HASTELLOY® X alloy

Oxidation Resistance

Comparative Static Oxidation Data in Flowing Air for 1008 Hours*

Alloy	1800°F (980°C)				2000°F (1095°C)			
	Metal Loss/Side		Metal Loss + CIP**/Side		Metal Loss/Side		Metal Loss + CIP**/Side	
-	mils	mm	mils	mm	mils	mm	mils	mm
X	**0.29**	**0.007**	**0.74**	**0.019**	**1.5**	**0.038**	**2.7**	**0.069**
INCONEL® 600	0.32	0.008	0.90	0.023	1.1	0.028	1.6	0.041
INCONEL® 601	0.53	0.013	1.3	0.033	1.2	0.031	2.6	0.06
625	0.32	0.008	0.72	0.018	3.3	0.083	4.8	0.12
800H®	0.024	0.024	1.8	0.046	5.4	0.137	7.4	0.19

*Cycled to room temperature once a week **CIP=Continuous Internal Penetration
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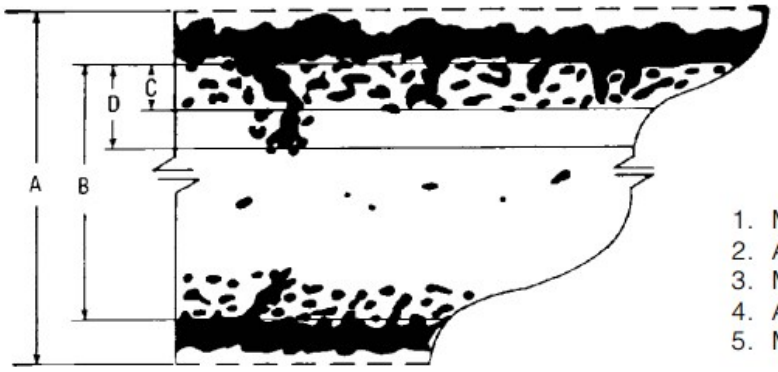
Schematic Representation of Metallographic Technique used for Elevating Oxidation Tests



1. Metal Loss = (A-B)/2
2. Average Internal Penetration = C
3. Maximum Internal Penetration = D
4. Average Metal Affected = ((A-B)/2) + C
5. Maximum Metal Affected = ((A-B)/2) + D

Comparative Average Hot Corrosion Resistance*

Test Temperature		Test Period	Total Metal Affected/Side					
			X		S		188	
°F	°C	h	mils	mm	mils	mm	mils	mm
1650	900	200	**3.0**	**0.08**	2.7	0.07	2.1	0.05
1650	900	1000	**6.8**	**0.17**	7.5	0.19	3.7	0.09

*All tests performed by exposure to the combustion products of No. 2 fuel oil (0.4 percent sulfur) and 5 ppm of sea salt. Gas velocity over samples was 13 ft./sec. (4m/s). Thermal shock frequency was one/hour.