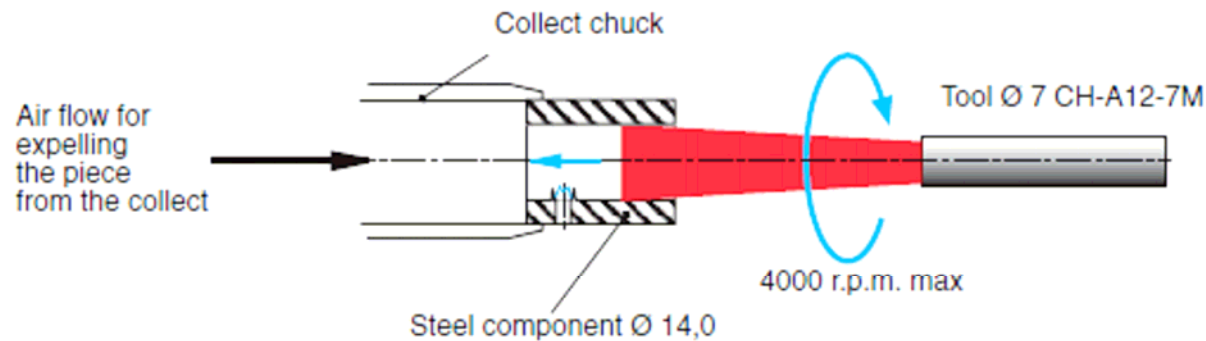

How to operate XEBEC Cross-Hole Deburring Tool Alumina Fiber Rod Type
with **low speed lathes**

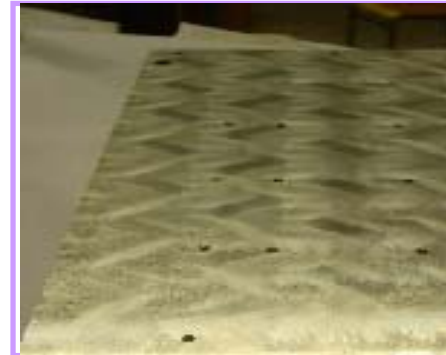


When the spindle can bring up to max 4,000 rpm only, problem is solved by using the air flow, originally used for expelling the workpiece. The air helps the spreading of the fibers and the tool can work for reaching the required surface finish $Ra=0.4$

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Category	Material industry
Workpiece	Various material
Pre-processing	
Processing description	Surface finishing



XEBEC Tool:A11series

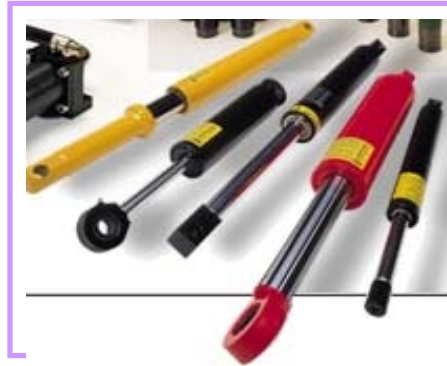
← This pattern is created by wavy feed

Before XEBEC	Tool used	Abrasive tool for hand marbling
	Problem	Time consuming
After XEBEC	Quality	A uniform and new design =3D like created by feeding various direction
	Cost	Much faster process for wide surface

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Category	Industry
Workpiece	Piston rod
Pre-processing	Carbonitriding
Processing description	Removing black surface from piston to get a shining surface



XEBEC Tool:A21CB40
 Revolution:3000
 Depth of cut:0,5
 Feed :lathe
 Tool life:

Before XEBEC	Tool used	Flap Wheel used by hand
	Problem	Timeconsuming 15min/ piece
After XEBEC	Quality	A21CB40
	Cost	With Xebec it only takes about 30sek in a lathe.

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Category	Industry hand machine
Workpiece	Stainless
Pre-processing	Welding
Processing description	Polish hard to reach corners instead of using 3M materials like unitized wheels.



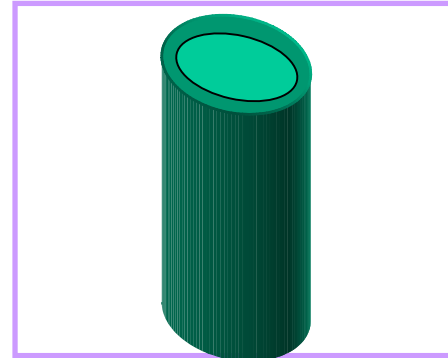
XEBEC Tool: A11 CB06M

Before XEBEC	Tool used	Sand paper, scotch brite un77
	Problem	Time consuming
After XEBEC	Quality	Nice surface
	Cost	Work was done in 5min instead of 45min.

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Category	Medical
Workpiece	Peek Plastic 90mm dia inside
Pre-processing	Lathe
Processing description	Removing lathe marks and get a finer surface on inside. From 0,6 to 0,4 Ra



XEBEC Tool:A11CB60
Revolution:900
Depth of cut:
Feed :300
Tool life:

Before XEBEC	Tool used	Different types of rubber abrasives.
	Problem	Takes long time and polishing is depending on worker. Material is expensive.
After XEBEC	Quality	A11CB60 with extension 55mm
	Cost	

If used at higher speed material melts.

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Category	Truck industry
Workpiece	Transmission part
Pre-processing	milling
Processing description	Milling, deburring and after that lapping.

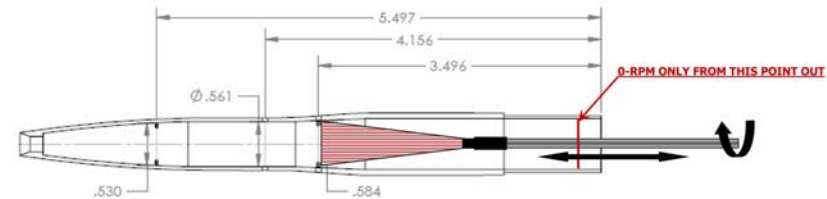


XEBEC Tool:A21CB100
 Revolution:900
 Depth of cut: 0,3
 Feed :2000
 Tool life: 5000

Before XEBEC	Tool used	Stainless axial brush wire 0,2mm
	Problem	Brush made scratches on surface and didn't deburr ok.
After XEBEC	Quality	A21-CB100M
	Cost	No more scratches, lapping not needed and deburring ok. Earning of 2 euro/pc

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Category	Aerospace
Workpiece	Nozzle, Inconel
Pre-processing	Drilling
Processing description	Cross-hole deburring/ polishing



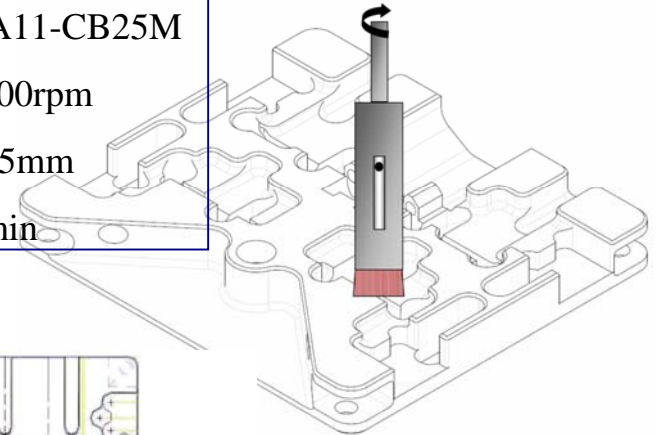
XEBEC Tool: CH-A12-7L
 Revolution: 8,500~9,000rpm
 Feed: 350~400mm/min

Before XEBEC	Tool used	Spiral-wound brushes, bore polishers, flex-hones etc..
	Problem	Unstable quality
After XEBEC	Quality	Able to keep even pressure on the walls of the bore throughout its length
	Cost	

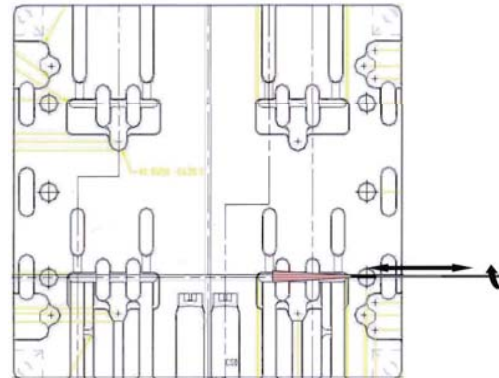
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Category	Aerospace
Workpiece	Valve Body, Titanium
Pre-processing	Face milling, end milling
Processing description	Removing mill marks and deburring , cross-hole deburring

XEBEC Tool: A11-CB25M
 Revolution: 2,000rpm
 Depth of cut: 0.5mm
 Feed: 750mm/min



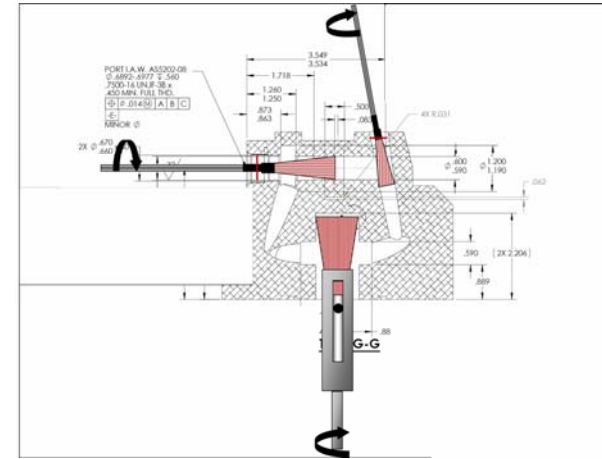
XEBEC Tool: CH-A12-3L
 Revolution: 8,000~8,500rpm
 Feed: 350~400mm/min



Before XEBEC	Tool used	Impregnated nylon brush
	Problem	The brush broke down fast and suffered unstable quality, 100% inspection
After XEBEC	Quality	Quality stabilized
	Cost	Eliminated 100% inspection and changed to less frequent quality sampling

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Category	Aerospace
Workpiece	Pump Impeller Housing(1), High Silicon Aluminum
Pre-processing	Drilling, boring
Processing description	Deburring of several areas



XEBEC Tool: CH-A12-7M
 Revolution: 8,500~9,000rpm
 Feed: 200~250mm/min

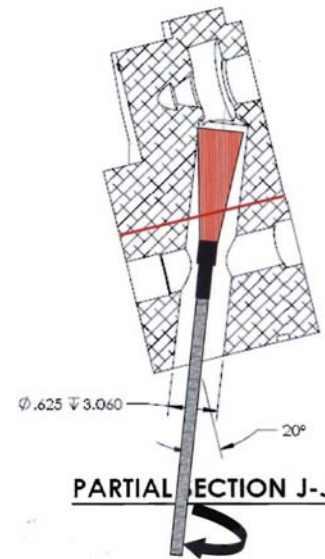
XEBEC Tool: A11-CB25M
 Revolution: 3,000rpm
 Feed: 300~350mm/min

XEBEC Tool: CH-A12-5M
 Revolution: 8,000~9,000rpm
 Feed: 350~400mm/min

Before XEBEC	Tool used	Hand deburring with various tools
	Problem	Took 30 min per part and causing a bottleneck in the operation.
After XEBEC	Quality	Edge & sealing quality stabilized
	Cost	Labor cost down by CNC automation

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Category	Aerospace
Workpiece	Pump Impeller Housing(2)
Pre-processing	Face milling, end milling
Processing description	Deburring/polishing

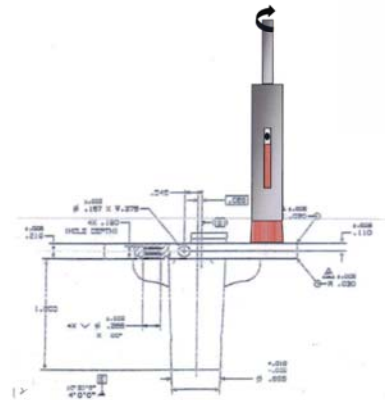


XEBEC Tool: CH-A12-7M
 Revolution: 8,500~9,000rpm
 Feed:350~4000mm/min

Before XEBEC	Tool used	Hand deburring with various tools
	Problem	Took 30 min per part and causing a bottleneck in the operation.
After XEBEC	Quality	Edge & sealing quality stabilized
	Cost	Labor cost down by CNC automation

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Category	Medical
Workpiece	Tibial Implant, Cobalt Chrome
Pre-processing	Face milling, end milling
Processing description	Removing mill marks and improving surface finish



XEBEC Tool: A11-CB15M
 Revolution: 3,000rpm
 Depth of cut: 0.5mm
 Feed: 550mm/min

Before XEBEC	Tool used	Mounted sand paper disks and impregnated nylon brushes
	Problem	Time consuming
After XEBEC	Quality	Produced a more uniform finish
	Cost	Reduced the polishing cycle time by more than 30%