

PICUS



Handy Surface Preparation Tool for Narrow and Deep Applications

Blastriker PICUS is a blasting surface preparation tool specifically designed in narrow and deep environments. With a compact width, the PICUS features a 1.18 in. diameter and 2.75 in. length cylindrical body, equipped with heat-treated blades which is multiple and special shapes. These blades expand outward due to centrifugal force and impact the surface, then retract within the diameter upon contact---achieving precise point-impact treatment on steel surfaces.

For instance, in bridge expansion joints where water stops are used, deterioration of the water stop function often leads to damage in Bridge bearings or the expansion joint structure itself. By using PICUS, the steel surface can be finished to a blast-equivalent condition, enhancing adhesion performance for water stop materials beyond traditional repair methods. This enables the restoration and reinforcement of water stop functions. Additionally, the PICUS simplifies work procedures and reduces overall repair costs, making it possible to plan more frequent and timely maintenance. This contributes to the long-term preservation of bridge bearings systems. The effectiveness of this tool lies in its ability to overcome the challenge of performing surface preparation of Sa 2 1/2 in extremely tight and deep gaps of bridge expansion joint.

Blastriker PICUS

Product :BLPM - G1(1pc)
Code :BLPM - G3(3pcs)



For Recommended Tool
Grip Attachment

**M10 grip can be attached.*

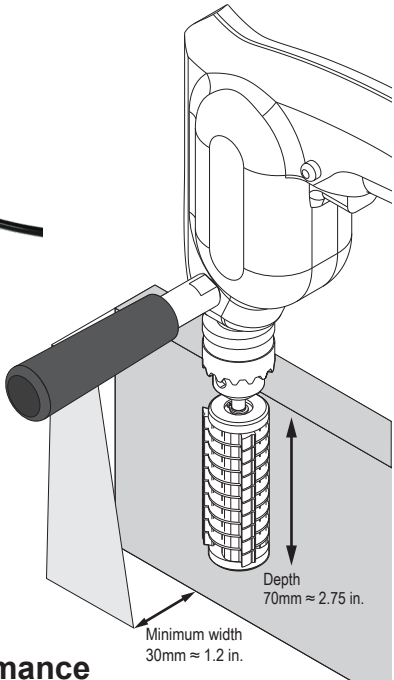
Product Code : GR # 2 - 01



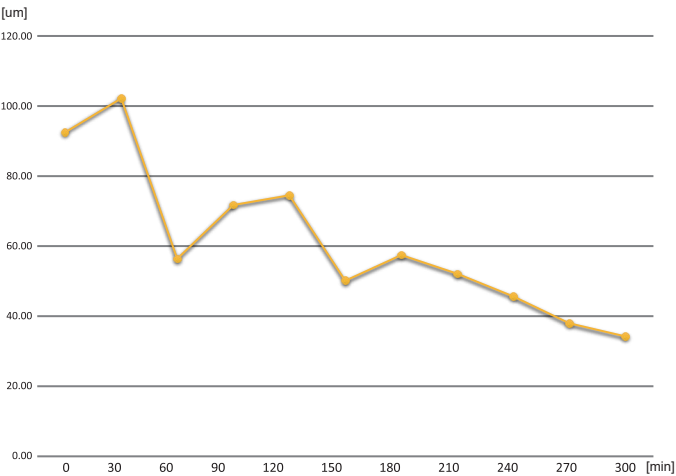
Note: This product is not available for direct sale.

e.g. HIKOKI D6-SH

PICUS can be attached to tools with a drill chuck.
Please use it at a rotational speed of 4,300 RPM or lower.



Durability



The blades were continuously used in 30-minute intervals to induce wear.

After each interval, a section of mill scale steel plate was cleaned, and the surface roughness was measured using a roughness meter.

This cycle was repeated multiple times, and the results are shown in Figure 2.

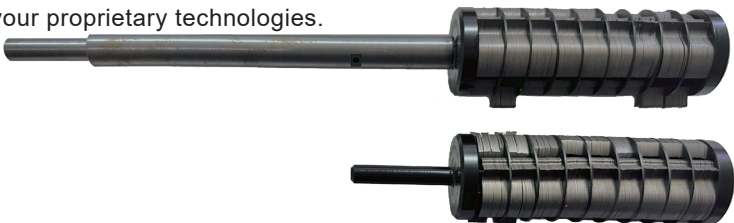
After approximately 7 hours, the roughness tends to stabilize at around Rz 30µm.

PICUS Technical Performance

Category	Specification	Unit	PICUS
Surface Preparation	Impact Energy	N•m	0.0019
	Number of Impact Points	points	3
Quality & Efficiency	Impact Frequency	hit / sec	44,000
	Blade Hardness	HRC	60
	Maximum Operating Speed	r.p.m	MAX 4,300
Sustainability	Power Consumption	W	100 - 200

Technology Expansion and Customization

To better tailor the Blastriker PICUS to your field needs, we offer custom-made configurations, including adjustments to body length, specific anchor profiles, compatibility with non-metallic materials, and dust collection systems. We are also open to collaboration with your proprietary technologies.



Surface Quality and Work Efficiency

Using the experimental apparatus in Photo1, two sheets of black oxide steel plates were installed at 1.9 in. intervals as shown in Photo3, similar to Photo2. The finish of the surface and the required time were compared when processing an area of 2.7 in. × 3.1 in. using a rotary grinder and a wire brush.



Photo 1

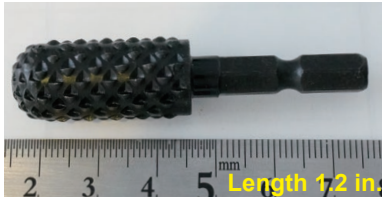


Photo 2



Photo3

Commonly Used Rust Removal Tools



Length 1.2 in.



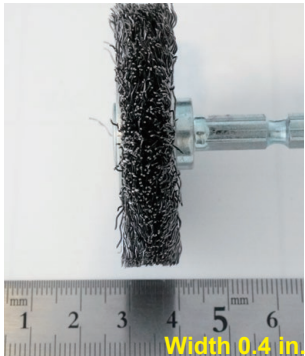
Diameter 0.6 in.

Rotary Grinder



Diameter 1.9 in.

Wire Brush



Width 0.4 in.

	Blastriker PICUS	Rotary Grinder	Wire Brush
Diameter	1.18 in.	0.6 in.	1.9 in.
Contact Surface Length	2.75 in.	1.2 in.	0.4 in.
Rotation Speed	4,300rpm	2,000rpm	7,000rpm
Processing Time	20 sec	122 sec	95 sec
Anchor Profile			
Surface Photo			
Magnified Surface Photo			
	It was possible to remove rust and form an SA 2 1/2 anchor profile simultaneously. The processing time was the shortest.	It was not possible to completely remove the rust, and the processing time was the longest.	The mill scale has been removed, but the surface tends to become smooth. Since the contact area is the shortest, it requires the most vertical and horizontal movement.

Manufacturer

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