


<b>Date:</b>	20.07.2022	
<b>Editor:</b>	Füllmann, Robert	
<b>Material:</b>	Aluminium Alloys EN AC (casting alloys)	
<b>Mounting:</b>	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
<b>Base</b>	SiC paper	SiC paper	SiC paper	SiC paper	SiC paper	PanTec	MolTec	ChemTec	
<b>Grit size</b>	P180	P320	P600	P1200	P2500	3 µm mkd water-based	1 µm mkd water-based	0,04 µm SiO2 OPS	
<b>Lubricant</b>	H2O	H2O	H2O	H2O	H2O	coolTec I	coolTec I	-	
<b>Drive</b>	150 rpm	150 rpm	150 rpm	150 rpm	150 rpm	150 rpm	150 rpm	150 rpm	
<b>Rotation direction</b>	><	><	><	><	><	><	><	><	
<b>Downforce !centralpressure!</b>	10 N/sample	10 N/sample	10 N/sample	10 N/sample	10 N/sample	10 N/sample	10 N/sample	10 N/sample	
<b>Time</b>	until planar	1,0 min	1,0 min	1,0 min	0,5 min	2,5 min	2,5 min	2+0,5 Spüli	
<b>Echting</b>	5% NaOH								
<b>Remarks</b>									

Legend [EN]	Legende [DE]
<b>DPS</b> = Diamond Plane Grinding Disc   <b>DSS</b> = Diamond Grinding Disc   <b>ADAMANT</b> = ADAMANT Diamond Grinding Disc   <b>IDAMANT</b> = IDAMANT Diamond Grinding and Polishing Disc	<b>DPS</b> = Diamant-Planschleifscheibe   <b>DSS</b> = Diamant-(Fein)schleifscheibe   <b>ADAMANT</b> = ADAMANT Diamantschleifscheibe   <b>IDAMANT</b> = IDAMANT-Schleifpolierscheibe
>< Countercurrent   >> Concurrent	>< Gegenlauf   >> Gleichlauf
<b>mkd</b> = monocrystalline Diamond, concentration 50 carat/litre <b>pkd</b> = polycrystalline Diamond, concentration 50 carat/litre	<b>mkd</b> = monokristalliner Diamant, Konzentration 50 Karat/Liter <b>pkd</b> = polykristalliner Diamant, Konzentration 50 Karat/Liter
<b>Lubricant:</b> coolTec I (Water-based)   coolTec II (Alcohol-based)   coolTec III (Oil-based)   coolTec IV (Water-based)   coolTec Orange (Anhydrous)	<b>Schmiermittel:</b> coolTec I (Wasserbasis)   coolTec II (Alkohobasis)   coolTec III (Ölbasis)   coolTec IV (Wasserbasis)   coolTec Orange (Wasserfrei)
<b>Spüli:</b> Dishwasher detergent with H2O for cleaning the samples	<b>Spüli:</b> Spüli mit Wasser zum Reinigen der Proben
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