

Material P235GH is non-alloy steel defined in the EN 10028 and EN10216 system. It offers good plasticity, toughness, cold bending and welding properties even under high temperature. The letter "P" means "weldable", "G" means "softened annealed" and "H" means "hardened". Compared with material P265GH, the P235GH have similar chemical composition but the lower content of Carbon and higher content of Manganese. P235GH steel has lower yield and tensile strength compared with P265GH.

EN 10216 and EN 10028 series specified respectively seamless steel tubes and plates for pressure purposes. EN 10216 Part 2 specified the non alloy and alloy steel tubes with specified elevated temperature properties while EN10028 part 2 specified the non alloy and alloy steel plates with specified elevated temperature properties. P235GH plate is the designation flat alloy in the European standard, also referred to as A285 grade C steel in ASTM A285 / A285M standard. The P235GH seamless tube and P235GH plates are mainly for pressure purposesuch as the manufacturing of boilers and heat exchangers, steam tubes and pressure vessels.

P235GH material is typically available in the market in different treated condition including the normalized condition.

The available forms of P235GH steels in the industrial market including: Steel Plates and Sheets, Tubes and Pipes, Billets, Forged Rings and Blocks and so on. The corresponding standards in different countries are:

EN 10216-2 P235GH / DIN 17175 St 35.8

ASTM A285 Grade C/ DIN 1.0345 /JIS SB410

P235GH chemical composition:

C	Si	Mn	P	S	Cr	Cu	Ni	Mo
≤0.16	≤0.35	0.6-1.2	≤0.025	≤0.01	≤0.3	≤0.3	≤0.3	≤0.08

P235GH mechanical properties:

Grade	Tensile strength Rm	Yield strength YS	Elongation A(%)
P235GH	350 - 480 MPa at 20 °C	185 - 235 MPa at 20 °C	>24

P235GH supplies a wide range of applications such as process utilities in chemical industries, power stations, and shipping, instruments and processing utilities in fertilizer and food industries. DIN EN10216 P235GH steel pipe is mainly used for high pressure pipeline of boiler. GNEE STEEL provides P235GH boiler tubes and tubes in various sizes and specifications and also supply P235GH steel plates in large amount. If you are looking for this material, please contact us or get a quotation!