Material Data Sheet

QUEST 4 ALLOYS

Alloy 800 H/HT

Chemical Composition	Cr	Ni	Mo	Cu	Cb+ Ta	Al	Al + Ti	C	Fe	Co	Mn	Si	P	S
% Values (minimum)	19	30		-		0.15	0.85	0.06	39.5		-	-	-	-
% Values (Maximum)	23	35		0.75		0.6	1.2	0.1			1.5	1	0.045	0.15

APPLICATION

Nitric acid catalyst supports
Reformer outlet pigtails and manifolds
Heat exchangers
Pressure vessels
Dampers

DESCRIPTION

Alloy 800 H / HT is an austenitic heat resistant alloy designed for high temperature structural applications. The strength of 800 H / HT is achieved by controlled levels of carbon, aluminium and titanium along with a 1148°C minimum anneal to achieve a grain size of ASTM 5 or coarser.

CORROSION RESISTANCE

Alloys 800, 800H and 800HT have the same nickel, chromium, and iron contents and generally display similar corrosion resistance. Since alloys 800H and 800HT are used for their high-temperature strength, corrosive environments to which these alloys are exposed normally involve high temperature reactions such as oxidation and carburization.