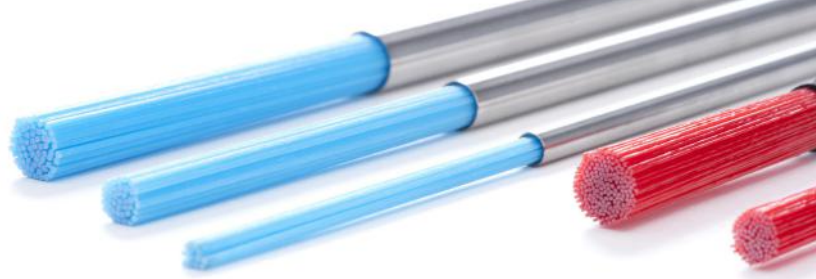


Cross-Hole Deburring cutting fiber brush



FEATURES

- Powerful tip grinding with “XEBEC Cutting Fibers” in rods made of Alumina Fiber abrasive stone.
- Centrifugal force spreads out the rods and efficiently remove fine burrs in cylinders.
- Can also be used for polishing or scale removal on inner wall surfaces of cylinders.
- Suggested starting operating parameters are 6,000 to 10,000 RPM at 12 to 15 inches per minute feed rate.

Red

Target Bore Diameter		EDP Number	Part Number	Brush Diameter		Overall Length		Shank Length		Shank Size		Max RPM
mm	inch			mm	inch	mm	inch	mm	inch	mm	inch	
3.5 - 5ø	.140 - .197	20007	CH-A12-1.5M	1.5	.060	120	4.724	70	2.756	3	.118	20,000
5 - 8ø	.197 - .315	20001	CH-A12-3M	3	.118	120	4.724	70	2.756	3	.118	12,000
		20004	CH-A12-3L	170	6.693	120	4.724	4	.158	12,000		
8 - 10ø	.315 - .394	20002	CH-A12-5M	5	.197	120	4.724	70	2.756	6	.232	12,000
		20005	CH-A12-5L	170	6.693	120	4.724	6	.232	12,000		
10 - 20ø	.394 - .787	20003	CH-A12-7M	7	.276	120	4.724	70	2.756	6	.232	12,000
		20006	CH-A12-7L	170	6.693	120	4.724	8	.315	12,000		



Blue

Target Bore Diameter		EDP Number	Part Number	Brush Diameter		Overall Length		Shank Length		Shank Size		Max RPM
mm	inch			mm	inch	mm	inch	mm	inch	mm	inch	
5 - 8ø	.197 - .315	20008	CH-A33-3M	3	.118	130	5.12	70	2.756	3	.118	12,000
		20012	CH-A33-3L	180	7.09	120	4.724	4	.158	12,000		
8 - 10ø	.315 - .394	20009	CH-A33-5M	5	.197	130	5.12	70	2.756	6	.232	12,000
		20013	CH-A33-5L	180	7.09	120	4.724	6	.232	12,000		
10 - 14ø	.394 - .551	20010	CH-A33-7M	7	.276	130	5.12	70	2.756	6	.232	12,000
		20014	CH-A33-7L	180	7.09	120	4.724	8	.315	12,000		
14 - 20ø	.551 - .787	20011	CH-A33-11M	11	.433	130	5.12	70	2.756	12	.472	10,000
		20015	CH-A33-11L	180	7.09	120	4.724	12	.472	10,000		



Selecting a Brush

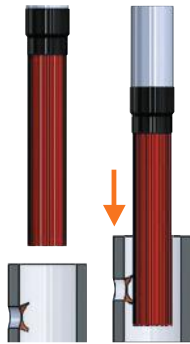
Red: Aluminum, general steel, and other softer materials

Blue: Hard-to-cut materials, cast iron, general steel, and other harder materials

Cross-Hole Deburring tech applications



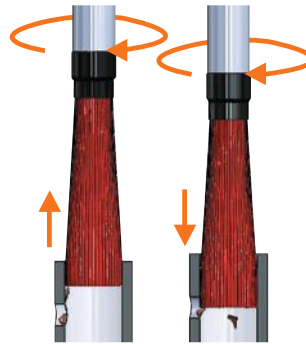
How to Use The tip of the rod effectively removes burrs under centrifugal force creating a finished edge.



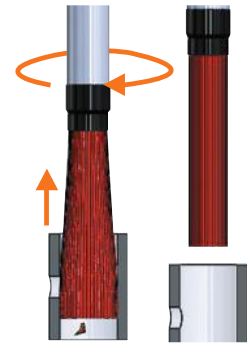
1 Insert brush while not in motion.
*If you rotate the brush outside the cylinder, the bristles may be damaged or scattered.



2 Rotate brush past the crosshole.



3 Work brush back and then forward.
*Pulling the brush back past the crossholes prevents burrs from being laid flat against the interior surface of the cylinder.



4 Stop brush rotation and remove brush while it is at rest.
*Working the brush both clockwise and counterclockwise will increase the deburring effect and result in a more uniform edge.

Successful Applications

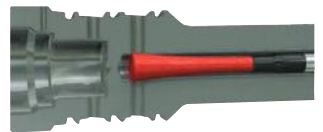
Category	Automotive part
Workpiece	Screw
Material	Stainless steel SUS304
Process Details	Machining center/Crosshole deburring of internal diameter

XEBEC product used: CH-A33-5M
Rotation speed: 10000min⁻¹
Depth of cut: 1mm
Feed: 300mm/min



Category	Automotive transmission part
Workpiece	Input shaft
Material	SCM
Process Details	Custom machine/Crosshole deburring of internal diameter

XEBEC product used: CH-A 12-7M
Rotation speed: 10000min⁻¹
Feed: 800mm/min



Category	Automotive engine part
Workpiece	Cylinder head
Material	Aluminum casting
Process Details	Machining center/Crosshole deburring of internal diameter

XEBEC product used: CH-A12-5L
Rotation speed: 8000min⁻¹
Feed: 300mm/min

