CHEMCUT Finishing Process

ACTON[®]

At ActOn we have developed the Chemcut finishing process for the removal of grinding, linishing and machine marks and surface improvement on steel, hardened steel and certain stainless steels. This process gives a rapid metal cut-down and levelling, producing super smooth surfaces, ready for polishing and electro-plating. We recommend using the Chemcut compound with non-abrasive media.

Technical Information

Chemcut Compound

РН		1-2	OOO Excellent	
State		Powder	OO Good	
Colour		White		
Application guide and characteristics	Removal of machining/ grinding lines	000	U Average	
	Foam	0		
Materials that can be processed	Carbon Steel	000		
	Hardened Steel	000		
	Iron	000		
	Stainless Steel	00		

Chemcut Solution Tank

With dosing pump, agitator, level switch and control panel

Model	Technical Info	Capacity	Dimensions in mm / inch (L x Ø x H)
CMT-100	Based on process requirement dosing quantity will be between 12 LPH to max. 32 LPH.	Suitable for preparing the mixture of 90 Ltr of Chemcut solution.	1200 x 500 x 1600/ 47.2 x 19.7 x 63
CMT-200		Suitable for preparing the mixture of 200 Ltr of Chemcut solution.	1300 x 600 x 1600/ 51.2 x 23.6 x 63

Both models include Control Panel with: selector switch for agitator operation either manual or via cyclic based timer, dosing pump on/off, low level indicator and fault indicator



Chemcut Installation

The installation required for a Chemcut process should include:

- A tank for the Chemcut solution
 A compound dosing pump mound
 - A compound dosing pump mounted on the tank which can dose between 12 and 32 litres per hour.
 - A vibratory finishing machine.

0



Chemcut Process

To achieve the smooth and polished finish we recommend a 2 step process:



Case Study Achieve an Ra Below 0.1µm and a Mirror Finish

The aim

Achieve an Ra below 0.1 μm (starting from a 0.16 to 0.18 μm value), remove the machining lines and miror finish 100cr6 tapered rollers.

What we did

The first stage is carried out to achieve a smooth finish in the vibratory bowl finishing machine using polishing media and ActOn Chemcut compound, for 60 minutes.

Then the components are polished in the bowl machine with polishing media and compound for another 60 minutes.

The result

- The final Ra was reduced to 0.05 µm.
- The tapered rollers are polished to customer's requirements.
- The machining lines are removed.
- Using the vibratory finishing machine we offered an efficient process and consistent finishing results.



Case Study Remove Linishing Lines on Silver Knives.

The aim

Remove linishig lines and achieve a bright polished finish on stainless steel knife blade.

What we did

The first stage is carried out to remove the linish lines in the bowl finishing machine using polishing media and ActOn Chemcut compound. This compound is recommended for removal of grinding and linishing marks, giving a rapid metal cut-down and levelling, producing a super smooth surface ready for polishing.

Once the knife blade surface has been prepared, this is polished with polishing compound and media.

The result

We achieved the polished finish in approx. 4 hours. This has improved considerably the time our client was spending on polishing the knives. Moreover the dimensional integrity of the part was maintained.

