

Date:	09.12.2022
Editor:	Füllmann, Robert
Material:	CW511L   CuZn38As(ADZ-USA)
Mounting:	Cold, D=40 mm, EpoClear (epoxy resin)

TIP // For reference images, take a look at our wide-ranging microstructure database. There you will find many micrographs of various materials, including their state of heat treatment and the etching agent we used.

[Link to our Microstructure Database \(Gefügedatenbank\)](#)

	Grinding					Polishing			
	1	2	3	4	5	1	2	3	4
Base	SiC paper	SiC paper	SiC paper	SiC paper	SiC paper	MolTec	MolTec	ChemTec	
Grit size	P180 + Wax	P320 + Wax	P600 + Wax	P1200 + Wax	P2500 + Wax	6 µm mkd water-based	1 µm mkd water-based	< 0,05 µm SiO <sub>2</sub> OPS*	
Lubricant	H <sub>2</sub> O	H <sub>2</sub> O	H <sub>2</sub> O	H <sub>2</sub> O	H <sub>2</sub> O	coolTec I	coolTec I	-	
Drive	150 rpm	150 rpm	150 rpm	150 rpm	150 rpm	150 rpm	150 rpm	150 rpm	
Rotation direction	>>	>>	>>	>>	>>	<<	<>	<>	
Downforce !centralpressure!	10 N/sample	10 N/sample	10 N/sample	10 N/sample	10 N/sample	10 N/sample	10 N/sample	10 N/sample	
Time	until planar	2,0 min	2,0 min	2,0 min	0,5 min	3,0 min	3,0 min	2,5+0,5 Spüli	
Etching	Etching reagent for brass (Messingätzmittel)								
Remarks	OPS* = 200 ml OPS + 4 ml ammonia solution; Caution: Wear PPE!								

Legend [EN]	Legende [DE]
DPS = Diamond Plane Grinding Disc   DSS = Diamond Grinding Disc   ADAMANT = ADAMANT Diamond Grinding Disc   IDAMANT = IDAMANT Diamond Grinding and Polishing Disc	DPS = Diamant-Planschleifscheibe   DSS = Diamant-(Fein)schleifscheibe   ADAMANT = ADAMANT Diamantschleifscheibe   IDAMANT = IDAMANT-Schleifpolierscheibe
<< Countercurrent   >> Concurrent	<< Gegenlauf   >> Gleichlauf
mkd = monocrystalline Diamond, concentration 50 carat/litre pkd = polycrystalline Diamond, concentration 50 carat/litre	mkd = monokristalliner Diamant, Konzentration 50 Karat/Liter pkd = polykristalliner Diamant, Konzentration 50 Karat/Liter
Lubricant: coolTec I (Water-based)   coolTec II (Alcohol-based)   coolTec III (Oil-based)   coolTec IV (Water-based)   coolTec Orange (Anhydrous)	Schmiermittel: coolTec I (Wasserbasis)   coolTec II (Alkohobasis)   coolTec III (Ölbasis)   coolTec IV (Wasserbasis)   coolTec Orange (Wasserfrei)
Spüli: Dishwasher detergent with H <sub>2</sub> O for cleaning the samples	Spüli: Spüli mit Wasser zum Reinigen der Proben
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