

Numbering System for Designating Grades of Cast Ferrous Materials

1. **Scope**—This SAE Recommended Practice is intended to supply a uniform means of designating cast ferrous materials reported in SAE Standards and Recommended Practices. The system outlined in this report is intended to facilitate the addition of new, widely used casting materials and also the deletion of now obsolete grades.
2. **References**—There are no referenced publications specified herein.
3. **Designation System**
 - 3.1 **Basic Number**—The method of identifying ferrous cast materials will be based on a designation consisting of a letter prefix followed by an integral four-digit number arranged in the following manner:
 - 3.1.1 PREFIX LETTER
 - a. G—Gray Iron
 - b. M—Malleable Iron
 - c. D—Nodular Iron
 - 3.1.2 FIRST TWO DIGITS
 - a. For G—Tensile Strength
 - b. For M—Yield Strength
 - c. For D—Yield Strength (10 will be used for 100 000 psi)
 - 3.1.3 SECOND TWO DIGITS
 - a. For G use 00
 - b. For M—Elongation
 - c. For D—Elongation

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3.2 Suffix Letters—Suffix letters may be used to indicate special conditions within each category of materials. Suffix letters shall be assigned in the sequence in which the conditions or requirements are adopted for a particular category of material.

EXAMPLE—SAE D5506 is a ductile iron having a minimum yield strength of 55 000 psi and a minimum elongation of 6%.

PREPARED BY THE SAE IRON AND STEEL TECHNICAL COMMITTEE

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