



Duplex 255

(UNS S32550) W Nr. 1.4507

Chemical composition	C	Si	Mn	Cr	Ni	Mo	Cu	N	P	S
% Present (Max)	≤0.04	≤1.00	≤1.50	24.0 – 27.0	4.5–6.5	2.9–3.9	1.5–2.5	0.10 – 0.25	≤0.040	≤0.030

UNS S32550 is a super duplex stainless steel designed for high strength and superior corrosion resistance in extremely aggressive environments. Its balanced ferritic–austenitic microstructure offers approximately equal amounts of ferrite and austenite, providing exceptional resistance to pitting, crevice corrosion, and stress-corrosion cracking, especially in chloride-containing environments and chemical media. The alloy contains chromium, molybdenum, nitrogen, and copper which contribute to its high mechanical strength and durability beyond conventional duplex and austenitic stainless steels.

Note: Values are in accordance with EN 10088 specifications. Actual mill certs available upon request.

