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Material:	1.3345   S790   HS6-5-3-C (high speed steel)
Mounting:	Hot, D=40 mm, Black epoxy resin EPO

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	ADAMANT	ADAMANT	ADAMANT	ADAMANT		IDAMANT	PanTec	ChemTec	
Grit size	P80	P220	P600	P1200		6 µm	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		coolTec I	coolTec I	-	
Drive	150 rpm	150 rpm	150 rpm	150 rpm		150 rpm	150 rpm	150 rpm	
Rotation direction	><	><	><	><		><	><	><	
Downforce !central pressure!	50 N/sample	50 N/sample	50 N/sample	50 N/sample		30 N/sample	30 N/sample	30 N/sample	
Time	until planar (60 min)	20,0 min	20,0 min	10,0 min		10,0 min	5,0 min	2+0,5 Spüli	
Etching									
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 (Wasserfrei)
Spüli: Dishwasher detergent with H <sub>2</sub> O 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>