

# Aka-Brief #7 Stainless and Duplex Steels

1						 BF, 50x	
	Piatto 220+	Water	300 rpm	25 N	Until plane		
2							 BF, 50x
	Allegran 3	DiaUltra 6 µm	150 rpm	30 N	2:30 min		
3						 BF, 50x	
	Daran	DiaUltra 3 µm	150 rpm	25 N	2:00 min		
4						 BF, 50x	
	Chemal*	Fumed Silica 0.2 µm Alkaline	150 rpm	20 N	2:00 min		

Times are stated for a 300 mm preparation system and Forces for an individual 40 mm dia. sample.

On a 250 mm system the times should be increased by 30%, on a 200 mm system by 100%.

With larger samples the force should be increased, with smaller samples decreased.

The rotational speed of the head (sample holder or sample mover plate) used is 150 rpm.

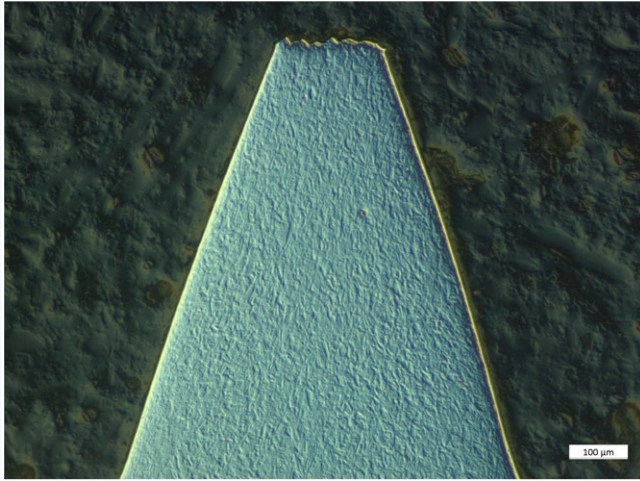
Time and Force may vary depending on the equipment.

\* Prior to oxide polishing the polishing cloth should be wetted with water until the holder touches the polishing cloth. For the last 10 seconds of the oxide polishing step, the polishing cloth should be flushed with water to clean both samples and polishing cloth.

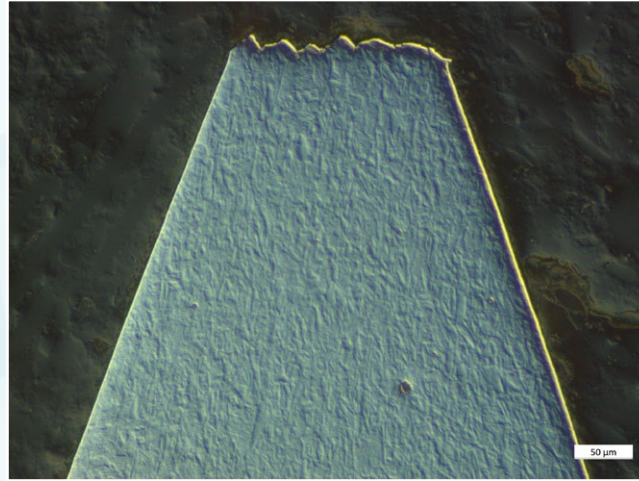


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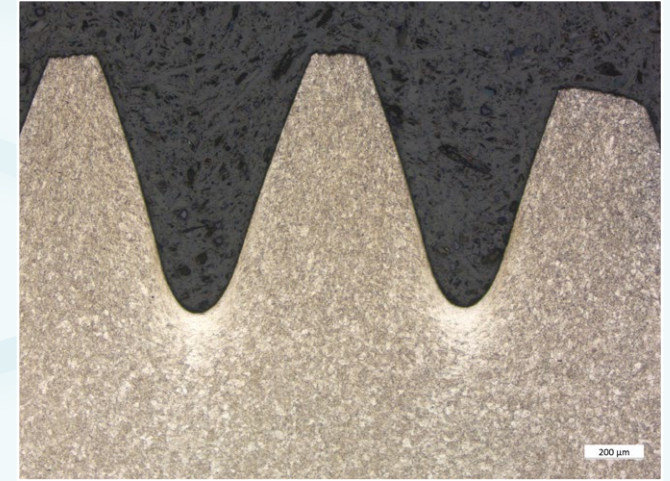
## FINAL RESULT



Stainless Steel fastener, DIC, 100x



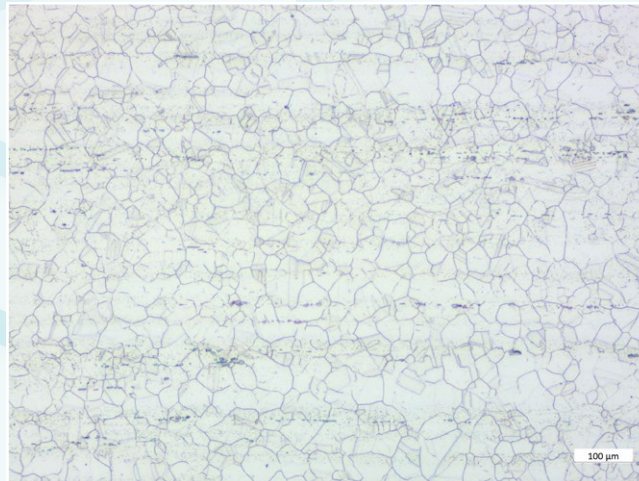
Stainless Steel fastener, DIC, 200x



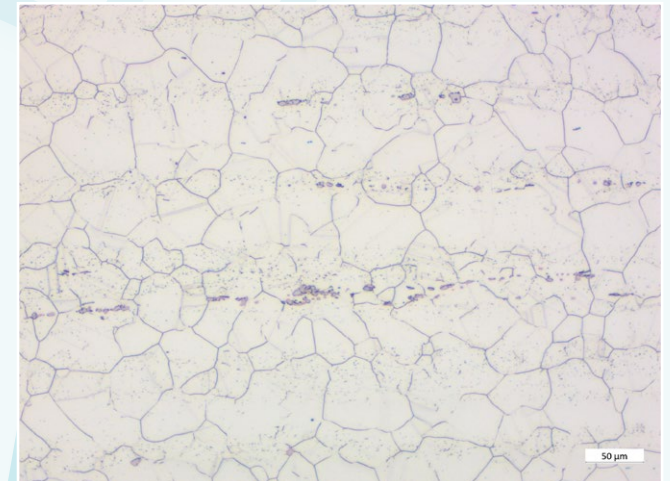
Stainless Steel fastener, external electrolytic etching with 10% aqueous oxalic acid, 15 V, 60 - 90 sec, BF, 50x



Duplex Steel, DIC, 100x



Duplex Steel, external electrolytic etching with 10% aqueous oxalic acid, 15 V, 60 - 90 sec, BF, 100x



Duplex Steel, external electrolytic etching with 10% aqueous oxalic acid, 15 V, 60 - 90 sec, BF, 200x