

Chemical composition of stainless steel

Classification	Specification		Chemical Composition										other
	JIS	AISI	C	Si	Mn	P	S	Ni	Cr	Mo	Cu	N	
Martensitic Grades	SUS403	403	Max.0.15	Max.0.50	Max.1.00	Max.0.040	Max.0.030	-1	11.50~13.00	-	-	-	-
	SUS410	410	Max.0.15	Max.1.00	Max.1.00	Max.0.040	Max.0.030	-1	11.50~13.50	-	-	-	-
	SUS410J1	-	0.08~0.18	Max.0.60	Max.1.00	Max.0.040	Max.0.030	-1	11.50~14.00	0.30~0.60	-	-	-
	SUS410F2	-	Max.0.15	Max.1.00	Max.1.00	Max.0.040	Max.0.030	-1	11.50~13.50	-	-	-	Pb 0.05~0.30
	SUS416	416	Max.0.15	Max.1.00	Max.1.25	Max.0.060	Min.0.15	-1	12.00~14.00	-2	-	-	-
	SUS420J1	420	0.16~0.25	Max.1.00	Max.1.00	Max.0.040	Max.0.030	-1	12.00~14.00	-	-	-	-
	SUS420J2	420	0.26~0.40	Max.1.00	Max.1.00	Max.0.040	Max.0.030	-1	12.00~14.00	-	-	-	-
	SUS420F	420F	0.26~0.40	Max.1.00	Max.1.25	Max.0.060	Min.0.15	-1	12.00~14.00	-2	-	-	-
	SUS420F2	-	0.26~0.40	Max.1.00	Max.1.00	Max.0.040	Max.0.030	-1	12.00~14.00	-	-	-	Pb 0.05~0.30
	SUS431	431	Max.0.20	Max.1.00	Max.1.00	Max.0.040	Max.0.030	1.25~2.50	15.00~17.00	-	-	-	-
	SUS440A	440A	0.60~0.75	Max.1.00	Max.1.00	Max.0.040	Max.0.030	-1	16.00~18.00	-3	-	-	-
	SUS440B	440B	0.75~0.95	Max.1.00	Max.1.00	Max.0.040	Max.0.030	-1	16.00~18.00	-3	-	-	-
	SUS440C	440C	0.95~1.20	Max.1.00	Max.1.00	Max.0.040	Max.0.030	-1	16.00~18.00	-3	-	-	-
	SUS440F	S44020	0.95~1.20	Max.1.00	Max.1.25	Max.0.060	Min.0.15	-1	16.00~18.00	-3	-	-	-
Ferritic Grades	SUS405	405	Max.0.08	Max.1.00	Max.1.00	Max.0.040	Max.0.030	-	11.50~14.50	-	-	-	Al 0.10~0.30
	SUS410L	-	Max.0.03	Max.1.00	Max.1.00	Max.0.040	Max.0.030	-	11.00~13.50	-	-	-	-
	SUS430	430	Max.0.12	Max.0.75	Max.1.00	Max.0.040	Max.0.030	-	16.00~18.00	-	-	-	-
	SUS430F	430F	Max.0.12	Max.1.00	Max.1.25	Max.0.060	Min.0.15	-	16.00~18.00	-2	-	-	-
	SUS434	434	Max.0.12	Max.1.00	Max.1.00	Max.0.040	Max.0.030	-	16.00~18.00	0.75~1.25	-	-	-
	SUS447J1	-	Max.0.01	Max.0.40	Max.0.40	Max.0.030	Max.0.020	-	28.50~32.00	1.50~2.50	-	Max.0.015	-
SUSXM27	-	Max.0.01	Max.0.40	Max.0.40	Max.0.030	Max.0.020	-	25.00~27.50	0.75~1.50	-	Max.0.015	-	
Austenitic Ferritic Grades	SUS329J1	329	Max.0.08	Max.1.00	Max.1.50	Max.0.040	Max.0.030	3.00~6.00	23.00~28.00	1.00~3.00	-	-	-
	SUS329J3L	S31803	Max.0.03	Max.1.00	Max.2.00	Max.0.040	Max.0.030	4.50~6.50	21.00~24.00	2.50~3.50	-	0.08~0.20	-
	SUS329J4L	S31260	Max.0.03	Max.1.00	Max.1.50	Max.0.040	Max.0.030	5.50~7.50	24.00~26.00	2.50~3.50	-	0.08~0.30	-
Austenitic Grades	SUS201	201	Max.0.15	Max.1.00	5.50~7.50	Max.0.060	Max.0.030	3.50~5.50	16.00~18.00	-	-	0.25??	-
	SUS202	202	Max.0.15	Max.1.00	7.50~10.00	Max.0.060	Max.0.030	4.00~6.00	17.00~19.00	-	-	Max.0.25	-
	SUS301	301	Max.0.15	Max.1.00	Max.2.00	Max.0.045	Max.0.030	6.00~8.00	16.00~18.00	-	-	-	-
	SUS302	302	Max.0.15	Max.1.00	Max.2.00	Max.0.045	Max.0.030	8.00~10.00	17.00~19.00	-	-	-	-
	SUS303	303	Max.0.15	Max.1.00	Max.2.00	Max.0.200	Min.0.15	8.00~10.00	17.00~19.00	-2	-	-	-
	SUS303Se	303Se	Max.0.15	Max.1.00	Max.2.00	Max.0.200	Max.0.060	8.00~10.00	17.00~19.00	-	-	-	Se Min.0.15
	SUS303Cu	-	Max.0.15	Max.1.00	Max.3.00	Max.0.200	Min.0.15	8.00~10.00	17.00~19.00	-2	1.50~3.50	-	-
	SUS304	304	Max.0.08	Max.1.00	Max.2.00	Max.0.045	Max.0.030	8.00~10.50	18.00~20.00	-	-	-	-
	SUS304L	304L	Max.0.03	Max.1.00	Max.2.00	Max.0.045	Max.0.030	9.00~13.00	18.00~20.00	-	-	-	-
	SUS304N1	304N	Max.0.08	Max.1.00	Max.2.50	Max.0.045	Max.0.030	7.00~10.50	18.00~20.00	-	-	0.10~0.25	-
	SUS304N2	-	Max.0.08	Max.1.00	Max.2.50	Max.0.045	Max.0.030	7.50~10.50	18.00~20.00	-	-	0.15~0.30	Nb Max.0.15
	SUS304LN	304LN	Max.0.03	Max.1.00	Max.2.00	Max.0.045	Max.0.030	8.50~11.50	17.00~19.00	-	-	0.12~0.22	-
	SUS304J3	-	Max.0.08	Max.1.00	Max.2.00	Max.0.045	Max.0.030	8.00~10.50	17.00~19.00	-	1.00~3.00	-	-
	SUS305	305	Max.0.12	Max.1.00	Max.2.00	Max.0.045	Max.0.030	10.50~13.00	17.00~19.00	-	-	-	-
	SUS309S	309S	Max.0.08	Max.1.00	Max.2.00	Max.0.045	Max.0.030	12.00~15.00	22.00~24.00	-	-	-	-
	SUS310S	310S	Max.0.08	Max.1.50	Max.2.00	Max.0.045	Max.0.030	19.00~22.00	24.00~26.00	-	-	-	-
	SUS316	316	Max.0.08	Max.1.00	Max.2.00	Max.0.045	Max.0.030	10.00~14.00	16.00~18.00	2.00~3.00	-	-	-
	SUS316L	316L	Max.0.03	Max.1.00	Max.2.00	Max.0.045	Max.0.030	12.00~15.00	16.00~18.00	2.00~3.00	-	-	-
	SUS316N	316N	Max.0.08	Max.1.00	Max.2.00	Max.0.045	Max.0.030	10.00~14.00	16.00~18.00	2.00~3.00	-	0.10~0.22	-
	SUS316LN	316LN	Max.0.03	Max.1.00	Max.2.00	Max.0.045	Max.0.030	10.50~14.50	16.50~18.50	2.00~3.00	-	0.12~0.22	-
	SUS316Ti	-	Max.0.08	Max.1.00	Max.2.00	Max.0.045	Max.0.030	10.00~14.00	16.00~18.00	2.00~3.00	-	-	Ti Min.5xC%
	SUS316J1	-	Max.0.08	Max.1.00	Max.2.00	Max.0.045	Max.0.030	10.00~14.00	17.00~19.00	1.20~2.75	1.00~2.50	-	-
	SUS316J1L	-	Max.0.03	Max.1.00	Max.2.00	Max.0.045	Max.0.030	12.00~16.00	17.00~19.00	1.20~2.75	1.00~2.50	-	-
	SUS316F	-	Max.0.08	Max.1.00	Max.2.00	Max.0.045	Min.0.10	10.00~14.00	16.00~18.00	2.00~3.00	-	-	-
	SUS317	317	Max.0.08	Max.1.00	Max.2.00	Max.0.045	Max.0.030	11.00~15.00	18.00~20.00	3.00~4.00	-	-	-
	SUS317L	317L	Max.0.03	Max.1.00	Max.2.00	Max.0.045	Max.0.030	11.00~15.00	18.00~20.00	3.00~4.00	-	-	-
	SUS317LN	-	Max.0.03	Max.1.00	Max.2.00	Max.0.045	Max.0.030	11.00~15.00	18.00~20.00	3.00~4.00	-	0.10~0.22	-
SUS317J1	-	Max.0.04	Max.1.00	Max.2.50	Max.0.045	Max.0.030	15.00~17.00	16.00~19.00	4.00~6.00	-	-	-	
SUS836L	-	Max.0.03	Max.1.00	Max.2.00	Max.0.045	Max.0.030	24.00~26.00	19.00~24.00	5.00~7.00	-	Max.0.25	-	
SUS890L	-	Max.0.02	Max.1.00	Max.2.00	Max.0.045	Max.0.030	23.00~28.00	19.00~23.00	4.00~5.00	1.00~2.00	-	-	
SUS321	321	Max.0.08	Max.1.00	Max.2.00	Max.0.045	Max.0.030	9.00~13.00	17.00~19.00	-	-	-	Ti Min.5xC%	
SUS347	347	Max.0.08	Max.1.00	Max.2.00	Max.0.045	Max.0.030	9.00~13.00	17.00~19.00	-	-	-	Nb Min.10xC%	
SUSXM7	304Cu	Max.0.08	Max.1.00	Max.2.00	Max.0.045	Max.0.030	8.50~10.50	17.00~19.00	-	3.00~4.00	-	-	
SUSXM15J1	-	Max.0.08	3.00~5.00	Max.2.00	Max.0.045	Max.0.030	11.50~15.00	15.00~20.00	-	-	-	-	
Precipitation Hardening Grades	SUS630	S17400	Max.0.07	Max.1.00	Max.1.00	Max.0.040	Max.0.030	3.00~5.00	15.00~17.50	-	3.00~5.00	-	Nb 0.15~0.45
	SUS631	S17700	Max.0.09	Max.1.00	Max.1.00	Max.0.040	Max.0.030	6.50~7.75	16.00~18.00	-	-	-	Al 0.75~1.50

* SUS329J1 denotes austenitic and ferritic stainless steel.

Note:

- (1) May contain at most 0.6% Ni.
- (2) May have at most 0.6% Mo added.
- (3) May have at most 0.75% Mo added.

Remarks:

- 1) Ferritic SUS447J1 and SUSXM27 may contain at SUS447J1 and SUSXM27 may contain at most 0.50%
- 2) With SUSXM15J1 any alloy element other than