














PREPARATION METHOD

TITANIUM BASED ALLOY

 CUTTING		Equipment QATM Qcut / Brilliant	Consumable Cut-off wheel: silicon carbide, resin bond Anti-corrosion coolant				
 MOUNTING		Equipment QATM Qpress / Opal	Consumable EPO black, EPO-Max KEM 20, 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	SiC-paper/foil P320 (280)	H ₂ O	250-300	▶▶ Synchronous rotation	25	Until plane	
 Grinding	SiC-paper/foil P600 (400)	H ₂ O	250-300	▶▶ Synchronous rotation	25	1:30	
 Pre-polishing	ALPHA/BETA	Dia Complete Poly, 9 μ m	120-150	◀▶ Counter rotation	30	5:00	
 Final polishing	OMEGA	Eposil F, 0.1 μ m*	120-150	◀▶ Counter rotation	40	8:00-10:00** (H ₂ O during final 0:30)	
 Optional: Etching (chemical)	Kroll's reagent					Approx. 0:45-0:55	

* Eposil F has to be mixed with hydrogen peroxide (35%) in a ratio of 5:1 (safety advice: use personal protective equipment)

** Depends on the alloy