ASTM A387 Chrome Moly Plate

ASME SA / ASTM A387 Gr 11 Cl. 2
ASME SA / ASTM A387 Gr 22 Cl. 2
ASME SA / ASTM A387 Gr 5 Cl. 2
ASME SA / ASTM A387 Gr 9 Cl. 2

1. Arguably the most commonly used steel specifications for Chrome Moly plate are ASME SA387 and ASTM A387. As is normal, the chemical and mechanical properties of the ASME and ASTM specifications are the same.

2. UNITEDSTEEL supplies Chrome Moly plates to ASME SA387 and ASTM A387 both from stock and, where required by the customer, cut to size and shape. There are broadly equivalent specifications produced to the European standard EN 10028-2 and these are also supplied.

3. Both SA387 and A387 are described as a "Standard Specification for Pressure Vessel Plates, Alloy Steel, Chromium-Molybdenum". The specification covers alloy steel plates intended primarily for welded boilers and pressure vessels designed for elevated temperature use.

4. Plates are available under these specifications in several grades each having different nominal Chromium (Cr) and Molybdenum (Mo) contents as follows:

| Grade | Nominal Cr Content (%) | Nominal Mo Content (%) |
| --- | --- | --- |
| 2 | 0.50 | 0.50 |
| 12 | 1.00 | 0.50 |
| 11 | 1.25 | 0.50 |
| 22, 22L | 2.25 | 1.00 |
| 21, 21L | 3.00 | 1.00 |
| 5 | 5.00 | 0.50 |
| 9, 91 | 9.00 | 1.00 |

Each grade except Grades 21L, 22L, and 91 is available in two classes of tensile strength described as Class 1 and Class 2.

5. The most regularly specified grades and hence those that are most readily available from stock are Grades 12, 11, 22, 5, and 9 and in most case stock plates will be produced to the tensile requirements of Class 2.

6. As with all ASME and ASTM pressure vessel steels, Chrome Moly to SA387 and A387 is produced in conformity to SA20 / A20 which outlines the testing and retesting methods and procedures, permissable variations in dimensions and weight, quality and repair of defects, marking, loading, and ordering information.

7. In addition to the basic requirements of SA20 / A20 certain supplementary requirements are available when additional control, testing, or examination is required to meet end use requirements. These might include product analysis (S2), charpy V-notch impact test (S5), or ultrasonic testing (S12): a variety of supplementary requirements are available.

8. If you have any other requirement for steel plate, please feel free to contact us.