


Date:	20.07.2022								
Editor:	Füllmann, Robert								
Material:	Aluminium Alloys EN AC (casting alloys)								
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	PanTec	MolTec	ChemTec	
Grit size	P180	P320	P600	P1200	P2500	3 µm mkd water-based	1 µm mkd water-based	0,04 µm SiO2 OPS	
Lubricant	H2O	H2O	H2O	H2O	H2O	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	1,0 min	1,0 min	1,0 min	0,5 min	2,5 min	2,5 min	2+0,5 Spüli	
Etching	5% NaOH								
Remarks									

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 (Alkoholbasis) coolTec III (Ölbasis) coolTec IV (Wasserbasis) coolTec Orange (Wasserfrei)
Spüli: Dishwasher detergent with H2O for cleaning the samples	Spüli: Spüli mit Wasser zum Reinigen der Proben
You can find metallography supplies in our store (link)	Verbrauchsmaterialien finden Sie in unserem Shop (Link)