

Chrome-Moly Alloy Steel Flanges: F11, F22, F5, F9, F91 for

High-Temperature Service

BLD Forge Direct - Product RFQ Datasheet

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Chrome-moly steels add chromium and molybdenum so that a flange keeps its strength and resists oxidation at temperature - the grades for steam, boiler and refinery heater lines. Each step up from 1.25Cr-0.5Mo F11 to 9Cr-1Mo-V F91 buys temperature capability and makes the heat treatment more exacting.

Scope note: This PDF is generated from the visible product page technical table. It is an RFQ preparation sheet, not a substitute for the buyer's current standard, drawing revision, tolerance note or project specification. Standard dimensions are not invented here.

Chrome-Moly Alloy Steel Flanges Technical Specification

Grade scope

ASTM A182 F11 (Class 1, 2, 3), F22 (Class 1, 3), F5, F9 and F91 (Type 1, 2); F1 and F12 on request.

Standards / drawings

ASME B16.5 and B16.47 by class EN 1092-1 by PN JIS B 2220 by K rating GOST 33259 by PN Project drawing for hot-service nozzles and special flanges

Material grades

ASTM A182 F11 (Class 1, 2 or 3) ASTM A182 F22 (Class 1 or 3) ASTM A182 F5 ASTM A182 F9 ASTM A182 F91 (Type 1 or 2) ASTM A182 F1 and F12 on request

Heat-treatment condition

Annealed, or normalized and tempered, for F11, F22, F5 and F9 as grade and class allow; normalized and tempered for F91 - temperatures stated on the certificate.

Critical dimensions

Flange type, facing, bore at the weld end, hub dimensions and bolt pattern from the governing standard or drawing.

Inspection depth

Hardness per test piece, tensile, simulated PWHT test pieces when ordered, PMI on Cr and Mo when specified, UT/MT/PT as named, EN 10204 3.1 or 3.2.

Reviewed before quotation

Grade with class or type, and design temperature Heat-treatment condition and temperatures on the certificate Hardness limit and where it is measured Simulated PWHT cycle for test pieces, if required Certificate type 3.1 or 3.2 and any third-party inspection

Best-fit RFQ

Best for flange line items in steam, boiler, refinery heater and other high-temperature service where ASTM A182 F11, F22, F5, F9 or F91 is specified.

Buyer application

Power plant steam lines, refinery heaters and hydroprocessing units, boiler headers and high-temperature process piping.

RFQ reminder

Send the standard or drawing, material grade, quantity, inspection requirement, document list and destination country to quote@bldforgedirect.com.