



Material Reference Chart

Ladish Material Code	Common Name	Main Ingredients	Casting Specifications		Forging Specifications		Bar Specifications	
			ASTM	UNS	ASTM	UNS	ASTM	UNS
017	303	18Cr - 9Ni - 1.5Mn	A743 CF16Fa	J92701	N/A	N/A	A276-303	S30300
012	304	18Cr - 8Ni	A351 CF8	J92600	A182-F304	S30400	A276-304	S30400
	304H	18Cr - 8Ni - .10C (max)	A351 CF10	J92590	A182-F304H	S30409	A276-304H	S30409
019	304L	18Cr - 8Ni - .03C (max)	A351 CF3	J92500	A182-F304L	S30403	A276-304L	S30403
329	309	24Cr - 13Ni	A351-CH20	J93402	A182-F309H	S30909	A276-309	S30900
337	310	25Cr - 20Ni	A351-CK20	J94202	A182-F310	S31008	A276-310S	S31008
007	316	18Cr - 9Ni - 2Mo	A351-CF8M	J92900	A182-F316	S31600	A276-316	S31600
021	316H	18Cr - 9Ni - 2Mo - .10C (max)	A351-CF10M	J92901	A182-F316H	S31609	A479-316H	S31609
018	316L	18Cr - 9Ni - 2Mo - .03C (max)	A351-CF3M	J92800	A182-F316L	S31603	A276-316L	S31603
274	317	18Cr - 12Ni - 3.5Mo	A351-CG8M	J93000	A182-F317	S31700	A276-317	S31700
	317L	18Cr - 12Ni - 3.5Mo - .03C (max)	A351-CG3M	J92999	A182-F317L	S31703	A276-317L	S31703
027	321	18Cr - 10Ni - Ti	N/A	N/A	A182-F321	S32100	A276-321	S32100
	321H	18Cr - 10Ni - Ti - .10C (max)	N/A	N/A	A182-321H	S32109	A276-321H	S32109
013	347	18Cr - 10Ni - Nb	A351-CF8C	J92710	A182-F347	S34700	A276-347	S34700
	347H	18Cr - 10Ni - Nb - .10C (max)	N/A	N/A	A182-F347H	S34709	A276-347H	S34709
	410	12.5Cr - 86Fe - .5Mo	A217-CA15	J91150	A182-F6A	S41000	A276-410	S41000
341	415	13Cr - 4Ni - 1Mo - 82Fe	A487-CA6NM	J91540	A182-F6NM	S41500	A276-415	S41500
	420	13Cr - 1Ni - .5Mo - 85Fe	A743-CA40	J91153	A473-420	S42000	A276-420	S42000
	17-4PH	17Cr - 4Ni - 3Cu	A747-CB7Cu	J92180	N/A	N/A	A693-630	S17400
020	Alloy 20	21Cr - 29Ni - 2.5Mo - 3.5Cu	A351-CN7M	J95150	A182-F20	N08020	B473	N08020
040 / 330	Alloy 20	21Cr - 29Ni - 2.5Mo - 3.5Cu	A744-CN7M	J95150	A182-F20	N08020	B462	N08020
045	AL6XN	21Cr - 24.5Ni - 6.5Mo - Cu - N	A351-CN3MN	J94651	N/A	N/A	B462	N08367
	904L	21Cr - 25Ni - 4.5Mo	N/A	N/A	N/A	N/A	B625	N08904
028	254-SMO	20Cr - 18Ni - 6Mo	A351-CK3MCuN	J93254	A182-F44	S31254	A276-S31254	S31254
332	Duplex 2205	22Cr - 5Ni - 3Mo - N	A890 Gr. 4A CD3MN	J92205	A182-F51	S31803	A276-S32205	S32205
	Super Duplex 2507	25Cr - 7Ni - 4Mo - N	A890 Gr. 5A CE3MN	J93404	A182-F53	S32750	A479-S32750	S32750
	Super Duplex Zeron 100	25Cr - 7Ni - 3.5Mo - N	A890 Gr. 6A CD3MWCuN	J93380	A182-F55	S32760	A479-S32760	S32760
339	Ferrallium 255 - Super Duplex	25Cr - 5.5Ni - 3Mo - Cu - N	A890 Gr. 1A CD4MCu A890 Gr. 1B CD4MCuN	J93370 J93372	A182-F61	S32550	A479-S32550	S32550
002	Hastelloy B	67Ni - 28Mo - 5Fe	A494 N-12MV	N30012	N/A	N/A	B335	N10001
008	Hastelloy B2	68Ni - 31Mo - 1Fe	A494 N-7M	N30007	N/A	N/A	B335	N10665
003	Hastelloy C276	58Ni - 16Cr - 16Mo - 6Fe - 4W	A494 CW-12MW	N30002	B564-N10276	N10276	B574	N10276
022	Hastelloy C (Modified)	54Ni - 20Cr - 20Mo - 3Fe	A494 CW-6M	N30107	N/A	N/A	N/A	N/A
011	Hastelloy C4	62Ni - 16Cr - 16Mo - 2Fe	A990 CW2M	N26455	N/A	N/A	B574	N06455
025	Hastelloy C22	58Ni - 21Cr - 14Mo - 4Fe - 3W	A494 CX2MW	N26022	N/A	N/A	B574	N06022



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			ASTM	UNS	ASTM	UNS	ASTM	UNS
016	Inconel 600	78Ni - 15Cr - 5Fe	A494-CY40	N06040	B564-N06600	N06600	B166	N06600
276	Inconel 625	65Ni - 22Cr - 9Mo - 3.5Nb	A494-CW6MC	N26625	B564-N06625	N06625	B446	N06625
340	Incoloy 800	33Ni - 20Cr - 45Fe - Nb	A351-CT15C	N28820	B564-N08800	N08800	B408	N08800
331	Inconel 825	43Ni - 22Cr - 3Mo - 30Fe - Nb	A494-CU5MCuC	N08826	B564-N08825	N08825	B425	N08825
001	Monel 400	67Ni - 30Cu	A494 M35-1	N24135	B564-N04400	N04400	B164 Class A	N04400
249	Monel (Weldable)	64Ni - 30Cu - 2Cb - 3.5Fe	A494-M30C	N24130	N/A	N/A	N/A	N/A
144	Monel K500	65Ni - 29.5Cu - 2.8Al - 1Fe	N/A	N/A	B564-N05500	N05500	N/A	N/A
005	Nickel 200	97Ni	A494-CZ100	N02100	B160-N02200	N02200	B160	N02200
015	Titanium	.10C - .30Fe - .05N - 99Ti	B367 Gr. C-3	R50550	B381 Gr. F-3	R50550	B348 Gr. 3	R50550
061	Titanium	.10C - .30Fe - .03N - .25Pd - 99Ti	B367 Gr. C-7	R52400	B381 Gr. F-7	R52400	B348 Gr. 7	R52400
213	Titanium	.10C - .30Fe - .03N - 99Ti	B367 Gr. C-2	R50400	B381 Gr. F-2	R50400	B348 Gr. 2	R50400
044	Zirconium	95Zr - 4.5Cu	B752 Gr. 702C	R60702	B493 Gr. 702	R60702	B550 Gr. 720	R60702