Date:	21.04.2009
Editor:	Füllmann, Robert
Material:	AlMgSi0,5 (EN AW-6060) with Sn-solder, laser welding test
Mounting:	cold, D=40 mm, EpoClear (Epoxy-Resin)

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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	ChemTec		
Grit size	500	800	1200	2500	4000	3 µm mkd water-based	0,04 µm SiO2 OPS		
Lubricant	H2O	H2O	H2O	H2O	H2O	coolTec I	-		
Drive	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		
Time	bis plan	1,0 min	1,0 min	0,5 min	0,5 min	3,0 min	2+0,5 Spüli		
Echting	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** = polycristalline 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 (Wassserfrei)
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)