















PREPARATION METHOD

ALUMINUM ($\geq 99.7\%$) AND WROUGHT ALUMINUM ALLOY

 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, Bakelite red/black KEM 15 plus, KEM 20, KEM 30			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	20	Until plane	
 Grinding	SiC-paper/foil* P600 (400)	H ₂ O	250-300	▶▶ Synchronous rotation	20	1:00	
 Grinding	SiC-paper/foil* P1200 (600)	H ₂ O	250-300	▶▶ Synchronous rotation	20	1:30 (change SiC paper/foil after 0:60)	
 Polishing	GAMMA/DELTA	Dia Complete Poly, 3 μ m	120-150	▶▶ Synchronous rotation	30	6:00	
 Final polishing	LAMBDA/OMEGA	Eposil F, 0.1 μ m	120-150	◀▶ Counter rotation	20	2:00 (H ₂ O during final 0:30)	
 Optional: Etching (electrolytic)	Barker's reagent					30 V	

* Coat grinding paper/foil with paraffin wax before grinding to reduce the contamination of the sample by SiC particles