















PREPARATION METHOD

NITRIDED STEEL

 CUTTING		Equipment QATM Qcut / Brillant	Consumables Cut-off wheel: corundum, resin bond Anti-corrosion coolant				
 MOUNTING		Equipment QATM Qpress / Opal	Consumables EPO black, EPO-Max KEM 15 plus			Method Hot mounting* Cold mounting	
 GRINDING/ POLISHING		Equipment QATM Qpol / Saphir Sample size \varnothing 40 mm					
STEP	MEDIUM		 rpm		 N	 min	
 Planar grinding	GALAXY green SiC-paper/foil P320 (280)	H ₂ O	250-300	▶▶ Synchronous rotation	30	Until plane	
 Pre-polishing	ALPHA/BETA	Dia Complete Poly, 9 μ m	120-150	◀▶ Counter rotation	30	5:00	
 Polishing	GAMMA/DELTA	Dia Complete Poly, 3 μ m	120-150	▶▶ Synchronous rotation	30	6:00	
 Polishing	ZETA	Dia Complete Poly, 1 μ m	120-150	▶▶ Synchronous rotation	30	3:00	
 Final polishing	LAMBDA/OMEGA	Eposal, 0.06 μ m	120-150	◀▶ Counter rotation	15	2:00 (H ₂ O during final 0:30)	
 Optional: Etching (chemical)	Kalling II					Approx. 0:02-0:10	

* If necessary: Before hot mounting the sample should be wrapped in aluminum foil to stabilize the nitrided layer