

Mold and Die Steels

STEEL DESCRIPTIONS

Three Steels for Structural Sections

D-M-E NO. 1 STEEL

No. 1 Steel is a medium carbon (SAE 1030) or equivalent, silicon-killed forging quality steel with approximately 25% greater tensile strength than typical low-carbon warehouse steels. It machines easily, but is not "sticky," permitting a faster and smoother cut.



D-M-E NO. 2 STEEL

No. 2 Steel is an AISI 4130 or equivalent type steel. It is supplied pre-heat treated to 28-34 HRC (271-321 Bhn). A high strength steel, it is ideal for cavity and core retainer plates, clamping plates and support plates in molds and dies.

D-M-E NO. 7 STEEL

No. 7 Steel is a modified AISI 400 or equivalent series stainless steel for holder block applications. It is supplied pre-heat treated to 32-36 HRC (302-340 Bhn). This stainless steel offers corrosion-resistance and exceptional machinability but cannot be further hardened (see D-M-E No. 6). For humid environments, corrosive plastics, "clean room" or "100% stainless" applications, it is an ideal choice for all structural (non-cavity/core) mold plates.

Three Steels for Cavities and Cores

D-M-E NO. 3 STEEL

No. 3 Steel is a P-20 AISI 4130 (modified) type cavity steel. Exceptionally clean, it is pre-heat treated to 28-34 HRC (271-321 Bhn). It provides high hardness, good machinability and exceptional polishability for both plastics molds and die cast dies.

D-M-E NO. 5 STEEL

No. 5 Steel is a thermal shock resistant, hotwork die steel (AISI-SAE H-13 type) or equivalent. Supplied fully annealed 13-20 HRC (approx. 200 Bhn) for easy machinability, it can be subsequently heat treated to the desired hardness with a minimum of deformation.

Mainly used for die cast dies, it is also suitable for plastics molds with exceptional hardness or polishability requirements.

D-M-E NO. 5 Steel meets or exceeds the acceptance criteria established by the NADCA as detailed in Technical Digest Number 01-80-01D

D-M-E NO. 6 STEEL

No. 6 Steel is T-420 type or equivalent stainless steel. It is supplied fully annealed to 8-23 HRC (179-241 Bhn), making it readily machinable. It can be used for injection, compression or transfer molds where the properties of the plastics materials or excessive condensation require a highly corrosion resistant cavity steel.

OTHER TYPES OF STEEL AVAILABLE ON SPECIAL ORDER. CONTACT D-M-E.