

Ni- and Mo-Free Ferritic Stainless Steel with High Corrosion Resistance, JFE443CT[†]

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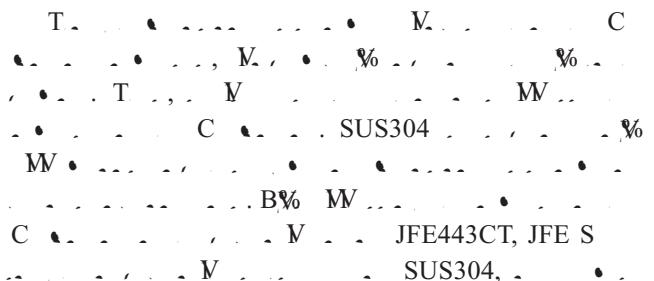
Abs rac :

High corrosion resistant ferritic stainless steel JFE443CT has been developed. With the increase of Cr content to 21% and the addition of Cu, its corrosion resistance is equivalent to that of SUS304 in the neutral chloride environment. Moreover, without the addition of Ni and Mo, its price is stable even when the price of Ni and Mo soars. JFE443CT has been applied widely as the substitution for SUS304, the price of which is fluctu-

tails on examples of application.

2. Background of Development

2.1 Development Targets and Policy



C
C
E
F (),
C / (F
+ C))
%X- %V
%X- %V
%W(XPS)
%

Fig. 2.

C
C
MH 2
C
C
4 ()-12() 4

Fig. 4.**Figure 3.**

MH 21%C -0.3%T
18%C -0.3%T
700 V 10
M - V 16 T M MH
V - M - MH
I - M - MH
18%C -0.3%T
21%C -0.3%T
C T C

	SUS430	JFE430C N (SUS430J1L)	SUS304	JFE443CT
A 30 %				
A 150 %				

1 A 150% V. O M 609-91 (JA O: J) A
O (#600)
60 × 80)

2 A 150% V. O M 609-91 (JA O: J) A
V. 304, SUS304, SUS430, SUS430J1L, SUS304, SUS430CT, SUS304.

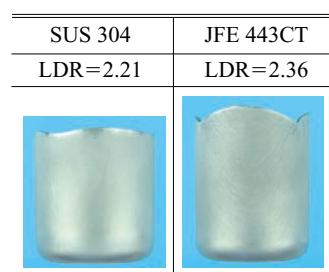
Photo 1 V. 30 % 150 %
JASO M 609-91. SUS430
A SUS430J1L
SUS304, V. V.

M% JFE443CT SUS304
Photo 2 V. O (20) I SUS304, V. JFE443CT
SUS304.
A JFE443CT SUS304
V. V.

3.2 Physical Properties

T. V% • V. V. JFE443CT
Table 3. T. V% • V. V. T.

2 M. (T. V%, SV%, : 0.8) JFE443C				
S	0.2% M. (MP)	T. (MP)	E. (%)	M. r-
JFE443CT	305	483	31	1.3
SUS430	320	490	29	1.0
JFE430C N (SUS430J1L)	356	496	29	1.3
SUS304	260	645	60	1.0



3 C. L. D. JFE443C L. D. 304 ()

• M V
 • C V SUS304,
 M
 • % A
 JFE443CT
 % SUS304 (7.74...7.93),
 %2.5% V

4. Conclusion

JFE443CT (SUS304) (21%) (0.4%). JFE443CT (SUS304, N, M, T, JFE443CT, SUS304, MV • T V • N MV% • 2006, V • SUS304 T JFE443CT V %A V • % SUS304 MV • MV • E V • MV • Photo 4. JFE443CT MV • V • SUS304. W % MV% MV%

References

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