

スーパー二相ステンレス鋼鋳鋼品

DUPLEX STAINLESS STEEL AND SUPER DUPLEX STAINLESS STEEL CASTINGS

Element (Wt%)

Designation	Type	C Max.	Si Max.	Mn Max.	P Max.	S Max.	Ni	Cr Max.	Mo	Cu	W	N	PRE	Heat Treatment	Yield Strength Min.(N/mm ²)	Tensile Strength Min.(N/mm ²)	Elongation (G.L.:50mm) Min. (%)
ASTM A 890 3A UNS J93371 ACI CD6MN	25Cr-5Ni -Mo-N	0.06	1.00	1.00	0.040	0.040	4.0 ~ 6.0	24.0 ~ 27.0	1.75 ~ 2.5	-	-	0.15 ~ 0.25	-	Min. 1070 WQ	450	655	25
ASTM A 890 5A ⁴ UNS J93404 ACI CE3MN	25Cr-7Ni -Mo-N	0.03	1.00	1.50	0.040	0.040	6.0 ~ 8.0	24.0 ~ 26.0	4.0 ~ 5.0	-	-	0.10 ~ 0.30	Min. 40	Min.1120 FC Min. 1045 WQ	515	690	18
ASTM A 890 6A ⁴ UNS J93380 ACI CD3MWCuN	25Cr-7Ni -Mo-N	0.03	1.00	1.00	0.030	0.025	6.5 ~ 8.5	24.0 ~ 26.0	3.0 ~ 4.0	0.5 ~ 1.0	0.5 ~ 1.0	0.20 ~ 0.30	Min. 40	Min. 1100 WQ	450	690	25
JIS G 5121 SCS10	24Cr-6Ni -Mo-N	0.03	1.50	1.50	0.040	0.030	4.5 ~ 8.5	21.0 ~ 26.0	2.50 ~ 4.00	-	-	0.08 ~ 0.30	-	1050 ~1150 WQ	390	620	15

* PRE : %Cr + 3.3%Mo + 16%N

Pitting Corrosion Test

Test Method : Per ASTM G48 Method A

Test Solution : 10%FeCl₃

Test Temp. : 50

Test Time : 24hours

Test Material :

ASTM A890 Gr. 5A (PRE:42.5)

ASTM A890 Gr. 3A (PRE:37.4)

JIS SUS316L

Ni-Resist

Test Result

Weight loss/Area (g / m²·day)

ASTM A890 Gr. 5A (PRE:42.5) : 0.3

ASTM A890 Gr. 3A (PRE:37.4) : 2190.4

JIS SUS316L : 1760.0

Ni-Resist : 2555.1

Pitting corrosion result

Photo-1

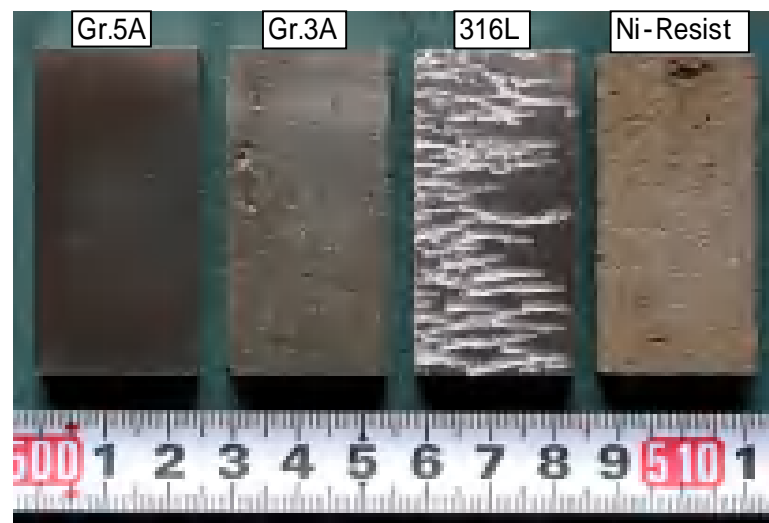


Photo-1 Pitting corrosion result