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BE2379, 1.2379 Data Sheet

(BD2, X153CrMoV13)

DIN	ASTM	JIS	GOST
X153CrMoV13	D2	SKD11	X12MF

Standards:

Chemical Composition [%]

Heat No.	C-content	Si-content	Mn-content	P-content (max)	S-content (max)
20-2379-0088	1,53	0,31	0,27	0,023	

Cr-content	Mo-content	V-content
11,21	0,74	0,74

Typical Analysis:

Characteristics:

High carbon, high chromium tool steel heat treatable to 60-62Hrc. Excellent wear and abrasion resistance due to large volumes of carbides in the microstructure. Used in cold work application requiring high wear resistance and compression strength with minimal heat treatment distortion.

Typical Applications:

- Blanking, forming and trim dies
- Wear parts
- Lamination dies
- Thread rolling dies

- Shear blades
- Extrusion dies

Thickness	Metric: 3.2mm – 6.2mm
Width	Metric: 30.3mm – 150.3mm
Length	Metric 500mm

W1.2379 Data Sheet

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Tempering. Double tempering is recommended. Tempering should be done with the least delay possible after hardening, preferably when the tools are still hand warm. Refer to the tempering curve and select a suitable temperature bearing in mind the service requirements. Heat slowly and uniformly. When the tool has reached the desired temperature, soak for at least sixty minutes, withdraw from the furnace and allow to cool in air. The second tempering should be a repetition of the first.

Guide to Tempering Temperatures.

Tools for Light Shock Applications:

When maximum wear resistance is required, i.e. moulding dies, thin sheet punching

Temper 190-250^{o}C – Hardness 60-63HRc

Medium Duty Applications:

Slitting cutters, plate punching dies, master hobbing tools, trimming dies, cold extrusion dies

Temper 500-520^{o}C – Hardness 58-60HRc

Medium to Heavy Duty Applications:

Shear blades, punching tools, forming tools, trimming dies, cold extrusion dies, bolt cutters

Temper 520-540^{o}C – Hardness 55-58HRc