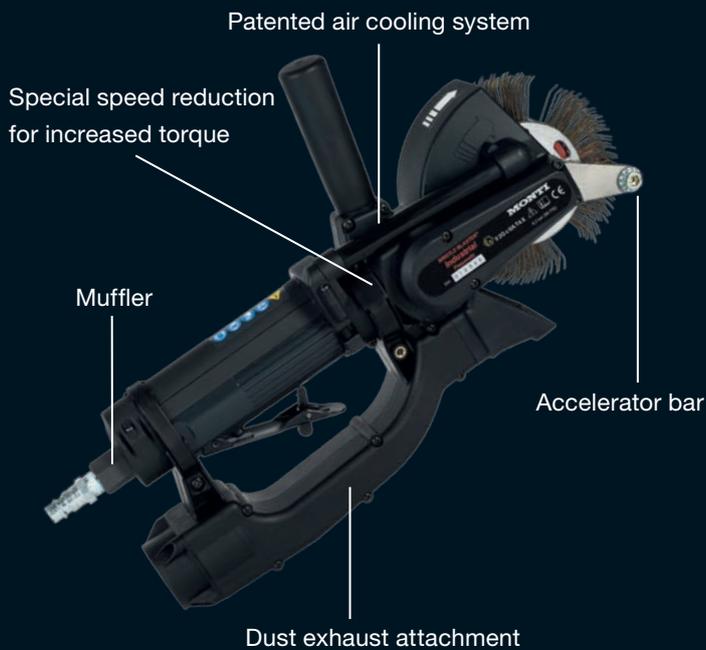


Scanning electron micrograph of bristle blasted surface



20x

100x



### Bristle Blaster® Pneumatic

Technical data:	
Weight:	1.1 kg   2.4 lbs
Threaded air inlet:	Rp 1/4"
Required hose diameter (interior):	9.5 mm   3/8"
Idle speed:	3,500 rpm
Required flow pressure:	6.2 bar   90 psi
Average air consumption:	17.5 cfm   0.5 m³/min
Vibration:	2 m/sec²
Sound pressure level:	83 dB (A)

### Bristle Blaster® Electric

Technical data:	
Weight:	2.2 kg   4.9 lbs
Output:	700 W
Voltage:	230 V (±10 %) 120 V (±10 %)
Idle speed:	3,200 rpm
Vibration:	2.8 m/sec²
Sound pressure level:	83 dB (A)



**II 2G c IIA T4 X**

Bristle Blaster® Pneumatic is 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 2½, NACE No. 2 or SSPC-SP 10)

### Surface Texture / Anchor Profile

Roughness capability from 40-120 µm R<sub>z</sub> (1.6-4.7 mils) – depending on treated material. Also on weld seams

### Eco-friendly

“Green” surface treatment, does not use or produce hazardous materials

### Improved Integrity of Treated Surface

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



### Bristle Blaster® Pneumatic Set:

- drive unit Bristle Blaster® Pneumatic with air cooling and muffler
- adaptor systems for 23 mm- and 11 mm-belts
- accelerator bars for 23 mm- and 11 mm-belts
- air pressure regulators for 23 mm- and 11 mm-belts, with couplings and nipples
- dust exhaust attachment
- 5 Bristle Blaster® belts, 23 mm
- 5 Bristle Blaster® belts, 11 mm
- in a blow mold case

**Item Code SP-647-BMC**

As set for stainless steel or aluminum surface preparation:  
incl. stainless steel belts and stainless steel accelerator bars

**Item Code SP-649-BMC**



### Bristle Blaster® Electric Set:

- drive unit Bristle Blaster®
- adaptor system for 23 mm-belts
- accelerator bar for 23 mm-belts
- 10 Bristle Blaster® belts, 23 mm
- in a blow mold case

**230 V Item Code SE-677-BMC**

**120 V Item Code SE-667-BMC**

As set for stainless steel or aluminum surface preparation:  
incl. stainless steel belts and stainless steel accelerator bar

**230 V Item Code SE-678-BMC**

**120 V Item Code SE-668-BMC**



### Bristle Blaster® Belts, Carbon Steel

bristles: steel, angled, ground tips  
ring color: red  
23 mm:  
11 mm:  
(10 pack)

**Item Code BB-033-10**

**Item Code BB-034-10**



### Bristle Blaster® Belts, Stainless Steel

bristles: stainless steel, angled, ground tips  
ring color: white  
23 mm:  
11 mm:  
(10 pack)

**Item Code BB-102-10**

**Item Code BB-103-10**

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