

Technical data sheet – X40CrMoV5-1 (1.2344)

- Alloyed tool steel

Applications: Tools for hot work, dies

Chemical composition (acc. DIN EN ISO 4957 (11/2018))

X40CrMoV5-1	mass fraction in %			
	C [%]	Si [%]	Mn [%]	Cr [%]
	0,35 – 0,42	0,80 – 1,20	0,25 – 0,50	4,80 – 5,50
	P [%] max.	S [%] max.	Mo [%]	Cu [%]
0,030	0,020	1,20 – 1,50	-	
Ni [%]	V [%]			
-	0,85 – 1,15			

ISO 9001: 2015 TÜV NORD certified.



Heat treatment (acc. DIN EN ISO 4957 (11/2018))

Hardening	1.010 -1.030 °C	Oil
Tempering	540 - 560 °C	

Mechanical properties (acc. DIN EN ISO 4957 (11/2018))

annealed	<= 229 HBW
hardened	~ 56,0 HRC
tempered at ~ 50 ° C	~ 55,0 HRC
tempered at ~ 100 ° C	~ 54,0HRC
tempered at ~ 150 ° C	~ 53,0 HRC
tempered at ~ 200 ° C	~ 51,9 HRC
tempered at ~ 250 ° C	~ 51,3 HRC
tempered at ~ 300 ° C	~ 51,7 HRC
tempered at ~ 350 ° C	~ 52,5 HRC
tempered at ~ 400 ° C	~ 54,0 HRC
tempered at ~ 450 ° C	~ 55,5 HRC
tempered at ~ 500 ° C	~ 55,8 HRC
tempered at ~ 550 ° C	~ 52,4 HRC
tempered at ~ 600 ° C	~ 47,8 HRC
tempered at ~ 650 ° C	~ 41,5 HRC