

TKM 2714

AISI: L6 / 6 F 3

Other designations

France : 55NCDV 7
 Germany : 55 Ni Cr Mo V 7 (W. Nr 1.2714)
 Euronorm : 55 Ni Cr Mo V 7

Old designations

UAM SPECIAL

Applications areas

Forge and press dies of all kinds, shear blades, extrusion rams, die holders, hot deburring plates.

In case of using this grade for injection plastic moulds, please contact ThyssenKrupp Materials France in order to deliver a written agreement. For this application, we recommend THYROPLAST 2711, as annealed.

After roughing and heat treatments, this grade has a highly uniform hardness and is also suitable for polishing and chemical etching.

We recommend also ADS 38 and ADS 40, precipitation hardened as delivered, which has been especially developed for high requirements of polishing and chemical etching, for plastic mould dies.

For tool holders application, hardness must be specified before ordering.

Steel properties

Tough die steel, very good retention to tempering.

Chemical composition

typical analysis in %

C	Cr	Ni	Mo	V
0,56	1,10	1,70	0,50	0,10

Mechanical properties

U.T.S.	Y.S. 0.2%
MPa	MPa
≥ 1000	≥ 830

Traitement thermique

Trempe

Température	830-870 °C	860-900 °C
Milieu de trempe	huile à 80°C	air, vide
Dureté après trempe	58 HRC	56 HRC

Revenu après trempe huile

° C	100	200	300	400	500	550	600
HRC	57	54	52	49	46	43	38

Revenu après trempe air, vide

° C	100	200	300	400	500	550	600
HRC	55	52	50	47	43	40	36

Physical Properties

Thermal conductivity			
° C	20	350	700
W/(m.k)	36	38	35

Thermal expansion							
° C	20-100	20-200	20-300	20-400	20-500	20-600	
10 ⁻⁶ m / (m.k)	12,2	13	13,3	13,7	14,2	14,4	

Etat de livraison

Annealed for max. 250 HB.

Hardness as delivered for 350-410 HB (hardened and tempered).

