

Renewable Energy in Australia



Use of the Bristle Blaster for coating preparation

Proud Supporters & Members of the



Blasting without Grit

Safe, environmentally friendly ...



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Bristle Blaster[®] Technology

- Provides surface cleanliness up to ISO Sa 2 ½ to Sa 3
- Generates roughness R_z up to 120 μm (4.7 mils)
- Simultaneously removes corrosion and coatings and provides anchor profile for new coating adhesion.

Safe, Environmentally friendly, improves coating performance



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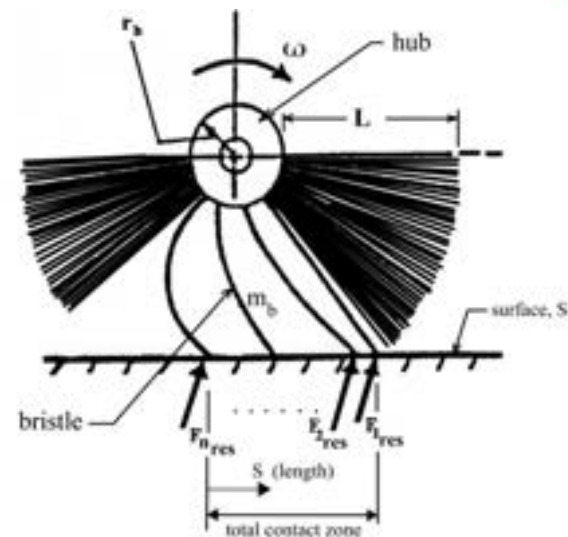
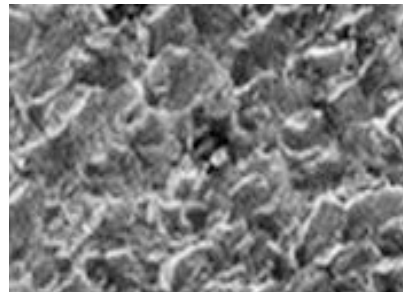


How it works / Conventional wire brush

- Each wire strikes and retracts immediately after the impact
→ negligible heat generation due to very low friction

- no grinding process
→ no burning marks

- abrasive blast finish



Bristle Blaster® Drive Units

Bristle Blaster® Pneumatic



Bristle Blaster® Electric



New Products on the horizon

Bristle Blaster® Cordless



Bristle Blaster® Wide



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Bristle Blaster® Belts & Adaptors

Carbon Steel

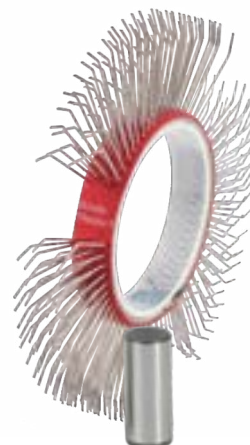


11 mm



23 mm

Stainless Steel



11 mm



23 mm



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Not to be confused with.....!!

MBX



← No Accelerator Bar



Smaller, thinner gauge wires,
no plastic insert. NOT RED

Wind tower weld seams



We have all seen images like the one top right

Left compared to Right:

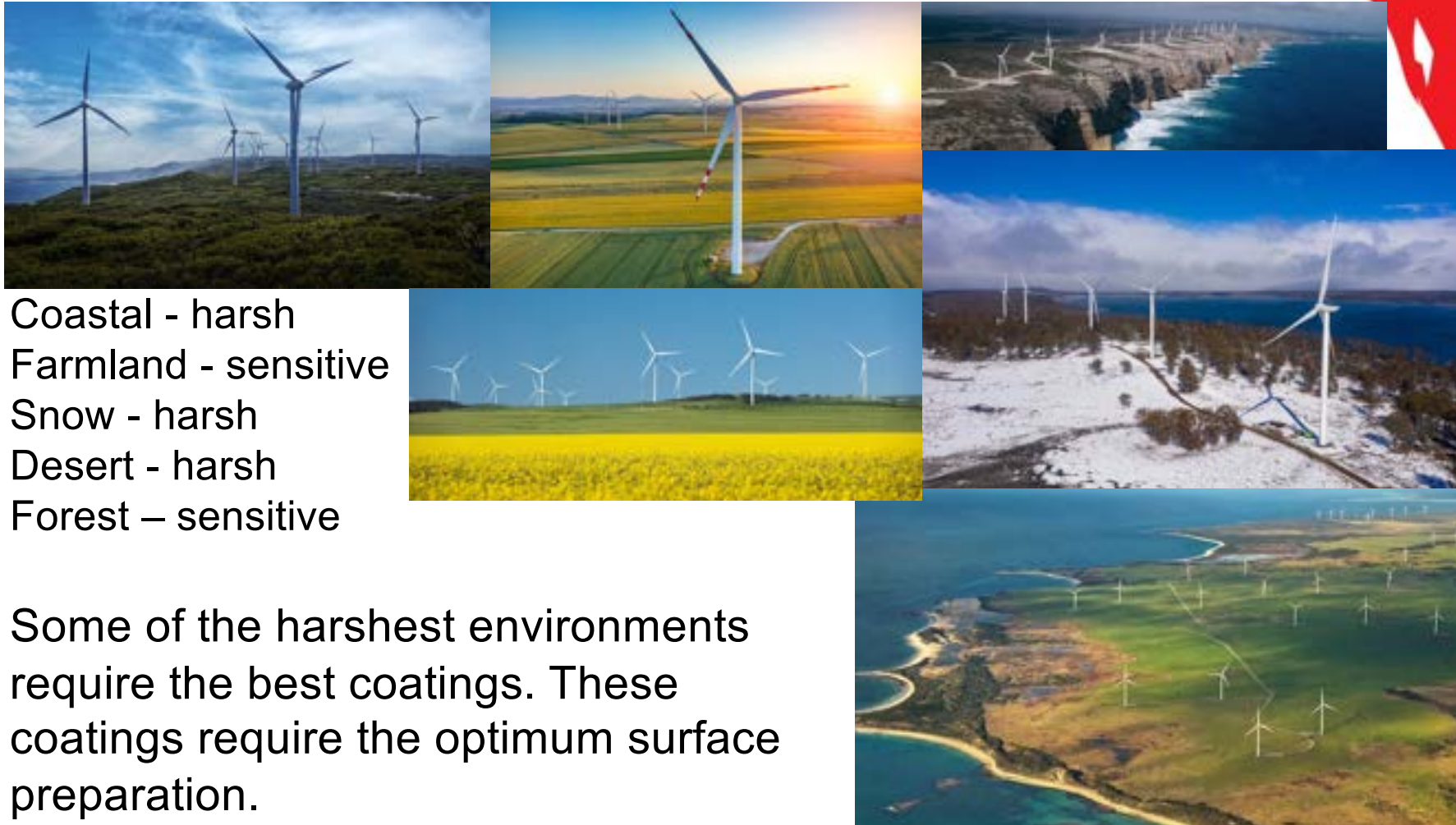
- No heat generation;
- No scratching, but rather cleaning and profiling for increased coating performance;
- Compressive residual stress generation rather than introduction of grinding marks that serve as initiation sites for fatigue cracks;

Flange Repairs



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Australian Environment

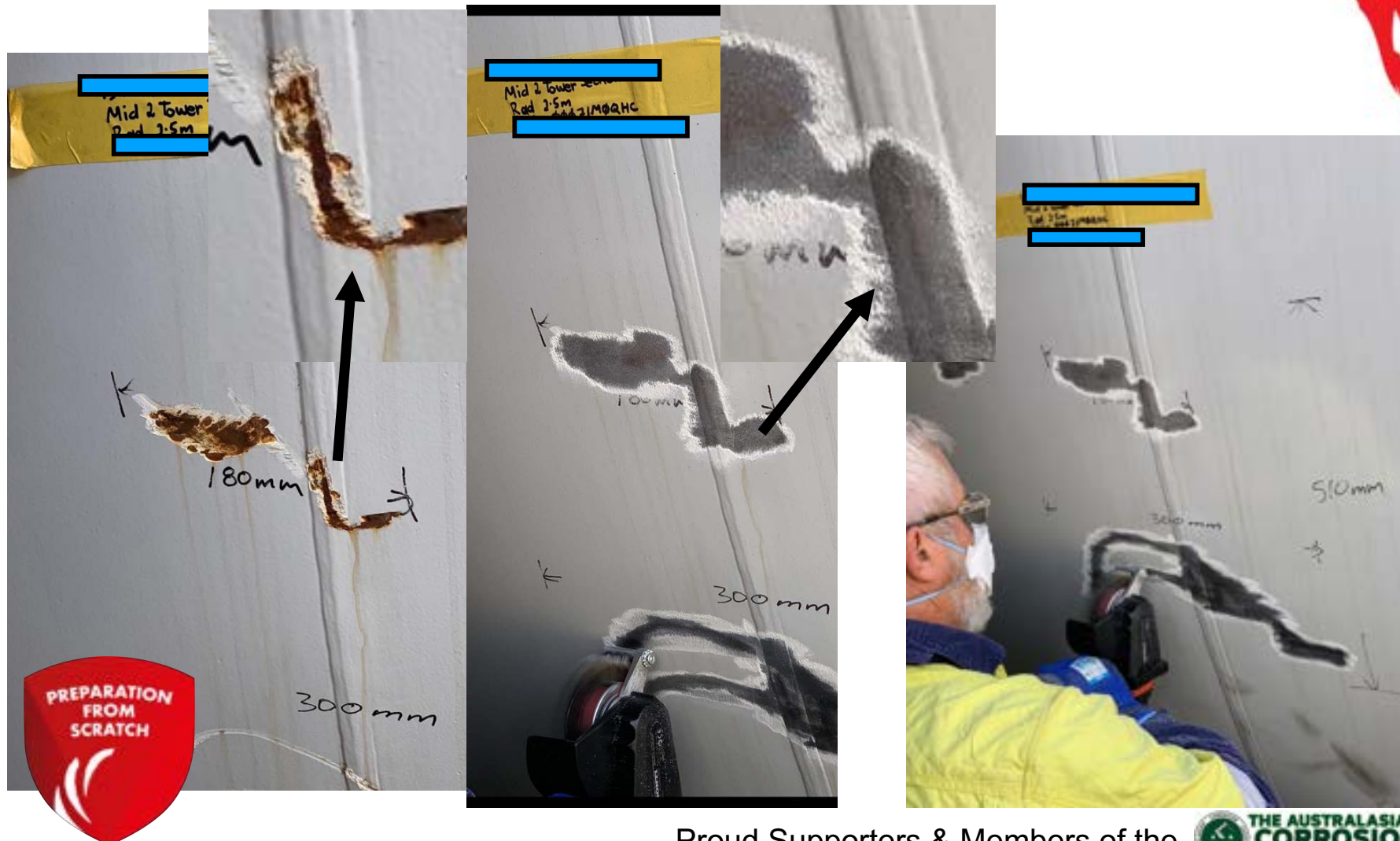


Coastal - harsh
Farmland - sensitive
Snow - harsh
Desert - harsh
Forest – sensitive

Some of the harshest environments require the best coatings. These coatings require the optimum surface preparation.

Case Study 1 - 2019

Tower segments before erecting - damaged during shipping. 30+ turbines, each tower has three segments. All but 2 damaged.



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Case Study 2 - 2020

Repairs to towers at coastal wind farm where incorrect coating had been applied and was not withstanding the harsh environment



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Case Study 2 - 2020

Repairs to towers at coastal wind farm where incorrect coating had been applied and was not withstanding the harsh environment

Flange Joint thoroughly cleaned

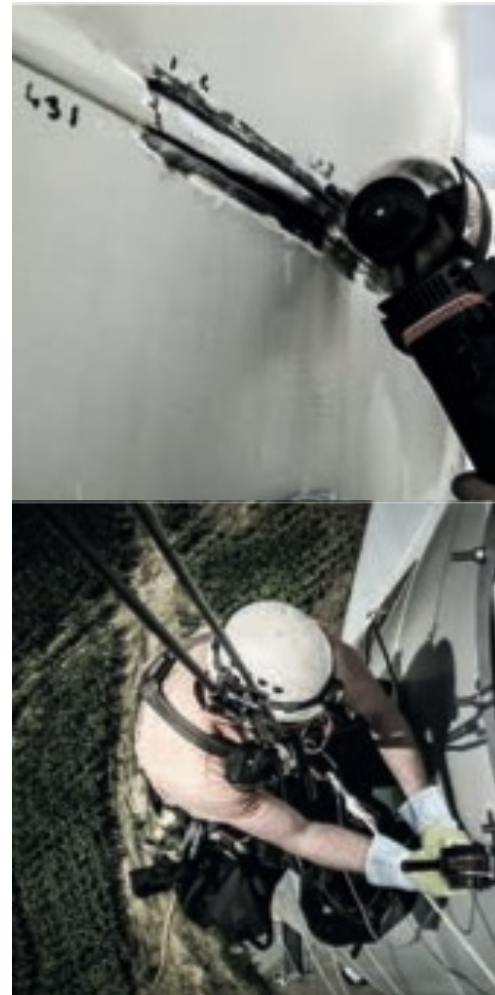


Other Steel Structures



Global OEM's

Vestas
Senvion
Ambau
Enercon
Dong Energy
Siemens Wind Power
EnBW Wind
RWE
GE
Areva



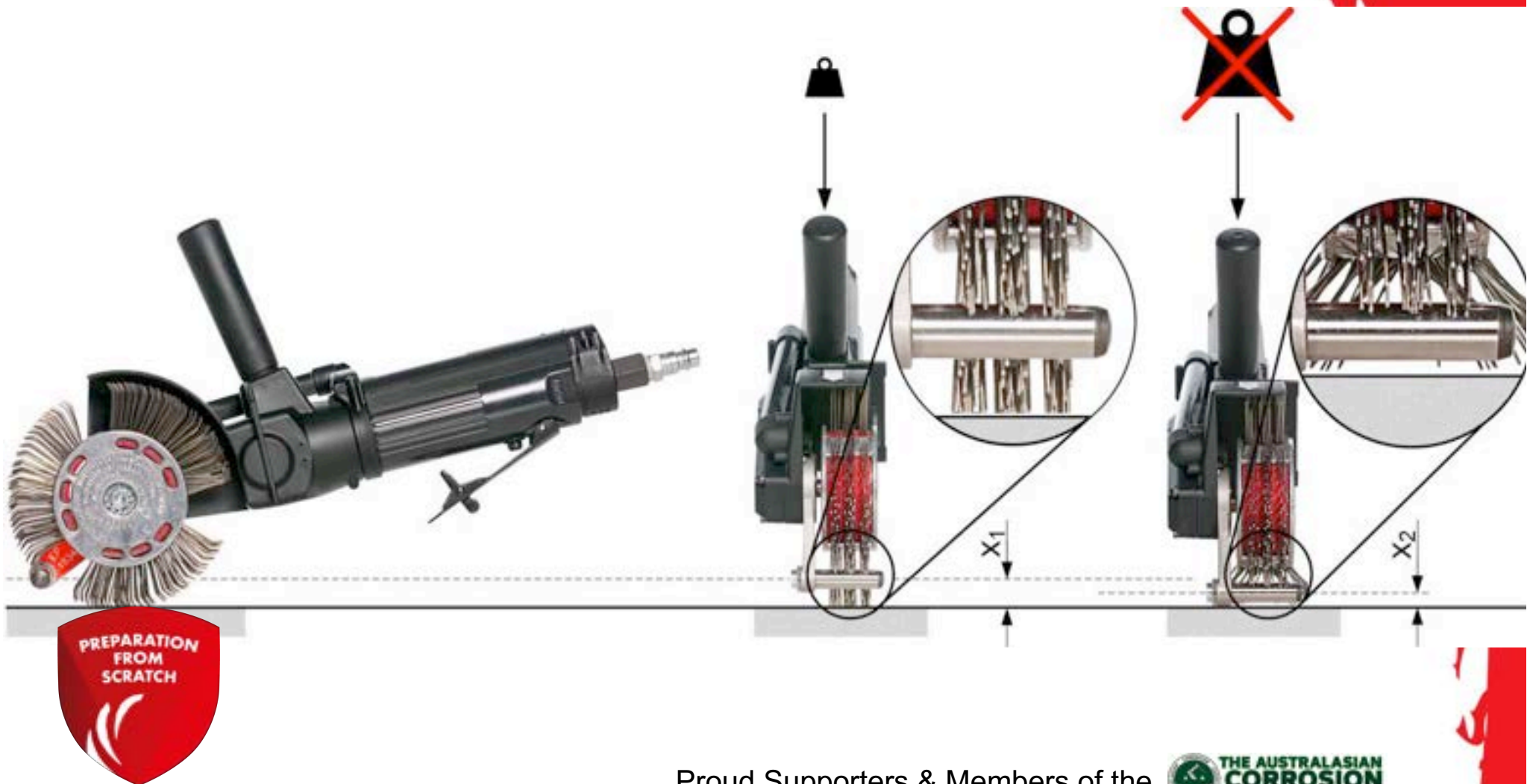
Coating manufacturers specifying the Bristle Blaster



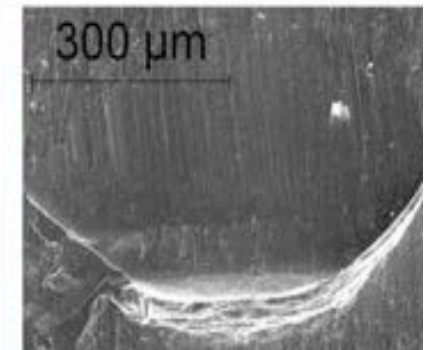
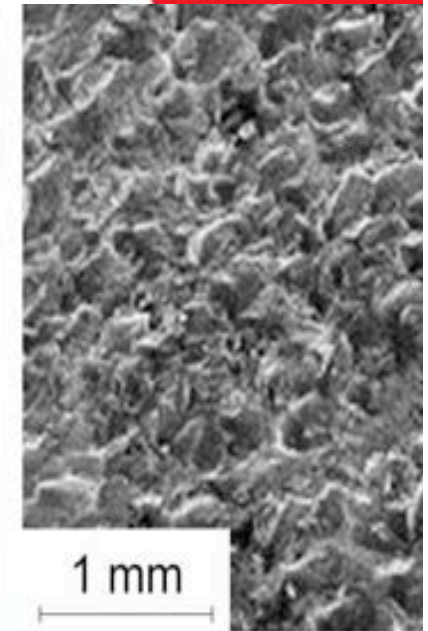
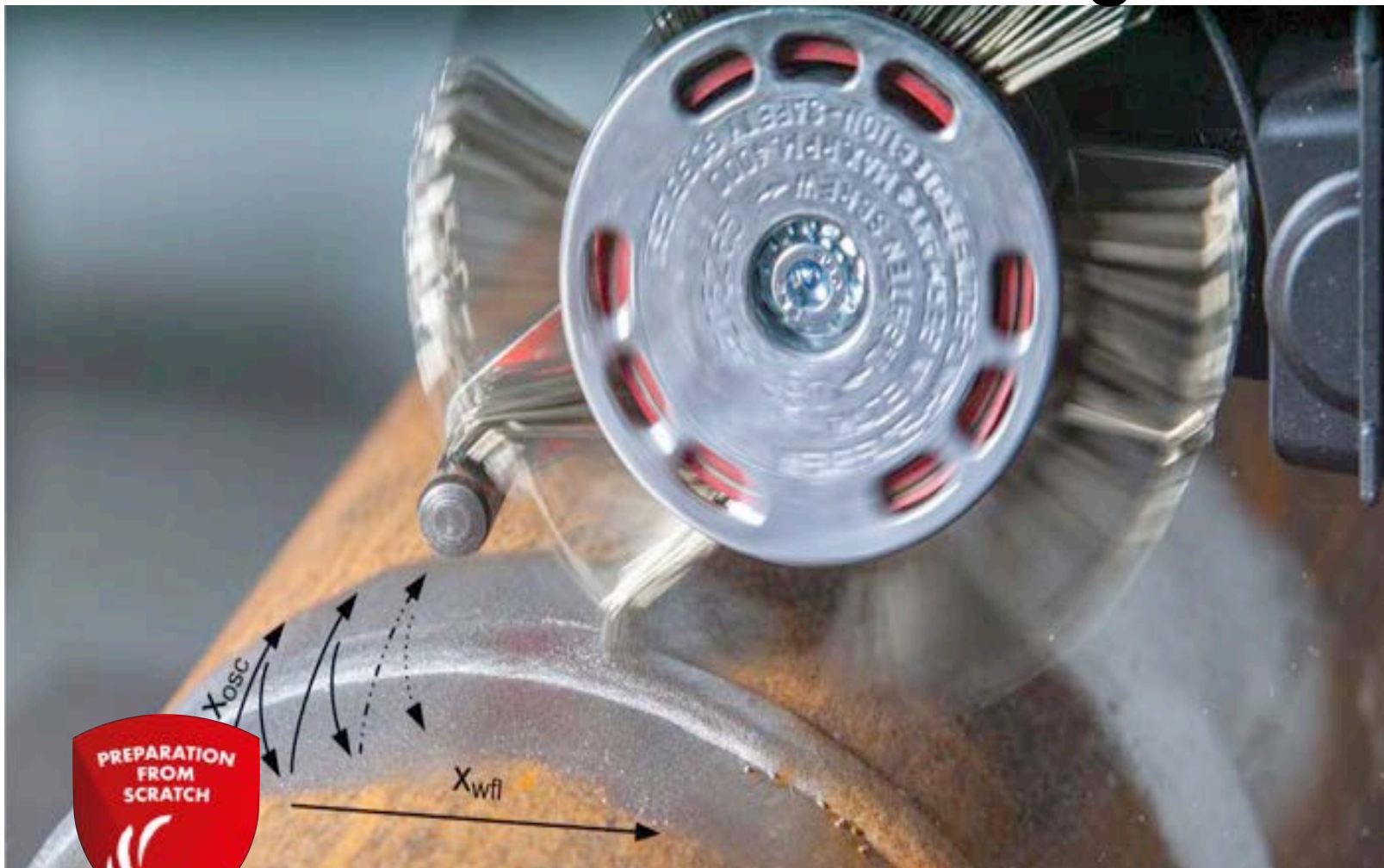
Standard Development - inclusion of Bristle Blaster in revised Coating Standard

AS/NZS 2312.1: 2014 “Guide to the protection of structural steel against atmospheric corrosion by the use of protective coatings”

How to Operate: Tool-Workpiece-Distance



How to Operate: Tool Handling



Live Demo

We couldn't fit a wind tower into the building, so a miniature version will have to suffice.

However – the principles of using the Bristle Blaster on any steel substrate are essentially the same.