


Date:	09.12.2022								
Editor:	Füllmann, Robert								
Material:	Stellite 6 buildup welded on low alloy steel (Co-Cr base alloy)								
Mounting:	Hot, D=40 mm, Black bakelite resin (fiber-glass reinforced)								
<b>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.</b>									
<a href="#">Link to our Microstructure Database (Gefügedatenbank)</a>									
	Grinding					Polishing			
	1	2	3	4	5	1	2	3	4
Base	SiC paper	SiC paper	SiC paper	SiC paper	SiC paper	RamTec	ChemTec		
Grit size	P120	P240/P500	P800	P1000	P2500	3 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	-		
Drive	300 rpm	300 rpm	300 rpm	300 rpm	300 rpm	150 rpm	150 rpm		
Rotation direction	><	><	><	><	><	><	><		
Downforce !centralpressure!	20 N/sample	20 N/sample	20 N/sample	20 N/sample	20 N/sample	15 N/sample	15 N/sample		
Time	until planar (ca. 3 min)	2,0 min	2,0 min	2,0 min	0,5 min	2,5 min	2,5+0,5 Spüli		
Etching	Electrolytic; Cr(VI)O solution (m12) ~ 4 sec (Caution: carcinogenic)								
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 (Alkohobasis)   coolTec III (Ölbasis)   coolTec IV (Wasserbasis)   coolTec Orange (Wassserfrei)
Spüli: Dishwasher detergent with H2O for cleaning the samples	Spüli: Spüli mit Wasser zum Reinigen der Proben
<a href="#">You can find metallography supplies in our store (link)</a>	<a href="#">Verbrauchsmaterialien finden Sie in unserem Shop (Link)</a>