Steels for Die Blocks for Drop Forging Specification - (Indian Standard) IS 5518:1996

Steels used for die blocks in drop forging **are required to withstand the high stresses, thermal cycling, and abrasive wear** that occur during the forging process. Die blocks play a critical role in shaping and forming metal during forging operations, so the material used for these blocks must exhibit exceptional strength, toughness, and resistance to heat and wear.

The specification for steels used in die blocks for drop forging **emphasizes the importance of strength, toughness, wear resistance, and heat stability**. The material must withstand repeated thermal cycles and mechanical stresses without cracking or deforming, ensuring the longevity and efficiency of the forging process.

Taking the importance of the subject ahead, **Bureau of Indian Standards (BIS)** has formulated an Indian Standard "**Steels for die blocks for drop forging**" as per **IS 5518 : 1996**.

This **IS 5518 : 1996 outlines the requirements for steels for die blocks in square, rectangular and circular sections for drop forging which includes chemical composition, heat treatment, destructive and non-destructive tests for the material.**

Ministry of Steel **through Steel & Steel (Quality Control) Order mandates compliance and compulsory use of Standard Mark under a license from the Bureau of Indian Standards** to ensure the product is expected to meet the prescribed specifications and a curb on sub standards products is in place.

This summary provides an overview of the essential properties, applications, and common grades of steel used for die blocks in drop forging, offering insight into their importance for the manufacturing process. Let me know if you need further details.

In conclusion, **Steels for die blocks in drop forging must possess a combination of toughness, heat resistance, wear resistance, and thermal fatigue resistance**. When selecting die block steels, considerations include the material being forged, operating temperatures, production volume, and cost, ensuring that the chosen steel meets the specific needs of the forging process.