

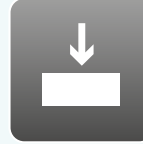

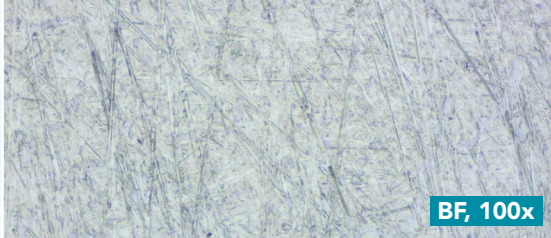
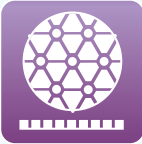


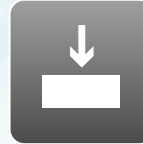





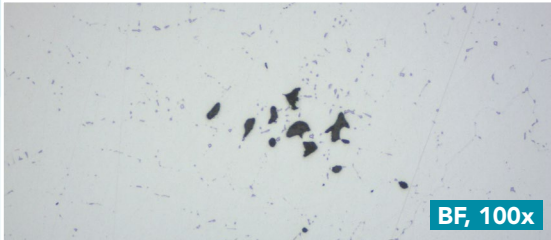



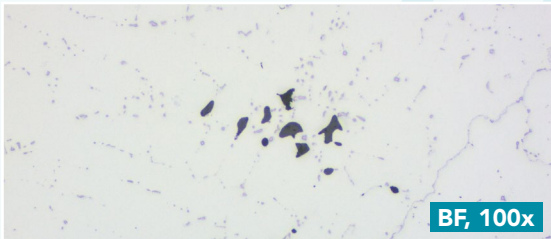


# Aka-Brief #20 Superalloys

1						 <p>BF, 100x</p>	
	Rhaco Grit P220	Water	300 rpm	25 N	Until plane		
2							 <p>BF, 100x</p>
	Largan 9	DiaUltra 9 µm	150 rpm	35 N	3:00 min		
3						 <p>BF, 100x</p>	
	Silk	DiaUltra 3 µm	150 rpm	30 N	3:00 min		
4							 <p>BF, 100x</p>
	Chemal*	Fumed Silica 0.2 µm Alkaline	150 rpm	15 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.

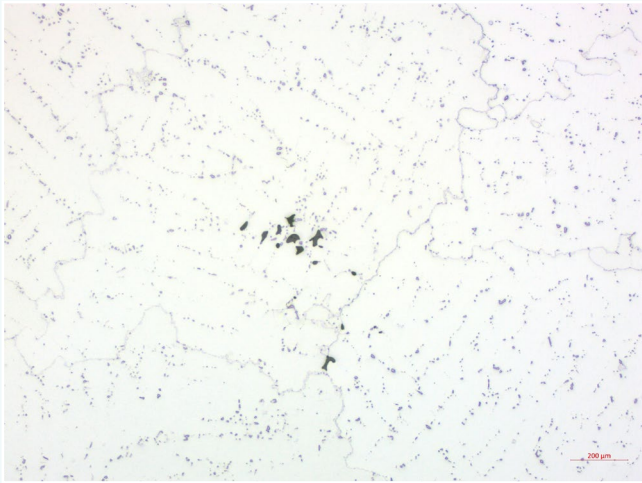
\* Prior to oxide polishing the polishing cloth should be wetted with water until the holder touches the polishing cloth. For the last 10 seconds of the oxide polishing step, the polishing cloth should be flushed with water to clean both sample(s) and polishing cloth.

\*\* The last polishing step can be increased by 2 min at a time if residual metal has to be removed from pores. Longer time with oxide polishing will increase the etching effect, and make subsequent etching process easier.

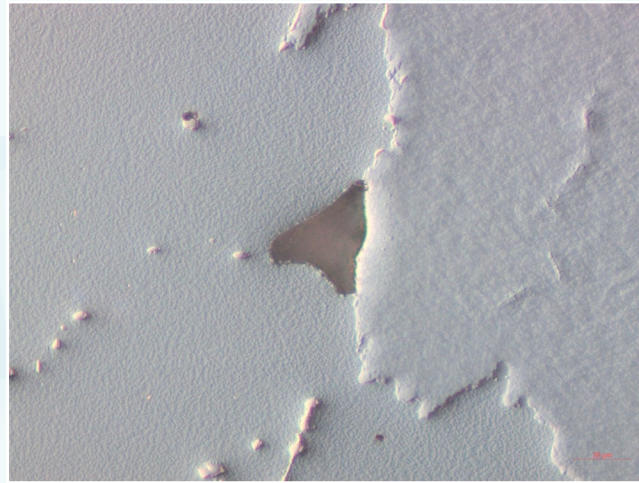


# Aka-Brief #20 Superalloys

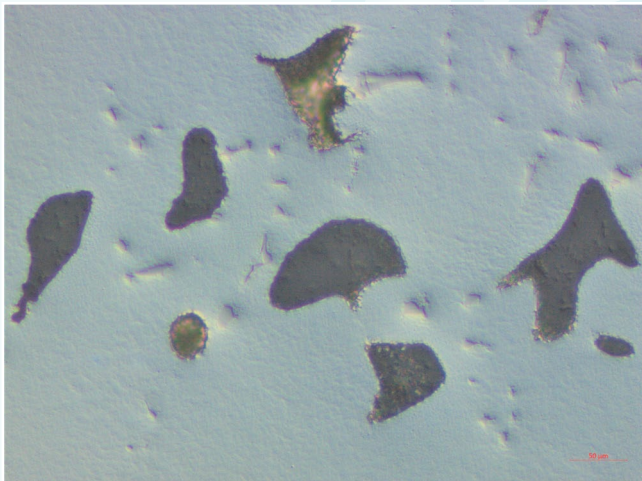
## FINAL RESULT



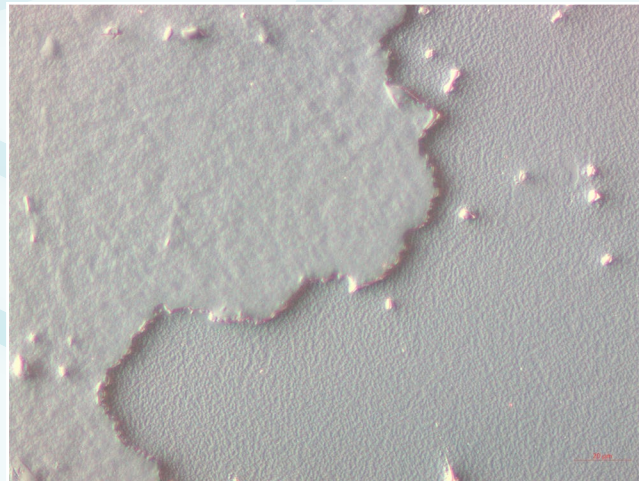
Porosity in Superalloy, BF, 50x



Porosity in Superalloy, DIC, 500x



Porosity in Superalloy, DIC, 500x



Superalloy, DIC, 500x