



Grade	Code	AISI	Hot Work Tool Steel
1.2344 ESR	X40CrMoV5-1	H13	

Steel Properties

1.2344 ESR is a Chromium-Molybdenum-Vanadium-alloyed hot working tool steel with extra fine structure (EFS), very high hot-wear resistance and hot tensile strength as well as very good toughness, very high thermal conductivity and insusceptibility to hot cracking. Can be water-cooled to a limited extent.

Chemical Composition (1.2344 ESR)

C	Si	Mn	Cr	Mo	Ni	V	W	Co	Sonst.
0,40	1,00	0,40	5,20	1,35	-	1,00	-	-	-

Suitable for

1.2344 ESR is used on dies and die inserts, tools for forging machines, pressure casting dies for light metals, highly stressed tools for extrusion of light metals, particularly mandrels for extrusion of tubes, part dies. 1.2344 ESR is also used on hot extrusion tools, forging dies, casting- and pressure tools, ejector pins, hot shear knives, tool holders and shrink fit chucks.

Remarks

1.2344 has in comparison a higher hot-wear resistance than 1.2343. For requirements concerning cleanness, better homogeneity and toughness we recommend the use of 1.2344 ESR. Preheating before use: 250 - 300 °C – is recommended.

Specification

1.2344 ESR, X40CrMoV5-1, H13