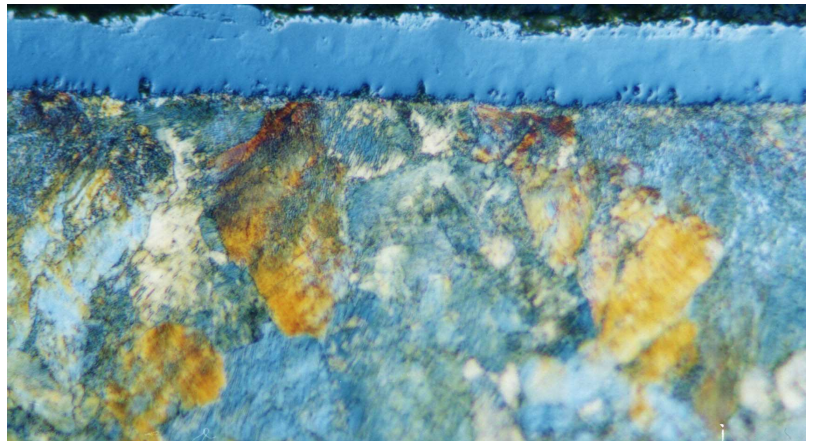


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Homepage: www.metkon.deE-Mail: info@metkon.de**Material:** TiC Coating**Micrologue
Method No.:** H01**Results:**

Single layer titanium carbide coating deposited on pearlitic low alloy steel through a thermochemical process. The thickness is approx. 10 microns and hardness is around 2500 kg/mm². Careful low feed cutting recommended. Edge effects should be avoided.

**Material:** TiC Coating on Pearlitic Steel**Magnification:** 875X**Etching:** 3 % Nital**Preparation Method:****Cutting:** SERVOCUT A-250 Cut-off machine with ø 250 TRENO-S abrasive wheels (19-023)
(CUTO-S cut-off wheels can also be used, 19-023/A)**Mounting:** METAPRESS-A Automatic Mounting Press with DAP, Diallyphtalat (29-012)**Mechanical Preparation:** DIGIPREP 300-1V Grinding / Polishing Machine with integrated Automatic Specimen Mover.

Parameter Stage	Surface	Abrasive	Lubricant	Force per Sample, (N)	Time min.	Disc Speed, rpm	Relative Rotation
Planar Grinding	DEMPAX Paper Disc 38-050-180	180 Grit SiC	Water	30	2 min. or until plane	300	Contra
MP Step 1.	DEMPAX Paper Disc 38-050-400	400 Grit SiC	Water	30	2	300	Contra
MP Step 2.	DEMPAX Paper Disc 38-050-800	800 Grit SiC	Water	30	2	300	Contra
MP Step 3.	FEDO-6J Cloth 39-025-300	Diam. 6µ DIAPAT 39-430-M	DIALUB 39-502	20	3	150	Contra
Final Polishing	FEDO-1 Cloth 39-065-300	Diam. 1µ DIAPAT 39-410-M	DIALUB 39-502	20	3	150	Contra

Etching: 3 % Nital