

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?

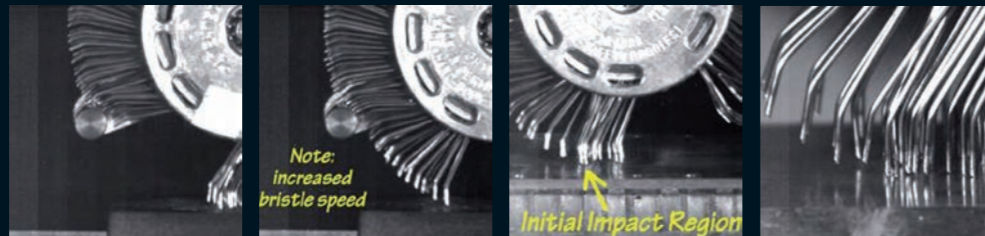
Bristle Blasting is a new process that uses a specially designed rotary bristle tool for achieving both corrosion removal and an anchor profile.

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.

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

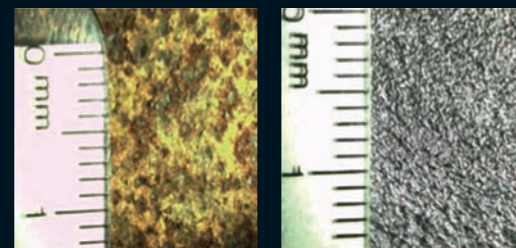


Sequences from the high-speed-video, recorded with a frame rate of 30,000 frames/sec
Hub speed: 2,500 rpm
Impact duration: 0.0003 sec

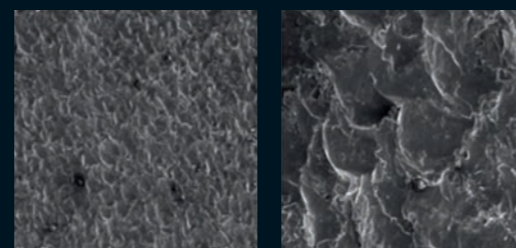
Advantages

- visual cleanliness as achieved by grit blasting (near-white metal or SSPC-SP 10 or Sa 2½)
- roughness capability from 40-120 µm 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) |

Ex II 2G c IIA T4 X

Bristle Blaster® Pneumatic is approved by ATEX for the use in Zone 1 – potentially explosive atmospheres.

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) |

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_z (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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Item Code: P-033-EN (10/2017)