

# FERRITICS

CLASSIFICATION		TYPE	COMPOSITIONS'										
		Unity	C	Si	Mn	P	S	N	Cr	Mo	Nb	Ni	Other
Ferritics	Utility	3CR12	0.03	1.0	2.0	0.040	0.030		10.5-12.5			1.5	Ti: 4X(C+N) to 0.6
		3CR12L	0.03	1.0	1.5	0.040	0.015	0.03	10.5-12.5			0.3-1.0	
		410S	0.08	1.0	1.0	0.040	0.015		11.5-13.5			0.6	
	Standard	40910	0.03	1.0	1.0	0.040	0.015	0.03	10.5-11.7			0.5	Ti: 6X(C+N) to 0.5
		430	0.08	1.0	1.0	0.040	0.015		16.0-18.0			0.75	
		439	0.03	1.0	1.0	0.040	0.015	0.03	17.0-18.0				Ti: 4X(C+N)+0.2 to 0.8
		430DDQ	0.08	1.0	1.0	0.040	0.015		16.0-18.0			0.5	Al: 0.30max
	1.4509	0.03	0.75	1.0	0.040	0.015		17.5-18.5		3XC+0.3to 1.00		Ti: 0.1 to 0.6	
	Moly	434	0.08	1.0	1.0	0.040	0.015		16.0-18.0	0.9-1.25			
		436	0.08	1.0	1.0	0.040	0.015	0.04	16.0-18.0	0.8-1.25	7X(C+N)+0.1 to 0.8		
444		0.025	1.0	1.0	0.040	0.015	0.03	17.5-19.5	1.8-2.5		1.0	Ti <sup>2</sup> : 4X(C+N)+0.15 to 0.8	

1. Compositions are maximum values, unless otherwise stated.-

2. Stabilisation may be by use of titanium or niobium or zirconium. For ASTM A240,  $Ti+Nb > 4(C+N) + 0.20$ . For EN10088-2, according to the atomic mass of these elements and the content of carbon and nitrogen, the equivalence shall be the following:  $Nb$  (% by mass) =  $Zr$  (% by mass) =  $7/4 Ti$  (% by mass), (i.e. when replacing titanium with niobium nearly double (1.75) the niobium is needed.)

## 1.2 Duplexes

CLASSIFICATION		TYPE	COMPOSITIONS'										
		Unity	C	Si	Mn	P	S	N	Cr	Mo	Nb	Ni	Other
Duplexes	Lean	2001	0.03	1.0	4.0-6.0	0.035	0.015	0.05-0.17	19.5-21.5	0.6		1.0-3.0	Cu: 1.0 max
		2304	0.03	1.0	2.0	0.035	0.015	0.05-0.20	22.0-24.0	0.1-0.6		3.5-5.5	Cu: 0.1 to 0.6
	Standard	2205	0.03	1.0	2.0	0.035	0.015	0.14-0.20	22.0-23.0	2.2-3.5		4.5-6.5	