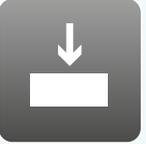
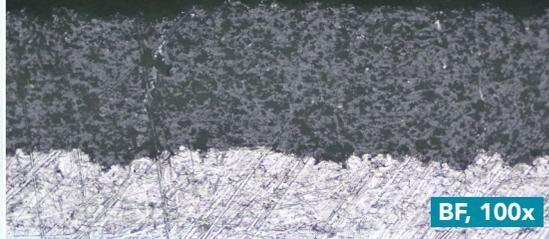
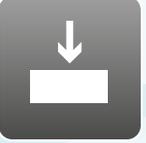
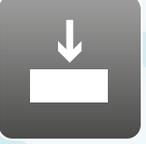
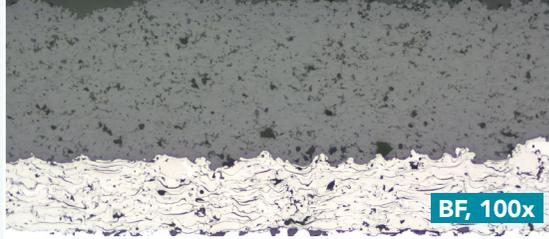


Aka-Brief #21 Ceramic Thermal Spray Coated Parts

1						
	Piatto 220+	Water	300 rpm	30 N	Until plane	BF, 100x
2						
	Allegran 3	DiaUltra 6 µm	150 rpm	35 N	4:00 min	BF, 100x
3						
	Silk	DiaUltra 3 µm	150 rpm	30 N	3:00 min	BF, 100x
4						
	Chemal*	Colloidal Silica 50 nm Alkaline	150 rpm	15 N	5:00 min**	BF, 100x

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.

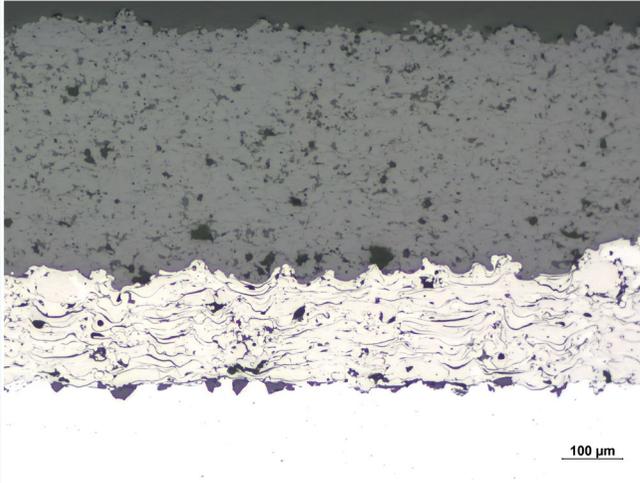
Time and force may vary depending on the equipment.

* 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.

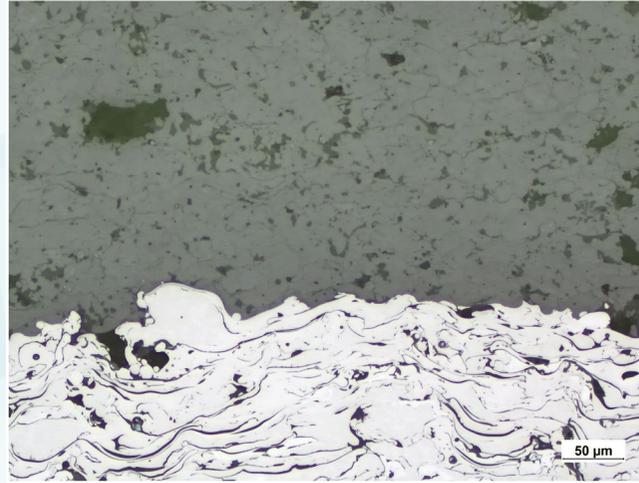
** For other ceramic thermal spray coated parts, the oxide polishing time may need to be increased.

Aka-Brief #21 Ceramic Thermal Spray Coated Parts

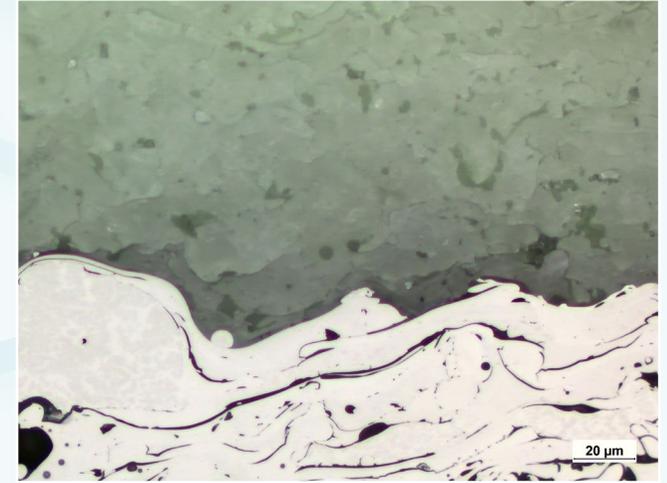
FINAL RESULT



Thermal barrier coatings with ceramic top and metallic bond, BF, 100x



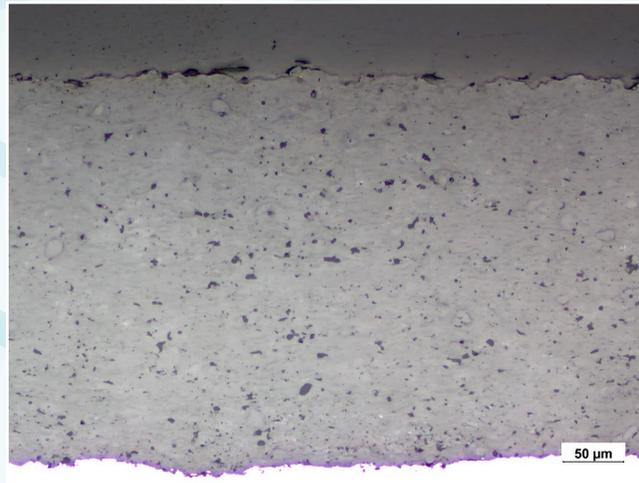
Thermal barrier coatings with ceramic top and metallic bond, BF, 200x



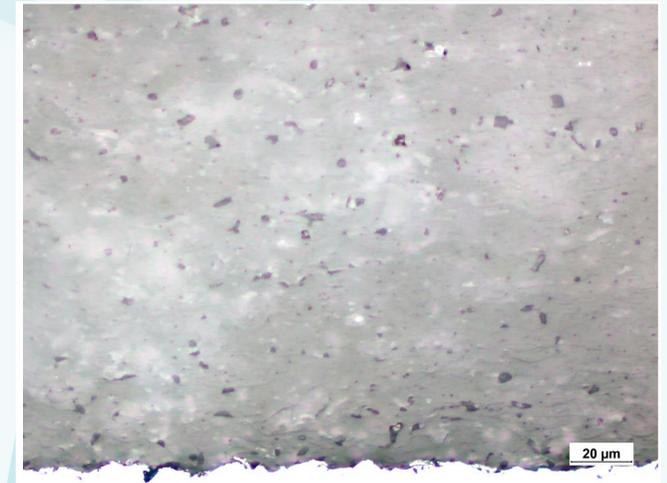
Thermal barrier coatings with ceramic top and metallic bond, BF, 500x



Al₂O₃ coating on a steel substrate, BF, 100x



Al₂O₃ coating on a steel substrate, BF, 200x



Al₂O₃ coating on a steel substrate, BF, 500x