

Material specification sheet

Saarstahl - P295GH (17Mn4)

Material No.:	Former brand name:	International steel grades:
1.0481	Atrix 100	BS: 3059-440, 1501 Gr.224 AFNOR: A48CP SAE: A515-, A516 Gr.70

Material group: High-temperature constructional steel according to DIN EN 10028

Chemical composition: (Typical analysis in %)	C	Si	Mn	Cr	other
	0,17	0,30	1,10	-	-

Application: High-temperature constructional, weldable steel for forgings and tubes of constructions for steam boilers, pipelines, pressure vessels and plant manufacture.

Hot forming and heat treatment: Normalising: 890 - 950°C/air

Mechanical Properties:

Condition of delivery: Normalised

Wall thickness [mm]	<=16	>16 - 40	>40 - 60	>60 - 100	>100 - 150
0,2% proof stress R_{p0,2} [N/mm²]	min. 295	min. 290	min. 285	min. 260	min. 235
Tensile strength R_m [N/mm²]	460 - 580	460 - 580	460 - 580	460 - 580	440 - 570
Fracture elongation A₅ [%]	min. 22	min. 22	min. 22	min. 21	min. 21
Notch impact energy ISO-V [J]	min. 27	min. 27	min. 27	min. 27	min. 27