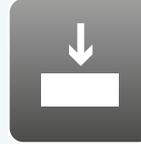
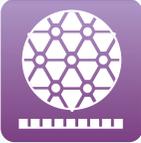
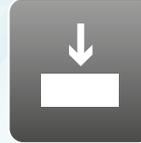
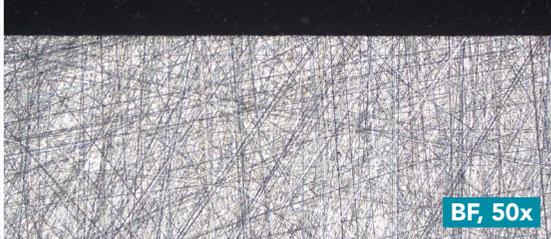
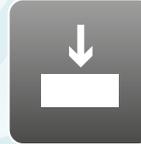
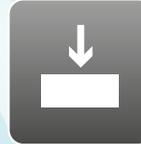


# Aka-Brief #11 Materials of Hardness 400-700 HV

1						→	
	Piatto 120	Water	300 rpm	35 N	Until plane		BF, 50x
2						→	
	Allegran 6	DiaUltra 9 μm	150 rpm	40 N	4:00 min		BF, 50x
3						→	
	Plural	DiaUltra 3 μm	150 rpm	35 N	3:00 min		BF, 50x
4						→	
	Napal	DiaUltra 1 μm	150 rpm	25 N	1:00 min		BF, 50x

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.

\* This step is optional.

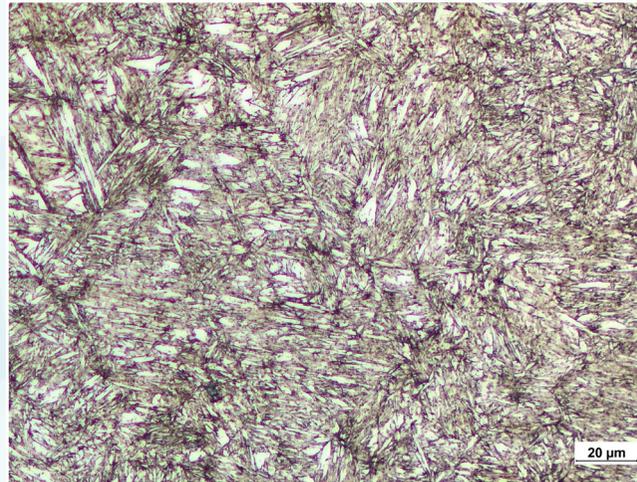
Please make sure that all necessary safety precautions are taken when handling chemicals.

# Aka-Brief #11 Materials of Hardness 400-700 HV

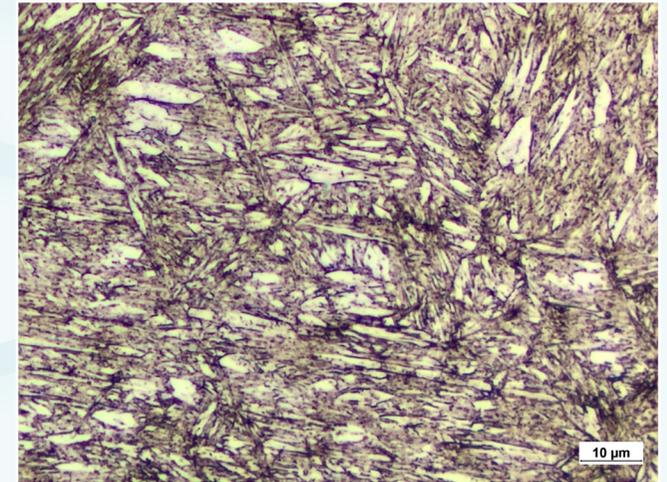
## FINAL RESULT



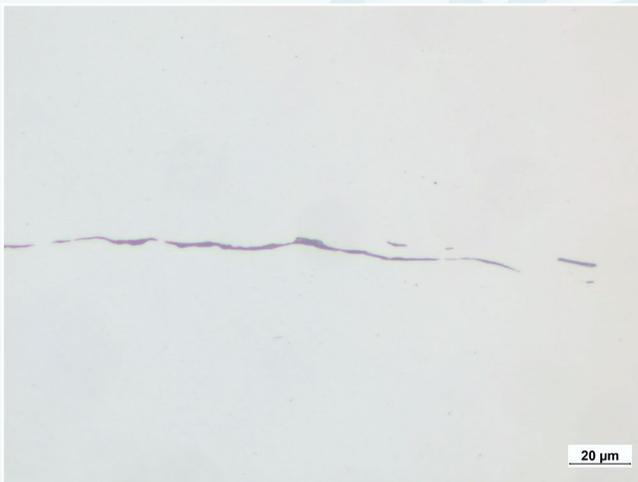
Tool Steel X40CrMoV51+QT, 410-470 HV, cross section  
BF, 500x



Tool Steel X40CrMoV51+QT, 410-470 HV, cross section  
etched with Nital 3%, BF, 500x



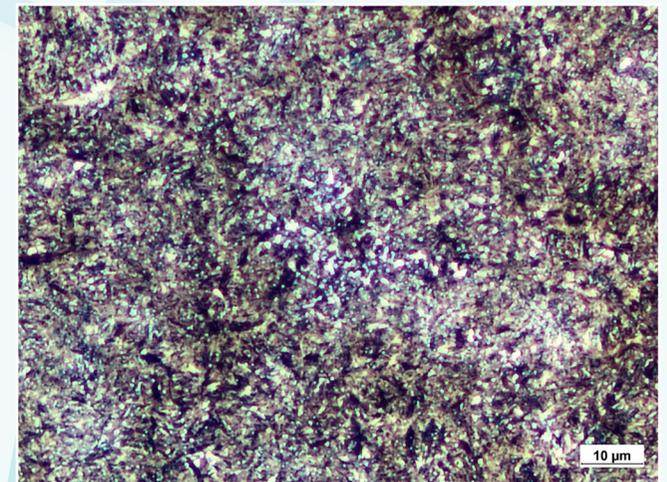
Tool Steel X40CrMoV51+QT, 410-470 HV, cross section  
etched with Nital 3%, BF, 1000x



Tool Steel 100MnCrW4+QT, 700 HV, longitudinal section  
BF, 500x



Tool Steel 100MnCrW4+QT, 700 HV, longitudinal section  
etched with Nital 3%, BF, 1000x



Tool Steel 100MnCrW4+QT, 700 HV, cross section  
etched with Nital 3%, BF, 1000x