

## Investment Casting Material Chemical Composition

Standard No.	Chemical Composition												
	C	Si	Mn	P	S	Cr	Ni	Mo	Cu	Ti	Nb	N	Others
S15C	0.13/0.18	0.15/0.35	0.30/0.60	≤0.030	≤0.035	≤0.20	≤0.20		≤0.30				
S20C	0.18/0.23	0.15/0.35	0.30/0.60	≤0.030	≤0.035	≤0.20	≤0.20		≤0.30				
S35C	0.32/0.38	0.15/0.35	0.60/0.90	≤0.030	≤0.035	≤0.20	≤0.20		≤0.30				
S45C	0.42/0.48	0.15/0.35	0.60/0.90	≤0.030	≤0.035	≤0.20	≤0.20		≤0.30				
S48C	0.45/0.51	0.15/0.35	0.60/0.90	≤0.030	≤0.035	≤0.20	≤0.20		≤0.30				
S50C	0.47/0.53	0.15/0.35	0.60/0.90	≤0.030	≤0.035	≤0.20	≤0.20		≤0.30				
SS400/SS440	≤0.30		≤1.60	≤0.050	≤0.050	≤0.40	≤0.40						
WCB	≤0.30	≤0.60	≤1.00	≤0.040	≤0.045	≤0.50	≤0.50	≤0.20	≤0.30				V≤0.03
AISI1020	0.17/0.23		0.30/0.60	≤0.040	≤0.050								
IC105	0.40/0.55	0.20/0.35	0.60/0.90	≤0.040	≤0.050								
ENIA	0.07/0.15	≤0.10	0.80/1.20	≤0.070	0.20/0.30								
EN19	0.35/0.45	0.10/0.35	0.50/0.80	≤0.050	≤0.050	0.90/1.50		0.20/0.40					
CLA4	0.20/0.28	0.10/0.35	0.45/0.70	≤0.035	≤0.035	3.00/3.50		0.40/0.65					
CLA2	0.18/0.25	0.20/0.50	1.20/1.70	≤0.035	≤0.035	≤0.30	≤0.40	≤0.10	≤0.30				
CLAIA	0.15/0.25	0.20/0.60	0.40/1.00	≤0.035	≤0.035	≤0.30	≤0.40	≤0.10	≤0.30				
CLAIC	0.35/0.45	0.20/0.60	0.40/1.00	≤0.035	≤0.035	≤0.30	≤0.40	≤0.10	≤0.30				
GS52	≤0.30	0.30/0.60	0.20/0.50	≤0.040	≤0.040								
GS1.7225	0.38/0.45	0.30/0.60	0.6/1.00	≤0.025	≤0.025	0.80/1.20		0.20/0.30					
AISI4140	0.38/0.43	0.15/0.35	0.75/1.00	≤0.035	≤0.040	0.80/1.10		0.15/0.25					
AISI4340	0.38/0.43	0.15/0.35	0.60/0.80	≤0.035	≤0.040	0.70/0.90	1.65/2.00	0.20/0.30					
AISI8620	0.18/0.23	0.15/0.35	0.70/0.90	≤0.035	≤0.040	0.40/0.60	0.40/0.70	0.15/0.25					
AISIA2	0.95/1.05	0.20/0.40	0.45/0.75			4.75/5.50		0.90/1.40					V:(0.40)
817M40	0.36/0.44	0.10/0.40	0.45/0.70	≤0.035	≤0.040	1.00/1.40	1.30/1.70	0.20/0.35					
40Cr	0.37/0.44	0.17/0.37	0.50/0.80			0.80/1.10	≤0.30						
SKS3	0.90/1.00	≤0.35	0.90/1.20			0.50/1.00							W:0.50/1.00
GCr15	0.95/1.05	0.15/0.35	0.25/0.45	≤0.025	≤0.025	1.40/1.65	≤0.30						
SCM435	0.33/0.38	0.15/0.35	0.60/0.85	≤0.030	≤0.030	0.90/1.20	≤0.25	0.15/0.30	≤0.30				
SCM440	0.38/0.43	0.15/0.35	0.60/0.85	≤0.030	≤0.030	0.90/1.20	≤0.25	0.15/0.30	≤0.30				
ZG40Cr	0.35/0.45	0.20/0.40	0.50/0.80	≤0.030	≤0.030	0.80/1.10		≤0.15					
SCW480	≤0.22	≤0.80	≤1.50	≤0.040	≤0.040	≤0.50		≤0.50					
42CrMo	0.38/0.45	0.30/0.60	0.60/1.00	≤0.025	≤0.025	0.80/1.20		0.20/0.30					
DINC40	0.37/0.44	≤0.40	0.50/0.80	≤0.045	≤0.045	≤0.40	≤0.40	≤0.10					
C22	0.17/0.24	≤0.40	0.40/0.70	≤0.045	≤0.045	≤0.40	≤0.40	≤0.10					Cr+Mo+Ni≤0.63
1.7225	0.38/0.45	≤0.40	0.60/0.90	≤0.035	≤0.035	0.90/1.20		0.15/0.30					
420+2%Ni	0.16/0.25	≤1.00	≤1.00	≤0.040	≤0.030	12.00/14.00		2.00/3.00					
58CrV4	0.55/0.62	0.15/0.40	0.70/1.10	≤0.035	≤0.035	0.90/1.20							V:0.10/0.20
1.0619(林)	0.18/0.22	≤0.60	0.50/1.10	≤0.030	≤0.020	≤0.30	≤0.40	≤0.12	≤0.30				V≤0.03
1.0619	0.18/0.23	0.30/0.60	0.50/0.80	≤0.020	≤0.015	≤0.30							

SCPH2	≤0.30	≤0.60	≤1.00	≤0.040	≤0.040									
WCBA216 大通	≤0.30	≤0.60	≤1.00	≤0.040	≤0.045	≤0.40	≤0.50	≤0.25						
SCS12	≤0.20	≤2.00	≤2.00	≤0.040	≤0.040	18.00/21.00	8.00/11.00							
SCS13	≤0.08	≤2.00	≤2.00	≤0.040	≤0.040	18.00/21.00	8.00/11.00							
SCS13A	≤0.08	≤2.00	≤1.50	≤0.040	≤0.040	18.00/21.00	8.00/11.00							
SCS14	≤0.08	≤2.00	≤2.00	≤0.040	≤0.040	17.00/20.00	10.00/14.00	2.00/3.00						
SCS14A	≤0.08	≤1.50	≤1.50	≤0.040	≤0.040	18.00/21.00	9.00/12.00	2.00/3.00						
无磁 SCS14	≤0.08	≤2.00	≤2.00	≤0.040	≤0.040	17.00/17.80	14.00/15.00	2.00/3.00						
SCS16	≤0.03	≤1.50	≤2.00	≤0.040	≤0.040	17.00/20.00	12.00/16.00	2.00/3.00						
SCS24	≤0.07	≤1.00	≤1.00	≤0.040	≤0.040	15.50/17.50	3.50/5.00		2.50/4.00		0.15/0.45			
SCS1	≤0.15	≤1.50	≤1.00	≤0.040	≤0.040	11.50/14.00	≤1.00	≤0.50						
SCS2	0.16/0.24	≤1.50	≤1.00	≤0.040	≤0.040	11.50/14.00	≤1.00	≤0.50						
SUS303	≤0.15	≤1.00	≤2.00	≤0.20	≥0.15	17.00/19.00	8.00/10.00	≤0.60						
SUS304	≤0.08	≤1.00	≤2.00	≤0.045	≤0.030	18.00/20.00	8.00/10.50							
SUS304L	≤0.03	≤1.00	≤2.00	≤0.045	≤0.030	18.00/20.00	9.00/13.00							
SUS316	≤0.08	≤1.00	≤2.00	≤0.045	≤0.030	16.00/18.00	10.00/14.00	2.00/3.00						
SUS316L	≤0.03	≤1.00	≤2.00	≤0.045	≤0.030	16.00/18.00	12.00/15.00	2.00/3.00						
SUS420J2	0.26/0.40	≤1.00	≤1.00	≤0.040	≤0.030	12.00/14.00	≤0.60							
SUS630	≤0.07	≤1.00	≤1.00	≤0.040	≤0.030	15.50/17.50	3.50/5.00		3.00/5.00					Nb+Ta0.15~0.45
SUS329J4L	≤0.03	≤1.00	≤1.50	≤0.040	≤0.030	24.00/26.00	5.50/7.50	2.50/3.50					0.08/0.30	
303	≤0.15	≤1.00	≤2.00	≤0.20	≥0.15	17.00/19.00	8.00/10.00							Zr 或 Mo≤0.60
304	≤0.08	≤1.00	≤2.00	≤0.045	≤0.030	18.00/20.00	8.00/10.50							
304L	≤0.03	≤1.00	≤2.00	≤0.045	≤0.030	18.00/20.00	8.00/12.00							
1.4301	≤0.07	≤1.00	≤2.00	≤0.045	≤0.030	17.00/19.00	8.50/10.50							
1.4308	≤0.07	≤2.00	≤1.50	≤0.045	≤0.030	18.00/20.00	9.00/11.00							
1.4313	≤0.05	≤0.60	≤1.00	≤0.035	≤0.015	12.50/14.00	3.50/4.50	0.40/0.70					≥0.02	
1.4401	≤0.07	≤1.00	≤2.00	≤0.045	≤0.030	16.50/18.50	10.50/13.50	2.00/2.50						
1.4404	≤0.03	≤1.00	≤2.00	≤0.045	≤0.030	16.50/18.50	11.00/14.00	2.00/2.50						
1.4408	≤0.07	≤1.50	≤1.50	≤0.045	≤0.030	18.00/20.00	10.00/12.00	2.00/3.00						
1.4462	≤0.03	≤1.00	≤2.00	≤0.030	≤0.020	21.00/23.00	4.50/6.50	2.50/3.50					0.08/0.20	
1.4541	≤0.08	≤1.00	≤2.00	≤0.045	≤0.030	17.00/19.00	9.00/12.00			≥5×C≤0.80				
1.4581	≤0.06	≤1.50	≤1.50	≤0.045	≤0.030	18.00/20.00	10.50/12.50	2.00/2.50			≥8×C			
1.4469	≤0.03	≤1.00	≤1.00	≤0.035	≤0.025	25.00/27.00	6.00/7.00	3.00/5.00	≤1.30			0.12/0.22		
1.4317	≤0.06	≤1.00	≤1.50	≤0.035	≤0.025	12.00/13.50	3.50/5.00	≤0.70						
1.3953	≤0.04	≤1.50	≤2.00	≤0.045	≤0.030	16.50/18.50	13.50/15.50	2.50/3.00						
CF8M	≤0.08	≤2.00	≤1.50	≤0.040	≤0.040	18.00/21.00	9.00/12.00	2.00/3.00						
CF8	≤0.08	≤2.00	≤1.50	≤0.040	≤0.040	18.00/21.00	8.00/11.00							
1Cr13	0.08/0.15	≤1.00	≤0.60	≤0.040	≤0.030	12.00/14.00								
2Cr13	0.16/0.24	≤1.00	≤0.60	≤0.040	≤0.030	12.00/14.00	≤0.60							
3Cr13	0.26/0.35	≤1.00	≤1.00	≤0.035	≤0.030	12.00/14.00	≤0.60						≥0.02	
11Cr17	0.95/1.20	≤1.00	≤1.00	≤0.035	≤0.030	16.00/18.00	≤0.60	≤0.75						
440C	0.95/1.20	≤1.00	≤1.00	≤0.040	≤0.030	16.00/18.00		≤0.75						

