

PREPARATION METHOD

COPPER AND COPPER BASED ALLOYS



EquipmentQATM Qcut / Brillant

Consumable Cut-off wheel: corundum, resin bond Anti-corrosion coolant



(chemical)

EquipmentQATM Qpress / Opal

Consumable
Bakelite red/black, Thermoplast
KEM 20, KEM 30
Hot mounting prefered

Method Hot mounting Cold mounting

<u></u>	GRINDING/ POLISHING	Equipment QATM Qpol / Saphir Sample size Ø 40 mm			
STEP		MEDIUM	٩		
	Planar	SiC-paper/foil	Н,		

			rpm		N	min
Planar grinding	SiC-paper/foil P320 (280)	H ₂ O	250-300	Syncronous rotation	30	Until plane
Pre-polishing	ВЕТА	Dia Complete Poly, 9 µm	120-150	Syncronous rotation	30	3:00-4:00
Polishing	SIGMA	Dia Complete Poly, 3 µm	120-150	Syncronous rotation	30	3:00-4:00
Final polishing	OMEGA	Eposil F, 0.1 μm*	120-150	◄ ► Counter rotation	15	1:00-2:00* (H ₂ O during final 0:30)
Optional: Etching	Cu Etchant A (chloride version)					Approx. 0:02

^{* 50} ml Eposil F + 1 ml $\rm H_2O_2$ + 1 ml $\rm NH_3$, otherwise polishing time x2