

# MONTIPOWER'S BRISTLE BLASTING® SOLUTIONS



II 2G c IIA T4 X

# IT'S GONNA GET ROUGH

QUALITY MADE IN GERMANY SINCE 1987



# BRISTLE BLASTER®



The Bristle Blasting® tool consists of wire bristle tips that are bent forward and dynamically tuned to a hand-held power tool which operates at approximately 2,500 rpm. The mechanical principles upon which the Bristle Blasting® tool is based are summarized as follows: 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 corroded steel surface, they retract (i.e., “rebound”) from the surface, which results in both corrosion removal and amicro-indentation that exposes fresh surface. Consequently, surfaces that have been treated by the Bristle Blasting® tool have a texture and visual cleanliness that mimics those obtained by traditional grit blasting processes.

## THE BRISTLE BLASTER® ADVANTAGE

- ① Removes corrosion, coatings, mill scale and other contaminants - without removing healthy material
- ② Generates anchor profiles ranging from 2.5 to 3.3mil (65 - 85 µm Rz) also on weld seams, edges, around bolts and on surface irregularities
- ③ Restores corroded and pitted surfaces to near-white metal or white metal appearance - no grinding or polishing during operation
- ④ Improves integrity of treated surface - generates compressive residual stress for crack growth resistance, improved fatigue life and improved corrosion resistance
- ⑤ Cleans and profiles quickly and economically with long lasting, safe Bristle Blaster® Belts - eliminating the need for costly abrasive blast equipment
- ⑥ Suitable for spot repairs as well as larger areas where other processes are prohibitive - will not use/produce hazardous material

## THE BRISTLE BLASTING® INNOVATION

- ① Bristle Blasting® is a new process that uses a specially designed rotary bristle tool for achieving both corrosion removal and an anchor profile
- ② The rotating bristles are DYNAMICALLY TUNED to the power tool which results in impact and immediate retraction of the bristle tips from the corroded surface
- ③ The bristle tips strike the corroded surface with kinetic energy that is equivalent to grit blast media, generating a texture and visual cleanliness that mimics the grit blasting process
- ④ Bristle Blasting® simplifies the surface preparation operation and reduces expense through the elimination of expensive equipment, media and extensive environmental and safety measures



- Low vibration levels
- ATEX-approved for use in Zone 1 (potentially explosive) atmospheres in accordance with Ex II 2G c IIA T4 X (Bristle Blaster® Pneumatic)
- Low sound pressure level of max. 83.2 dB(A)
- No need for elaborate protective clothing
- Lightweight and ergonomic design



- Removes corrosion, coatings, scale and adhesive residues
- Surface preparation grade comparable with Sa 2½-3 per ISO 8501-1
- Roughness levels of up to 120 µm Rz
- Minimal loss of base material
- Generates compressive residual stress across the treated surface for improved crack resistance, fatigue life and stress corrosion resistance
- Surface free of thermal damage and traces of heat marking
- Efficient removal of viscous coatings without smearing, gumming up or clogging the belt

# SETS, BELTS & ACCESSORIES



## BRISTLE BLASTER® PNEUMATIC SET

- 1 each 11 mm and 23 mm Adaptor Systems
- Pressure regulators for 11 mm and 23 mm Belts
- 5 each 11 mm and 23 mm Carbon Steel Belts
- Dust Exhaust Attachment

ITEM NO.  
SP-647-BMC



## BRISTLE BLASTER® ELECTRIC SET

- 1 each 11 mm and 23 mm Adaptor Systems
- 10 Bristle Blaster Carbon Steel Belts
- Blow Mold Case

ITEM NO.  
SE-667-BMC (120V/60Hz)  
SE-670-BMC (230V/50Hz)  
SE-679-BMC (230V/60Hz)

## BRISTLE BLASTER® BELTS CARBON STEEL

0.7 mm spring steel angled, ground tips OD: 115mm

| ITEM NO.  | WIDTH(MM) |
|-----------|-----------|
| BB-033-10 | 11        |
| BB-034-10 | 23        |

## STAINLESS STEEL

0.7 mm stainless steel angled, ground tips OD: 115 mm

| ITEM NO.  | WIDTH(MM) |
|-----------|-----------|
| BB-102-10 | 11        |
| BB-103-10 | 23        |



## BRISTLE BLASTER® PNEUMATIC TOOL

|                         |                      |
|-------------------------|----------------------|
| Free Speed              | : 3,500 rpm          |
| Required Air Pressure   | : 90 psi / 6.2 bar   |
| Average Air Consumption | : 17 cfm / 500 l/min |
| Interior Air Hose Size  | : 17 cfm / 500 l/min |
| Weight                  | : 2.4 lbs / 1.1 kg   |
| Warranty                | : 12 months          |



## BRISTLE BLASTER® ELECTRIC TOOL

|                |   |
|----------------|---|
| Free Speed     | : 3,200 rpm   |
| Voltage Rating | : 120V ± 10% / 60Hz<br>230V ± 10% / 50Hz<br>230V ± 10% / 60Hz |
| Weight         | : 4.9 lbs / 2.2 kg  |
| Warranty       | : 12 months   |

## ADAPTOR SYSTEM

Made of high quality die cast aluminium, with safety elements. Includes screw and allen key

| ITEM NO. | WIDTH(MM) |
|----------|-----------|
| AS-012   | 11        |
| AS-009   | 23        |



## AIR PRESSURE REGULATOR

Reduce the air pressure to the optimum operating pressure (6.2 bar for 23 mm belts, 5.2 bar for 11 mm belts)

| ITEM NO. |                              |
|----------|------------------------------|
| ZU-070   | Air pressure regulator 11 mm |
| ZU-071   | Air pressure regulator 23 mm |



## ACCELERATOR BAR

Extremely robust and low-wearing. Available in two length and material variants (use dependent on width and material of the belt)

| ITEM NO.  |                                       |
|-----------|---------------------------------------|
| ZU-061-05 | Accelerator Bar Steel 11 mm           |
| ZU-060-05 | Accelerator Bar Steel 23 mm           |
| ZU-063-05 | Accelerator Bar Stainless Steel 11 mm |
| ZU-062-05 | Accelerator Bar Stainless Steel 23 mm |



## SWIVEL CONNECTOR

Increases freedom of movement through a full 360°. Makes working even easier. Prevents air pressure hoses from twisting

| ITEM NO. |                  |
|----------|------------------|
| ZU-073   | Swivel connector |



## DUST EXHAUST

Captures up to 80% of the particles that arise as a result of the work process. Can be adapted for use with all commonly used industrial vacuum cleaners.

| ITEM NO. |   |
|----------|---|
| ZU-021   | Dust Exhaust for Bristle Blaster® Pneumatic |





MontiPower - Part of Monti Group  
MONTI - Werkzeuge GmbH  
Reisertstr. 21 | 53773 Hennef | Germany  
T +49 (0) 2242 9090 630  
info@montipower.com  
www.montipower.com