Metal Discs - Iron Base - Steel

Iron Base Steel Carbon Steel Disc

Low Carbon		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Co	N	Nb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.005	0.039	0.0029	0.0027	0.0064	0.0095	0.0197	0.0124	0.002	0.0032	0.0019	0.0001	0.003	(0.005)	0.0011	0.0006	0.0007	0.0003	<0.001	<0.001		Ø44x50mm	CRM	
	%	0.0258	0.155	0.0033	0.0054	0.0253	0.0171	0.0387	0.0197	0.0008	0.0348	0.0021		0.0144	0.0034		0.0015	0.0004	0.0009				Ø30x15mm	CRM Wrought	

Various		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Co	N	Nb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.1744		0.0151	0.001				1.048	0.578													Ø35x30-35mm	CRM	
	%	0.47	0.78	0.029	0.037	0.4	0.135	0.092	(0.06)		(0.007)												Ø35x30-35mm	CRM	
	%	0.401	0.94	0.03	0.03	0.378	0.097	0.068	(0.033)	(0.006)	0.022	0.042							(0.002)				Ø35x30-35mm	CRM	
	%	0.418	0.929	0.031	(0.031)	0.388	0.097	0.068	(0.035)	(0.009)	(0.02)	(0.042)							(0.002)				Ø35x30-35mm	CRM	
	%	0.394	0.594	0.021	0.033	0.287	0.265	0.158	0.138		(0.017)												Ø35x30-35mm	CRM	
	%	0.388	0.61	(0.022)	0.03	0.286	0.261	0.157	0.14		(0.015)												Ø35x30-35mm	CRM	
	%	0.414	0.701	0.02	0.027	0.293	0.104	0.093	0.493		0.056												Ø35x30-35mm	CRM	
	%	0.432	1.41	0.031	(0.07)	0.242	0.408	0.165	0.17	(0.028)	(0.004)	(0.038)					0.033						Ø35x30-35mm	CRM	
	%	0.384	0.93	0.045	(0.047)	0.25	0.418	0.226	0.321	0.043	0.004	0.037					0.028						Ø35x30-35mm	CRM	
	%	0.406	0.931	(0.017)	0.04	0.386	0.345	0.19	0.184	(0.042)		0.038					0.03						Ø35x30-35mm	CRM	
	%	0.312	0.962	0.034	(0.039)	0.4	0.453	0.218	0.358	(0.038)	<0.004	(0.039)					0.066						Ø35x30-35mm	CRM	
	%	0.27	0.979	0.036	(0.047)	0.354	0.441	0.241	0.328	(0.043)		0.04					0.03						Ø35x30-35mm	CRM	
	%	0.355	1.018	(0.018)	(0.06)	0.443	0.415	0.188	0.157	(0.043)	(0.004)	(0.036)					0.046						Ø35x30-35mm	CRM	
	%	0.447	0.73	0.027	0.013	0.277		(0.048)	(0.017)	(0.007)	(0.002)	0.055							(0.002)				Ø35x30-35mm	CRM	
	%	1.2	0.28	0.014	0.01	0.173	0.059	0.072	(0.026)		(0.009)												Ø31x18mm	RM	1144
	%	0.45	1.45	0.009	0.29	0.18	0.089	0.035	0.048	0.008	0.003	0.005	0.002	0.007	0.0059	(0.002)	0.005	0.002	0.003				Ø31x18mm	RM	1045
	%	0.45	0.76	0.006	0.014	0.27	0.09	0.048	0.092	0.018	0.003		<0.0005	0.006	0.0084	0.001	0.007	0.002	0.057	(<0.01)			Ø31x18mm	RM	1030
	%	0.32	0.66	0.009	0.03	0.25	0.17	0.065	0.08	0.011	0.004	0.008	0.0002	0.007	0.0082	0.002	0.008	0.0013	0.024	0.002			Ø31x18mm	RM	1040
	%	0.4	0.67	0.011	0.0053	0.2	0.021	0.028	0.058	0.016	0.029	0.002	0.0013	0.003	0.006	0.0009	0.0013	0.0018	0.0017	0.004			Ø31x18mm	RM	K02600
	%	0.16	0.66	0.015	0.034	0.15	0.41	0.15	0.15	0.048	0.0018	0.007	0.0003	0.008	0.0082	0.002	0.018	0.001	0.002	(0.007)			Ø31x18.75mm	RM	C-1018
	%	0.17	0.81	0.01	0.016	0.27	0.11	0.09	0.081	0.025	0.011	0.0039	0.0002	0.009	0.0079	0.002	0.008	0.001	0.019	(0.003)	(0.002)		Ø31x18.75mm	RM	C-1117
	%	0.2	1.13	0.02	0.076	0.15	0.17	0.08	0.17	0.01	0.002	(0.011)	(0.0004)	0.009	0.008	0.003	0.011	0.002	0.003		(0.001)		Ø31x18mm	RM	1117
	%	0.17	1.07	0.018	0.12	0.05	0.085	0.042	0.076	0.016	0.0033	0.005	(0.0003)	(0.023)	0.0057	(0.0027)	0.0072	0.0014	0.0018	(0.003)			Ø40x40mm	CRM Wrought	
	%	0.4	0.63	0.017	0.009	0.16	0.14	0.13	0.16		(0.01)												Ø40x40mm	CRM Wrought	
	%	0.75	0.47	0.012	(0.005)	0.22	0.12	0.081	0.09		0.02												Ø40x40mm	CRM Wrought	
	%	1.19	0.27	0.013	0.007	0.13	0.059	0.067	0.079		0.03												Ø40x40mm	CRM Wrought	
	%	(0.041)	0.095	0.008	0.006	(0.028)	0.028	0.017	0.011	(0.002)	(0.073)		(0.0002)						(0.004)		(0.009)	/Y	Ø40x30mm	CRM	
	%	0.025	0.138	0.0044	0.021	0.0015	0.384	0.0066	0.205										0.042			/Y	Ø40x30mm	CRM	
	%	0.109	0.75	0.034	0.011	0.52	0.243	0.121	0.202										0.254			/Y	Ø40x30mm	CRM	
	%	0.341	0.923	0.051	0.011	0.416	0.187	0.143	0.069										0.136			/Y	Ø40x30mm	CRM	
	%	0.664	1.25	0.071	0.028	0.164	0.142	0.24	0.073										0.077			/Y	Ø40x30mm	CRM	
	%	1.03	1.63	0.086	0.03	0.176	0.122	0.324	0.063										0.031			/Y	Ø40x30mm	CRM	
	%	1.23	1.87	0.093	0.032	0.805	0.082	0.445	0.321										0.011				Ø37x45mm	CRM	
	%	0.543	0.663	0.024	0.024	0.361	0.118	0.164	0.169		0.089	0.012	0.0621				0.0026						Ø38x25mm	CRM Wrought	0.05C
	%	0.0507	0.246	0.012	0.0127	(0.003)	0.0146	0.0096	0.0114						0.0003								Ø38x25mm	CRM Wrought	0.3C
	%	0.297	0.879	0.0238	0.0371	0.206	0.32	0.168	0.15			0.023					0.0263						Ø38x30mm	CRM Wrought	
	%	1.054	0.226	0.0128	0.0095	0.281		0.053	0.121	0.0089					0.0146	0.00043			0.204				Ø38x30mm	CRM Wrought	
	%	0.105	1.32	0.0128	0.0016	0.262		0.0253	0.0243	0.002	0.046			0.017		0.0252							Ø31x19mm	CRM Wrought	
	%	0.118	0.35	0.035	0.056	0.25	0.09	0.1	0.13	0.05	(0.067)	(<0.005)						(0.0012)	0.02				Ø31x19mm	CRM Wrought	
	%	0.75	0.41	0.009	0.039	0.173	0.072	0.054	0.071	0.013	0.06								0.002				Ø31x19mm	CRM Wrought	
	%	0.97	0.402	0.014	0.026	0.215	0.006	0.007	0.19	0.003	(0.028)			0.003				(0.0008)	0.002				Ø31x19mm	CRM Wrought	
	%	0.072	0.365	0.004	0.018	0.007	0.012	0.018	0.016	0.009	0.061								<0.001				Ø40x15mm	RM Cast	
	%	0.05	2	0.06	0.8	0.15	0.5	0.15	0.15	0.6		0.05		0.1			0.25	0.05					Ø40x15mm	RM Cast	
	%	0.1	1.75	0.05	0.02	0.25	0.4	0.3	0.3	0.45	0.05			0.2			0.15						Ø40x15mm	RM Cast	
	%	0.15	1.25	0.04	0.04	0.35	0.3	0.4	0.4	0.3	0.15	0.1		0.3			0.07	0.1					Ø40x15mm	RM Cast	
	%	0.2	1	0.02	0.05	0.45	0.2	0.5	0.5	0.2	0.2			0.45			0.02						Ø40x15mm	RM Cast	
	%	0.25	0.5		0.06	0.6	0.1	0.7		0.1	0.3	0.1		0.6				0.1					Ø38x19mm	CRM Wrought	
	%	0.91	0.68	0.011	0.031	0.23	0.052	0.038	0.04		0.004												Ø38x19mm	CRM Wrought	
	%	0.0249	0.902	0.121	0.0065	0.015		0.04	0.049	(0.004)				(0.006)	0.0052	0.004							Ø38x19mm	CRM Wrought	
	%	0.0065	0.712	0.0171	0.036	0.0822		0.0196	0.0166	(0.002)				(0.006)	0.0066	0.0174							Ø38x19mm	CRM Wrought	
	%	0.096	1.188	0.011	0.0083	0.0071		0.037	0.0262	(0.004)				(0.006)		0.059							Ø38x19mm	CRM Wrought	
	%	0.275	1.546	0.0611	0.0141	0.51		0.037	0.238	(0.014)				(0.006)	0.0104	0.038							Ø38x19mm	CRM Wrought	
	%	0.489	0.39	0.0373	0.0424	0.328		0.133	0.184	(0.018)				0.0116		0.134							Ø38x19mm	CRM Wrought	
	%	0.112	0.22	0.012	0.0221	0.297					0.0018		0.0015	0.0504		0.0057			0.0221		(0.014)		Ø38x19mm	CRM Wrought	
	%	0.307	0.327	0.0098	0.0448	0.105					0.087		0.0046	0.0217		0.0174			0.153		0.025		Ø38x19mm	CRM Wrought	
	%	0.198	0.479	0.0281	0.0314	0.504					0.055			0.198		0.051			0.105		(0.064)		Ø38x19mm	CRM Wrought	
	%	0.467	0.909	0.0482	0.0481	0.64					0.0154		0.011	0.089		0.0102			0.0585		(0.074)		Ø38x19mm	CRM Wrought	
	%	0.383	0.616	0.0374	0.0099	0.126					0.024		0.0027	0.0106		0.068			0.0322		(<0.0005)		Ø44x19mm	CRM Cast	
	%	0.102	1.3	0.034	0.024	0.263	(0.04)	(0.03)	(0.14)	(0.006)	0.033			(0.09)					(0.002)		(<0.005)		Ø44x19mm	CRM Cast	
	%	0.94	0.66	0.023	0.031	0.057		(0.02)	(0.03)	(0.004)	0.96			(0.06)					(0.001)		(<0.005)		Ø44x19mm	CRM Cast	
	%	0.78	0.236	0.02	0.056	0.97	(0.05)	(0.03)	(0.04)	(0.004)	0.076			(0.01)					(0.001)		(<0.005)		Ø44x19mm	CRM Cast	
	%	0.199	1.91	0.016	0.072	0.75	(0.07)	(0.09)	(0.06)	(0.02)	0.008			(0.01)					(0.001)		(<0.005)		Ø44x19mm	CRM Cast	
	%	0.4	0.345	0.054	0.015	0.54	(0.06)	(0.05)	(0.06)	(0.01)	0.027			(0.008)					(0.001)		(0.12)		Ø38x19mm	RM Wrought	1018
	%	0.168	0.67	0.005	0.03	0.22	0.305	0.083	0.071	0.019	0.002	0.006		0.008	0.009		0.012		0.0006				Ø38x19mm	RM Wrought	
	%	0.022	0.17	0.007	0.012	<0.002	0.036	0.04	0.021	0.002	(0.002)	0.003		0.006	0.0024	<0.002	(0.001)	<0.001	0.001	<0.002			Ø38x19mm	RM Wrought	LF2
	%	0.187	1.01	0.015	0.024	0.237	0.065	0.111	0.152	0.04	0.022	0.003			0.0084								Ø38x19mm	RM Wrought	1035
	%	0.352	0.8	0.011	0.016	0.27	0.217	0.07		0.024	(0.001)	0.005		0.093	0.008		0.009		0.058				Ø38x19mm	RM Wrought	1026
	%	0.234	0.76	0.01	0.015	0.25	0.15	0.08	0.144	0.033	(0.001)	(0.005)		0.005	0.008		0.008		0.06				Ø38-44x19mm	RM Wrought	1045
	%	0.48	0.72	0.011	0.025	0.24	0.016	0.017	0.024	0.006	(0.065)				0.0054		<0.002						Ø38-44x19mm	RM	1045
	%	0.46	0.75	0.016	0.025	0.34	0.22	0.055	0.056	0.011	0.002	0.005	0.0002		0.009		0.03	0.0015	0.012				Ø38-44x19mm	RM Wrought	
	%	0.196	0.554	0.009	0.027	0.202	0.197	0.07	0.12	0.018	(0.002)			0.007	0.0077		0.008		0.063				Ø38-44x19mm	RM Wrought	1095
	%	0.92	0.22	0.015	0.0025	0.22	0.016	0.038	0.26	0.008					0.0084		<0.003	0.002					Ø35-45x19-20mm	RM Wrought	1005
	%	0.043	0.32	0.003	0.014	0.01	0.018	0.017	0.014	0.005	0.069	0.003		0.003	0.0048	<0.002	0.006	<0.001	<0.002	<0.002			Ø35-45x19-20mm	RM Wrought	3115
	%	0.158	0.52	0.005	0.011	0.28	0.027	1.27	0.65	0.02	0.006	0.003		0.017	0.0078	(0.001)	0.002	0.002	0.031	0.002	<0.002		Ø35-45x19-20mm	RM Wrought	1340
	%	0.438	1.75	0.012	0.024	0.28	0.015	0.018	0.041	0.007	0.033	0.002		0.006	0.0058	<0.002	(0.001)	0.002	<0.003	<0.002	(<0.002)		Ø40x25mm	RM Wrought	
	%	0.11	0.38	0.007	0.01	0.23	0.099	0.069	0.054	0.012	(<0.1)	0.026				(<0.005)	0.012						Ø40x25mm	RM Wrought	
	%	0.092	1.05	0.06	(0.01)	0.24	0.108	0.065	0.048	0.009	(<0.1)	0.075				(<0.005)	0.011		(0.001)				Ø40x25mm	RM Wrought	
	%	0.34	0.72	0.014	0.016	0.22	0.089	0.091	0.17	0.013	(<0.1)	0.019				(<0.005)	0.009			0.003			Ø40x25mm	RM Wrought	
	%	0.6	0.66	0.014	0.02	0.32	0.078	0.06	0.062	0.009	(<0.1)	0.015				(<0.005)	0.009	(0.018)	(0.003)	(0.006)			Ø40x25mm	RM Wrought	
	%	0.74	0.31	0.012	0.016	0.21	0.082	0.067	0.076	0.012	(<0.1)	0.02				(<0.005)	0.008		(0.001)	(0.077)			Ø40x25mm	RM Wrought	
	%	0.23	0.66	0.006	0.009	0.28	0.107	0.1	0.089	0.01	(<0.1)	0.024				(<0.005)	0.012		(0.001)	(0.005)			Ø40x25mm	RM Wrought	
	%	0.45	0.59	0.009	0.022	0.29	0.087	0.13	0.12	0.016	(<0.1)	0.018				(<0.005)	0.011	(0.014)	(0.002)	(0.007)			Ø40x25mm	RM Wrought	
	%	0.8	0.31	0.026	0.02	0.2	0.089	0.035	0.018	0.003	0.019	0.025				(0.003)	0.015	(0.001)	0.004	(0.0045)			Ø40x25mm	RM Wrought	
	%	0.18	0.55	0.01	0.034	0.28	0.168	0.104	0.05	0.018	0.057	0.025				(0.008)	0.012	(0.002)	0.004	(0.007)			Ø40x25mm	RM Wrought	
	%	0.34	0.64	0.012	0.027	0.255	0.12	0.12	0.165	0.03	0.031	0.015				(0.006)	0.009	(0.001)	0.003	(0.009)			Ø40x25mm	RM Wrought	
	%	1.14	0.27	0.007	0.016	0.245	0.055	0.029	0.055	0.003	0.031	0.015				(0.001)	0.005	(0.001)	0.006	(0.003)			Ø40x25mm	RM Wrought	
	%	0.44	0.7	0.024	(0.022)	0.27	0.23	0.06	0.077	0.012	(<0.1)	0.021				(<0.005)	0.02		(0.001)				Ø75x26mm	RM Wrought	
	%	0.5	0.7	0.047	(0.045)	0.3	0.16	0.048	0.03	0.004	(<0.1)	0.029				(<0.005)	0.058		(0.001)	(0.005)		/Y	Ø35x30mm	CRM Wrought	
	%	0.0037	0.011	0.0025	0.0022	(0.009)	(0.001)	(0.001)	(0.003)		(0.002)			(0.003)				(0.002)				/Y	Ø35x30mm	CRM Wrought	
	%	0.0083	0.049	0.0072	0.004	0.03					(0.003)							0.003				/Y	Ø35x30mm	CRM Wrought	
	%	0.019	0.097	0.017	0.0057	0.048					0.015							0.006				/Y	Ø35x30mm	CRM Wrought	
	%	0.05	0.14	0.027	0.0089	0.067					0.049							0.009				/Y	Ø85x30mm	CRM Wrought	
	%	0.001	0.004	0.0021	0.0046	(0.002)	0.005	0.009	0.007	0.005	(0.001)			0.009		0.004		0.004	0.005	(0.006)	0.006	/Y	Ø35x30mm	CRM Wrought	
	%	0.0012				(0.004)	0.01	0.014	0.013	0.01				0.014		0.009		0.005	0.01	0.01	(0.003)	/Y	Ø35x30mm	CRM Wrought	
	%	0.0024				0.006	0.049	0.054	0.053	0.03				0.035		0.03		0.021	0.03	0.03	(0.002)	/Y	Ø35x30mm	CRM Wrought	
	%	0.0032				(0.009)	0.099	0.103	0.102	0.062				0.065		0.06		0.052	0.06	0.058	0.011	/Y	Ø35x30mm	CRM Wrought	
	%	0.049	(0.41)			0.21		0.015	0.011	0.095	0.044	0.0097					0.006	0.078				/Y	Ø35x30mm	CRM Wrought	
	%	0.05	(0.41)			0.2		0.047	0.096	0.069	0.046	(0.005)					0.012	0.012				/Y	Ø35x30mm	CRM Wrought	
	%	0.053	(0.41)			0.19		0.077	0.042	0.01	0.043	0.031					0.066	0.103				/Y	Ø35x30mm	CRM Wrought	
	%	0.051	(0.41)			0.19		0.101	0.07	0.039	0.05	0.046					0.039	0.046				/Y	Ø35x30mm	CRM Wrought	
	%	0.05	(0.41)			0.21					0.019		0.0014	0.052		0.05			0.01		0.008	/Y	Ø35x30mm	CRM Wrought	
	%	0.05	(0.41)			0.2					0.031		0.0028	0.038		0.03			0.03		0.016	/Y	Ø35x30mm	CRM Wrought	
	%	0.048	(0.41)			0.2					0.047		0.0048	0.028		0.02			0.059		0.02	/Y	Ø35x30mm	CRM Wrought	
	%	0.049	(0.41)			0.2					0.073		0.0072	0.013		0.01			0.092		0.039	/Y	Ø35x30mm	CRM Wrought	
	%	0.099	0.43	0.029	0.03	0.116	0.102	0.011	0.011													/Y	Ø35x30mm	CRM Wrought	
	%	0.138	0.43	0.029	0.03	0.117	0.101	0.011	0.01													/Y	Ø35x30mm	CRM Wrought	
	%	0.196	0.43	0.029	0.03	0.117	0.101	0.011	0.011													/Y	Ø35x30mm	CRM Wrought	
	%	0.39	0.56	0.019	0.019	0.25	0.102	0.011	0.011													/Y	Ø35x30mm	CRM Wrought	
	%	0.61	0.55	0.019	0.019	0.25	0.102	0.011	0.013													/Y	Ø35x30mm	CRM Wrought	
	%	0.75	0.55	0.019	0.019	0.25	0.101	0.011	0.013														Ø40x20mm	CRM Wrought	

Iron Base Steel Low Alloy Disc

		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Ce	N	Pb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.363	0.626	0.038	0.011	0.343	0.276	0.683	0.608	0.309	0.041	0.053	0.0034			0.0062	0.03	0.041	0.282	0.041	0.003		Ø40x20mm	CRM Wrought	
	%	0.15	0.951	0.078	0.046	0.194	0.484	3.71	0.209	0.099	0.106	0.023	0.0018			0.0073	0.065	0.07	0.376	0.468	0.009		Ø40x20mm	CRM Wrought	
	%	0.843	0.334	0.018	0.031	0.926	0.108	0.129	3.02	1.32	0.345	0.017	0.001			0.0024	0.03	0.269	0.136	0.222	0.032		Ø31x18mm	RM Wrought	4820
	%	0.2	0.54	0.009	0.024	0.28	0.12	3.34	0.13	0.25	0.03		0.0003		0.0096	(<0.01)	0.006	0.002	0.001	(<0.01)			Ø31x18mm	RM Wrought	E9310
	%	0.11	0.52	0.017	0.016	0.26	0.17	2.97	1.3	0.12	0.037		0.0003		0.0088	(0.002)	0.009	0.002	0.006	0.076			Ø31x18mm	RM Wrought	
	%	0.004	1.57	0.004	0.07		0.88	1.29	0.032	0.009	0.72		(0.0001)		0.0003		0.002	0.002	0.78	1.44			Ø31x18mm	RM Wrought	
	%	0.003	1.65	0.005	0.086	0.021	1.4	1.43	0.036	0.009	0.8		(0.001)		0.0004		0.002	0.002	1.13	1.57			Ø31x18mm	RM Wrought	
	%	0.003	1.29	0.005	0.073	0.91	0.64	0.77	0.014	1.08	0.55		(0.0002)		0.0002		(0.003)	0.002	0.4	1.02			Ø31x18mm	RM Wrought	
	%	0.003	1.36	0.019	0.087	1.08	0.95	1.01	0.016	1.25	0.64		(0.0002)		0.0005		0.003	0.003	0.59	1.19			Ø31x18mm	RM Wrought	
	%	0.003	0.12	0.03	0.064	0.46	0.009	2.32	0.004	0.69	0.19		0.0004		0.0002		0.003	0.004	0.004	0.52			Ø31x18mm	RM Wrought	
	%	0.31	0.21	0.033	0.065	0.79	0.31	2.5	2.19	0.95	0.3		(0.001)		0.0004		0.003	0.005	0.006	0.65			Ø31x18mm	RM Wrought	
	%	0.56	0.019	0.039	0.025	0.01	0.005	1.51	2.55	1.57	0.032		(0.0002)		0.0003		0.002	0.006	0.006	(0.02)			Ø31x18mm	RM Wrought	
	%	0.78	0.01	0.007	0.004	1.29	0.4	0.025	3.52	0.014	0.39		0.0003		0.0004		0.003	0.003	0.003	0.038			Ø31x18mm	RM Wrought	
	%	0.85	0.011	0.015	0.004	1.7	0.72	0.024	4.39	0.015	0.48		0.0004		0.0006		0.003	0.004	0.28	0.041			Ø31x18mm	RM Wrought	
	%	0.007	0.41	0.004	0.046	0.023	0.89	1.29	0.037	0.006	0.76		0.0004		0.0096		0.002	0.002	0.76	1.48			Ø31x18mm	RM Wrought	
	%	0.007	1.76	0.004	0.095	0.026	1.45	1.4	0.044	0.009	0.87				0.0185		0.002	0.003	1.12	1.65			Ø31x18mm	RM Wrought	86L20
	%	0.2	0.9	0.028	0.023	0.25	0.23	0.5	0.56	0.18	0.02		0.0003		0.0067	0.14	0.012	0.005	0.005	(0.01)			Ø31x18mm	RM Wrought	1215
	%	0.068	0.9	0.069	0.26	(0.019)	0.098	0.044	0.041	0.012	0.004	0.008	0.0006		0.0119		0.005	0.0015	0.002			/Y	Ø30x30mm	CRM Wrought	
	%	0.483	0.343	0.01	0.041	0.194	0.497	1.09	0.717	1.2	0.484	0.0078	0.0012				0.011	0.141	0.301	1.3	0.0036	/Y	Ø30x30mm	CRM Wrought	
	%	0.658	0.12	0.0044	0.0018	0.069	0.385	0.774	0.35	0.266	1.51	0.012					0.011	0.483	0.447	0.897	0.156	/Y	Ø30x30mm	CRM Wrought	
	%	0.106	1.07	0.022	0.014	0.481	0.099	1.46	1.45	1.21	0.108	0.011	0.0016				0.02	0.343	0.083	0.307	0.024	/Y	Ø30x30mm	CRM Wrought	
	%	0.345	0.674	0.036	0.052	0.41	0.999	1.94	1.04	0.116	0.271	0.0075	0.01				0.039	0.242	0.198	0.598	0.039	/Y	Ø30x30mm	CRM Wrought	
	%	0.211	1.36	0.046	0.021	0.174	0.233	0.487	0.124	0.472	0.866	0.062	0.0089				0.0077	0.812	0.619	1.6	0.077	/Y	Ø30x30mm	CRM Wrought	
	%	0.034	1.96	0.069	0.011	0.663	0.06	0.102	1.92	0.674	0.0093	0.093	0.0041				0.0045	0.017	0.042	0.106	0.0045	/Y	Ø38x30mm	CRM	
	%	0.162	0.626	0.044	0.0096	0.191	0.314	3.29	3.03	0.331	0.032	0.019	0.0061	0.018	0.01	0.0009	0.045	0.227	0.215	0.457		/Y	Ø38x30mm	CRM	
	%	0.137	3.74	0.058	0.057	0.105	0.083	4.22	0.864	0.061	0.018	0.028	0.0005	0.0006	0.0079	0.0011	0.064	0.345	0.503	0.109		/Y	Ø38x30mm	CRM	
	%	0.227	0.771	0.038	0.021	0.324	0.244	1.15	2.22	0.577	0.054	0.011	0.0044	0.0019	0.0054		0.01	0.335	0.347	0.757		/Y	Ø38x30mm	CRM	
	%	0.061	2.71	0.049	0.02	0.104	0.342	2.86	4.88	1.41	0.012	0.016	0.0019		(0.035)		0.036	0.101	0.404	1.99		/Y	Ø38x30mm	CRM	
	%	0.273	1.92	0.034	0.036	0.458	0.247	0.924	3.59	0.196	0.17	0.025	0.011		(0.027)	0.0007	0.028	0.116	0.301	0.21		/Y	Ø38x40mm	CRM	
	%	0.481	0.345	0.0072	0.055	0.92	0.526	0.151	0.194	0.422	0.441	0.0047	0.03		0.0068	0.015	0.0042	0.046	0.013	0.429		/Y	Ø38x30mm	CRM	
	%	0.436	0.452	0.032	0.0008	0.547	0.54	0.178	0.147	0.447	0.549	0.0063	0.024	0.128	0.0043	0.014	0.0072	0.058	0.062	0.238			Ø37x40mm	CRM Wrought	
	%	0.447	0.825	0.028	0.022	1.2	0.252	0.434	1.1	0.036	0.07	0.023	0.015			0.0062	0.0063	0.065	0.219	0.015	0.0011	/Y	Ø38x30mm	CRM Wrought	
	%	0.076	1.1	0.0072	0.0094	1.64	0.034	0.025	0.013	0.02		0.0092	5.5				0.0093	0.272	0.391			/Y	Ø38x30mm	CRM Wrought	
	%	0.222	0.95	0.023	0.037	1.18	0.148	0.224	0.254	0.532		0.084	0.0092				0.03	0.574	0.34			/Y	Ø38x30mm	CRM Wrought	
	%	0.316	0.613	0.047	0.013	0.568	0.239	0.782	1.46	0.116		0.046	0.0059				0.053	0.299	0.451			/Y	Ø38x30mm	CRM Wrought	
	%	0.625	0.758	0.045	0.034	0.548	0.378	0.742	1.06	0.212		0.031	0.0044				0.025	0.65	0.195			/Y	Ø38x30mm	CRM Wrought	
	%	0.425	1.39	0.015	0.019	0.127	0.135	1.5	0.465	0.333		0.018	7.8				0.095	0.076	0.029			/Y	Ø38x30mm	CRM Wrought	
	%	0.847	0.29	0.027	0.013	0.752	0.233	0.441	0.753	0.484		0.0054	0.0021				0.055		0.132			/Y	Ø38x30mm	CRM Wrought	
	%	0.17	1.73	0.016	0.025	0.248	0.116	0.077	0.416	0.062		0.027	0.0087				0.074	0.12	0.061				Ø44x13mm	CRM Wrought	
	%	(0.003)	0.047	0.004	0.0038	0.001	0.006	0.018	0.013	0.001	(0.001)	0.001					0.0011	(0.5)		<1			Ø44x13mm	CRM Wrought	
	%	0.225	0.06	0.007	0.123	3.15	<0.093	0.725	0.66	0.385	0.016	0.027	0.0069		-50	5	0.113	0.149	0.302	0.188	0.001		Ø44x13mm	CRM Wrought	
	%	1.38	0.37	0.008	0.006	0.123	0.293	2.82	0.122	0.011	0.023	0.005	0.0003		49	(<5)	0.004	0.004	0.027	0.016	0.001		Ø44x13mm	CRM Wrought	
	%	0.047	1.74	0.009	0.012	1.02	0.568	1.09	0.024	0.036	0.15	0.005	0.0005		36	<5	0.051	0.003	0.004	0.354	0.078		Ø44x13mm	CRM Wrought	
	%	1.013	2.23	0.028	(0.01)	3.48	0.089	0.25	2.33	0.016	0.023	0.006	0.0005		104	(<5)	0.008	0.01	0.017	(0.001)	(0.002)		Ø44x13mm	CRM Wrought	
	%	0.566	0.715	0.024	(0.02)	0.23	0.179	3.84	0.032	0.123	0.06	0.022	0.0116		51	0.002	0.003	0.022	0.178	(0.001)	0.002		Ø44x13mm	CRM Wrought	
	%	0.393	1.31	0.013	0.007	1.41	0.227	1.58	1.51	0.255	0.042	0.007	0.0009		-50	(<5)	0.018	0.047	0.021	0.054	0.5		Ø44x13mm	CRM Wrought	
	%	0.119	0.525	0.035	0.018	0.567	0.036	0.085	3.51	0.565	0.019	(0.007)	0.0006		122	0.003	0.013	0.087	0.558	0.67	0.013		Ø44x13mm	CRM Wrought	
	%	0.332	0.169	0.006	0.033	0.775	0.057	0.445	5.11	1.28	0.093	(0.005)	0.0047		76	0.001	0.005	0.034	0.802	0.091	0.052		Ø44x13mm	CRM Wrought	
	%	0.175	0.262	0.032	0.051	0.286	0.06	5.34	1.065	0.837	0.041	0.08	0.003		-40	0.002	0.029	0.326	0.054	1.3	0.005		Ø31x19mm	CRM Wrought	
	%	0.196	0.152	0.008	0.017	0.13	0.043	2.81	1.53	0.344	0.109	0.019					0.012	0.04	0.0057				Ø32x17mm	RM Wrought	
	%	0.95	0.081	0.01	0.01	0.365	0.116	0.127	1.58	0.3	0.016	0.002	(<0.0002)	0.023	0.0141	0.004	0.024	0.055	0.105	0.014	0.005		Ø32x17mm	RM Wrought	
	%	0.211	0.316	0.018	0.005	0.015	0.023	0.43	0.081	0.05	0.016	0.05	(0.00002)	(<0.0005)	0.0099	0.0009	0.061	0.004	0.01	0.04	(0.01)		Ø32x17mm	RM Wrought	
	%	0.642	1.71	0.028	0.006	1.26	1.14	0.95	0.05	0.004	0.024		(0.0001)	0.009	0.009	0.021	0.097	0.03	0.01	(0.002)	(<0.001)		Ø38x17mm	RM Chill Cast	
	%	0.142	1.12	0.016	0.008	0.058	0.03	0.029	0.044	0.008	0.041	0.003											Ø38x19mm	RM Wrought	3310
	%	0.13	0.51	0.012	0.017	0.24	0.089	3.28	1.53	0.052	0.014	0.004			0.0096		0.006		0.003				Ø38x19mm	RM Wrought	8620
	%	0.195	0.72	0.008	0.011	0.21	0.026	0.47	0.53	0.164	0.036	0.003			0.0042		0.0017		0.001				Ø38x19mm	RM Wrought	4140
	%	0.42	0.91	0.01	0.018	0.33	0.128	0.1	0.97	0.176	0.023	0.008			0.0073		0.008		0.003				Ø38x19mm	RM Wrought	4130
	%	0.321	0.54	0.016	0.018	0.27	0.2	0.19	1.01	0.229	0.02	0.004			0.007		0.012		0.005				Ø38x19mm	RM Wrought	
	%	0.208	0.546	0.011	0.021	0.264	0.202	0.112	0.105	0.519	0.048												Ø38x19mm	RM Wrought	E4320
	%	0.215	0.565	0.016	0.022	0.236	0.133	1.67	0.51	0.27	0.022				0.0079								Ø38x19mm	RM Wrought	4617
	%	0.168	0.58	0.007	0.018	0.244	0.146	1.83	0.138	0.219	0.023	0.005			0.0072		0.007		(0.001)				Ø38x12mm	RM Wrought	4140
	%	0.43	0.76	0.027	0.037	0.2	0.006	0.012	0.84	0.16	0.036	(0.002)			0.0064	0.004	(0.002)	0.003	0.005				Ø38x12mm	RM Wrought	4142SE
	%	0.428	0.85	0.015	0.031	0.17	0.13	0.081	0.84	0.164	0.017	0.016			0.0087	0.002	0.015		0.003				Ø38x12mm	RM Wrought	4150MOD
	%	0.47	0.9	0.024	0.079	0.21	0.19	0.15	1.01	0.21	0.012	0.005			0.0087	0.001	0.013		0.008				Ø37x19mm	RM Wrought	4330
	%	0.318	0.91	0.008	0.0009	0.24	0.181	1.91	0.91	0.475	0.021	(0.006)			0.0076		0.01	(0.004)	0.094				Ø37x19mm	RM Wrought	4340
	%	0.414	0.74	0.004	<0.001	1.65	0.134	1.78	0.78	0.35	0.076	0.007			0.002		0.009	0.004	0.056				Ø38x19mm	RM Wrought	4620
	%	0.189	0.57	0.006	0.018	0.25	0.216	1.75	0.072	0.24	0.032	0.0084	0.00006		0.0078	0.0002	0.013	0.0026	(0.0008)	0.0009			Ø38x19mm	RM Wrought	6150
	%	0.49	0.79	0.012	0.017	0.27	0.106	0.074	0.96	0.039	0.024	(0.004)			0.0076		0.006		0.164				Ø38x19mm	RM Wrought	AI93
	%	0.414	0.56	0.015	0.021	0.22	0.165	0.16	0.97	0.54	(0.004)	0.005			0.008		0.014		0.28				Ø35-44x19mm	RM Wrought	4615
	%	0.15	0.59	0.01	0.02	0.28	0.215	1.74	0.14	0.21	0.03				0.0086		0.01		(0.003)				Ø35-44x19mm	RM Wrought	
	%	0.44	0.96	0.067	0.088	0.18	0.06	0.18	0.16	0.08	0.029				0.0027		0.005						Ø38x12mm	RM Wrought	E52100MOD
	%	1.01	0.36	0.011	0.012	0.26	0.07	0.072	1.37	0.024	0.019	0.004			0.0086	0.0005	0.008		0.005				Ø38x19mm	RM Wrought	6418
	%	0.255	1.42	0.01	0.004	1.54	0.11	1.74	0.34	0.42	0.027	0.0044			0.0066		0.006	0.003	0.003				Ø38x12mm	RM Wrought	8620mod
	%	0.202	0.84	0.014	0.029	0.23	0.135	0.44	0.59	0.17	0.022	0.005			0.01	(0.0002)	0.009		0.003				Ø38x19mm	RM Wrought	K90901
	%	0.107	0.333	0.008	0.008	0.327	0.115	0.123	8.22	0.9	0.017	0.007			0.055		0.009	(0.002)	0.236	0.003			Ø35x30-35mm	CRM Wrought	

Various		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Co	N	Nb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.105	0.38	0.008	0.02	0.07	0.209	3.26	0.71	0.04	0.035												Ø35x30-35mm	CRM Wrought	
	%	0.107	0.671	0.023	0.033	0.415	0.21	1.36	1.06	0.064		(0.042)					(0.02)		(0.008)				Ø35x30-35mm	CRM Wrought	
	%	0.462	0.292	(0.02)	(0.01)	0.385	(0.025)	4.7	(0.388)	1.17	(0.014)				4.7				0.478				Ø35x30-35mm	CRM Wrought	
	%	0.355	0.403	0.01	(0.018)	0.325	0.096	3.64	1.65	0.072	(0.038)						(0.01)		(0.01)				Ø35x30-35mm	CRM Wrought	
	%	0.386	0.458	0.017	(0.008)	0.263	0.06	2.88	0.734	(0.036)	(0.012)	(0.047)											Ø35x30-35mm	CRM Wrought	
	%	0.174	0.774	(0.016)	(0.016)	0.288		0.054	1.02	0.238	(0.025)												Ø35x30-35mm	CRM Wrought	
	%	0.475	0.604	(0.01)	(0.04)	1.666	(0.133)	(0.076)	(0.158)	(0.044)	(0.036)												Ø35x30-35mm	CRM Wrought	
	%	(0.246)	0.46	0.037		0.378	(0.118)	0.956		0.207	(0.114)						(0.057)	0.06	0.05				Ø35x30-35mm	CRM Wrought	
	%	(0.244)	0.466	0.037		0.38	0.117	0.962		0.204	(0.102)						0.059	(0.049)	0.051				Ø35x30-35mm	CRM Wrought	
	%	(0.243)	0.47	0.037		0.381	0.119	0.983		0.208	(0.089)						0.059	(0.041)	0.051				Ø35x30-35mm	CRM Wrought	
	%	1.016	0.328	0.024	(0.034)	0.291	0.143	0.085	1.5	(0.016)		(0.011)					(0.011)	(0.002)					Ø31x18mm	RM	4130
	%	0.29	0.48	0.009	0.009	0.28	0.13	0.14	0.931	0.2	0.018		0.0001	0.009	0.008	(0.002)	0.012	0.001	0.004				Ø31x18.75mm	RM Wrought	C-4140
	%	0.39	0.84	0.021	0.016	0.28	0.16	0.18	0.94	0.16	0.02		(0.0001)	0.009	0.0108	(0.002)	0.014	0.003	0.004		(0.002)		Ø31x18.75mm	RM Wrought	C-4340
	%	0.41	0.75	0.012	0.028	0.22	0.19	1.66	0.85	0.22	0.036	(0.006)	(0.0002)	0.011	0.12	0.003	0.008	0.003	0.004	(<0.02)	(0.003)		Ø31x18.75mm	RM Wrought	C-8620
	%	0.2	0.81	0.016	0.024	0.25	0.14	0.44	0.54	0.15	0.038		0.0002	0.009	0.0078	0.003	0.011	0.001	0.004	(<0.01)	(0.002)		Ø31x18.75mm	RM Wrought	C-4620
	%	0.19	0.54	0.01	0.014	0.22	0.15	1.68	0.17	0.22	0.022		0.0002	0.01	0.007	0.003	0.01	0.003	0.002	<0.01	(0.003)		Ø31x18.75mm	RM Wrought	C-6150
	%	0.48	0.81	0.021	0.021	0.29	0.21	0.14	0.94	0.053	0.024		0.0002	0.009	0.0089	0.002	0.012	0.002	0.16	(<0.01)	(0.002)		Ø31x18.75mm	RM Wrought	E52100
	%	1.04	0.31	0.009	0.013	0.26	0.082	0.064	1.35	0.015	0.016	0.004	(0.0001)	0.007	0.0078	0.001	0.005	0.003	0.008	(<0.005)	(<0.01)		Ø40x40mm	CRM Wrought	
	%	0.033	1.97	0.01	0.007		0.46	2.06	0.035	0.01	0.036								0.3				Ø40x40mm	CRM Wrought	
	%	1.11	0.15	0.014		1.063	0.13	0.021	1.59	0.43	0.017												Ø40x40mm	CRM Wrought	
	%	0.5	0.77	0.068	0.052	0.44	0.27	0.58	0.57	0.18	0.024					0.041		0.19	0.18				Ø40x40mm	RM	
	%	0.011	0.015	0.008	0.01	0.009	0.051	0.019	0.007	0.025	0.008				0.0058		0.026		0.002				Ø40x40mm	RM	
	%	0.106	0.31	0.01	0.039	0.55	0.036	0.23	0.072	0.084	0.017				0.013				0.022				Ø40x40mm	RM	
	%	0.195	0.43	0.022	0.016	0.27	0.055	0.046	0.034	0.043	0.034				0.01	0.013	0.15	0.01	0.045				Ø40x40mm	RM	
	%	0.24	0.5	0.022	0.025	0.1	0.11	0.13	1.25	0.05	0.007				0.0154				0.039				Ø40x40mm	RM	
	%	0.35	1.16	0.024	0.021	0.33	0.51	0.1	0.42	0.11	(0.029)				0.0142		0.008	(0.005)	0.096				Ø40x40mm	RM	
	%	0.36	0.65	0.045	0.024	0.043	0.25	0.35	0.27	0.07	(0.015)				0.0087	0.009			(0.063)				Ø40x40mm	RM	
	%	0.64	0.94	0.025	0.035	0.25	0.33	0.022	0.72	0.074	0.025				0.013			(0.0008)	0.076				Ø40x40mm	RM	
	%	0.49	0.77	0.038	0.015	0.43	0.41	0.29	0.94	0.024	0.023				0.0154	0.041		(0.0014)	0.087				Ø40x40mm	RM	
	%	0.69	1.72	0.026	(0.049)	0.3	0.18	0.19	0.14	0.058	(0.014)				0.012		0.22		0.059				Ø40x40mm	RM	
	%	0.93	1.15	0.018	0.0064	0.16	0.042	0.049	0.062		0.01				0.0086			(0.0007)	0.006				Ø40x40mm	CRM Wrought	
	%	0.4	1.53	0.023	(0.009)	0.29	0.45	0.15	0.62	1.5									(0.013)				Ø40x40mm	CRM Wrought	
	%	0.41	0.25	0.012	(0.009)	1.38	0.094	2.35	0.12	(0.041)													Ø40x40mm	CRM Wrought	
	%	0.41	0.6	0.018	0.011	0.104	0.17	0.28	2.85	0.13									0.28				Ø40x40mm	CRM Wrought	
	%	0.43	0.14	(0.009)	0.01	0.17	(0.034)	4.01	0.12	(0.007)									0.19				Ø40x40mm	CRM Wrought	
	%	0.44	0.43	0.017	(0.009)	0.79	0.12	0.6	1.02	0.27									0.52				Ø40x40mm	CRM Wrought	
	%	0.41	0.25	0.011	0.007	1.69	0.41	0.69	0.43	0.66									0.19				Ø40x40mm	CRM Wrought	
	%	0.46	1.05	0.028	0.012	0.58	0.14	0.15	1.67	0.48									0.34				Ø40x40mm	CRM Wrought	
	%	0.4	1.81	0.026	0.012	0.35	0.31	1.44	0.2	0.21									0.079				Ø35x42mm	CRM	
	%	0.374	0.335	0.0085	0.0079	1.04	0.133	0.085	5.11	1.23									0.91			/Y	Ø36x25mm	CRM Wrought	

	%	0.094	2.02	0.0086	0.056	0.701	0.218	1.26	0.93	0.46	0.011		0.0002					0.032	0.28			/Y	Ø36x25mm	CRM Wrought	
	%	0.196	1.47	0.0202	0.007	0.397	0.095	0.759	1.21	0.25	0.061		0.0032					0.093	0.105			/Y	Ø36x25mm	CRM Wrought	
	%	0.428	0.837	0.0185	0.017	1.05	0.039	0.102	0.71	0.2	0.191		0.0002					0.165	0.21			/Y	Ø36x25mm	CRM Wrought	
	%	0.696	0.681	0.045	0.041	0.264	0.318	0.305	0.51	0.18	0.22		0.005					0.243	0.103			/Y	Ø36x25mm	CRM Wrought	
	%	0.943	0.44	0.035	0.044	0.576	0.05	0.508	0.264	0.35	0.093		0.0024					0.415	0.36			/Y	Ø36x25mm	CRM Wrought	
	%	1.261	0.083	0.055	0.008	0.187	0.176	0.942	0.131	0.14	0.125		0.0041					0.074	0.031			/Y	Ø35x60mm	CRM Wrought	
	%	0.05	0.975	0.0036	0.0084	0.32	0.1	2.21	0.415	0.37	0.13							0.027	0.23			/Y	Ø35x60mm	CRM Wrought	
	%	0.15	0.86	0.0057	0.022	0.145	0.14	3.04	0.76	0.21	0.036							0.06	0.14			/Y	Ø35x60mm	CRM Wrought	
	%	0.31	0.71	0.026	0.0031	0.27	0.18	4.01	1.57	0.029	0.175							0.16	0.064			/Y	Ø35x60mm	CRM Wrought	
	%	0.45	0.49	0.02	0.027	0.41	0.11	1.7	1.21	0.505	0.129							0.0099	0.31			/Y	Ø35x60mm	CRM Wrought	
	%	0.63	0.31	0.039	0.047	0.125	0.3	1.04	1.94	0.083	0.258							0.195	0.39				Ø35x42mm	CRM	
	%	0.869	0.963	0.0029	0.062	0.072	0.028	0.073	2.45	0.057	0.015		0.002	0.059		0.438		0.508	0.032	2.38			Ø35x30mm	CRM Wrought	
	%	0.598	0.07	0.0267	(0.0006)	0.579	0.111	0.078	1.08	0.07				(0.0153)	0.0068	0.00144		(0.0014)	0.188	1.87			Ø35x30mm	CRM Wrought	
	%	0.195	1.354	0.014	0.025	0.026	0.161	0.096	1.186	0.035	0.046	0.018	0.0004	0.014	0.014		0.011						Ø35x30mm	CRM Wrought	
	%	0.139	0.972	0.0063	0.0086	0.404	0.598	1.178	0.182	0.347	0.0257	0.0062	(0.0002)	0.0073	0.0108	0.0232		(0.0013)	(0.0019)				Ø38x30mm	CRM Wrought	
	%	(0.73)	0.571	0.016	0.0121	0.466	0.0355	0.327	1.566	0.768					0.01				0.312				Ø31x16mm	RM Wrought	
	%	0.43	1.45	0.043	0.031	0.63	0.48	0.97	1.09	0.31	0.13	(0.037)	0.006	0.08		0.06	0.081	0.12	0.12		0.1		Ø31x16mm	RM Wrought	
	%	0.22	1.28	0.05	0.034	0.42	0.23	0.49	1.22	0.27	0.25	0.016		0.11		0.22	0.061	0.25	0.14		0.04		Ø31x16mm	RM Wrought	
	%	0.15	1.51	0.053	0.045	1.49		1 1.6	1.37	1.03	0.65			0.47		0.2		0.28	0.44		0.09		Ø32x10mm	RM Wrought	709
	%	0.48	0.56	0.009	0.005	0.28	0.06	0.13		1 0.53							0.003		0.3				Ø45x30mm	RM	
	%	0.52	1.04	0.039	0.025	0.486	0.262	0.786	0.697	0.398	0.098	0.031	0.0057	0.052	0.0053	0.056	0.0165	0.078	0.33	0.139	0.025		Ø45x30mm	RM	
	%	1.075	2.38	0.04	0.013	0.34	0.242	0.603	2.35	0.128	0.016	0.027	0.0018	0.013	(0.0085)	0.086	0.033	0.013	0.156	0.194	0.005		Ø45x30mm	RM	
	%	0.252	1.85	0.018	0.007	1.16	0.52	1.01	0.217	0.048	0.013	0.023	0.004	0.103	0.0076	0.007	0.083	0.002	0.083	0.386	0.002		Ø35x19mm	CRM Cast	
	%	0.043	0.21	0.011	0.0137	1.46	0.047	0.04	0.02	1.08	0.02					0.16	0.002	0.17	0.46				Ø35x19mm	CRM Cast	
	%	0.031	0.31	0.014	0.082	1.19	0.18	2.43	1.25	0.47	0.18	0.007		0.012		(0.03)		0.05	0.042				Ø35x19mm	CRM Cast	
	%	0.104	0.49	0.053	0.073	0.81	0.166	1.93	0.14	0.91	0.042	0.07	(0.002)	0.011			0.06	0.11	0.23				Ø35x19mm	CRM Cast	
	%	0.12	0.75	0.041	0.052	0.73	0.2	1.32	0.59	0.25	(0.01)	0.13	0.004	0.07		0.044	0.1	0.12	0.67				Ø35x19mm	CRM Cast	
	%	0.34	0.99	0.071	0.042	0.7	0.29	0.32	0.79	0.55	0.03	0.06	0.008			0.16	0.13	0.09	0.8				Ø35x19mm	CRM Cast	
	%	0.36	1.13	0.063	0.023	0.55	0.25	0.92	1.45	0.062	0.1	0.007					0.007	0.085	0.44				Ø35x19mm	CRM Cast	
	%	0.78	1.79	0.039	0.024	0.37	0.53	0.59	0.24	0.074	0.016	0.032	(0.012)	0.039		0.043	0.05	0.022	0.15				Ø35x19mm	CRM Cast	
	%	1.16	1.99	0.014	0.007	0.15	0.066	0.125	0.9		(0.02)	0.003	(0.011)			0.035	0.016	0.011	0.1				Ø35x19mm	CRM Cast	
	%	0.22	0.84	0.019	0.016	0.33	0.11	0.11	1.04	0.012	0.1		0.006			0.12	0.004	0.23	0.34				Ø35x19mm	CRM Cast	
	%	0.98	0.075	0.019	0.02	1.79	0.5	1.08	1.83												0.074		Ø35x19mm	CRM	
	%	0.011	0.019	0.008	0.01	0.006	0.032	0.023	(0.01)	(<0.005)	(0.004)	(0.005)						(<0.002)	(<0.005)				Ø35x19mm	CRM	
	%	0.43	0.76	0.028	0.048	0.34	0.41	1.62	1.32	0.21	0.007	0.011	0.0035	0.011		0.022	0.032	0.011	0.026				Ø35x19mm	CRM	
	%	1.16	0.65	0.028	0.005	1.21	0.107	0.16	3.17	1.25			0.0006	0.3		0.41		0.26	0.14				Ø35x19mm	CRM	
	%	0.89	0.69	0.03	0.031	0.8	0.14	0.15	3.7	1.2	0.13			0.21				0.32	0.33				Ø35x19mm	CRM Cast	
	%	0.055	1.4	0.076	0.049	0.37	0.28	0.188		1.11	0.22							0.22	0.85				Ø35x19mm	CRM	
	%	0.008	0.09	0.012	0.013	0.005	0.034	0.038	0.03	(<0.01)	0.01	(0.003)		(<0.01)			(0.003)	(<0.002)	(<0.005)				Ø35x19mm	CRM Cast	
	%	0.2	0.14	(0.012)	0.025	0.53	0.25		5.94										1.16	1.19			Ø35x19mm	CRM Cast	
	%	0.55	1.07	0.047	0.043	1.72	0.49														0.09		Ø35x19mm	CRM Cast	
	%	0.092	1.92	0.049	0.043	0.43	0.2	1.99	0.08	1.4	0.4							0.48	0.79				Ø35x19mm	CRM Cast	
	%	0.24	(0.25)	0.012	(0.003)	0.09	0.23	0.54	1.52	0.13	(0.01)		(0.004)	(0.02)				0.05	0.33	0.11			Ø35x19mm	CRM Cast	
	%	(1.3)	0.33	0.014	0.002	0.86	0.18	0.08	0.34	0.02	0.01		(0.006)	0.03					(0.04)	(0.01)			Ø35x19mm	CRM	
	%	0.36	0.89	0.016	0.019	0.99	0.52	0.93	1.06	0.19	(0.07)		0.008	(0.5)				0.5	0.19	(0.04)			Ø35x19mm	CRM Cast	
	%	(1.5)	1.3	0.05	0.03	0.22	(0.3)	1.03	0.36	0.17	0.02		0.004	0.35				0.1	0.14	(0.01)			Ø35x19mm	CRM Cast	Bearing Steel
	%	1.03	0.46	(0.02)	0.01	0.32	0.09	0.18	1.63														Ø35x19mm	CRM Cast	Spring Steel
	%	0.52	0.84	(0.02)	0.025	0.46	0.28	(0.1)	1.24										0.2				Ø35x19mm	CRM Cast	Construction Steel
	%	0.096	1.53	(0.01)	0.018	0.59	0.73	0.97	0.54	0.56	(0.01)					(0.04)		0.11	0.27				Ø31x19mm	CRM Wrought	
	%	0.79	0.92	0.012	0.013	0.8	0.47	0.98	2.18	0.51	(0.13)	(<0.005)						(0.004)	0.26				Ø31x19mm	CRM Wrought	
	%	0.0029	0.014	(0.002)	0.0011	(3.2)	0.003	(0.002)	0.006		0.005			(0.002)				(0.004)	(<0.001)				Ø31x19mm	CRM Wrought	
	%	0.274	0.48	0.007	0.014	0.221		0.018	0.91	0.166									0.004				Ø31x19mm	CRM Wrought	
	%	0.085	0.274	0.0022	0.0044	0.231	0.125	5.42	0.467	0.446	0.054			0.029			(0.003)	0.0021	0.0018				Ø31x19mm	CRM Wrought	
	%	0.16	1.05	0.044	0.037	0.4	0.51	0.59	0.3	0.07	0.081	0.096	0.0025	0.3	(0.004)	0.3	0.016	0.1	0.041	0.2	0.22		Ø31x19mm	CRM Wrought	
	%	0.626	1.5	0.029	0.0057	0.74	0.098	0.32	1.31	0.03	0.24	0.01	0.00091	0.048	(0.0041)	0.049	0.104	0.05	0.31	0.046	0.05		Ø31x19mm	CRM Wrought	
	%	0.87	0.258	0.01	0.025	0.067	0.25	0.142	0.066	0.49	(0.008)	0.052	(0.011)	0.15	(0.0032)	0.157	(0.008)	0.24	0.106	0.102	0.069		Ø31x19mm	CRM Wrought	
	%	0.298	1.35	0.012	0.0061	0.189	0.095	0.108	0.201	0.036	0.016						0.005		0.004				Ø31x19mm	CRM Wrought	
	%	0.077	0.626	0.0065	0.0065	0.247	0.114	0.174	2.34	0.956				0.038					0.013				Ø34x19mm	CRM Wrought	
	%	1.03	0.678	0.04	0.035	0.18	0.3	1.99	0.22	0.103	0.055	0.011		20 (0.028)	0.0044	0.021	(0.05)	0.18	0.053		0.013		Ø34x19mm	CRM Wrought	
	%	0.337		2 0.033	0.03	0.35	0.12	1.15	0.92	0.35	0.069	0.018		49 0.062	0.0022	0.07	0.046	0.095	0.2		0.029		Ø34x19mm	CRM Wrought	
	%	0.203	1.58	0.012	0.023	0.63	0.043	0.51	0.043	0.5	0.043	0.055		54 0.095	0.0044	0.1	0.011	0.31	0.3		0.044		Ø34x19mm	CRM Wrought	
	%	0.592	1.21	0.02	0.012	0.057	0.51	0.202	1.48	0.2	0.009	0.01		10 (0.01)	0.0023	0.042		0.028	0.106		0.0015		Ø34x19mm	CRM Wrought	
	%	0.006	0.144	0.0052	0.0038	(0.004)	0.0013	0.154	0.051	0.0055	(0.006)	0.001		9 0.0012	0.001	0.0004	0.002		0.004		(0.0002)		Ø34x19mm	CRM Wrought	
	%	0.015	0.067	0.002	0.0024	0.01	0.015	0.021	0.024	0.0035	0.012	0.0035	1.2	0.002	0.0033	0.005	0.001	0.0005	0.009		-10 (0.0004)		Ø34x19mm	CRM Wrought	
	%	0.52	0.022	0.0031	0.009	0.026	0.0014	0.002	0.0015	0.02	0.004	0.0005		10 0.005	0.0008	0.01	0.006	0.011	0.033		(0.004)		Ø31x19mm	CRM Chill Cast	
	%	0.058	0.332		0.02	0.36	0.37	1.17	0.8	0.164				0.036			0.035		0.15				Ø44x50mm	CRM	
	%	0.394	0.436	0.0043	0.0026	0.289	0.149	1.461	1.236	0.19	0.0148	0.0021	0.0007	0.0175	0.0024	0.0065	0.0086	0.01	0.0088				Ø38x19mm	CRM Wrought	
	%	0.935	1.197	0.0265	0.0078	0.602	0.101	0.019	0.138	0.499	0.074			0.0041	(0.015)				0.496				Ø38x19mm	CRM Wrought	
	%	1.311	0.228	0.0157	0.0138	0.111	0.302		0.652	0.14	0.161				0.0069				0.194				Ø38x19mm	CRM Wrought	
	%	0.75	1.68	0.055	0.038	0.209	0.221	0.223	0.463	0.088	0.049				(0.01)				0.341				Ø38x19mm	CRM Wrought	
	%	0.696	0.532	0.0479	0.0228	1.121	0.428	0.393	0.714	0.307	0.018				0.0089				0.107				Ø38x19mm	CRM Wrought	
	%	0.044	0.903	0.0095	0.0585	0.947	0.022	0.102	0.206	0.025	0.304			(0.009)	(0.011)				0.411				Ø38x19mm	CRM Wrought	
	%	0.173	0.447	0.0102	0.043	0.342	0.289	1.62	2.001	0.98	0.013	0.012							0.01				Ø38x19mm	CRM Wrought	
	%	0.49	0.195	0.038	0.0105	0.66	0.397	0.527	3.03	0.83	0.04			0.0058					0.19				Ø38x19mm	CRM Wrought	
	%	0.289	0.557	0.056	0.03	0.237	0.694	4.13	0.111	0.098	0.154	0.0046			0.0075				0.067				Ø38x19mm	CRM Wrought	
	%	0.086	0.559	0.0141	0.0179	1.18	0.205	3.02	1.318	0.599	0.094				0.0108				0.008				Ø38x19mm	CRM Wrought	
	%	0.428	0.419	0.074	0.041	1.1	0.436	2.07	1.684	0.432	0.46	0.0053		0.0248	0.0155				0.44			/Y	Ø38x19mm	CRM Wrought	
	%	(0.049)	(0.11)	(0.012)	(0.027)	(0.07)				(0.028)									(<0.02)	0.52		/Y	Ø38x19mm	CRM Wrought	
	%	(0.036)	(0.09)	(0.015)	(0.025)	(0.06)				(0.033)									(<0.02)	1.28		/Y	Ø38x19mm	CRM Wrought	
	%	(0.03)	(0.07)	(0.017)	(0.027)	(0.05)				(0.027)									(<0.02)	2.06		/Y	Ø38x19mm	CRM Wrought	
	%	(0.024)	(0.09)	(0.02)	(0.024)	(0.05)				(0.036)									(<0.02)	3.02			Ø44x19mm	CRM Cast	
	%	0.12	0.6		(0.02)	0.28	(0.06)	0.97	4.14	0.8									0.21				Ø44x19mm	CRM Cast	
	%	0.2	0.96		(0.02)	0.58	(0.06)	2.01	1.99	1.04									0.3				Ø44x19mm	CRM Cast	
	%	0.3	1.68		(0.02)	0.17	(0.05)		0.49	0.21					4.01				0.1				Ø35-44x19mm	RM Wrought	8620
	%	0.194	0.84	0.007	0.018	0.235	0.116	0.42	0.5	0.168	0.021			0.012	0.0079		0.007		0.002				Ø35-44x19mm	RM Wrought	8620
	%	0.221	0.84	0.01	0.022	0.208	0.177	0.412	0.49	0.158	0.024	0.006		0.009	0.008		0.013		0.002				Ø35-44x19mm	RM Wrought	6150
	%	0.49	0.81	0.008	0.026	0.25	0.18	0.24	0.93	0.06	0.005				0.0074		0.011		0.15				Ø38x19mm	RM Wrought	
	%	0.133	0.485	0.012	0.022	0.63	0.133	0.117	1.22	0.47	0.035						0.007						Ø38x19mm	RM Wrought	
	%	0.14	0.55	0.018	0.03	0.18	0.13	0.2	2.36	0.94	0.02				0.014		(0.01)		(0.01)				Ø38x19mm	RM Wrought	
	%	0.131	0.44	0.017	0.016	0.27	0.11	0.12	4.21	0.47	0.02				0.0182		0.009		0.016				Ø38x19mm	RM Wrought	
	%	0.12	0.42	0.012	0.01	0.69	0.13	0.29	8.75	0.95	0.02				0.021		0.015		0.015				Ø38x19mm	RM Wrought	4620
	%	0.19	0.52	0.016	0.016	0.018	0.231	1.68	0.157	0.224	0.021	0.0024	0.0001	0.009	0.006	0.0005	0.009	0.0012	0.003	0.003			Ø35-44x19mm	RM Wrought	E52100
	%	1.02	0.35	0.014	0.015	0.23	0.16	0.09	1.53	0.034	0.019	0.004	(0.0001)	0.008	0.0084		0.007	(0.002)	0.006	(0.013)			Ø35-44x19mm	RM Wrought	9310
	%	0.127	0.45	0.01	0.006	0.32	0.157	3.02	1.35	0.14	(0.47)				0.0124		(0.011)		(0.007)				Ø35-44x19mm	RM Wrought	4140
	%	0.41	0.88	0.011	0.024	0.22	0.11	0.16	0.99	0.16	(0.027)				0.0058		0.01						Ø35-44x19mm	RM Wrought	4340
	%	0.42	0.8	0.011	0.013	0.24	0.15	1.71	0.87	0.25	0.035				0.0067		(0.01)						Ø35-44x19mm	RM Wrought	4340
	%	0.41	0.82	0.013	0.009	0.22	0.08	0.76	0.76	0.23	0.03				0.0068		0.004		0.01				Ø35-44x19mm	RM Wrought	8620
	%	0.19	0.77	0.014	0.029	0.2	0.033	0.55	0.5	0.17	0.035				0.005		(0.007)						Ø35-44x19mm	RM Wrought	8620
	%	0.21	0.81	0.009	0.025	0.27	0.2	0.43	0.51	0.17	0.022				0.0102		0.008		0.002				Ø35-44x19mm	RM Wrought	Nitrading
	%	(0.39)	0.52	0.01	0.02	0.25	0.166	0.168	1.51	0.313	1.08				0.0072		0.01		0.008				Ø35-44x19mm	RM Wrought	
	%	0.26	1.28	0.008	0.013	1.29	0.09	1.71	0.28	0.39	0.028			(0.036)	0.0062		(0.007)						Ø35-44x19mm	RM Wrought	A350(LF3)
	%	0.183	0.52	0.006	0.018	0.206	0.08	3.36	0.098	0.056	0.017	0.006	0.0001	0.056	0.0054		0.006		(0.002)				Ø40x25mm	RM Wrought	
	%	0.85	0.34	0.01	0.013	0.24	0.062	0.049	0.076	0.005	(<0.1)	0.011				(<0.005)	0.009		0.19	(0.025)			Ø40x25mm	RM Wrought	
	%	0.32	1.34	0.017	0.012	1.2	0.08	0.06	0.05	(0.008)	(<0.1)	0.019				(<0.005)	0.008	(0.003)	(0.002)	(<0.01)			Ø40x25mm	RM Wrought	
	%	0.58	0.81	0.009	0.008	1.8	0.09	0.07	0.04	0.01	(<0.1)	0.021				(<0.005)	0.023	(0.004)	(0.002)	(<0.01)			Ø40x25mm	RM Wrought	
	%	0.31	0.6	0.013	0.019	0.21	0.09		3 0.7	0.03	(<0.1)	0.019				(<0.005)	0.01		(0.004)	(<0.01)			Ø40x25mm	RM Wrought	
	%	0.17	0.65	0.009	0.009	0.26	0.11	4.05	0.99	0.26	(<0.1)	0.024				(<0.005)	0.011	(0.001)	(0.035)	(0.01)			Ø40x25mm	RM Wrought	
	%	0.34	0.43	0.008	0.024	0.37	0.08	0.11	1.4	0.19	(0.8)	0.017				(<0.005)	0.012	(0.002)	(0.002)	(<0.01)			Ø40x25mm	RM Wrought	
	%	0.59	0.65	0.01	0.006	0.26	0.11	1.45	0.93	0.19	<0.1	0.018				(0.005)	0.014	(0.001)	0.12	0.34			Ø40x25mm	RM Wrought	
	%	0.32	0.46	0.009	0.025	0.23	0.09	2.42	0.56	0.49	(<0.1)	0.019				(<0.005)	0.009		(0.001)	(<0.01)			Ø40x25mm	RM Wrought	
	%	0.32	0.62	0.018	0.013	0.23	0.21	1.84	0.7	0.03	(<0.1)	0.02				(<0.005)	0.024	(0.001)	(0.003)	(<0.01)			Ø40x25mm	RM Wrought	
	%	0.19	0.87	0.008	0.027	0.29	0.14	1.03	0.93	0.01	(<0.1)	0.023				(<0.005)	0.014	(0.018)	(0.004)	(<0.01)			Ø40x25mm	RM Wrought	
	%	0.31	0.65	0.012	0.009	0.3	0.11	4.25	1.25	0.08	(0.1)	0.023				(<0.005)	0.009		(0.003)	(0.01)			Ø40x25mm	RM Wrought	
	%	0.5	0.85	0.01	0.009	2.19	0.08	0.05	0.03	0.48	(<0.1)	0.016				(<0.005)	0.006	(0.003)	(0.002)	(<0.01)			Ø40x25mm	RM Wrought	
	%	0.4	0.56	0.018	0.025	0.27	0.21	1.34	1.2	0.24	(<0.1)	0.018				(<0.005)	0.033	(0.001)	(0.004)	(<0.01)			Ø40x25mm	RM Wrought	
	%	0.05	0.21	0.007	0.017	0.12	0.54	0.12	0.03	0.12	(<0.1)	0.024				(<0.005)	0.032		(0.002)	(<0.01)			Ø40x25mm	RM Wrought	
	%	0.38	0.8	0.012	0.015	0.14	0.08	0.08	1.13	0.26	<0.1	0.019				(<0.005)	0.012		(0.002)	(<0.01)			Ø40x25mm	RM Wrought	
	%	0.94	0.33	0.017	0.009	0.25	0.1	0.09	1.6	0.01	(<0.1)	0.02				(<0.005)	0.009	(0.002)	(0.008)	(<0.01)			Ø40x25mm	RM Wrought	
	%	0.34	0.645	0.013	0.02	0.215	0.15	0.795	0.715	0.23	0.025	0.028				(0.009)	0.016	(0.002)	0.005	0.019			Ø40x25mm	RM Wrought	
	%	0.15	0.605	0.013	0.009	0.215	0.175	0.102	1.04	0.2	0.008	0.025				(0.01)	0.036	(0.001)	0.005	0.027			Ø30x25mm	RM Wrought	
	%	1.05	0.249	0.008	0.01	0.215	0.09	0.069	0.495	0.013	0.005	0.025				(0.004)	0.013	(0.002)	0.003	0.007			Ø40x25mm	RM Wrought	
	%	0.96	0.28	0.011	0.017	0.2	0.028	0.029	0.05	0.002	0.034	0.01				(0.001)	0.003	(0.001)	0.195	(0.002)			Ø40x25mm	RM Wrought	
	%	0.43	0.439	0.027	0.007	1.38	0.135	0.285	5.09	1.45	0.012	0.02				(0.16)	0.01	(0.004)		1 0.1			Ø40x25mm	RM Wrought	
	%	0.38	0.32	0.018	0.008	1.1	0.07	0.125	5.01	1.28	0.015	0.015				(0.012)	0.007	(0.002)	1.05	0.49			Ø40x25mm	RM Wrought	
	%		1 0.605	0.016	0.007	0.37	0.079	0.145	5.15	1.05	0.008	0.018				(0.012)	0.007	(0.004)	0.38	0.045			Ø40x25mm	RM Wrought	
	%	1.29	0.23	0.01	0.01	0.21	0.058	0.052	0.51	0.01	0.006	0.01				(0.001)	0.004	(0.001)	0.005	(0.005)			Ø40x25mm	RM Wrought	
	%	0.58	0.845	0.013	0.017	1.95	0.04	0.03	0.36	0.008	0.022	0.015				(0.003)	0.005	(0.002)	0.005	0.013			Ø30x25mm	RM Wrought	
	%	0.47	0.805	0.012	0.02	0.295	0.045	0.045	1.06	0.012	(0.013)	0.015				(0.003)	0.005	(0.002)	0.19	(0.014)			Ø40x25mm	RM Wrought	
	%	0.46	0.6	0.034	(0.037)	0.3	0.59	0.18	0.13	0.039	(<0.1)	0.027				(<0.005)	0.045		(0.002)	(0.007)		/Y	Ø35x30mm	CRM Wrought	
	%	0.5	0.114	0.035	0.028	0.21	0.04	3.93	0.3	0.2	(0.006)								0.019			/Y	Ø35x30mm	CRM Wrought	
	%	0.39	1.62	0.029	(0.019)	0.079	0.092	2.94	0.111	0.043	(0.006)								0.051			/Y	Ø35x30mm	CRM Wrought	
	%	0.28	0.42	0.022	0.039	0.39	0.47	1.97	0.49	1.01	0.012								0.094			/Y	Ø35x30mm	CRM Wrought	
	%	0.184	0.81	0.0088	(0.01)	0.29	0.28		1 1.02	1.31	(0.001)								0.19			/Y	Ø35x30mm	CRM Wrought	
	%	0.089	1.27	0.0037	0.0044	0.6	0.2	0.49	2.01	0.41	0.009								0.3			/Y	Ø35x30mm	CRM Wrought	
	%	0.042	0.18	0.0012	0.0014	0.41	0.4	0.116	3.01	0.72	(0.007)								0.38			/Y	Ø35x30mm	CRM Wrought	
	%	0.106	0.43	0.015	0.021	0.16	0.009	0.023	0.039	0.008	0.024											/Y	Ø35x30mm	CRM Wrought	
	%	0.151	0.76	0.01	0.0162	0.19	0.008	0.019	1.12	0.005	0.031								0.006			/Y	Ø35x30mm	CRM Wrought	
	%	0.21	0.78	0.013	0.0153	0.22	0.009	0.02	1.02	0.21	0.038								0.004			/Y	Ø35x30mm	CRM Wrought	
	%	0.171	0.59	0.009	0.0094	0.25	0.022	2.24	0.3	0.011	0.029								0.002			/Y	Ø35x30mm	CRM Wrought	
	%	0.21	1.03	0.012	0.013	0.28	0.083	3.05	1.7	0.41	0.011								0.011			/Y	Ø35x30mm	CRM Wrought	
	%	0.171	1.11	0.013	0.0118	0.25	0.072		3 1.6	0.52	0.029								0.008			/Y		CRM Wrought	
Bearing Steel (High C)		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Co	N	Nb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.801	0.093	0.0029	0.0012	0.81	0.342	0.377	0.113	0.105	0.031							0.061		0.15		/Y		CRM Wrought	
	%	1.13	0.484	0.0029	0.0096	0.699	0.152	0.264	0.648	0.077	0.016	0.057					0.0024	0.047		0.065		/Y		CRM Wrought	
	%	0.659	0.715	0.011	0.028	0.555	0.242	0.163	1.43	0.045	0.072	0.029					0.003	0.02		0.031		/Y		CRM Wrought	
	%	0.992	0.291	0.031	0.03	0.396	0.019	0.067	0.362	0.01	0.009	0.0078					0.018	0.0086		0.09		/Y		CRM Wrought	
	%	0.909	1.01	0.0202	0.0051	0.168	0.046	0.066	1.01	0.013	0.188	0.013					0.0057	0.011		0.013		/Y		CRM Wrought	
	%	1.22	1.32	0.039	0.025		0.102	0.025	1.68	0.0045	0.034	0.0038					0.035	0.004		0.0009			Ø31x19mm	CRM Wrought	
Ca Treated		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Co	N	Nb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	(0.03)	(0.28)	(0.03)	(0.008)	(2.9)	(0.07)	(0.04)	(0.02)	(0.008)													Ø35-45x19mm	RM	
	%	0.351	1.46	0.022	0.008	0.331	0.025	0.27	0.044	0.009	0.036	0.014	0.0017			0.044	0.047		0.105				Ø35-45x19mm	RM	
	%	0.252	1.12	0.034	0.006	0.31	0.032	0.017	0.068	0.046	0.011	0.029	0.0013			0.068	0.034		0.014				Ø31x18.75mm	RM Wrought	1-1/4Cr-1/2Mo
CrMo		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Co	N	Nb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.13	0.45	0.006	0.015	0.58	0.11	0.084	1.12	0.46	0.016		0.0005	0.008	0.0079	0.003	0.006	0.003	0.005	(<0.01)	(0.002)		Ø31x18.75mm	RM Wrought	2-1/4Cr-1Mo
	%	0.14	0.49	0.01	0.038	0.21	0.13	0.18	2.18	0.96	0.03		(0.0002)	0.012	0.0102	0.004	0.008	0.003	0.006	(<0.01)	(0.003)		Ø31x18.75mm	RM Wrought	5Cr-1/2Mo
	%	0.13	0.46	0.017	0.018	0.25	0.13	0.1	4.27	0.46	0.03	(0.007)	(0.004)	0.015	0.02	0.004	0.008	0.004	0.012	(<0.02)	(0.003)		Ø31x18.75mm	RM Wrought	9Cr-1Mo
	%	0.13	0.43	0.023	0.013	0.78	0.11	0.14	8.84	0.94	0.03	(0.023)	0.0004	0.016	0.0191	0.005	0.01	0.004	0.013	0.01	(0.003)	/Y	Ø40x30mm	CRM Wrought	Die Steel
Cr Mo V		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Co	N	Nb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.425	0.155	0.0047	0.015	1.49	0.173	0.254	5.67	1.03	0.313								0.19			/Y	Ø40x30mm	CRM Wrought	Die Steel
	%	0.474	0.324	0.026	0.0035	1.32	0.356	0.278	4.79	1.55	0.174								0.449			/Y	Ø40x30mm	CRM Wrought	Die Steel
	%	0.353	0.439	0.017	0.036	0.96	0.108	0.141	3.89	1.99	0.299								0.593			/Y	Ø40x30mm	CRM Wrought	Die Steel
	%	0.315	0.73	0.025	0.015	1.15	0.041	0.131	3.43	2.43	0.235								0.86			/Y	Ø40x30mm	CRM Wrought	
	%	0.252	0.613	0.038	0.024	0.79	0.071	0.45	2.49	3.06	0.44								1.26				Ø31x18mm	RM Wrought	12L14
High S		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Co	N	Nb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.072	1.01	0.07	0.31	(0.01)	0.006	0.006	0.01	0.002	(0.002)			0.005	0.0056	(0.002)	(0.001)	(0.002)	(<0.01)				Ø40x40mm	RM	
	%	0.6	0.4	(0.049)	0.026	0.34	0.1	0.085	0.2		0.033	0.065			0.0115		0.008						Ø40x40mm	RM	
	%	0.39	1.18	0.057	0.097	(0.056)	0.032	0.029	0.036		0.016	0.002			0.0125		0.059						Ø40x40mm	RM	
	%	0.27	1.33	0.073	0.21	0.43	0.25	0.25	0.19		(0.027)	0.007			0.011		0.12						Ø40x40mm	RM	
	%	0.25	1.57	0.03	0.38	0.23	0.093	0.057	0.16		0.032	0.033			0.0171		(0.007)						Ø40x40mm	RM	
	%	0.1	0.6	0.082	0.28	(0.019)	0.06	0.046	0.11		0.005	0.004			0.0059		0.009						Ø40x40mm	RM	
	%	0.029	0.95	(0.018)	(0.057)	0.15	0.044	0.023	0.18		(0.007)	0.065					0.002						Ø38x19mm	RM Wrought	4150
	%	0.516	1.24	0.021	0.073	0.24	0.25	0.18	0.67	0.19	0.02			0.012	0.008	0.002	0.012		0.003	0.002		/Y	Ø38x30mm	CRM Wrought	
Si Steel		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al(tot)	As	B	Co	N	Sb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.022	1.88	0.075	0.0091	4.14	0.559	0.182	0.288		1.19		0.022		0.0046	0.0008	0.071	0.072			0.021	/Y	Ø38x30mm	CRM Wrought	
	%	0.063	1.42	0.062	0.017	1.49	0.25	0.37	0.222		0.465		0.013		0.0062	0.0012	0.033	0.032			0.0084	/Y	Ø38x30mm	CRM Wrought	
	%	0.106	0.546	0.045	0.029	1.03	0.146	0.571	0.187		0.783		0.012		(0.0058)	0.0012	0.019	0.026			0.017	/Y	Ø38x30mm	CRM Wrought	
	%	0.12	0.256	0.04	0.038	0.162	0.157	0.837	0.09		1.47		0.009		0.0025	(0.0004)	0.017	0.014			0.014	/Y	Ø38x30mm	CRM Wrought	
	%	0.04	1.1	0.02	0.031	4.16	0.063	0.101	0.042		0.068		0.0054		0.0026	0.022	0.0055	0.01			0.0035	/Y	Ø38x30mm	CRM Wrought	
	%	0.032	2.08	0.018	0.0087	3.38	0.351	0.06	0.627		0.0067		0.022		0.005	0.0011	0.105	0.037			0.0035	/Y	Ø38x30mm	CRM Wrought	
	%	0.036	1.75	0.061	0.011	2.47	0.278	0.159	0.492		1.18		0.021		0.0042	0.0008	0.072	0.043			0.023	/Y	Ø25mm	CRM Wrought	
Spring Steel		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Co	N	Nb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.5	1.16	0.017	0.0045	1.28			1.03													/Y	Ø25mm	CRM Wrought	
	%	0.53	0.925	0.016	0.007	1.49			0.88													/Y	Ø25mm	CRM Wrought	
	%	0.6	0.58	0.014	0.006	1.74			0.71													/Y	Ø25mm	CRM Wrought	
	%	0.68	0.52	0.014	0.005	1.93			0.29													/Y	Ø25mm	CRM Wrought	
	%	0.59	1.37	0.016	0.005	2.35			1.21													/Y	Ø33x33mm	CRM Wrought	
Iron Base	Steel	Medium Alloy		Disc																					
W Cr V		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Co	N	Nb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.492	0.047	0.034	0.0032	0.075	0.087		1.85	1.98	0.285								2.44	9.34		/Y	Ø33x33mm	CRM Wrought	
	%	0.802	0.353	0.072	0.0058	0.134	0.476		2.57	2.81	0.044								1.99	8.8		/Y	Ø33x33mm	CRM Wrought	
	%	0.634	0.166	0.038	0.059	0.768	0.396		3.31	3.5	0.13				0.0211				1.6	7.34		/Y	Ø33x33mm	CRM Wrought	
	%	0.903	0.43	0.026	0.039	0.615	0.25		4.05	4.14	0.042								1.25	5.91		/Y	Ø33x33mm	CRM Wrought	
	%	0.67	0.562	0.011	0.023	1.22	0.045		4.83	4.92	0.197								0.831	4.59		/Y	Ø33x33mm	CRM Wrought	
	%	0.991	0.261	0.051	0.0089	0.365	0.136		5.49	5.69	1.63				0.0146				0.428	3.42			Ø35x30-35mm	CRM Wrought	
Iron Base	Steel	High Alloy		Disc																					
Cr		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Co	N	Nb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.09	0.99	0.024	0.32	0.275	0.093	0.24	16.9	0.219	(0.004)		(0.0003)	(0.026)			(0.006)		0.079				Ø35x30-35mm	CRM Wrought	
	%	0.305	0.65	0.019	0.022	0.336	0.1	0.308	12.9	0.052				0.026					0.052				Ø31x18.25mm	RM	430
	%	0.077	0.5	0.019	0.009	0.59	0.05	0.26	17.59	0.03	(0.003)			0.023	0.083	(0.007)	(0.01)	(<0.01)	0.055				Ø31x18.25mm	RM Wrought	431
	%	0.14	0.61	0.024	0.006	0.37	0.1	2.27	16.03	0.07	(0.076)			0.03	(0.057)	0.04	(0.007)	0.004	0.07	0.024			Ø31x18.25mm	RM Wrought	440C
	%	1.02	0.39	0.015	0.001	0.72	0.03	0.14	16.78	0.48	0.004			0.016	0.029	0.003	0.004	0.002	0.041	(0.003)			Ø31x18.25mm	RM Wrought	446
	%	0.016	0.426	0.022	0.0015	0.51	0.071	0.29	23.6	0.096	0.004			0.03	0.043	0.006	0.005	0.0024	0.11	0.011			Ø31x18mm	RM Wrought	420
	%	0.39	0.47	0.018	0.003	0.35	0.044	0.19	12.82	0.052	0.008			0.021	0.0294	0.004	0.004	0.002	0.045	0.011			Ø31x18mm	RM Wrought	422
	%	0.23	0.73	0.014	0.003	0.28	0.033	0.92	11.48	0.98	0.005			0.018	0.046	0.006	0.003	0.002	0.24	1.01			Ø31x18.25mm	RM Wrought	410
	%	0.13	0.54	0.019	0.006	0.29	0.054	0.3	11.97	0.064	0.024			0.016	0.0468	0.028	0.004	0.005	0.048	0.01			Ø40x12mm	CRM Wrought	
	%	0.14	0.66	(0.01)	0.013	0.6		1.06	10.83	0.82						0.43			0.69	0.92			Ø40x12mm	CRM Wrought	
	%	0.072	0.69	(0.013)	0.013	0.9	0.47	0.69	13.25		0.018						(0.015)	0.083					Ø40x12mm	CRM Wrought	
	%	0.096	0.64	0.015	0.013	1.3	0.12	0.59	14.34		0.51							0.2			(0.011)		Ø40x12mm	CRM Wrought	
	%	0.044	0.71	0.015	0.013	0.6	0.4	0.43	15.65									0.26					Ø40x12mm	CRM Wrought	
	%	0.114	0.49	0.013	0.012	1.18	0.22	0.53	17.11		0.88							0.16					Ø40x12mm	CRM Wrought	
	%	1.08	1.14	0.01	0.016	0.94	0.034	0.63	19.12			0.0023		0.021				(0.02)	0.033				Ø40x12mm	CRM Wrought	
	%	0.13	0.63	0.014	0.016	0.93		0.76	26.98													/Y	Ø33x33mm	CRM Wrought	
	%	0.04	0.13	0.0062	0.0028	0.223	0.056	0.5	14.26	0.064				0.016				0.041	0.059	0.058		/Y	Ø33x33mm	CRM Wrought	
	%	0.245	0.337	0.0103	0.032	0.42	0.284	0.393	11.03	0.353				0.054				0.079	0.151	0.27		/Y	Ø33x33mm	CRM Wrought	
	%	0.159	0.495	0.0165	0.017	0.568	0.171	0.207	12.52	0.157				0.036				0.091	0.089	0.19		/Y	Ø33x33mm	CRM Wrought	
	%	0.34	0.74	0.0262	0.0054	0.772	0.374	0.461	9.37	0.244				0.078				0.371	0.201	0.38		/Y	Ø33x33mm	CRM Wrought	
	%	0.472	0.983	0.043	0.041	0.487	0.522	0.771	7.84	0.487				0.116				0.187	0.287	0.5			Ø35x30mm	CRM Wrought	
	%	0.903	0.808	0.017	0.0088	0.907	0.0711	0.563	17.1	2.1	0.003			0.0233	0.1142	(0.006)			0.388				Ø38x25mm	CRM Wrought	
	%	0.1166	0.676	0.0178	0.0026	0.242	0.1498	2.79	11.82	1.71	0.0275	0.0139		0.0218	0.0214		0.0131		0.363				Ø38x19mm	RM Wrought	
	%	0.11	0.48	0.015	0.023	0.27	0.079	0.34	12.04	0.053	0.015			0.023	0.036		0.006	0.015	0.025				Ø38x19mm	RM Wrought	
	%	0.088	0.52	0.018	0.36	0.63	0.004	0.24	13.15	0.065				0.019	0.02		0.005		0.025				Ø32x10mm	RM Wrought	
	%	0.045	0.55	0.018	0.012	0.52		0.22	18.2									0.44					Ø32x10mm	RM Wrought	431
	%	0.163	0.58	0.022	0.018	0.5	0.1	1.73	15.86	0.07					0.05								Ø32x10mm	RM Wrought	410CB
	%	0.158	0.42	0.009	0.001	0.42	0.038	0.26	12.02	0.021	<0.004				0.024	0.094	0.002							RM Wrought	410CB
	%	0.147	0.51	0.016	0.007	0.36	0.074	0.22	11.86	0.008	<0.004				0.028	0.12	0.004						Ø30x18mm	CRM Cast	
	%	0.42	0.91	0.02	(0.003)	0.42	0.35	0.31	15									(0.05)		0.5			Ø30x18mm	CRM Cast	
	%	0.53	0.83	(0.02)	0.015	0.89	0.04	0.37	16.3									0.3		0.21			Ø30x18mm	CRM Cast	

	%	0.12	0.48	0.017	(0.003)	0.7	0.22	0.2	21.8									0.03		0.1			Ø30x18mm	CRM Cast		
	%	0.2	0.49	0.021	0.024	0.67	0.1	0.15	18.9									0.1		(0.12)			Ø30x18mm	CRM Cast		
	%	0.062	0.35	0.018	0.022	0.42	0.085	0.1	9.07									0.21		0.15			Ø30x20mm	CRM Cast		
	%	0.061	1.1	0.026	0.017	1.38	(0.18)		23.5		1.53												Ø31x19mm	CRM Wrought		431
	%	0.149	0.42	0.026	0.001	0.545	0.162	2.16	15.64	0.164					0.078				0.056				Ø31x19mm	CRM Wrought		416
	%	0.127	1.08	0.018	0.329	0.327	0.081	0.232	12.64	0.053					(0.05)				0.068				Ø32x19mm	CRM		405
	%	0.027	0.387	0.022	0.0003	0.321	0.26	0.194	13.52	0.023				0.02					0.082				Ø40x15mm	RM Cast		414
	%		1.1		0.07	0.2		0.5	14	0.5													Ø40x15mm	RM Cast		
	%	0.15	0.65	0.02	0.1	0.3		1	13	1													Ø40x15mm	RM Cast		
	%	0.15	0.3		0.3	0.5		1.5	12	1.5													Ø40x15mm	RM Cast		
	%	0.05	1.4	0.05	0.05	0.6	0.2	1.75	18	0.5						0.75							Ø40x15mm	RM Cast		
	%	0.1	1.25	0.01	0.01	0.2	0.05	0.75	11	1				0.05		1.5							Ø40x15mm	RM Cast		
	%	0.15	0.5	0.03	0.03	0.8	0.35	3	15.5	0.25				0.1		0.1							Ø40x15mm	RM Cast		
	%	0.1	0.85	0.07	0.05	0.6	0.2	2.5	14.5	0.4				0.2		0.6							Ø40x15mm	RM Cast		
	%	0.05	1.25	0.01	0.01	0.5	0.15	1.5	16.5	0.6						0.8							Ø40x15mm	RM Chill Cast		
	%	0.21	0.17	0.011	0.011	0.06	0.06	2.1	9.93	1.58	0.004	0.011					0.005	0.007	0.1				Ø40x15mm	RM Chill Cast		
	%	0.3	0.18	0.013	0.014	0.14	0.02	2.84	11.91	2.02	0.037	0.014					0.005	0.01	0.2				Ø40x15mm	RM Chill Cast		
	%	0.04	0.07	0.007	0.008	0.06	0.003	1.2	10.79	1.02	<0.001	0.023					0.001	<0.002	0.04				Ø40x15mm	RM Cast		
	%	0.75	0.74	0.042	0.046	0.75	0.2	3.99	12.8	2.75	0.024	0.07	1.06		0.028			0.11	0.2				Ø38x19mm	CRM Wrought		
	%	0.279	0.598	0.015	0.02	0.421	(0.02)	0.246	11.93					(0.01)					(0.02)				Ø38x19mm	CRM Wrought		
	%	0.153	0.235	0.024	0.035	0.335	(0.02)	0.369	17.68					(0.02)					(0.02)				Ø38x19mm	CRM Wrought		
	%	0.095	0.417	0.018	0.023	0.326	(0.02)	0.96	23.85					(0.02)					(0.03)				Ø38x19mm	CRM Wrought		
	%	0.227	1.02	0.032	0.029	1.05	(0.02)	1.95	15.82	0.661				(0.02)					(0.02)				Ø38x19mm	CRM Wrought		
	%	0.172	0.494	0.019	0.03	0.604	(0.02)	(0.06)	9.06	0.95				(0.01)					(0.02)				Ø44x13mm	CRM Wrought		
	%	0.18	0.38	0.024	0.02	0.35		0.4	16.35														Ø58x12mm	CRM Wrought		410
	%	0.05	0.41	0.018	0.011	0.62	0.036	0.23	12.36	0.117	0.078	0.003	7	0.017	0.033	0.007	0.004	0.002	0.034		0.003		Ø38-45x13mm	RM Wrought	182FM	
	%	0.046	1.7	0.021	0.334	0.42	0.05	0.2	18.62	1.91	0.006	0.014		0.024	0.029	0.005	0.004		0.058	0.012			Ø38-45x13mm	RM Wrought	416SE	
	%	0.09	0.41	0.021	0.018	0.65	0.11	0.24	13.19	0.088	(0.002)	(0.002)		0.018	0.022	0.005	0.005		0.046	0.01			Ø38-45x13mm	RM Wrought	420F	
	%	0.32	0.36	0.022	0.275	0.44	0.05	0.14	13.41	0.061	(0.002)	(0.005)		0.015	0.02	0.006	0.003		0.051	<0.01			Ø38-45x13mm	RM Wrought	430F	
	%	0.024	0.39	0.017	0.28	0.5	0.051	0.14	17.33	0.29	0.005	0.004		0.017	0.021	0.005	0.004		0.048	0.007			Ø38-45x13mm	RM Wrought	430FR	
	%	0.03	0.4	0.027	0.302	1.26	0.063	0.25	17.58	0.31	(0.002)	(0.018)		0.019	0.039	0.005	(0.005)		0.046	(0.01)			Ø38-45x13mm	RM Wrought	440F	
	%	1	0.34	0.014	0.15	0.4	0.03	0.14	16.61	0.45	0.001			0.019	0.037	0.001	0.004		0.105	0.002			Ø38-45x13mm	RM Wrought	440F	
	%	1.06	1.15	0.022	0.007	0.46	0.09	0.35	16.84	0.5	0.002			0.046	0.041	(0.005)	(0.004)		0.13	0.11			Ø31x12mm	RM Wrought	440F	
	%	0.436	0.43	0.016	0.001	3.08	0.12	0.21	8.17	0.044	(0.007)			0.018	0.014	(0.002)	(0.007)	0.014	0.041	0.017			Ø38-45x13mm	RM Wrought		410
	%	0.131	0.38	0.018	0.003	0.3	0.09	0.26	11.58	0.077				(0.021)	0.02			(0.003)	0.038				Ø38x12mm	RM Wrought		416
	%	0.085	0.53	0.023	0.328	0.58	0.12	0.3	13.01	0.14	(0.006)			0.021	0.037	0.011	0.005		0.076	0.032			Ø38-45x13mm	RM Wrought		430
	%	0.066	0.42	0.017	0.002	0.52	0.05	0.17	16.58	0.035	(0.002)			0.02	0.032	(0.004)	0.004		0.09				Ø38-45x13mm	RM Wrought		431
	%	0.15	0.42	0.021	0.003	0.42	0.13	2.12	15.92	0.17	(0.002)			0.04	0.073	(0.006)	(0.006)		0.07	(0.02)			Ø38-45x13mm	RM Wrought	440C	
	%	1.02	0.52	0.022	0.001	0.9	0.12	0.35	17.33	0.5	0.009			0.048	0.0359	0.005	0.003	0.007	0.24	0.11			Ø38-45x13mm	RM Wrought		422
	%	0.216	0.71	0.021	0.0004	0.39	0.066	0.76	11.82	1.05	0.018	(0.002)	(0.0005)	0.041	0.03	0.007	(0.003)	(0.002)	0.21	0.95			Ø38-45x13mm	RM Wrought		420
	%	0.309	0.48	0.019	0.0014	0.72	0.098	0.21	13.35	0.034	0.003	(0.003)	(0.0002)	0.02	0.0181	0.003	0.006	0.002	0.075	0.009			Ø40x25mm	RM Wrought	440F	
	%	0.15	0.79	0.025	0.032	0.23	0.08	2.22	15.5	0.05				(0.02)		<0.01	(0.009)	0.005	0.017	0.03			Ø40x25mm	RM Wrought		
	%	0.33	0.49	0.014	0.014	0.6	0.05	0.09	13.5	(0.006)				(0.01)		<0.01	(0.008)	0.03	0.014	(0.01)			Ø40x25mm	RM Wrought		
	%	0.37	0.62	0.034	0.063	0.45	0.06	0.23	12.1	0.04				0.03		(0.02)	0.008	0.001	0.03	(0.028)			Ø40x25mm	RM Wrought		
	%	1.63	0.34	0.018	0.007	0.24	0.07	0.14	10.9	0.72				0.03			0.008	0.001	0.4	(0.23)			Ø40x25mm	RM Wrought		
	%	0.45	0.4	0.014	0.008	2.68	0.01	0.18	8.4	0.03				0.01			0.007	0.003	0.02	(0.024)			Ø40x15mm	RM Wrought		

CrNi		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Co	N	Nb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy	
	%	0.16	1.56	(0.026)	0.014	0.73	0.08	6.9	20.75	2.08	(0.01)	0.018	0.001	0.031		1.05	0.045	(0.01)	0.16	(0.04)			Ø40x15mm	RM Wrought		
	%	0.22	1.24	0.019	0.01	0.62	0.086	0.77	11.8	0.28	(0.01)	0.007		(0.028)			0.006	0.005	0.086	0.31			Ø40x15mm	RM Wrought		
	%	0.067	0.67	0.026	0.024	0.02	0.09	4.38	11.7	0.79	(0.01)	0.007		0.021			(0.006)		(0.01)	(0.02)			Ø40x15mm	RM Wrought		
	%	0.11	0.36	(0.02)	0.01	1.5	0.095	6.95	8.44	0.85	(0.01)	0.009		(0.013)			0.07	(0.005)	0.014	(0.01)			Ø40x15mm	RM Wrought		
	%	0.058	0.29	0.018	0.032	0.25	0.28	5.68	12.6	0.44	(0.01)	(0.007)		0.027		0.075	(0.006)		0.094	0.15			Ø40x15mm	RM Wrought		
	%	0.56	0.39	0.019	0.037	0.8	0.075	0.19	21.4	1.14	(0.01)	(0.007)		0.022		0.005	(0.006)		0.05	2.15			Ø40x15mm	RM Wrought		
	%	0.97	0.96	(0.03)	0.011	1.47	0.09	0.53	7.88	0.6	(0.01)	0.005		(0.019)			(0.007)	(0.002)	(0.01)	1.07			Ø40x15mm	RM Wrought		
	%	0.12	0.3	0.015	0.022	0.81	0.11	18.4	8.47	1.29	(0.03)	0.007	0.0005	0.029		0.33	0.02	0.57	0.12	1.59			Ø40x15mm	RM Wrought		
	%	0.32	0.45	0.016	0.011	0.26	0.14	3.11	17.3	0.02	(0.01)	0.007	0.0005	0.032			0.005	(0.01)	0.033	0.02			Ø40x15mm	RM Wrought		
	%	0.19	1.55	(0.02)	0.015	0.26	0.07	21.1	14.9	4.49	(0.01)	(0.005)	(0.001)	0.036		0.64	(0.006)	0.11	0.4	0.47			Ø40x15mm	RM Wrought		
	%	0.11	1.13	0.037	0.008	0.37	0.05	33.6	13.9	0.35	0.31	(0.005)		0.056			(0.025)	1.03	0.13	2.23			Ø30x30mm	RM Wrought		
	%	0.054	1.01	0.013	0.013	0.6	0.085	11	19.1	(0.01)	0.075	0.008		0.051		0.005	0.005	0.43	(0.04)	0.005			Ø30x30mm	RM Wrought		
	%	0.049	0.23	0.013	0.017	0.2	0.075	3.8	12.1	0.26	0.005	0.01		0.025		0.005	0.008	0.005	(0.02)	0.005			Ø30x30mm	RM Wrought		
	%	0.06	1.25	0.016	0.013	0.59	0.05	11.2	18.7	(0.01)	0.07	0.008		0.024		0.005	0.007	0.43	(0.04)	0.005			Ø30x30mm	RM Wrought		
	%	0.057	1.15	0.016	0.013	0.67	0.076	11.2	18.4	(0.01)	0.075	0.023		0.045		0.005	0.048	0.42	(0.04)	0.005			Ø30x30mm	RM Wrought		
	%	0.055	1.14	0.016	0.013	0.59	0.071	11.45	18.4	(0.01)	0.075	0.029		0.041		0.005	0.097	(0.5)	(0.04)	0.005			Ø37x20mm	CRM Wrought		
	%	0.0133	1.73	0.016	0.0009	0.141	0.936	30.82	26.72	3.55	0.008	(0.0037)	0.0012	0.058	0.0344	0.0012		0.0039	0.075	0.0084			Ø35x30-35mm	CRM Wrought		
	%	0.124	1.7	0.027	(0.0033)	0.444	0.2	19.02	25.01	0.205	0.062			0.193		(0.014)		0.066	0.084	(0.066)			Ø31x18mm	RM Wrought	N08367	
	%	0.023	0.35	0.014	0.001	0.39	0.14	23.8	20.7	6.18	0.021			0.045	0.2	0.019	(<0.01)	(0.004)	0.044	0.023			Ø31x18.25mm	RM Wrought		347
	%	0.047	0.39	0.013	0.001	0.33	1.53	6.94	14.53	0.82	0.006			0.24	0.0355	0.65	0.009	0.005	0.033	0.12			Ø31x18.25mm	RM Wrought	Custom 455	
	%	0.0067	0.026	0.007	0.0025	0.039	2.23	8.28	11.44	0.016	0.062			0.027	0.0022	0.25	0.004	1.11	0.067	0.011			Ø31x18.25mm	RM Wrought	Nitronic50	
	%	0.032	5.12	0.033	0.003	0.38	0.17	13.36	21.34	2.3	(0.003)			0.08	0.33	0.22	0.005	(0.002)	0.2	0.093			Ø31x18.25mm	RM Wrought	Nitronic60	
	%	0.085	8.58	0.032	0.0012	3.67	0.362	8.5	16.37	0.31	0.006		(0.002)	0.124	0.157	0.004	0.003	0.006	0.058	0.02			Ø31x18.25mm	RM Wrought		
	%	0.021	9.31	0.021	0.002	0.48	0.174	6.83	19.98	0.275	0.01		0.001	0.098	0.25	0.057	0.005	0.006	0.102	0.022			Ø31x18.25mm	RM Wrought		303
	%	0.057	1.99	0.03	0.33	0.29	0.42	8.99	17.24	0.24	(0.001)		(0.0003)	0.18	0.041	0.012	0.013	(<0.001)	0.006	0.025			Ø31x18.25mm	RM Wrought	Greek Ascoloy	
	%	0.18	0.3	0.018	0.007	0.35	0.06	1.93	12.15	0.12	(0.004)			0.031	0.0222	0.01	0.004	(0.003)	0.086	2.59			Ø31x18.25mm	RM Wrought	PH13-8MO	
	%	0.038	0.059	0.006	0.003	0.047	0.032	8.17	12.32	2.11	1.04			0.02	0.0039	0.008	0.002	0.012	0.011	0.01			Ø31x18.25mm	RM Wrought	15-5PH	
	%	0.046	0.53	0.021	0.001	0.41	3.23	4.85	14.42	0.35	0.007			0.082	0.012	0.307	0.008	0.006	0.056	0.031			Ø31x18.25mm	RM Wrought	17-4PH	
	%	0.034	0.81	0.022	0.022	0.4	3.67	4.1	15.21	0.19	0.003			0.038	0.0334	0.28	0.009	0.002	0.059	0.02			Ø31x18mm	RM Wrought	N08020	
	%	0.022	0.36	0.015	0.001	0.37	3.25	33.31	19.42	2.06	0.006			0.14	0.0227	0.52	(0.005)	(0.005)	0.098	(0.021)			Ø31x18.25mm	RM Wrought	A-286	
	%	0.05	0.19	0.013	0.002	0.16	0.038	25.06	14.76	1.24	0.25		(0.007)	0.24	0.0064	0.021	0.003	2.03	0.28	0.068			Ø31x18.25mm	RM Wrought		304
	%	0.017	1.73	0.028	0.023	0.6	0.42	8.49	18.44	0.45	0.005		(0.0004)	0.1	0.083	0.01	0.008	0.002	0.043	0.018			Ø31x18.25mm	RM Wrought		309
	%	0.058	1.68	0.027	0.0034	0.46	0.282	12.62	22.41	0.49	0.009		(0.0004)	0.093	0.079	0.077	0.008	0.004	0.066	0.047			Ø31x18.25mm	RM Wrought		310
	%	0.059	1.5	0.025	0.003	0.97	0.15	20	24.33	0.11	(0.012)		(0.004)	0.23	0.037	0.029	0.004	0.005	0.075	0.02			Ø31x18.25mm	RM Wrought		316
	%	0.049	1.37	0.025	0.029	0.42	0.36	10.15	16.32	2.09	0.004		(0.0005)	0.082	0.057	0.009	0.007	0.002	0.064	0.03			Ø31x18.25mm	RM Wrought		321
	%	0.038	1.73	0.038	0.0087	0.61	0.13	9.23	17.61	0.09	0.064		0.0003	0.139	0.027	0.003	0.005	0.22	0.039	0.013			Ø31x18.25mm	RM Wrought		330
	%	0.062	1.47	0.018	(0.001)	1.38	0.21	35.84	19.32	0.19	0.023			0.069	0.013	0.023	0.004	(0.005)	0.048	(0.031)			Ø31x18.25mm+	RM Wrought		347
	%	0.06	1.5	0.03	0.027	0.43	0.46	9.15	17.53	0.7	0.003		0.0008	0.146	0.054	0.67	0.011	0.002	0.047	0.14			Ø40x12mm	CRM Wrought		
	%	0.315	0.69		0.0097	1.96		7.3	11.87											0.49			Ø40x12mm	CRM		
	%	0.207	1.15	(0.03)	0.014	2.52	0.045	4.48	27.83	0.564									0.185	0.505			Ø40x12mm	CRM		
	%	0.47	0.6	0.021	(0.012)	0.73	0.056	14.94	15.56	0.41									0.4	2.07			Ø40x12mm	CRM Wrought		
	%	0.23	1.75	0.022	0.009	1.96		35.23	15.57														Ø40x12mm	CRM Wrought		
	%	0.03	1.56	0.013	0.016	0.75		14.26	16.24	2.25			0.0049								0.0046		Ø40x12mm	CRM Wrought		
	%	0.054	1.6	0.011	0.017	0.93	0.098	16.1	17.59	3.7								0.47					Ø40x12mm	CRM Wrought		
	%	0.2	1.56	0.017	0.013	0.93		12.6	18.71							1.02							Ø40x12mm	CRM Wrought		
	%	0.029	1.54	0.008	0.013	0.3		11	17.56				0.0047										Ø40x12mm	CRM Wrought		
	%	0.099	1.26	0.033	(0.011)	0.75		8.31	19.57		0.097							0.62					Ø40x12mm	CRM Wrought		
	%	0.11	1.72	(0.015)	0.012	0.62		9.08	20.82	1.57								0.49					Ø40x12mm	CRM Wrought		
	%	0.06	2.03	0.013	0.009	0.86	3	29.04	25.37	3.1				0.033				0.86	0.047				Ø40x12mm	CRM Wrought		
	%	0.25	1.55	0.028	0.012	1.1	0.05	12.26	25	0.34									0.18	0.33		/Y	Ø38x40mm	CRM		
	%	0.032	0.578	0.013	0.0036	0.238	0.03	22.43	4.04	0.0019		0.0026		0.011	0.011		0.0022	0.0018	0.026	0.0022		/Y	Ø38x40mm	CRM		
	%	0.097	2.5	0.005	0.025	1.21	0.288	16.71	6.95	1.02		0.065		0.156	0.0079		0.062	0.156	0.065	0.051		/Y	Ø38x40mm	CRM		
	%	0.069	4.76	0.031	0.011	0.47	0.121	4.54	11.54	3.09		0.021		0.044	0.04		0.015	0.01	0.02	0.023		/Y	Ø38x40mm	CRM		
	%	0.057	0.529	0.03	0.0046	0.517	0.142	6.95	15.06	2.26		0.022		0.098	0.038		0.021	0.052	0.022	0.028		/Y	Ø38x40mm	CRM		
	%	0.123	9.8	0.047	0.018	0.66	0.133	4.01	16.14	0.168		0.034		0.088	0.244		0.014	0.0034	0.034	0.02		/Y	Ø38x40mm	CRM		
	%	0.046	1.3	0.024	0.011	0.574	0.197	12.14	17.03	2.73		0.029		0.056	0.023		0.016	0.35	0.029	0.013		/Y	Ø38x40mm	CRM		
	%	0.064	1.25	0.027	0.01	0.707	0.105	8.71	17.8	0.093		0.023		0.106	0.018		0.0079	0.631	0.023	0.0094		/Y	Ø38x40mm	CRM		
	%	0.066	1.7	0.022	0.0012	0.452	0.083	12.95	24.75	0.105		0.03		0.085	0.052		0.0055	0.0021	0.03	0.01		/Y	Ø33x33mm	CRM Wrought		
	%	0.061	0.644	0.0085	0.027	0.663	0.152	10.35	15.36	0.62	0.044	0.014		0.074			0.0083	0.072		0.32		/Y	Ø33x33mm	CRM Wrought		
	%	0.164	0.981	0.037	0.016	0.413	0.363	11.52	12.46	0.35	0.074	0.018		0.093			0.026	0.21		0.61		/Y	Ø33x33mm	CRM Wrought		
	%	0.241	1.98	0.04	0.018	0.96	0.276	13.12	9.32	0.69	0.038	0.01		0.13			0.0057	0.51		0.71		/Y	Ø33x33mm	CRM Wrought		
	%	0.184	1.57	0.028	0.02	0.92	0.303	16.41	7.4	0.5	0.24	0.0069		0.16			0.049	1.03		0.49		/Y	Ø33x33mm	CRM Wrought		
	%	0.096	0.732	0.018	0.038	0.654	0.126	9.05	17.16	0.26	0.26	0.0067		0.059			0.0035	0.57		0.25		/Y	Ø33x33mm	CRM Wrought		
	%	0.017	0.156	0.0049	0.0025	0.171	0.049	6.93	20.76	0.079	0.034	0.038		0.0133			0.041	0.31		0.055		/Y	Ø33x33mm	CRM Wrought		
	%	0.101	0.356	0.01	0.0015	1.08	0.098	7.82	18.9	0.17	0.2	0.028		0.028			0.021	0.71		0.17			Ø40x15mm	RM HIP		
	%	0.041	1.541	0.024	0.012	0.72	0.182	11.01	16.93	2.73				0.139	0.1154	0.023			0.074				Ø40x15mm	RM HIP		
	%	0.014	0.858	0.02	0.003	0.676	0.761	17.69	19.79	6.14				0.159	0.007	0.007			0.044				Ø34x30mm	CRM		
	%	0.0201	1.745	0.0258	0.0237	0.537	0.1831	10.72	16.811	2.111	0.0027	0.0063	0.0026	0.0525	0.0151		0.0047	0.191	0.0425				Ø38x30mm	CRM Wrought		
	%	0.016	1.48	0.027	0.0014	0.569	0.203	10.35	18.61	0.247			0.89	0.148	0.019								Ø35x30mm	CRM Wrought		
	%	0.0489	1.016	0.0114	0.0027	0.531		24.68	14.63	1.102	0.199	(0.006)	0.0044	0.065			0.111	2.01	0.26				Ø38x30mm	CRM Wrought		
	%	0.0367	1.744	0.0175	0.0055	0.402	0.0391	10.09	18	0.0464	(0.002)	(0.008)	(0.0003)	0.0255	0.064	0.571							Ø38x25mm	CRM Wrought		
	%	0.0166	1.758	0.0167	0.0003	0.418	1.481	24.41	19.51	3.996	0.0203	0.0041	0.0018	0.045	0.0615		0.0025		0.0456				Ø38x30mm	CRM Wrought	Duplex	
	%	0.0146	0.398	0.0197	0.0006	0.262		7.06	24.72	3.799	0.0285	0.201	0.0021	0.055	0.263			0.0014	0.0607				Ø32x15mm	RM	304M	
	%	0.043	0.69	0.01	0.012	0.4	0.1	8.4	18.25	0.49	0.002			0.06		0.01	0.006	0.03	0.03	0.02			Ø38x19mm	RM Wrought	20CB-3	
	%	0.034	0.19	0.017	0.003	0.38	3.28	33.55	19.63	2.25			0.0023	0.035		0.86	0.003		0.053				Ø32x10mm	RM	304N	
	%	0.062	1.76	0.021	0.028	0.48	0.28	8.4	19.8	0.24				0.1	0.25				0.11				Ø38x19mm	RM Wrought		303
	%	0.07	1.64	0.029	0.31	0.58	0.49	9.08	17.78	0.41				0.16			0.007		0.044				Ø38x19mm	RM Wrought	303SE	
	%	0.048	0.76	0.14	0.013	0.61	0.15	8.89	17.84	0.39				0.16						0.42			Ø38x19mm	RM Wrought		304
	%	0.063	0.78	0.026	0.023	0.56	0.34	9.6	18.57	0.33				0.2		0.043	0.017		0.037				Ø38x19mm	RM Wrought		305
	%	0.067	1.85	0.025	0.022	0.55	0.29	11.95	18.58	0.45				0.22					0.078				Ø38x19mm	RM Wrought		316
	%	0.061	1.67	0.029	0.023	0.69	0.25	12.61	17.6	2.45				0.14			0.006		0.051				Ø38x19mm	RM Wrought	Custom 450	
	%	0.036	0.39	0.014	0.006	0.29	1.49	6.36	15.2	0.8				0.16	0.028	0.67	0.008		0.043				Ø38x19mm	RM Wrought	Custom 455	
	%	0.012	0.074	0.01	0.005	0.13	2.32	8.22	11.37	0.027			0.0024		0.002	0.28	0.004	1.18					Ø38x19mm	RM Wrought	Custom 630	
	%	0.036	0.39	0.018	0.013	0.63	3.25	4.2	15.94	0.11			0.0018	0.11	0.028	0.36	0.007		0.022				Ø31x16mm	RM Wrought	316M	
	%	0.062	1.5	0.005	0.006	0.8	0.1	12.52	17.48	2.48	0.03		0.0011	0.12		0.008	0.005	0.005	0.03	0.005	0.005		Ø32x10mm	RM		
	%	0.09	0.87	0.025	0.007	0.6	0.36	9.85	18.26	0.56					0.052								Ø32x10mm	RM		305
	%	0.067	1.86	0.025	0.022	0.55	0.28	11.95	18.57	0.45				0.22					0.078				Ø32x10mm	RM		316
	%	0.063	1.64	0.022	0.022	0.6	0.21	12.32	17.48	2.28				0.16									Ø32x10mm	RM	13-8MO	
	%	0.035	0.044	0.003	0.003	0.019	0.03	8.32	12.57	2.2	1.14		0.0009	0.03		0.001		0.019	<0.004				Ø35x20mm	CRM Cast		
	%	0.155	1.77	0.022	0.02	0.88	0.16	11.2	17.5	2.98						0.98							Ø35x20mm	CRM Cast		
	%	0.063	1.44	0.026	0.012	0.89	0.2	10.45	17.8									0.27					Ø30x20mm	CRM		
	%	0.2	2.15	0.018	0.01	0.54	0.2	27.8	1.22	0.76								0.19					Ø30x20mm	CRM Cast		
	%	0.135	1.35	0.026	0.01	0.43	0.05	18.1	16.7	1.17								(0.02)					Ø30x20mm	CRM		
	%	0.03	1.15	0.017	0.022	0.25	0.11	12.5	12.8	1.06													Ø30x20mm	CRM Cast		
	%	0.043	0.38	(0.02)	0.013	0.26	1.54	3.9	16.7	2.64						0.64							Ø30x20mm	CRM		
	%	0.59	0.54	(0.02)	0.017	0.25	2.06	7.51	23.6	0.46						1.41							Ø30x20mm	CRM		
	%	0.085	0.56	0.024	0.004	1.27	0.2	2.6	18.8	2.28								0.25					Ø30x20mm	CRM		
	%	0.07	1.25	0.02	0.002	0.14	0.12	11.8	16.4	1.04								0.03					Ø30x20mm	CRM		
	%	0.15	(1.07)	0.021	(0.003)	0.72	0.24	10.9	10.7	1.62								0.86					Ø30x20mm	CRM		
	%	0.21	(1.9)	0.032	0.003	0.87	0.45	14.8	20.2	0.2								0.13					Ø31x19mm	CRM Wrought		316
	%	0.046	1.63	0.02	0.018	0.502	0.169	12.18	18.45	2.38				0.101					0.047				Ø31x19mm	CRM Wrought		321
	%	0.067	1.8	0.018	0.013	0.54	0.121	11.2	17.4	0.165				0.1				0.34					Ø31x19mm	CRM Wrought		348
	%	0.056	1.76	0.025	0.014	0.59	0.105	11.35	17.4	0.22				0.12		0.65							Ø31x19mm	CRM Wrought	A286	
	%	0.044	0.64	0.023	0.0007	0.43	0.14	24.2	14.8	0.18	0.24		0.0055	0.15		(0.07)		2.12	0.23				Ø31x19mm	CRM Chill Cast		
	%	0.034	2.39	0.017	0.038	0.29	0.385	7.25	22.59	0.79	(0.003)			0.033	(0.21)	(0.015)			0.04				Ø31x19mm	CRM Chill Cast		
	%	0.142	0.95	0.023	0.0064	0.64	0.097	10.86	17.76	0.44	(0.004)			0.22	(0.055)	(0.15)			0.033				Ø31x19mm	CRM Chill Cast		
	%	0.225	0.544	0.03	0.019	1	0.226	8.76	16.7	0.24	(0.004)			0.127	(0.11)	(0.48)		(0.013)	0.176		(0.001)		Ø31x19mm	CRM Chill Cast		
	%	0.1	1.44	0.06	0.051	0.53	0.44	13.08	19.31	0.068				0.38	(0.077)	(0.22)		(0.004)	0.135		(0.001)		Ø31x19mm	CRM Chill Cast	ACI-CD-4M-CU	
	%	0.036	0.71	0.013	0.003	0.61	2.63	1.07	17.06	0.23			(0.0004)	0.1		0.15			0.092	(0.1)			Ø31x19mm	CRM Chill Cast	17-4PH	
	%	0.062	1.03	0.025	0.027	0.74	3.17	5.46	25.1	2.13			(0.0004)	0.19		(0.002)			0.2	(0.18)			Ø40x15mm	RM Cast		
	%	0.15	0.75	0.01		0.5	0.1	5	18	1				0.05				0.25					Ø40x15mm	RM Cast		
	%	0.1	0.5	0.03	0.03	0.85		10	18	2.5	0.05							0.5					Ø40x15mm	RM Cast		
	%	0.05	0.25	0.07	0.07	1.2	0.05	15	18	4				0.02				0.75					Ø40x15mm	RM Cast		
	%	0.1	0.5	0.03	0.03	0.85		10	16	2.5	0.1							0.5					Ø40x15mm	RM Cast		
	%	0.1	0.5	0.03	0.03	0.85	0.05	10	20	2.5				0.05				0.5					Ø40x15mm	RM Cast		
	%	0.05	0.8			0.6		6	24	1.5													Ø40x15mm	RM Cast		
	%	0.1	0.6			0.8		5.5	26	1													Ø40x15mm	RM Cast		
	%	0.15	0.4			1		5	28	0.5													Ø40x15mm	RM Cast		316
	%	0.04	1	0.006	0.005	1	0.1	12	17.5	2.8			0.002	0.05				0.02		0.1	0.01		Ø40x15mm	RM Cast		
	%	0.05	1	0.006	0.005	1	0.2	12	17.5	2.8			0.007	0.1				0.05		0.15	0.03		Ø40x15mm	RM Cast		
	%	0.04	1	0.006	0.005	1	0.4	12	17.5	2.8			0.01	0.15				0.07		0.2	0.07		Ø40x15mm	CRM Cast		
	%	0.075	1.25	0.05	0.01	0.2	0.02	6	15	0.1				0.1		0.5							Ø40x15mm	CRM Cast		
	%	0.1	1	0.04	0.02	0.5	0.04	8	18	0.2				0.08		0.4							Ø40x15mm	CRM Cast		
	%	0.12	0.75	0.03	0.03	0.75	0.06	12		0.3				0.06		0.3							Ø40x15mm	CRM Cast		
	%	0.05	0.5	0.02	0.04	1.25	0.08	16	22	0.4				0.04		0.2							Ø40x15mm	CRM Cast		
	%	0.02	0.25	0.01	0.05	1.75	0.1	20	25	0.5						0.1							Ø40x15mm	CRM Cast		
	%	0.2	0.5	0.01	0.075	0.2	0.15	6	16	0.8				0.02		0.5							Ø40x15mm	CRM Cast		
	%	0.15	0.75	0.025	0.05	0.4	0.1	8	18	0.2				0.05		1.5							Ø40x15mm	CRM Cast		
	%	0.1	1	0.05	0.025	0.8	0.05	10	20	0.4				0.1		1							Ø40x15mm	CRM Cast		
	%	0.05	1.5	0.075	0.01	1.3	0.02	12	22	0.6				0.15		0.75							Ø40x15mm	RM Cast		
	%	0.02	0.5	0.01	0.075	1.2	0.15	5	15	1.5						0.02							Ø40x15mm	RM Cast		
	%	0.06	1.5	0.05	0.025	0.6	0.06	13	19	2.5						0.1							Ø40x15mm	RM Cast		
	%	0.08	2	0.075	0.01	0.3	0.02	18	23	3.5						0.15							Ø40x15mm	CRM Chill Cast		
	%	0.07	0.42			0.4		7.9	0.3	2.47					0.04								Ø40x15mm	CRM Chill Cast		
	%	0.1	0.7		0.01	0.6		10	18	2					0.1								Ø40x15mm	CRM Chill Cast		
	%	0.16	1.07			0.57		12	16.1	2.8					0.2								Ø40x15mm	CRM Chill Cast		
	%	0.17	0.44			0.58		10	19.1	0.11					0.04								Ø40x15mm	CRM Chill Cast		
	%	0.06	0.62			0.66		11.1	18.2	0.21					0.095								Ø40x15mm	CRM Chill Cast		
	%	0.101	0.107			0.73		9.05	17.1	0.49					0.29								Ø40x15mm	CRM Cast	17-4PH	
	%	0.04	1.6	0.05	0.025	0.05	3	5	16.5	0.1					0.05	0.05							Ø40x15mm	CRM Cast	FV 520	
	%	0.06	1.2	0.025	0.05	0.5	4	3.5	17	1					0.025	0.15							Ø40x15mm	CRM Cast		
	%	0.1	0.4	0.01	0.025	1.75	6	3	16	0.75					0.075	0.45							Ø40x15mm	CRM Cast		
	%	0.02	0.8	0.025	0.05	0.75	5.5	4	15	0.25					0.1	0.35							Ø40x15mm	CRM Cast		
	%	0.12	1	0.05	0.01	1	4.5	4.5	18	0.5					0.025	0.55							Ø40x15mm	CRM Cast		
	%	0.08	0.6	0.025	0.01	2	2	6.5	13	1.5					0.05	0.5							Ø40x15mm	CRM Cast		
	%	0.14	1.4	0.01	0.025	1.25	0.75	5.5	14	2.5					0.075	0.25							Ø38x19mm	CRM Wrought		
	%	0.0103	0.686	0.0053	0.0051	0.374	0.0091	6.124	14.727	0.0138				(0.004)									Ø38x19mm	CRM Wrought		
	%	0.0345	0.722	0.0053	0.0041	0.463	0.0112	12.85	11.888	0.0304													Ø38x19mm	CRM Wrought		
	%	0.019	1.4	0.025	0.019	0.27	0.276	10.2	18.46	0.265			0.0022	0.116	0.063								Ø38x19mm	CRM Wrought		
	%	0.086	0.79	0.02	0.028	0.57		20.05	25.39			(0.003)		0.054									Ø38x19mm	CRM Wrought		
	%	0.073	0.9	0.011	0.016	0.59	0.03	9	18					0.022				0.3	0.04				Ø38x19mm	CRM Wrought		
	%	0.062	0.698	0.02	0.016	0.505		8.61	17.65	2.19		0.017	0.0024			0.029	0.005						Ø38x19mm	CRM Wrought		
	%	0.082	0.788	0.018	0.019	0.52		9.21	18.09			0.004				0.99							Ø38x19mm	CRM Wrought		
	%	0.143	1.7	0.014	0.02	1.41		8.9	17.96					0.018									Ø38x19mm	CRM Wrought		
	%	0.022	1.7	0.008	0.02	0.17	0.35	14.74	19.06	3.55	(0.006)	0.03		(0.02)					0.3				Ø38x19mm	CRM Wrought		
	%	0.05	0.89	0.037	0.008	0.21	1.94	5.66	14.14	1.59	0.013			0.22		0.22	0.015						Ø35-41x12mm	RM Wrought	Carp20CB3	
	%	0.021	0.77	0.024	<0.002	0.77	3.17	32.93	20.16	2.07	0.1		(0.0019)	0.096	0.022	0.36	0.004	(0.001)	0.059				Ø35-41x12mm	RM Wrought	A-286	
	%	0.5	0.14	0.014	0.005	0.15	0.1	24.1	14	1.1	0.19		0.0065	0.18	0.0036	0.05	(0.003)	2.2	0.24	0.05			Ø35-41x12mm	RM Wrought	AL6XN	
	%	0.03	0.26	0.014	0.0007	0.39	0.61	23.78	20.58	6.19	0.007		(0.0012)	0.047	0.208	0.023	(0.001)	(0.003)	0.092	(0.005)			Ø38x12mm	RM Wrought	17-7PH	
	%	0.074	0.835	0.025	0.0005	0.387	0.412	7.11	16.44	0.43	1.17	(0.005)		0.104	0.029	0.168	0.008	0.076	0.124	0.05			Ø38x12mm	RM Wrought		316
	%	0.047	1.48	0.029	0.028	0.31	0.35	10.09	16.21	2.03	0.003		0.0005	0.18	0.044	0.007	0.012		0.059	0.023			Ø38-45x13mm	RM Wrought	317L	
	%	0.027	1.17	0.029	0.0014	0.67	0.23	13.63	18.16	3.07	(0.005)		0.0013	0.14	0.056	0.031	0.005		0.09	0.018			Ø35x12mm	RM Wrought		2205
	%	0.02	1.39	0.019	0.002	0.48	0.17	5.61	22.3	3.31	0.006		(0.0004)	0.101	0.159		0.004	(0.003)	0.064	<0.02			Ø38x12mm	RM Wrought		321
	%	0.037	1.72	0.025	0.022	0.58	0.28	10.58	17.16	0.3	0.044	(0.004)	(0.0005)	0.048	0.0082	0.008	0.006	0.38	0.079	(0.03)			Ø38x12mm	RM Wrought		347
	%	0.051	1.57	0.028	0.026	0.51	0.15	9.16	17.24	0.38	0.002	(0.003)	0.0036	0.05	0.056	0.71	0.006	(0.002)	0.04				Ø38-45x13mm	RM Wrought		303
	%	0.062	1.76	0.036	0.35	0.63	0.41	8.58	17.1	0.48	0.001	(0.015)	0.0012	0.16	0.035	0.016	0.01	(0.004)	0.087	0.047			Ø35-45x12mm	RM Wrought		304
	%	0.053	1.83	0.028	0.017	0.56	0.25	8.42	19.72	0.36	0.003	0.005	0.0007	0.11	0.234	0.013	0.01	<0.005	0.088	0.044			Ø35-45x12mm	RM Wrought	304L	
	%	0.026	1.35	0.023	0.012	0.36	0.19	10.06	18.15	0.41	0.014	0.014	0.0026	0.21	0.069		0.007	0.003	0.078	0.037			Ø35-45x12mm	RM Wrought		304
	%	0.05	1.71	0.029	0.021	0.48	0.31	8.5	18.36	0.38	0.02		0.0005	0.136		(0.0003)			0.044	0.03			Ø35-45x12mm	RM Wrought		304
	%	0.034	1.76	0.023	0.0012	0.0012	0.1	9.13	19.14	0.134	0.003			0.056	0.048	0.011	0.003	0.002	0.072	0.023			Ø38-45x13mm	RM Wrought		309
	%	0.062	1.61	0.027	0.001	0.58	0.26	12.49	22.38	0.31	0.006		0.0024	0.12	0.072	0.062	0.006	0.003	0.064	0.041			Ø38-45x13mm	RM Wrought		316
	%	0.017	1.46	0.035	0.025	0.57	0.46	10.34	17.12	2.08	(0.002)	(0.005)	0.0005	0.23	0.059	0.024	0.007	(0.002)	0.09	0.054			Ø38-45x13mm	RM Wrought		321
	%	0.049	1.69	0.0252	0.024	0.55	0.45	10.03	17.09	0.59	0.13	0.006	0.0006	0.97	0.016	0.065	(0.006)	0.48	0.134	0.06			Ø38-45x13mm	RM Wrought		330
	%	0.054	1.3	0.021	0.0011	1.22	0.23	34.99	18.74	0.24	(0.007)	(0.003)	0.0026	0.098	0.035	0.19	0.004	(0.006)	0.061	(0.03)			Ø38-45x13mm	RM Wrought		347
	%	0.055	1.66	0.025	0.026	0.64	0.28	10.21	17.37	0.29	0.004		0.0007	0.18	0.038	0.59	0.004	0.005	0.13	0.05			Ø38x12mm	RM Wrought		
	%	0.035	0.31	0.017	0.0011	0.468	3.42	4.61	14.93	0.063	0.003		(0.0004)	0.029	0.013	0.27	0.003	(0.001)	0.096				Ø38-45x13mm	CRM Wrought		310
	%	0.059	1.51	0.025	0.002	0.99	0.15	20.03	24.18	0.11	0.014		0.0026	0.24	0.037	0.026	0.005	0.003	0.075	0.011			Ø38-45x13mm	RM Wrought		
	%	0.045	1.06	0.026	0.016	0.71	0.34	8.57		0.34	0.003		0.0006	0.2	0.083	0.026	0.01	0.028	0.09	0.04			Ø38-45x13mm	RM Wrought		
	%	0.042	1.06	0.025	0.019	0.69	0.3	8.63	18.34	0.5	0.003		(0.0007)	0.19		0.016	0.009	0.031	0.08	0.04			Ø38-45x13mm	RM Wrought		
	%	0.038	0.97	0.027	0.024	0.7	0.42	8.59		0.41	0.003		0.0008	0.22	0.094	0.02	0.01	0.024	0.07	0.06			Ø40x25mm	RM Wrought		
	%	0.055	1.74	0.028	0.015	0.41	0.13	9.81	17.9	0.18				(0.07)		<0.01	(0.011)	0.032	0.03	0.12			Ø40x25mm	RM Wrought		
	%	0.055	1.3	0.015	0.014	0.58	0.07	12.6	17.4	2.46				(0.06)		<0.01	(0.002)	0.28	0.027	(<0.01)			Ø40x25mm	RM Wrought		
	%	0.038	1.69	0.01	0.018	0.55	0.05	11.59	17.8	(0.009)				(0.05)		<0.01	(0.008)	0.29	0.027	(<0.01)			Ø40x25mm	RM Wrought		
	%	0.05	1.45	0.011	0.02	0.42	0.06	12.95	13.5	0.03				(0.06)		<0.01	(0.007)	0.004	0.02	(<0.01)			Ø40x25mm	RM Wrought		
	%	0.045	1.45	0.036	0.017	0.39	0.4	9.55	16.7	0.85				0.21		(0.06)	0.017	0.25	0.06	(0.11)			Ø40x25mm	RM Wrought		
	%	0.065	1.89	0.046	0.025	0.43	0.35	8.45	17.5	0.5				0.22		(0.06)	0.014	0.004	0.04	(0.08)			Ø40x25mm	RM Wrought		
	%	0.045	1.54	0.035	0.059	0.29	0.5	8.25	17.6	0.74				0.29		(0.06)	0.016	0.004	0.03	0.18			Ø40x25mm	RM Wrought		
	%	0.55	1.35	0.013	0.017	0.63	0.08	12.6	17.4	2.36				0.03		(0.06)	0.009	0.3	0.03	(0.12)			Ø40x25mm	RM Wrought		
	%	0.04	1.49	0.012	0.023	0.37	0.07	12.5	17.2	2.33				0.05		(0.05)	0.008	0.006	0.03	(0.11)		/Y	Ø35x30mm	CRM Wrought		
	%	0.053	0.48	0.024	0.0048	0.3	0.02	0.18	16.7	0.013	(0.002)			0.017	0.0129							/Y	Ø35x30mm	CRM Wrought		
	%	0.018	1.81	0.035	0.0027	0.42	0.16	10.2	18.42	0.24	0.005			0.17	0.0198							/Y	Ø35x30mm	CRM Wrought		
	%	0.044	1.73	0.03	0.0027	0.42	0.2	11.38	16.56	2.13	(0.005)			0.18	0.0084							/Y	Ø35x30mm	CRM Wrought		
	%	0.044	1.8	0.023	0.0006	0.4	0.16	13.96	22.43	0.2	(0.003)			0.28	0.0554							/Y	Ø35x30mm	CRM Wrought		
	%	0.046	1.69	0.025	0.0006	0.4	0.15	19.42	24.79	0.23	(0.002)			0.15	0.02							/Y	Ø35x30mm	CRM Wrought		
	%	0.036	1.81	0.028	0.0043	0.62	0.2	9.52	17.34	0.22	0.017			0.17	0.0101	0.54							Ø38-45x13mm	RM Wrought		

CrNi - Ca Treated		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Co	N	Nb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy	
	%	0.203	1.54	0.026	0.019	0.46	0.43	11.21	17.44	2.08	0.004		0.0006	0.31	0.046	0.021	0.013	0.03	0.062	0.074			Ø38-45x13mm	RM Wrought		

	%	0.2	1.56	0.026	0.018	0.48	0.42	11.22	17.48	2.08	0.007		0.001	0.32	0.048	0.022	0.16	0.027	0.066	0.077			Ø38-45x13mm	RM Wrought	
	%	0.018	1.6	0.027	0.024	0.49	0.43	11.26	17.49	2.04	0.004		0.0005	0.22	0.058	0.031	0.01	0.033	0.063	0.05			Ø38-45x13mm	RM Wrought	
	%	0.018	1.43	0.028	0.027	0.46	0.42	11	17.6	2.03	(0.008)		(0.0004)	0.24	0.045	0.012	(0.012)	(0.036)	0.054	0.06		/Y	Ø40x30mm	CRM	
CrNiCu		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Co	Pb	Nb	Sn	Ti	V	W	Zn	Others/Set Only	Size	Type	Alloy
	%	0.028	0.493	0.019	0.035	1.97	3.06	7.85	14.15	1.99	0.099	0.021	0.0034	0.292	0.0026	0.192	0.054	0.268	0.11	0.42	0.0058	/Y	Ø40x30mm	CRM	
	%	0.044	0.6	0.035	0.037	0.99	3.44	13.99	16.05	1.33	0.108	0.0121	0.012	0.03	0.0018	0.047	0.025	0.62	0.042	0.067	0.0076	/Y	Ø40x30mm	CRM	
	%	0.11	0.22	0.0068	0.019	2.42	1.05	11.15	18.82	3.44	0.092	0.0094	0.0017	0.199	0.0037	0.098	0.0094	0.146	0.098	0.25	0.0073	/Y	Ø40x30mm	CRM	
	%	0.079	0.92	0.013	0.016	0.567	2.54	11.91	17.04	3.69	0.097	0.01	0.0015	0.115	0.003	0.071	0.0169	0.67	0.081	0.22	0.0068	/Y	Ø40x30mm	CRM	
	%	0.026	0.36	0.048	0.038	1.91	2.95	17.83	12.14	1.73		0.0226	0.016	0.008	0.0012		0.035	0.05			0.0064	/Y	Ø40x30mm	CRM	
	%	0.089	0.67	0.017	0.013	1.53	1.78	13.06	17.9	2.51	0.051	0.0099	0.056	0.053	0.0015	0.017	0.0152	0.125	0.066	0.12	0.0064		Ø31x19mm	CRM Wrought	Valve Steel
CrNiMn		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Co	N	Nb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.502	9.16	0.031	0.002	0.219	0.375	3.43	21.08	0.237									0.096				Ø32x19mm	CRM Wrought	201
	%	0.066	7.11	0.038	0.0033	0.397	0.442	5.34	16.69	0.331				0.127					0.08				Ø40x15mm	CRM Chill Cast	
	%	0.3	7.7			1.01		5.12	19						0.078	1.51							Ø40x15mm	CRM Chill Cast	
	%	0.66	10			1.04		4.07	21.7						0.25	1.95							Ø40x15mm	CRM Chill Cast	
	%	1.11	10.2			1.07		3.05	23.8						0.57	2.43							Ø40x15mm	CRM Chill Cast	
	%	0.514	9.34		0.009	1.54		6.83	29.08						0.813	2.83							Ø38x15mm	CRM Wrought	
	%	0.08	22.5		0.007	0.05	<0.05	0.1	24.9	1.1					1.07								Ø38x15mm	CRM Wrought	
	%	0.26	17.1		0.003	1.5	<0.05	0.1	23.9	1.1					0.81								Ø32-41x12mm	RM Wrought	
	%	0.344	3.26	0.029	0.01	0.79	0.32	7.4	23.28	0.3	0.001			0.1	0.32	0.042	(0.006)	0.002	0.1	0.05			Ø32-41x12mm	RM Wrought	Nitronic50
	%	0.018	5.05	0.012	0.001	0.32	0.067	13.19	21.09	2.04	0.012		(0.0023)	0.039	0.334	0.2	(0.002)	(0.002)	0.2	0.2			Ø32-41x12mm	RM Wrought	Nitronic60
	%	0.071	8.16	0.019	0.001	4.03	0.18	8.15	16.52	0.21	0.022		0.0009	0.072	0.148	0.017	0.005	0.007	0.094	0.04			Ø35-41x12mm	RM Wrought	Greek Ascoloy
	%	0.172	0.35	0.016	0.004	0.37	0.093	1.85	12.14	0.12	0.002	(0.002)	<0.0005	0.036	0.0256	0.006	0.003	0.002	0.09	2.6			Ø35-41x12mm	RM Wrought	PH13-8Mo
	%	0.035	0.06	0.007	0.001	0.08	0.041	8.34	12.66	2.2	1		(0.0004)	0.036	0.0045	(0.006)	(0.002)	0.051	0.014	0.032			Ø35-41x12mm	RM Wrought	15-5PH
	%	0.033	0.49	0.022	0.002	0.38	3.41	4.43	14.46	0.3	0.002		0.0017	0.026	0.027	0.32	0.007	(0.001)	0.048	(0.014)			Ø40x15mm	RM Cast	
CrNiW		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Co	N	Nb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%		0.6			1.5	0.2	12.5	20	0.2						0.25				3			Ø40x15mm	RM Cast	
	%	0.05	0.7	0.01	0.01	1.7		12.5	26	0.3				0.05		0.15				3.25			Ø40x15mm	RM Cast	
	%	0.1	0.25	0.03	0.03	2.5	0.5	9	22	0.5				0.1		0.5				3.5			Ø40x15mm	RM Cast	
	%	0.15	1.1			0.5		15.75	23											3			Ø40x15mm	RM Cast	
	%	0.05	0.7	0.02	0.02	1.5	0.25	12.5	23	0.2				0.2		0.25				2			Ø40x15mm	RM Cast	
	%	0.1	0.5	0.04	0.04	1.5	0.25	12.5	22	0.2						0.15				4			Ø31x18.25mm	RM Wrought	Invar36
Ni		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Co	N	Nb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.55	0.76	0.01	0.001	0.27	0.08	36.07	0.17	0.01	(0.002)			0.056	(0.0026)	(0.01)	(0.002)	<0.005	0.024	(0.035)			Ø31x18.25mm	RM Wrought	Maraging 300
	%	0.005	0.04	0.006	0.0006	0.02	0.093	18.48	0.09	4.87	0.1			9.25	0.0012	0.005	0.002	0.74	0.009	0.02			Ø38x19mm	RM	M250
	%	0.002	0.008				0.008	18.44		4.88	0.058		0.0024	7.54									Ø38x19mm	RM	M300
	%	0.005	0.034				0.047	18.51		4.97	0.12		0.002	9.07									Ø31x16mm	RM Cast	Invar36
	%	0.052	0.2	0.038	0.017	0.27	0.02	36.03	0.22	0.23	0.25			0.17		0.04	0.026	0.48	0.05				Ø31x16mm	RM Cast	Invar36
	%	0.098	0.59	0.031	0.027	0.41	0.13	35.84	0.06	0.11	0.17			0.44		0.09	0.0008	0.36	0.06				Ø32x10mm	RM	
	%	0.077	0.31	0.006	0.002	0.24	0.023	30	0.71	0.011				0.026			0.002						Ø31x19mm	CRM Wrought	Ni36
	%	0.025	0.468	0.004	0.005	0.194	0.039	36.03	0.062	0.01				0.008					0.001				Ø31x19mm	CRM Wrought	Ni48Fe51
	%	0.007	0.305	0.003	0.003	0.32	0.038	48.2	0.06	0.01				0.022									Ø35-41x12mm	RM Wrought	Invar36
	%	0.04	0.72	0.008	0.005	0.19	0.016	35.86	0.16	0.003	(0.001)			0.028	0.0026	<0.002	(0.002)	<0.003	0.001	<0.03			Ø38x25mm	CRM Wrought	
NiCo		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Co	N	Nb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.0018	0.0168	0.0053	0.0025	0.0177	0.0094	18.07	0.0236	4.99	0.1067		0.0009	7.76	0.0007			0.52			0.005		Ø32x15mm	CRM	
	%	0.014	0.015	0.003	<0.001	0.32	0.01	24.49	5.54	0.006	0.47		0.0038	29.24		4.62		0.82	0.043	<0.01			Ø32x10mm	RM	N35
	%		0.25	0.008		0.15	0.02	31.54	0.07	0.006	<0.004			5.22			0.001						Ø31x19mm	CRM Wrought	
	%	0.022	0.052	<0.003	0.0025	0.097	0.022	37.78	0.077	0.014	0.99		0.0079	16.1		2.99		1.48	0.077				Ø40x15mm	RM Cast	
	%	0.01	0.1	0.01	0.01	0.05		17.4	0.02	4	0.007			11				0.2					Ø40x15mm	RM Cast	
	%	0.01	0.15	0.02	0.01	0.1		18	0.15	4.5	0.002			9				0.52					Ø40x15mm	RM Cast	
	%	0.05	0.3	0.03	0.05	0.3		19	0.3	5.5	0.3			7				0.87					Ø40x15mm	CRM Cast	
NiCoAl		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Co	N	Nb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.08	0.26		0.007	0.31	6.1	17.1			9.03			15.1				0.5			0.2		Ø31x16mm	RM	AerMet100
NiCrCo		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Co	N	Nb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.228	0.002	0.001	<0.001	<0.01	0.006	11.38	3.12	1.18	0.004			13.39				0.005					Ø35x20mm	CRM Cast	
Various		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Co	N	Nb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.097	1.5	0.011	0.025	1.8	0.44	18.2	2.06	3.15						1.22		(0.01)					Ø35x20mm	CRM Cast	
	%	0.37	0.19	0.017	0.021	1.26	0.11	22.3	3.99	4.12								0.5					Ø35x20mm	CRM Cast	
	%	0.014	0.34	0.009	0.008	0.61	(0.02)	28.2	1	0.82								0.13					Ø35x20mm	CRM Cast	
	%	0.007	0.82	0.007	0.008	0.12	0.04	33.4	0.13	0.021													Ø35x20mm	CRM Cast	
	%	0.65	0.94	0.062	0.036	0.76	0.12	9.19	10.28	0.41						1.65		0.27					Ø35x20mm	CRM Cast	
	%	0.067	1.9	0.045	0.015	1.49	0.07	13.8	15.6	1.77						0.07		0.46					Ø35x20mm	CRM Cast	
	%	0.076	0.99	0.027	0.026	0.67	0.14	3.31	18.9	2.59						0.07		0.11					Ø35x20mm	CRM Cast	
	%	0.61	2.01	0.03	0.025	(1.2)	0.09	6.2	25.22	0.14						(0.12)		(0.5)					Ø40x15mm	RM Cast	
Iron Base	Steel	Special	Disc																						
High Mn		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Co	N	Nb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	1.6	12.5	0.052	0.017	1.3																	Ø40x15mm	RM Cast	
	%	1	10.5	0.015	0.005	1.5																	Ø40x15mm	RM Cast	
	%	1.5	13.5	0.076	0.026	1.2																	Ø50x10mm	CRM Chill Cast	
	%	0.873	11.74	0.098	0.0118	0.782		3.01	0.178	0.955	0.0375								(0.017)				Ø50x10mm	CRM Chill Cast	
	%	1.398	13.37	0.0421	0.0032	0.373	0.166	0.732	0.668	0.101	0.0022			(0.43)	0.0146				(0.025)				Ø40x15mm	CRM Chill Cast	
	%	0.5	20	0.01	0.01	0.25	0.05	0.1	1.25	0.5	<0.01						<0.01		<0.01				Ø40x15mm	CRM Chill Cast	
	%	0.75	10	0.01	0.01	1.25	0.05	0.5	0.25	1.5	0.01						0.05		0.05				Ø40x15mm	CRM Chill Cast	
	%	1	12	0.05	0.02	1	0.1	0.25	0.5	0.25	0.02						0.02						Ø40x15mm	CRM Chill Cast	
	%	1.25	14	0.035	0.035	0.5	0.25	1	2	0.75	0.02						0.02		0.02				Ø40x15mm	CRM Chill Cast	
	%	1.5	8	0.02	0.05	1.5	0.5	1.5	3.5	2	0.05						0.01		0.01				Ø50x10mm	CRM Chill Cast	
	%	0.994	16.73	0.0494	0.0112	1.101	(0.04)	0.0745	1.482	0.608	0.11								0.0839				Ø50x10mm	CRM Chill Cast	
	%	1.165	9.18	0.0468	0.0042	0.133		3.833	1.059	1.295	0.186								(0.01)				Ø50x10mm	CRM Chill Cast	
	%	0.873	11.74	0.098	0.0118	0.782		3.01	0.178	0.955	0.0375								(0.017)				Ø50x10mm	CRM Chill Cast	
	%	1.398	13.37	0.0421	0.0032	0.373	0.166	0.732	0.668	0.101	0.0022			(0.43)	0.0146				(0.025)				Ø44x19mm	CRM Wrought	
	%	0.813	14.05	0.079	0.0203	0.595		1.585	2.03	0.304	0.0093								(0.028)				Ø32x17mm	RM Cast	
	%	0.588	19.38	0.043	0.005	0.22	0.135	0.06	1.37	0.52	0.052			0.013	0.038	0.06	0.012		0.016				Ø32x17mm	RM Cast	
	%	1.13	11.3	0.019	0.043	0.64	0.029	0.36	0.22	0.049	0.019			0.009	0.042	0.05	0.007		0.32				Ø38x12mm	RM Wrought	Nitronic40
	%	0.022	9.72	0.015	0.001	0.46	0.072	6.74	19.57	0.15	(0.004)	(0.002)	0.0005	0.044	0.255	(0.004)	0.003	0.002	0.11	0.015			Ø38x12mm	RM Wrought	
	%	0.098	5.71	0.024	0.023	3.66	0.33	5.34	16.33	0.36	(0.002)			0.11	0.117	0.024		0.012	0.083	0.033			Ø38x12mm	RM Wrought	
	%	0.104	12.11	0.018	0.002	0.66	0.088	1.82	18.48	0.21	(0.003)		0.0007	0.028	0.37	0.014	0.004	0.003	0.107				Ø32x17mm	RM Cast	
	%	1.57	8.76	0.092	0.009	1.46	0.51	1.48	3.75	1.97	0.057			0.014	0.039	0.04	0.037		0.1				Ø41x13mm	RM Wrought	41140
High PbS		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Co	N	Nb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.4	0.9	0.009	0.022	0.27	0.13	0.25	1	0.205	(0.024)												Ø41x13mm	RM Wrought	4150
	%	0.497	0.87	0.029	0.029	0.26	0.21	0.17	0.98	0.19	0.02						0.014		0.004				Ø41x13mm	RM Wrought	86L20
	%	0.2	0.83	0.009	0.03	0.25	0.141	0.416	0.512	0.17	0.022	0.004		0.008	0.0113		0.008		(<0.002)				Ø41x13mm	RM Wrought	12L14
	%	0.079	1.04	0.065	0.308	0.002	0.006	0.007	0.02	0.002	(0.001)			0.005	0.004		(0.001)		(0.003)				Ø41x13mm	RM Wrought	11L17
	%	0.165	1.05	0.009	0.116	0.004	0.03	0.04	0.08	0.018	(0.002)												Ø31x19mm	CRM Wrought	
High S		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Co	N	Nb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.423	0.19	0.033	0.092	1.28	0.204	4.06	2.7	1.5				0.076		(0.045)		(0.015)	0.42				Ø31x19mm	CRM Chill Cast	1211
	%	0.02	0.102	0.09	0.112	0.876	0.041	0.067	0.049	0.038	0.111												Ø38x19mm	RM Wrought	1117
	%	0.152	1.16	0.012	0.094	0.26	0.111	0.045	0.072	0.01	0.002	0.004		0.006	0.0071		0.006		0.002				Ø41-44x19mm	RM Wrought	1117
	%	0.15	1.19	0.007	0.115	0.24	0.24	0.063	0.066	0.012	(0.002)			(0.007)	0.0084		0.01	(0.0015)	0.002				Ø41-44x19mm	RM Wrought	1141
	%	0.42	1.57	0.018	0.11	0.03	0.031	0.032	0.09	0.18							0.014	(0.002)					Ø38x25mm	CRM Wrought	
High Si		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Co	N	Nb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.0039	0.365	0.0076	0.0005	1.908					0.201				0.002								Ø35x30mm	CRM Wrought	
	%	0.61	0.87	0.022	0.035	1.72	0.281	0.19	0.218	0.048	0.014												Ø35x30mm	CRM Wrought	
	%	0.013	0.025	0.011	0.0017	3.14	0.008	0.018	0.025	(0.002)	0.397	0.0031			0.0026			0.009					Ø35x19mm	CRM Cast	
	%	0.16	2.05	0.068	0.051	1.95	0.09	3.74	0.26	0.11	0.037					0.11		0.075	0.53				Ø35x19mm	CRM Cast	
	%	0.1	0.14	0.014	0.013	5.29	0.033	0.036	0.065									0.02					Ø35x19mm	CRM Cast	
	%	0.09	0.6	0.058	0.033	0.66	0.1	0.11	0.4									(<0.01)					Ø35x19mm	CRM Cast	
	%	0.17	0.23	0.012	0.041	1.97	0.16	0.077	0.24									(<0.005)					Ø31x19mm	CRM Wrought	
	%	0.026	0.277	0.028	0.009	0.009	0.7	0.038	0.019	0.008	0.329						0.003						Ø31x19mm	CRM Wrought	
	%	0.027	0.094	0.006	0.026	3.19	0.056	0.05	0.022	0.014	0.0028						0.004		0.01				Ø31x18.75mm	RM Wrought	A-2
Tool		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Co	N	Nb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.99	0.54	0.017	0.003	0.35	0.1	0.14	4.79	1.01	0.006			0.014	0.0096	0.006	0.004	0.003	0.22	(0.026)	(<0.005)		Ø31x18.75mm	RM Wrought	A-6
	%	0.68	1.98	0.012	0.003	0.39	0.05	0.096	1.04	1.22	(0.006)		(0.001)	0.015	0.0107	0.005	0.004	0.003	0.014	0.013	(<0.005)		Ø31x18.75mm	RM Wrought	D-2
	%	1.49	0.36	0.021	0.005	0.3	0.035	0.095	(12.51)	0.8	0.014			0.025	0.0128		0.004	0.005	0.76	(0.022)	(<0.005)		Ø31x18.75mm	RM Wrought	H-13
	%	0.38	0.36	0.014	0.005	0.99	0.089	0.18	5.1	1.23	0.013		(0.0005)	0.013	0.0105	0.004	0.005	0.003	0.94	0.012	(<0.005)		Ø31x18.75mm	RM Wrought	L-6
	%	0.68	0.61	0.009	0.034	0.24	0.15	1.35	0.66	0.2	0.03	0.006	0.0002	0.016	0.009	0.003	0.008	0.003	0.008	(0.016)	(<0.01)		Ø31x18.75mm	RM Wrought	M-2
	%	0.84	0.27	0.014	0.006	0.39	0.072	0.18	3.86	4.79				0.41	0.0251	0.016	(0.008)	0.004	1.83	5.98	(0.004)		Ø31x18.75mm	RM Wrought	O-6
	%	1.39	0.89	0.014	0.012	1.02	0.05	0.11	0.13	0.25	0.011	0.003	(<0.0005)	0.004	0.008	0.002	0.005	0.003	0.005	(0.01)	(<0.01)		Ø31x18.75mm	RM Wrought	S-1
	%	0.49	0.48	0.023	0.012	0.94	0.08	0.3	1.31	0.16	0.011	(0.009)	(0.0009)	0.014	0.015	0.004	0.024	0.004	0.16	1.84	(<0.005)		Ø31x18.75mm	RM Wrought	S-5
	%	0.59	0.79	0.017	0.006	1.96	0.17	0.09	0.23	0.2	0.014		(<0.001)	0.007	0.0092	(0.002)	0.008	0.01	0.17	(0.016)	(<0.01)		Ø31x18.75mm	RM Wrought	T-1
	%	0.74	0.28	0.02	0.023	0.28	0.07	0.08	4.14	0.093	(0.006)			(0.04)	0.0096	0.004	(0.009)	(0.004)	1.12	(17.26)	(0.006)		Ø40x40mm	CRM Wrought	
	%	0.113	0.54	0.018	0.011	0.49	0.88	0.042	0.46	(0.008)	0.015		(0.002)			(0.005)		(0.002)	0.045		(0.002)		Ø40x40mm	CRM Wrought	
	%	0.082	0.31	0.093	0.012	0.34	0.27	0.04	0.52	0.007	0.013					(0.001)		0.022	0.002				Ø40x40mm	CRM Wrought	
	%	0.097	0.68	0.019	0.013	0.12	0.17	0.13	0.077	0.012	0.01					(0.01)		0.01	0.022		(0.003)		Ø40x40mm	CRM Wrought	
	%	0.114	0.37	0.081	0.016	0.58	0.46	0.039	0.41	0.015	0.021							0.023	(0.007)				Ø40x40mm	CRM Wrought	
	%	0.129	1.37	0.022	0.011	0.25	0.057	0.33	0.12	0.1	0.012		(0.001)			0.07		0.01	(0.005)				Ø40x40mm	CRM Wrought	
	%	0.482	1.21	0.014	0.013	0.29	0.56	0.097	0.16	0.054	0.013		(0.001)			0.08		0.01	0.074				Ø40x40mm	CRM Wrought	
	%	1.11	1.89	0.03	0.011	0.15	0.31	0.056	0.26	0.007	0.007					(0.01)		0.01	0.095		(0.002)	/Y	Ø35x50mm	CRM Wrought	
	%	0.26	0.535	0.013	0.007	0.325		0.52	1.54										0.095	10.42		/Y	Ø35x50mm	CRM Wrought	
	%	0.305	0.376	0.032	0.0235	0.24		0.326	2.01										0.19	7.54		/Y	Ø35x50mm	CRM Wrought	
	%	0.36	0.3	0.058	0.05	0.16		0.225	2.536										0.29	6.16		/Y	Ø35x50mm	CRM Wrought	
	%	0.38	0.445	0.012	0.034	0.18		0.096	3.095										0.395	9.42		/Y	Ø35x50mm	CRM Wrought	
	%	0.61	0.145	0.055	0.024	0.37		0.165	2.736										0.575	7.88		/Y	Ø38x25mm	CRM Wrought	
	%	0.809	0.241	0.0191	0.032	0.417		0.277	3.5	5.3									1.63	5.27		/Y	Ø38x25mm	CRM Wrought	
	%	0.845	0.295	0.0238	0.024	0.285		0.204	3.98	4.72									1.15	5.92		/Y	Ø38x25mm	CRM Wrought	
	%	0.735	0.077	0.0103	0.049	0.521		0.429	2.54	6.48									2.62	4.12		/Y	Ø38x25mm	CRM Wrought	
	%	0.732	0.08	0.0138	0.031	0.435		0.379	2.98	5.86									2.11	4.66		/Y	Ø38x25mm	CRM Wrought	
	%	0.941	0.403	0.035	0.012	0.167		0.099	4.93	3.54									0.37	7.05		/Y	Ø38x25mm	CRM Wrought	
	%	0.879	0.304	0.03	0.015	0.216		0.143	4.48	4.1									0.74	6.44			Ø38x25mm	CRM	
	%		0.365	0.0093	0.0189	1.034	0.183	0.203	4.975	1.134					0.0116		0.0133		0.296				Ø35x30mm	CRM Wrought	
	%	2.08	0.292	0.024	(0.0012)	0.26	0.06	0.298	12	0.103	0.012	(0.006)		0.018	0.0151		(0.0043)	0.02	0.055	(0.68)			Ø35x30mm	CRM Wrought	
	%	0.911	0.244	0.016	0.016	0.072	0.081	0.329	4.18	4.83				5.12	0.0325				1.91	6.27			Ø32x10mm	RM	O 2
	%	0.9	1.62	0.014	0.018	0.37	0.058	0.055	0.2	0.26									0.086				Ø38x19mm	RM Wrought	A2
	%	0.95	0.72	0.01	0.004	0.4	0.06	0.1	5.13	1.05									0.22				Ø38x19mm	RM Wrought	D2
	%	1.53	0.48	0.013	0.005	0.4	0.04	0.1	11.46	0.75				0.02					0.89	<0.01			Ø38x19mm	RM Wrought	H13
	%	0.39	0.3	0.015	0.005	1.05	0.061	0.1	5.23	1.36									1.02				Ø38x19mm	RM Wrought	M1
	%	0.8	0.3	0.012	0.005	0.22	0.087	0.12	3.91	8.22									1.05	1.58			Ø38x19mm	RM Wrought	M2
	%	0.82	0.33	0.012	0.004	0.27	0.06	0.25	4.03	4.96				0.05					1.81	6.47			Ø38x19mm	RM Wrought	M7
	%	1	0.29	0.012	0.003	0.34	0.066	0.1	3.6	8.49									2.02	1.78			Ø38x19mm	RM Wrought	O-1
	%	0.91	1.27	0.009	0.004	0.36	0.05	0.06	0.49	0.07									0.25	0.51			Ø32x10mm	RM	
	%	0.125	0.51	0.01	0.002	0.29	0.064	2.92	15.8	5.13													Ø32x10mm	RM	A6FM
	%	0.72	2.12	0.011	0.076	0.3	0.038	0.069	0.94	1.29	0.006								0.035				Ø35x40mm	CRM Wrought	
	%	0.89	0.478		0.064	0.11	0.14	0.16	3.46	2.5		0.006		2.4				(<0.02)	2.63	4.26			Ø35x40mm	CRM Wrought	
	%	0.6	0.55		0.0036	0.52	0.14	0.35	5.2	5.24		0.008		4.42				1.14	2.01	2.97			Ø35x40mm	CRM Wrought	
	%	1.37	0.58		0.023	0.31	0.34	0.257	3.99	1.54				(0.03)				(0.02)	4.62	11.71			Ø35x40mm	CRM Wrought	
	%	0.7	0.36		0.003	0.39	(0.16)	0.53	2.57	0.86				5.93				0.47	1.33	19.55			Ø35x19mm	CRM Cast	
	%	0.51	0.79	(0.02)	0.026	0.3	0.26	1.72	0.96	0.37													Ø31x19mm	CRM	M2
	%	0.836	0.34	0.011	0.004	0.18	0.088	0.228	4.36	4.86				0.028					1.82	6.28			Ø34x19mm	CRM	S7
	%	0.477	0.61	0.008	0.0031	0.264	0.083	0.105	3.1	1.39			<0.001	(<0.007)					0.236	(0.002)			Ø31x19mm	CRM Chill Cast	
	%	0.453	0.174	0.031	0.092	1.38	0.204	4.04	2.63	1.46	(0.005)	(0.002)		0.064				0.037	0.42				Ø40x15mm	RM Cast	
	%	0.75	0.3		0.01	0.6	0.05	0.05	3.5	5.5				0.3					2	5.2			Ø40x15mm	RM Cast	
	%	0.65	0.05	0.03	0.03	0.4	0.1	0.35	4.5	4.5				0.05					1.5	7.2			Ø40x15mm	RM Cast	
	%	0.85	0.15	0.05	0.05	0.2	0.2	0.2	4	5				0.15					1.75	6.2			Ø40x15mm	RM Cast	
	%	0.75	0.25	0.02	0.02	0.25		0.1	4	0.5				0.5					0.9	17.5			Ø40x15mm	RM Cast	
	%	0.9	0.4	0.04	0.04	0.35		0.05	4	0.75				5					1	18			Ø40x15mm	RM Cast	
	%	0.8	0.05	0.02	0.02	0.4		0.3	4.5	1				10					1.2	19			Ø40x15mm	RM Cast	
	%	1	0.1	0.01	0.01	0.1			3.8	0.2				2					0.5	10			Ø40x15mm	RM Cast	
	%	0.9	0.35	0.02	0.02	0.4	0.13	0.1	3.6	3.4				8					1.5	6			Ø40x15mm	RM Cast	
	%	0.7	0.2	0.03	0.03	0.2	0.25		4.2	5.2									1.9	6.5			Ø40x15mm	RM Cast	
	%	1.2	0.3	0.02	0.02	0.3	0.1		4.5	4.8				0.75					1.75	14			Ø40x15mm	RM Cast	
	%	1	0.3	0.02	0.02	0.3		0.1	4	9.3				9					1.2	1.8			Ø38x19mm	CRM Wrought	
	%	0.68	0.25	0.023	0.022	0.15		(0.09)	3.41	0.28				0.31					0.56	14			Ø38x19mm	CRM Wrought	
	%	0.67	0.26	0.027	0.027	0.14		(0.16)	3.95	0.4				0.29					1.04	17.8			Ø38x19mm	CRM Wrought	
	%	0.65	0.22	0.023	0.023	0.16		(0.08)	2.9	0.18				2.06					0.22	9.28			Ø38x19mm	CRM Wrought	
	%	0.94	0.41	0.043	0.039	0.3		(0.14)	4.02	0.66	(0.006)			4.97			0.019		1.02	17.8			Ø38x19mm	CRM Wrought	
	%	0.74	0.21	0.029	0.021	0.27		(0.06)	4.54	5.2	(0.005)			0.08			0.014		1.82	5.8			Ø38x19mm	CRM Wrought	
	%	1.02	0.26	0.022	0.029	0.18		(0.14)	3.91	9.41	0.006			7.95			(0.006)		1.14	1.8			Ø40x15mm	RM HIP	10V
	%	2.46	0.5	0.018	0.078	0.86	0.08	0.08	5.2	1.3				0.01					9.65	0.02			Ø40x15mm	RM Wrought	M-2
	%	0.85	0.3	0.027	0.0022	0.25	0.039	0.053	4.14	4.92	0.018			0.01	0.018				1.82	6.15			Ø40x15mm	RM Wrought	H-13
	%	0.395	0.38	0.017	0.005	1.06	0.049	0.1	5.15	1.24				0.031					0.94	0.1			Ø40x15mm	RM Wrought	O-1
	%	0.879	1.13	0.021	0.024	0.22	0.14	0.13	0.495	0.035	(0.005)			0.012					0.18	0.46			Ø40x15mm	RM Wrought	A-2
	%	0.97	0.68	0.021	0.007	0.27	0.06	0.089	2.25	0.96	0.01	0.002		0.01	0.0108		0.016		0.29	0.028			Ø40x15mm	RM Wrought	L-6
	%	0.67	0.62	0.009	0.019	0.21	0.16	1.45	0.79	0.17	0.011			(0.02)					(0.01)				Ø40x15mm	RM Wrought	A-6
	%	0.71	2.28	0.02	0.006	0.35	0.076	0.089	1.18	1.07	0.002	0.004		0.02	0.0076		0.005	0.002	0.1	0.11			Ø40x15mm	RM Wrought	O-6
	%	1.41	0.89	0.013	0.011	1.02	0.038	0.19	0.22	0.23	(0.007)	0.008							0.05	0.035			Ø40x15mm	RM HIP	
	%	0.36	0.32	0.016	0.015	0.94	0.07	0.24	3.5	2.4	0.004			2					0.62	0.3			Ø40x15mm	RM Wrought	A-10
	%	1.41	1.75	0.016	0.022	1.15	0.16	1.82	0.24	1.53	0.006			(0.01)					(0.004)	<0.005			Ø40x25mm	RM Wrought	
	%	0.43	0.36	0.012	(0.003)	0.99	0.07	0.09	1.39	0.09				(<0.05)					0.01	2.03			Ø40x25mm	RM Wrought	
	%	0.86	0.27	0.019	(0.01)	0.3	0.09	0.14	4.31	5.19				(<0.05)					1.98	6.75			Ø40x25mm	RM Wrought	
	%	0.87	0.34	0.023	(0.008)	0.31	0.09	0.17	4.24	0.34				0.25					0.99	18.5		/Y	Ø35x30mm	CRM Wrought	
	%	0.76	0.31	0.016	0.0008	0.28	0.027	0.065	4	0.58				0.12	0.029				0.83	17.16		/Y	Ø35x30mm	CRM Wrought	
	%	0.78	0.35	0.026	0.0031	0.3	0.025	0.052	3.97	0.54				4.59	0.027				0.84	17.48		/Y	Ø35x30mm	CRM Wrought	
	%	0.8	0.33	0.025	0.0028	0.36	0.017	0.044	3.99	0.41				9.09	0.032				0.99	17.03		/Y	Ø35x30mm	CRM Wrought	
	%	0.89	0.31	0.027	0.0007	0.32	0.053	0.12	3.98	4.85				4.63	0.0465				1.87	6.1		/Y	Ø35x30mm	CRM Wrought	
	%	1.23	0.31	0.026	0.0015	0.28	0.066	0.18	3.96	3.09				9.6	0.0348				3.25	8.94		/Y	Ø35x30mm	CRM Wrought	
	%	0.86	0.3	0.025	0.0013	0.37	0.046	0.13	3.97	4.88				0.4	0.0548				1.88	6.27		/Y	Ø35x30mm	CRM Wrought	
	%	0.95	0.96	0.0082	0.0095	0.24	0.022	0.038	0.9	0.051									(0.009)	0.66		/Y	Ø35x30mm	CRM Wrought	
	%	1.05	0.69	0.015	0.0065	0.22	0.092	0.109	0.75	0.107									0.064	1.13		/Y	Ø35x30mm	CRM Wrought	
	%	1.22	0.45	0.016	0.0069	0.31	0.037	0.16	0.36	0.16									0.16	3.44		/Y	Ø35x30mm	CRM Wrought	
	%	0.3	0.54	0.013	0.016	0.28	0.014	0.2	2.56	0.27									0.39	5.55		/Y	Ø35x30mm	CRM Wrought	
	%	0.38	0.3	0.018	(0.012)	0.89	0.21	0.044	4.92	1.19									0.42	0.103		/Y	Ø35x30mm	CRM Wrought	
	%	0.57	0.88	0.016	0.0165	0.101	0.16	1.51	0.87	0.36									(0.007)	(0.004)			Ø40x30mm+	RM Wrought	
Iron Base	Steel	Control Chart Samples	Disc																						
		C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	As	B	Co	N	Nb	Sn	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.09	1.2	0.06	0.3	0.001	0.006	0.01	0.01	0.005	0.0005	0.003	0.0001	0.003									Ø31x18mm	RM Wrought	
	%	0.51	1.03	0.039	0.025	0.49	0.26	0.78	0.7	0.4	0.1	0.033	0.006	0.054	0.0053	0.058	0.017	0.078	0.34	0.13			Ø31x18mm	RM Wrought	

	%	0.25	1.84	0.018	0.008	1.16	0.52	1.01	0.21	0.052	0.014	0.023	0.004	0.1	0.008	0.008	0.085	0.0023	0.085	0.38			Ø31x18mm	RM Wrought
	%	1.08	2.42	0.04	0.015	0.35	0.25	0.61	2.35	0.13	0.016	0.03	0.002	0.014	(0.0098)	0.088	0.034	0.013	0.16	0.19			100g	CRM

Iron Base Steel Carbon Steel Chips

		Al	Al(sol)	Al(tot)	As	B	C	Ca	Co	Cr	Cu	Ga	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Te	Ti	V	W	Zn	Zr	Others/Set Only	Size	Type	Alloy
	%														0.0037																100g	CRM	
	%														0.0096																100g	CRM	
	%														0.0161																100g	CRM	
	%														0.0241																100g	CRM	
	%						0.035													0.0116											100g	CRM	
	%						0.119													0.027											100g	CRM	
	%						0.221													0.0197											100g	CRM	
	%						0.889													0.007											100g	CRM	
	%						0.0021													0.0057											100g	CRM	
	%						0.221													0.0197											100g	CRM	
	%																			0.0383											100g	CRM	
	%						0.086													0.128											Ø35-40x30mm+	RM Wrought	

Iron Base Steel Low Alloy Disc

Control Chart Samples		Al	As	B	C	Ca	Co	Cr	Cu	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Te	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.0025	0.0015	0.0001	0.004	<0.0001	0.003	0.013	0.01	0.0385	<0.001		0.001	0.022	0.003	<0.001	0.0025		0.0065	0.0005	<0.0002	0.0005	0.0003	0.0002	<0.0002		Ø35-40x30mm+	RM Wrought	
	%	0.04	0.05	0.0035	0.36	0.0003	0.03	0.61	0.27	0.64	0.32	0.021	0.013	0.72	0.037	0.01	0.011	0.0015	0.35	0.03		0.042	0.29	0.04	0.002		Ø35-40x30mm+	RM Wrought	
	%	0.007		0.0045	0.04		0.21	16.7	0.09	1.7	2.01		0.77	11.03	0.026		0.002		0.36			0.005	0.07	0.03			Ø35-40x30mm+	RM Wrought	
	%	0.008	0.008	0.002	1.7		0.03	10.9	0.06	0.4	0.8		0.04	0.3	0.01	0.005	0.01		0.4	0.005		0.003	1	0.03	0.004		Ø40x40mm	SUS Wrought	

Iron Base Steel Setting-Up Samples (SUS) Disc

		Al	As	B	Bi	C	C(gr)	Ca	Co	Cr	Cu	In	La	Mg	Mn	Mo	N	Nb	Ni	P	Pb	Rb2O	S	Sb	Si	Sn	Ta	Te	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.03	0.05	0.001	0.05	0.15			0.05	0.1	0.5				1.5	0.1	0.02	0.1	3	0.07	0.05		0.07	0.01	0.2	0.05	0.3	0.02	0.01	0.5	0.5	0.1		Ø40x40mm	SUS Wrought	
	%	0.2	0.005	0.01	0.005	0.9		0.005	0.3	3	0.05				0.2	1.3	0.02	0.3	0.1	0.01	0.005		0.01	0.08	0.9	0.005	0.01	0.001	0.1	0.05	0.05	0.005		Ø40x40mm	SUS Wrought	
	%					0.5				3.5					17					0.01			0.01		0.6									Ø40x40mm	SUS	
	%	0.01				1			4	3.5	0.14				0.4	4.5		0.03	0.3	<0.01			<0.01			0.01			0.002	1.5	7			Ø40x40mm	SUS Wrought	
	%					1.3			10	4					0.3	3.5				0.01			0.01		0.4					3	10			Ø40x40mm	SUS Wrought	
	%					0.04				18	2				1.2	3		0.5	23	<0.01			<0.01		0.5									Ø40x40mm	SUS Wrought	
	%	0.3				0.1			20	22			0.02		1.5	3	0.2	1	20						0.4						2.5	0.02		Ø40x40mm	SUS Wrought	
	%	0.4	0.002	0.0005	0.001	1		0.0003	0.01	0.05	0.01				1.8	0.01	0.03	0.005	3	0.005	0.001		0.005	0.04	0.05	0.05	<0.01	0.001	0.01	0.01	0.01	0.005		Ø40x40mm	SUS Wrought	
	%	0.01	0.05	0.008	0.02	0.05		0.003	0.4	3	0.4				0.07	0.5	0.03	0.5	0.01	0.08	0.03		0.08	<0.001	1.8	0.005	0.2	0.02	0.1	0.5	0.4	0.2		Ø40x40mm	SUS Wrought	
	%	0.4	0.003	0.002	0.001	3		0.0003	0.01	0.1	0.01				1.8	0.02		0.005	3	0.005	0.002		0.01	0.04	0.1	0.05	0.002	0.001	0.01	0.03	0.006	0.002		Ø40x40mm	SUS Wrought	
	%	0.4				1									1.8				3							0.05								Ø40x40mm	SUS Wrought	
	%			0.008					0.4	3	0.4					0.5		0.5		0.08	0.03		0.08		1.8				0.1	0.5	0.4			Ø40x30mm	SUS Wrought	
	%	0.05			0.08		1				8				1				9		0.5		0.3			0.6		0.05						Ø40x40mm	SUS Wrought	
	%	0.3	0.06	0.008	(0.03)	0.9		0.005	0.8	2.7	0.5				1.6	0.9	0.06	0.5	3.1	0.1	0.02		0.08	0.2	1.3	0.1	(0.5)	(0.03)	0.1	0.5	0.7	(0.1)		100g	CRM	

Iron Base Steel Carbon Steel Chips

		Al	Al(sol)	Al(tot)	As	B	C	Ca	Co	Cr	Cu	Ga	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Te	Ti	V	W	Zn	Zr	Others/Set Only	Size	Type	Alloy
	%						0.565						0.707					0.016		0.021		0.25									150g	CRM	

Iron Base Steel Special Tool Chips

		Al	As	B	C	Co	Cr	Cu	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Ti	V	W	Others/Set Only	Size	Type	Alloy
	%				0.886	0.189	4.04	0.062	0.312	4.85	0.0259		0.191	0.02	0.0004	0.023		0.3	0.007		1.94	6.42		150g	CRM	

Iron Base Steel Low Alloy Chips

		Al	Al(sol)	As	B	C	Co	Cr	Cu	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Ti	V	W	Others/Set Only	Size	Type	Alloy
	%					1.263						0.0027				0.16	0.0094			0.0027		0.161	1.75		150g	CRM	
	%	0.036	0.032			0.1726	0.008	0.024	0.045	1.45	0.004	0.008	0.17	0.035	0.0148		0.011		0.36	0.006	0.0008	0.002			150g	CRM	
	%					0.1744		1.048			0.578				0.0151		0.001								100g	CRM	

Iron Base Steel High Alloy Chips

CrNi		Al	As	B	C	Ca	Ce	Co	Cr	Cu	Fe	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Se	Si	Sn	Ta	Ti	V	W	Others/Set Only	Size	Type	Alloy
	%						0.096		(22.3)			(1.7)	(0.1)			(11.3)													150g	CRM	
	%	0.0169		0.0018	0.0477	0.0033		0.089	16.76	0.199		1.589	2.531	0.0629		12.04	0.0222	1.6	0.0168			0.411	0.004			0.041			Ø10x500mm	CRM	

Iron Base Steel Low Alloy Pin

Various		O	Others/Set Only	Size	Type	Alloy
	%	0.0015		Ø10x500mm	CRM	
	%	0.0028		Ø10x500mm	CRM	
	%	0.0068		Ø10x500mm	CRM	

Iron Base Steel High Alloy Pin

CrNi		O	Others/Set Only	Size	Type	Alloy
	%	0.0198		150g	CRM	

	%	0.008	0.0039	0.0012	0.0133	0.123	0.058	26.72	0.936	1.73	3.55	0.0344	0.0012	3.82	0.016	1.29	0.0009	0.141	0.0039	0.075	0.0084		150g	CRM

Iron Base Steel Carbon Steel Chips

		Al	Al(sol)	Al(tot)	As	B	C	Ca	Co	Cr	Cu	Ga	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Te	Ti	V	W	Zn	Zr	Others/Set Only	Size	Type	Alloy
	%	0.0036					0.742		0.0048	0.0529	0.0175		0.803	0.0051	0.0054		0.0591	0.0101		0.0071		0.251	0.0044								Ø35x30-35mm	CRM	

Various		Al	As	C	Cr	Cu	Mn	Mo	Ni	P	S	Sb	Si	Sn	Others/Set Only	Size	Type	Alloy
	%	(0.028)	(0.003)	0.086	(0.021)	(0.013)	1.48	(0.006)	(0.029)	0.018	(0.006)	(0.0005)	0.406	(0.0085)		45x52x31 mm	CRM Wrought	

Iron Base Steel High Alloy Block

CrNi		B	C	Co	Cr	Cu	Mn	Mo	N	Ni	P	S	Si	Ti	Others/Set Only	Size	Type	Alloy
	%	(0.0004)	0.112	0.117	17.31	0.064	0.903	0.11	0.029	7.1	0.023	0.0112	0.616			45x52x31 mm	CRM Wrought	
	%	(0.0013)	0.021	0.151	19.51	0.045	1.61	(0.115)	0.064	9.07	(0.021)	0.0079	0.428			45x52x31 mm	CRM Wrought	
	%		0.037	0.266	17.04	0.058	1.72	2.04	0.0125	10.42	(0.025)	(0.004)	0.542	0.297		120g	CRM Wrought	

Iron Base Steel Carbon Steel Chips

		Al	Al(sol)	Al(tot)	As	B	C	Ca	Co	Cr	Cu	Ga	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Te	Ti	V	W	Zn	Zr	Others/Set Only	Size	Type	Alloy
	%		0.153				0.205			0.121	0.013		0.439	0.01			0.079	0.009		0.011		0.03									100g	CRM	
	%		(0.009)				0.415			0.1	0.278		0.699	0.029			0.104	0.029		0.036		0.292									100g	CRM	

Iron Base Steel High Alloy Chips

CrNi		Al	As	B	C	Ca	Ce	Co	Cr	Cu	Fe	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Se	Si	Sn	Ta	Ti	V	W	Others/Set Only	Size	Type	Alloy
	%				0.048			(0.16)	17.37	0.32		1.53	2.47	(0.036)		11.12	0.035		0.02			0.51							120g	CRM	

Iron Base Steel Carbon Steel Chips

		Al	Al(sol)	Al(tot)	As	B	C	Ca	Co	Cr	Cu	Ga	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Te	Ti	V	W	Zn	Zr	Others/Set Only	Size	Type	Alloy
	%						0.31			0.098	0.056		1.42	0.013			0.056	0.029		0.112		0.207									100g	CRM	
	%		0.093				0.837			0.215	0.187		0.923	0.099		0.061	0.174	0.023		0.027		0.24									100g	CRM	
	%		0.038			0.0084	0.406			0.17	0.125		1.04				0.085	0.017		0.025		0.541									100g+	RM	
	%														0.0095																100g+	RM	
	%														0.011																100g+	RM	
	%														0.017																100g+	RM	
	%														0.019																100g+	RM	Armco Iron

Iron Base Steel C,S,N,O,H Only Chips

		C	H	N	O	S	Others/Set Only	Size	Type	Alloy
	%			0.0033				100g+	RM	Cr13
	%			0.041				100g+	RM	Cr17Ni11

Iron Base Steel High Alloy Chips

CrNi		Al	As	B	C	Ca	Ce	Co	Cr	Cu	Fe	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Se	Si	Sn	Ta	Ti	V	W	Others/Set Only	Size	Type	Alloy
	%													0.04															100g+	RM	Cr10Ni20
	%													0.02															100g+	RM	Cr18Ni10
	%													0.022															Ø40x30mm	SUS Wrought	

Iron Base Steel Setting-Up Samples (SUS) Disc

		Al	As	B	Bi	C	C(gr)	Ca	Co	Cr	Cu	In	La	Mg	Mn	Mo	N	Nb	Ni	P	Pb	Rb2O	S	Sb	Si	Sn	Ta	Te	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.01				0.004				0.09	0.02				0.15	0.01			0.12	0.007			0.02		0.05				0.01	0.01				Ø40x30mm	SUS Wrought	
	%					0.48			11.8	4.3					0.63	6			0.53	0.005			0.017		0.17					1.54	0.45			Ø40x30mm	SUS Wrought	
	%					0.25				10.4	0.04				1.12	0.51		1.33	19.84	0.014			0.008		0.25						0.42			Ø40x30mm	SUS Wrought	
	%					0.18				1.99	0.17				0.3	0.18			2	0.06			0.08		1.83					0.14	2.04			Ø40x40mm	SUS HIP	
	%					0.4				13.6					0.5				0.1	0.01			0.01		0.8					0.3				Ø40x40mm	SUS HIP	
	%	0.01				1.6				11.5	0.06				0.4	0.8			0.2	0.01			0.01		0.3					0.8				Ø40x40mm	SUS HIP	
	%	0.01				0.9				0.4	0.04				2				0.1	0.01			0.01		0.3					0.1				Ø40x40mm	SUS HIP	
	%					2.3				20						1														4.2				Ø40x40mm	SUS HIP	
	%					1.6			5	4						1														5	12			Ø40x40mm	SUS HIP	
	%					2.45				5.3					0.5	1.3									0.9					9.6				100g	CRM	

Iron Base Steel Carbon Steel Chips

		Al	Al(sol)	Al(tot)	As	B	C	Ca	Co	Cr	Cu	Ga	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Te	Ti	V	W	Zn	Zr	Others/Set Only	Size	Type	Alloy
	%						0.12			0.04	0.08		0.53				0.036	0.012		0.026		0.23									100g	CRM	

Iron Base Steel High Alloy Chips

CrNi		Al	As	B	C	Ca	Ce	Co	Cr	Cu	Fe	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Se	Si	Sn	Ta	Ti	V	W	Others/Set Only	Size	Type	Alloy
	%				0.084				17.41			1.47	1.96			10.14	0.04		0.013			0.3			0.57				100g	CRM	

Iron Base Steel Special Tool Chips

		Al	As	B	C	Co	Cr	Cu	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Ti	V	W	Others/Set Only	Size	Type	Alloy
	%				0.33		2.61	0.13	0.38				1.52	0.023		0.007		0.23			0.29	8.31		100g	CRM	
	%				0.83		4.09		0.33	0.49			0.16	0.028		(0.0055)		0.35			1.23	17.3		100g	CRM	

Iron Base Steel Carbon Steel Chips

		Al	Al(sol)	Al(tot)	As	B	C	Ca	Co	Cr	Cu	Ga	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Te	Ti	V	W	Zn	Zr	Others/Set Only	Size	Type	Alloy
	%				(0.008)		0.41			0.18	0.11		0.66		(0.005)		0.071	0.025		0.029		0.24									100g	CRM	

Iron Base Steel Special Tool Chips

		Al	As	B	C	Co	Cr	Cu	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Ti	V	W	Others/Set Only	Size	Type	Alloy
	%				1.48		0.48		0.26					0.018		0.025		0.28			0.29	4.97		100g	CRM	

Iron Base Steel Carbon Steel Chips

		Al	Al(sol)	Al(tot)	As	B	C	Ca	Co	Cr	Cu	Ga	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Te	Ti	V	W	Zn	Zr	Others/Set Only	Size	Type	Alloy
	%						0.85			0.028	0.06		0.51		(0.005)		0.035	0.012		0.02		0.22									100g	CRM	
	%						1.21			0.09	0.049		0.23				0.049	0.013		0.024		0.23									100g	CRM	
	%						0.19			0.04	0.041		0.58				0.023	0.02		0.03		0.18									100g	CRM	
	%	0.041					0.146			0.08	0.129		1.03				0.062	0.112		0.114		0.3									100g	CRM	
	%	0.012	0.009				0.19			0.032	0.041		0.5	0.039			0.077	0.017		0.024		0.21				0.01					100g	CRM	
	%	0.032	0.026				0.12			0.45	0.88		0.56				0.041	0.019		0.03		0.55				(0.047)					100g	CRM	
	%	0.043	0.036				0.18			0.15	0.56		1.24	0.056		0.088	0.095	0.014		0.029		0.34				0.073					100g	CRM	
	%	0.012	(0.008)				0.11			0.32	0.17		0.37				0.051	0.029		0.027		0.18			0.021	0.046					100g	CRM	
	%	0.058	0.052				0.12			0.42	0.45		0.39				0.038	0.081		0.072		0.63			0.085						150g	CRM	1.0C
	%		0.171	0.174			1.03			0.063	0.122		1.63				0.32	0.086		0.03		0.176			0.156	0.031					150g	CRM	

Iron Base Steel Low Alloy Chips

R.E.		C	Mn	P	R E	S	Si	Ti	V	Others/Set Only	Size	Type	Alloy

%	0.092	1.07	0.058	0.028	0.011	0.36				150g	CRM			
%	0.22	1.6	0.067	0.069	0.009	0.36	0.1	0.067		100g	CRM			

Iron Base | Steel | High Alloy | Chips

Cr Ni Mn	C	Co	Cr	Mn	Mo	N	Ni	P	S	Si	Others/Set Only	Size	Type	Alloy
%	0.18	0.013	18.04	8.84	3.61	0.093	5.11	0.017	0.003	0.54		100g	CRM	

Iron Base | Steel | Special | Chips

High Mn	Al	C	Co	Cr	Cu	Mn	Mo	N	Ni	P	S	Si	V	Others/Set Only	Size	Type	Alloy
%		1.11		0.295	0.073	13.95			0.189	0.044	0.007	0.683	0.074		150g	CRM	

Iron Base | Steel | Special Tool | Chips

	Al	As	B	C	Co	Cr	Cu	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Ti	V	W	Others/Set Only	Size	Type	Alloy
%					2	11.71		0.294				0.113	0.049		0.0053		0.297				0.96		150g	CRM	

Iron Base | Steel | Carbon Steel | Chips

	Al	Al(sol)	Al(tot)	As	B	C	Ca	Co	Cr	Cu	Ga	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Te	Ti	V	W	Zn	Zr	Others/Set Only	Size	Type	Alloy
%						0.725						1.28					0.016		0.03		0.24									100g	CRM	0.3C
%						0.3			0.0061	0.0054		0.51				0.0038	0.019		0.03		0.26									100g	CRM	0.4C
%						0.41			0.0076	0.0087		0.63				0.0074	0.013		0.032		0.26									100g	CRM	0.15C
%				0.0034		0.15			0.013	0.023		0.46				0.01	0.0062		0.026		0.22									100g	CRM	0.6C
%				0.0019		0.59			0.014	0.015		0.73				0.008	0.0098		0.025		0.25									100g	CRM	0.5C
%				0.0011		0.48			0.009	0.006		0.65				0.006	0.016		0.028		0.27									100g	CRM	0.2C
%				0.003		0.22			0.027	0.017		0.45				0.02	0.015		0.03		0.23									100g	CRM	

Iron Base | Steel | Special Tool | Chips

	Al	As	B	C	Co	Cr	Cu	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Ti	V	W	Others/Set Only	Size	Type	Alloy
%				0.762		4.03	0.038	0.28	0.245			0.84	0.0241		0.026		0.241			1.3	18.16		100g	CRM	
%				0.855		4.08	0.041	0.275	4.84			0.046	0.0261		0.011		0.232			2.02	5.99		100g	CRM	
%				0.359		2.48	0.03	0.298	0.055			0.0208	0.0211		0.021		0.17			0.27	8.39		100g	CRM	
%				1.308		0.56	0.029	0.186	0.0175			0.0217	0.0222		0.04		0.266				5.03		100g	CRM	

Iron Base | Steel | High Alloy | Chips

Cr Ni	Al	As	C	Co	Cr	Cu	Mn	Mo	N	Ni	P	S	Si	Sn	Ti	V	W	Others/Set Only	Size	Type	Alloy
%	0.062	0.0096	0.046	0.056	17.03	0.197	1.3	2.73	0.023	12.14	0.024	0.011	0.574	0.016	0.35	0.029	0.013		100g	CRM	

NiCo	Al	B	C	Co	Cr	Cu	Fe	Mn	Mo	Nb	Ni	P	S	Si	Ta	Ti	V	Others/Set Only	Size	Type	Alloy
%			0.0015	17.77	0.148	0.072		0.307	4.13		28.8	0.0019	0.0056	0.106		0.004			100g	CRM	

Iron Base | Steel | Low Alloy | Chips

	Al	Al(sol)	As	B	C	Co	Cr	Cu	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Ti	V	W	Others/Set Only	Size	Type	Alloy
%	0.042		0.011	0.0031	1.006		1.506	0.126	1.063	0.011			0.046			0.0065	0.022	0.55	0.0107	0.0072				100g	CRM	

Iron Base | Steel | High Alloy | Chips

CrNi	Al	As	B	C	Ca	Ce	Co	Cr	Cu	Fe	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Se	Si	Sn	Ta	Ti	V	W	Others/Set Only	Size	Type	Alloy
%				0.03					15		0.41	2.06		0.56	6.16	0.025		0.012			0.32							150g	CRM	
%	0.029			0.109				17.97	0.208		0.96	0.153			20.12	0.027		0.013			1.35			0.45		0.155		100g	CRM	F 205

Iron Base | Steel | Special | Chips

Tool	C	Cr	Cu	Mn	Mo	N	Ni	P	S	Sb	Si	Sn	V	W	Others/Set Only	Size	Type	Alloy
%	0.91	3.98	0.091	0.32	2.59	0.051	0.1	0.021	0.0037		0.9		1.38	3.85		100g	CRM	

Iron Base | Steel | High Alloy | Chips

CrNi	Al	As	B	C	Ca	Ce	Co	Cr	Cu	Fe	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Se	Si	Sn	Ta	Ti	V	W	Others/Set Only	Size	Type	Alloy
%				0.029				17.39			0.96	3.64			14.62	0.018		0.007			0.76			0.32				100g	CRM	
%	1.03			0.063				17.35			0.66				7.48	0.0086		(0.004)			0.74							100g	CRM	
%				0.054				16.79	3.2		0.6			0.4	3.96	0.0076		0.0074			0.53							100g	CRM	

Iron Base | Steel | Carbon Steel | Chips

	Al	Al(sol)	Al(tot)	As	B	C	Ca	Co	Cr	Cu	Ga	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Te	Ti	V	W	Zn	Zr	Others/Set Only	Size	Type	Alloy
%						1.263			0.024	0.15		0.778				0.03	0.027		0.051		0.065									100g	CRM	
%						0.735			0.0063	0.0285		0.671				0.0097	0.03		0.019		0.292									150g	CRM	

Iron Base | Steel | High Alloy | Chips

CrNiMn	C	Cr	Mn	Ni	P	S	Si	Others/Set Only	Size	Type	Alloy
%	0.057	9.26	17.22		0.092	0.0083	0.606		150g	CRM	
%	0.077		14 13.49	1.63	0.074	0.0166	1.487		100g	CRM	

CrNi	Al	As	B	C	Ca	Ce	Co	Cr	Cu	Fe	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Se	Si	Sn	Ta	Ti	V	W	Others/Set Only	Size	Type	Alloy
%				0.125				15.39			1.62				35.92	0.03		0.031			0.834			1.09		2.89		100g	CRM	

Cr Ni	Al	As	C	Co	Cr	Cu	Mn	Mo	N	Ni	P	S	Si	Sn	Ti	V	W	Others/Set Only	Size	Type	Alloy
%			0.025		18.33	0.07	1.04	0.039		8.89	0.035	0.026	0.613		0.21		2.89		100g	CRM	

CrNi	Al	As	B	C	Ca	Ce	Co	Cr	Cu	Fe	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Se	Si	Sn	Ta	Ti	V	W	Others/Set Only	Size	Type	Alloy
%	0.182	0.042		0.061			0.031	17.81	0.08		1.3	0.02	0.016		10.31	0.024		0.003	0.0047		0.645	0.007		0.652	0.025		/Y	Ø32x42mm	CRM	

Cr Ni Mn	Al	C	Co	Cr	Cu	Mn	Mo	N	Nb	Ni	P	S	Si	Sn	Ti	V	W	Others/Set Only	Size	Type	Alloy
%		0.22		14.08		6.01	0.94		0.25	9.6	0.037	0.0033	0.34		0.052	0.32		/Y	Ø32x42mm	CRM	
%		0.22		16.05		7.21	0.79		0.35	4.96	0.018	0.0031	0.27		0.07	0.53		/Y	Ø32x42mm	CRM	
%		0.15		10.43		5.17	1.2		0.12	11.01	0.014	0.0055	0.21		0.102	0.81		/Y	Ø32x42mm	CRM	
%		0.34		12.43		8.44	0.72		0.18	8.14	0.021	0.0042	0.53		0.117	1.07		/Y	Ø32x42mm	CRM	
%		0.37		9.62		9.8	1.46		0.74	6.83	0.033	0.0043	0.6		0.089	1.28		/Y	Ø32x42mm	CRM	
%		0.48		8.43		11.07	1.79		0.43	5.9	0.035	0.013	1.03		0.27	1.72			1g, Ø6.350mm (20)	CRM	

Iron Base | Steel | Others | Ball

	H	N	O	Others/Set Only	Size	Type	Alloy
%	0.00044				2g (20)	CRM	

C-S-Mn

Iron Base | Steel | H Only | Ball

	H	N	O	Others/Set Only	Size	Type	Alloy
ppm	4.4				1g (20)	CRM	
ppm	2.4				1g (20)	CRM	
ppm		360	187		0.5g (20)	CRM	

Iron Base | Steel | Others | Ball

	H	N	O	Others/Set Only	Size	Type	Alloy
%		0.0231	0.0039		0.5g (20)	CRM	
%		0.00204	0.0353		3g (20)	CRM	

C-S-Mn

Iron Base | Steel | H Only | Ball

	H	N	O	Others/Set Only	Size	Type	Alloy
ppm	2.1				1g (50)	CRM	
ppm		57	8.4		1g (50)	CRM	
ppm		165	64		100g	CRM	
%	0.301	0.023			100g	CRM	
%	0.416	0.022			100g	CRM	
%	0.146	0.036			100g	CRM	
%	0.736	0.019			100g	CRM	
%	0.678	0.028			100g	CRM	
%	0.21	0.034			100g	CRM	
%	0.076	0.043			100g	CRM	
%	0.102	0.021			100g	CRM	
%	0.263	0.051			100g	CRM	
%	0.45	0.018			100g	CRM	
%	0.523	0.017			100g	CRM	
%	0.985	0.012			100g	CRM	
%	0.353	0.032			100g	CRM	

Iron Base | Steel | Carbon Steel | Chips

	Al	Al(sol)	Al(tot)	As	B	C	Ca	Co	Cr	Cu	Ga	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Te	Ti	V	W	Zn	Zr	Others/Set Only	Size	Type	Alloy
%						0.082											0.083		0.255											100g	CRM	
%						0.261			0.044	0.062		0.725		0.0091		0.085	0.0132		0.022		0.266									100g	CRM	
%						0.243			0.125	0.167		1.29				0.255	0.0121		0.0087		0.271									100g	CRM	
%						0.115						0.797					0.057		0.3											100g	CRM	
%						0.331						0.667					0.021	0.28	0.0156		0.264									100g	CRM	
%						0.104						0.726					0.0155	0.287	0.235		0.139									100g	CRM	
%	0.042			0.012		0.456			0.117	0.061		0.603		0.0051		0.042	0.018		0.021		0.318		0.0055							100g	CRM	
%	0.054			0.013		0.055				0.02		0.329		0.005			0.014		0.021		0.037									100g	CRM	
%				0.02		0.271			(0.088)	0.085		0.556		0.0044		(0.04)	0.0129		0.0254		0.282									100g	CRM	
%	(0.015)			0.023		0.858			(0.091)	0.065		0.327		0.01		(0.058)	0.0074		0.0095		0.194		(0.006)			(0.019)				100g	CRM	
%				0.018		0.107			0.048	0.117		1.274		0.0113		0.051	0.083	0.207	0.31		0.011		0.016							100g	CRM	
%	0.01					0.108			0.016	0.041		0.866		0.0078	0.0054	0.029	0.0057		0.024		0.037									100g	CRM	
%						0.181			(0.05)	(0.15)		1.18				(0.14)	(0.025)		0.126		(0.11)									100g	CRM	
%				(0.03)		0.22			(0.17)	0.21		(0.88)	(0.02)			(0.14)	0.092		(0.1)		(0.05)					(<0.01)				100g	CRM	
%						0.51			(0.16)	(0.15)		0.77	(0.02)			(0.12)	0.016		0.036		0.24									100g	CRM	
%	(0.01)					0.79			(0.11)	(0.12)		1.02	(0.026)			(0.13)	0.043		0.03		0.3		(0.017)			(0.01)				100g	CRM	
%						0.0507			0.0114	0.0146		0.246		0.0023		0.0096	0.012		0.0127		(0.003)									100g	CRM	
%						0.42			(0.07)	0.34		1.15	(0.02)			(0.13)	0.031		0.147		0.16		0.04							100g	CRM	
%						0.61			0.092	(0.14)		0.7	(0.02)			0.11	0.012		0.042		0.24									100g	CRM	
%	(0.004)					0.122			(0.028)	(0.06)		0.45	(<0.005)	0.004		(0.039)	(0.024)		(0.031)		(0.17)		(0.005)							100g	CRM	
%						0.21				0.1		(0.61)				0.21	(0.019)		(0.034)		0.12									100g	CRM	
%				(0.02)		1.26			(0.16)	(0.09)		0.3	(0.012)	(0.005)		(0.1)	0.019		0.022		0.24									100g	CRM	
%	0.034			0.007		0.151			(0.016)	(0.029)		1.28	(0.003)	0.0054		(0.021)	0.022		0.014		0.293		(0.0025)			0.058				100g	CRM	
%	0.021			0.004		0.596			0.0382	0.046		0.743		0.0074		0.022	(0.0234)		0.192		0.247		0.0037							100g	CRM	
%	0.023					0.099		0.017		0.026		0.605				0.042	0.0129		0.014		0.105		(0.0039)							100g	CRM	
%	0.032			(0.029)		0.415			0.018	0.025		0.769			(0.0047)	0.027	0.013	0.149	0.03		0.235			0.03						100g	CRM	
%	(0.004)			(0.004)		0.028			(0.013)	0.016		0.289		0.0022		0.014	0.0077		0.01											100g	CRM	
%						0.291				0.267		0.86	0.033			0.154	0.018		0.029		0.265		0.023							100g	CRM	
%						0.087		0.019		0.291		0.977					0.002	0.001	0.336		0.008					0.0021		0.0025		100g	CRM	
%				0.023		0.297			0.15	0.32		0.879				0.168	0.0238		0.0371		0.206		0.0263							100g	CRM	
%				0.024		0.174		0.015	0.078	0.171		0.671	0.021			0.118	0.01		0.046		0.0046		0.263		0.017					100g	CRM	
%						1.054			0.121		0.0028	0.226	0.0089	0.0146	0.00043	0.053	0.0128	0.00239	0.0095		0.0009		0.281			0.204		0.00209		100g	CRM	
%						0.518			0.312				0.098	0.0111		0.31														100g	CRM	
%	(0.003)			(0.02)		0.023		(0.017)	(0.022)	(0.05)		(0.252)	(0.003)	(0.001)		(0.039)	(0.014)	(0.0002)	0.0101		(0.003)		(0.01)		(0.0002)					100g	CRM	
%	0.044	0.04		(0.005)		0.113	0.0021	(0.006)	0.019	0.022		1.35	0.003		0.029	0.02	0.019	(0.0004)	0.0009	(0.001)	0.0263		(0.005)			0.0036				35x35x30mm	CRM	Wrought

Iron Base | Steel | Low Alloy | Block

Various	C	Co	Cr	Mn	Mo	N	Ni	P	S	Si	Others/Set Only	Size	Type	Alloy
%	0.395	0.034	2.18	1.28	0.41	0.0096	0.934	0.0112	0.0044	0.278		100g	CRM	

Iron Base | Steel | Special Tool | Chips

	Al	As	B	C	Co	Cr	Cu	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Ti	V	W	Others/Set Only	Size	Type	Alloy
%				0.95		4.25	0.124	0.236	2.64	0.04		0.114	0.016		0.022	0.0035	0.272	0.0251		2.44	3.03		100g	CRM	

Iron Base | Steel | Special | Chips

High Mn	Al	C	Co	Cr	Cu	Mn	Mo	N	Ni	P	S	Si	V	Others/Set Only	Size	Type	Alloy
%		0.912		0.354	0.073	12.73	0.032	0.02		0.045	0.0072	0.094			100g	CRM	

Iron Base | Steel | High Alloy | Chips

CrNi	Al	As	B	C	Ca	Ce	Co	Cr	Cu	Fe	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Se	Si	Sn	Ta	Ti	V	W	Others/Set Only	Size	Type	Alloy
%				0.068			0.221	17.24	0.123		1.443	0.306	0.035	0.66	10.32	0.032		0.012			0.482				0.057			100g	CRM	

Iron Base | Steel | Special Tool | Chips

	Al	As	B	C	Co	Cr	Cu	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Ti	V	W	Others/Set Only	Size	Type	Alloy
%	(0.009)			0.84	5.7	5.35	0.08	0.27	0.53			0.15	0.024		0.025		0.21	0.025		1.59	19.9		100g	CRM	

Iron Base | Steel | Special | Chips

High Mn	Al	Co	Cr	Cu	Mn	Mo	N	Ni	P	S	Si	V	Others/Set Only	Size	Type	Alloy
%		1.15	(0.35)	0.16	(0.17)	12.5	(0.031)	(0.013)	0.29	0.042	0.019	0.34	(0.02)		100g	CRM	

Iron Base | Steel | Special Tool | Chips

	Al	As	B	C	Co	Cr	Cu	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Ti	V	W	Others/Set Only	Size	Type	Alloy
%				0.88	0.32	5.12	0.09	0.3	4.92			0.12	0.023		0.029		0.19	0.019		1.94	6.97		100g	CRM	

Iron Base | Steel | Special | Chips

Tool	C	Cr	Cu	Mn	Mo	N	Ni	P	S	Sb	Si	Sn	V	W	Others/Set Only	Size	Type	Alloy
%	4.975	0.183	0.365	1.134	0.0116	0.203	0.0093	0.0189	0.296	1.034	0.0133	0.296				100g	CRM	

Iron Base | Steel | High Alloy | Chips

CrNi	Al	As	B	C	Ca	Ce	Co	Cr	Cu	Fe	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Se	Si	Sn	Ta	Ti	V	W	Others/Set Only	Size	Type	Alloy
%	0.015	(0.015)	0.0012	0.048			0.023	18.17	0.076		0.786		0.023		9.37	0.012	0.0005	0.016			0.929	0.009		0.216				100g	CRM	

Iron Base | Steel | Special Tool | Chips

	Al	As	B	C	Co	Cr	Cu	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Ti	V	W	Others/Set Only	Size	Type	Alloy

%	0.01		0.0003	1.219	10.27	4.15		0.217	3.41	0.033			0.022		0.029		0.345			3.28	9.66		100g	CRM

Iron Base | Steel | High Alloy | Chips

Various		Al	As	B	C	Co	Cr	Cu	H	Mn	Mo	N	Ni	O	P	S	Sb	Si	Sn	Ti	V	Zr	Others/Set Only	Size	Type	Alloy
	%	0.0027	0.0063	0.0026	0.0201	0.0525	16.811	0.1831		1.745	2.111	0.0151	10.72	0.0099	0.0258	0.0237		0.537	0.0047	0.191	0.0425			100g	CRM	
	%	0.1067		0.0009	0.0018	7.76	0.0236	0.0094		0.0168	4.99	0.0007	18.07		0.0053	0.0025		0.0117	(0.001)	0.52		0.005		100g	CRM	
	%	(0.0023)		(0.0003)	0.1	0.15	18.13			1.92	0.329	0.043	8.54	(0.0315)	0.026	0.28	0.0014		0.0084					100g	CRM	

CrNi		Al	As	B	C	Ca	Ce	Co	Cr	Cu	Fe	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Se	Si	Sn	Ta	Ti	V	W	Others/Set Only	Size	Type	Alloy
	%			0.89	0.016			0.148	18.61	0.203		1.48	0.247	0.019		10.35	0.027		0.0014			0.569							100g	CRM	
	%	0.199	(0.006)	0.0044	0.0489			0.065	14.63			1.016	1.102			24.68	0.0114		0.0027	(0.0013)		0.531	0.111		2.01	0.26			100g	CRM	

Iron Base | Steel | Special Tool | Chips

	Al	As	B	C	Co	Cr	Cu	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Ti	V	W	Others/Set Only	Size	Type	Alloy
%				0.911	5.12	4.18	0.081	0.244	4.83	0.0325		0.329	0.016		0.016		0.072			1.91	6.27		100g	CRM	

Iron Base | Steel | High Alloy | Chips

CrNi		Al	As	B	C	Ca	Ce	Co	Cr	Cu	Fe	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Se	Si	Sn	Ta	Ti	V	W	Others/Set Only	Size	Type	Alloy
	%	(0.002)	(0.008)	(0.0003)	0.0367			0.0255	18	0.0391		1.744	0.0464	0.064	0.571	10.09	0.0175		0.0055			0.402		(0.001)					100g	CRM	
	%	0.0203	0.0041	0.0018				0.045	19.51	1.481	48.36	1.758	3.996	0.0615		24.41	0.0167		0.0003	0.0007		0.418	0.0025			0.0456			100g	CRM	
	%	0.07			0.152			0.159	24.35	0.06		1.289	0.174	0.059		19.72	0.0228		0.0046			2.052				0.044			Rod, Ø8x100mm/90-100g (2)	CRM	

Iron Base | Steel | Carbon Steel | Rod

	N	O	Others/Set Only	Size	Type	Alloy
%	0.0053	0.0031		Ø8x100mm/90-100g (3)	CRM	
%	0.0042	0.0025		Ø8x100mm/90-100g (3)	CRM	
%	0.0157	0.0084		Ø8x100mm/90-100g (3)	CRM	
%	0.0029	0.0113		Ø8x100mm/90-100g (3)	CRM	
%	0.0083	0.0312		Ø57x52mm	SUS HIP	

Iron Base | Steel | Setting-Up Samples (SUS) | Disc

	Al	As	B	Bi	C	C(gr)	Ca	Co	Cr	Cu	In	La	Mg	Mn	Mo	N	Nb	Ni	P	Pb	Rb2O	S	Sb	Si	Sn	Ta	Te	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
%					0.9			0.3	1.7	0.7				1.1	0.9		0.6	3	0.02			0.014		0.8					0.5	0.7			100g	RM	Chips

Iron Base | Steel | C,S,N,O,H Only | Chips

	C	H	N	O	S	Others/Set Only	Size	Type	Alloy
%	0.0235		0.174		0.032		1g (100)	RM	
%			0.0064	0.0069			Ø50x40mm	RM	

Iron Base | Steel | Setting-Up Samples (SUS) | Disc

	Al	As	B	Bi	C	C(gr)	Ca	Co	Cr	Cu	In	La	Mg	Mn	Mo	N	Nb	Ni	P	Pb	Rb2O	S	Sb	Si	Sn	Ta	Te	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
%	0.0014	<0.0002	<0.0001		0.0006		<0.0001	0.0001	0.003	0.0004				0.0001	0.0005	0.0006	<0.0001	0.003				0.0001	<0.001	0.0003	<0.0001		<0.0004	<0.0003	<0.0002	<0.0005			Ø40x40mm	SUS Wrought	
%					0.002									0.001					0.0048			0.002		0.001									Ø45x40mm	SUS Wrought	
%	0.02				0.12				0.01	0.01				0.04				0.01	0.007			0.006		0.002									Ø40x40mm	SUS Wrought	
%	0.038				1.185				0.28	0.59				12.7	0.31			0.11	0.05			0.012		0.43				0.013					Ø40x40mm	SUS Wrought	
%					0.93			4.64	4.12					0.26	4.75				0.021			0.013		0.2					1.78	6.12			Ø40x40mm	SUS Wrought	
%					1.35			4.55	4.1	0.19			0.009	0.39	0.78			1.4	0.04			0.014		0.35				0.007	3.63	11.63			Ø40x40mm	SUS Wrought	
%	0.038		0.0051		0.341				19.7	0.082	0.04			1.55	1.46			12.9	0.0054	0.028	0.04	<0.001		0.568	0.011			0.014	0.095				Ø10x80mm	CRM	100Cr6

Iron Base | Steel | Others | Pin

	C	H	N	O	S	Others/Set Only	Size	Type	Alloy
%				0.0043			100g	CRM	

Iron Base | Steel | High Alloy | Chips

CrNi		Al	As	B	C	Ca	Ce	Co	Cr	Cu	Fe	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Se	Si	Sn	Ta	Ti	V	W	Others/Set Only	Size	Type	Alloy
	%								17.55						0.99	9.61								0.13		1.04	1.57		100g	CRM	

Iron Base | Steel | Others | Chips

	C	N	S	Others/Set Only	Size	Type	Alloy
%		0.0176			100g	CRM	

Iron Base | Steel | Carbon Steel | Chips

	Al	Al(sol)	Al(tot)	As	B	C	Ca	Co	Cr	Cu	Ga	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Te	Ti	V	W	Zn	Zr	Others/Set Only	Size	Type	Alloy
%						0.44						0.69					0.03		0.03		0.36									100g	CRM	

Iron Base | Steel | Special Tool | Chips

	Al	As	B	C	Co	Cr	Cu	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Ti	V	W	Others/Set Only	Size	Type	Alloy
%				0.879		4.29		0.28	0.85				(0.013)		0.013		0.22			2.61	12.13		100g	CRM	

Iron Base | Steel | Carbon Steel | Chips

	Al	Al(sol)	Al(tot)	As	B	C	Ca	Co	Cr	Cu	Ga	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Te	Ti	V	W	Zn	Zr	Others/Set Only	Size	Type	Alloy
%						0.99						0.28					0.006		0.023		0.25									100g	CRM	
%						0.54						0.78					0.021		0.044		0.371									100g	CRM	

Iron Base | Steel | High Alloy | Chips

CrNi		Al	As	B	C	Ca	Ce	Co	Cr	Cu	Fe	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Se	Si	Sn	Ta	Ti	V	W	Others/Set Only	Size	Type	Alloy
	%				0.081				19.11			1.47				9.43	0.03		0.02			0.63				(0.05)			100g	CRM	

Iron Base | Steel | Carbon Steel | Chips

	Al	Al(sol)	Al(tot)	As	B	C	Ca	Co	Cr	Cu	Ga	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Te	Ti	V	W	Zn	Zr	Others/Set Only	Size	Type	Alloy
%						0.451						0.59					0.011		0.031		0.28									100g	CRM	
%						0.319						1.51					0.026		0.021		0.32									100g	CRM	
%						0.457						0.6					0.012		0.032		0.281									100g	CRM	
%						0.105						0.523					0.0103		0.184		0.3									100g	CRM	
%				0.01				0.005	0.018	0.08		0.067				0.032	0.0074				0.11	0.012			<0.005					100g	CRM	
%				0.039				0.016	0.072	0.17		0.217	0.025			0.069	0.025				0.901			0.084		0.005				100g	CRM	

Iron Base | Steel | Special Tool | Chips

	Al	As	B	C	Co	Cr	Cu	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Ti	V	W	Others/Set Only	Size	Type	Alloy
%	(0.01)	0.006		0.89	2.4	3.46	0.14	0.478	2.5			0.16			0.064		0.11	(0.011)	(<0.02)	2.63	4.26		100g	CRM	
%	(1.1)	0.008		0.6	4.42	5.2	0.14	0.55	5.24			0.35			(0.0036)		0.52	(0.045)	1.14	2.01	5.97		100g	CRM	
%	(0.06)			0.94	8.92	4.46	0.2	0.44	9.57			(0.17)			0.048		0.2	(0.017)	(0.22)	1.05	2.83		100g	CRM	
%	(0.035)			1.37	(0.03)	3.99	(0.34)	0.58	1.54			0.257			0.023		0.31	(0.032)	(0.02)	4.62	11.71		100g	CRM	
%	(0.35)			0.7	5.93	2.57	(0.16)	0.36	0.86		(0.15)	0.53			(0.003)		0.39	(0.016)	(0.47)	1.33	19.55		100g	CRM	

Iron Base | Steel | Others | Chips

	C	N	S	Others/Set Only	Size	Type	Alloy
%		0.0321			Ø7x80mm	CRM	
%		0.0026			Ø7x80mm	CRM	
%		0.1784			Ø10x80mm	CRM	XCrNi18.5

Iron Base | Steel | High Alloy | Pin

	N	O	Others/Set Only	Size	Type	Alloy
%	0.0209	0.0098		Ø9x80mm	CRM	

Iron Base | Steel | Others | Pin

	C	H	N	O	S	Others/Set Only	Size	Type	Alloy
%			0.0357	0.0019			Ø7x80mm	CRM	
%			0.0049	0.1105			100g	RM	
ppm			1100	85			100g	RM	
ppm			70	200			100g	RM	
ppm			100	50			100g	RM	
ppm			200	165			1g (100)	RM	Pin

Iron Base | Steel | C,S,N,O,H Only | Chips

	C	H	N	O	S	Others/Set Only	Size	Type	Alloy
ppm			532	54			1g (100)	RM	Pin
ppm			34	14			0.5g (500)	RM	

Iron Base | Steel | Others | Pin

	C	H	N	O	S	Others/Set Only	Size	Type	Alloy
%	2.5				0.074		0.5g (500)	RM	
%	0.062				0.235		0.5g (500)	RM	
%	0.014				0.272		1g (100)	RM	
ppm		2.4					1g (100)	RM	
ppm		4.55					1g (50)	RM	Ball

Iron Base | Steel | C,S,N,O,H Only | Chips

	C	H	N	O	S	Others/Set Only	Size	Type	Alloy
ppm		3.7	425	18			100g	RM	

Iron Base | Steel | Others | 1g pin

	C	N	O	S	Others/Set Only	Size	Type	Alloy
ppm		300	15			100g	RM	
ppm		50	50			100g	RM	
ppm		600	100			0.5g (100)	RM	Pin

Iron Base | Steel | C,S,N,O,H Only | Chips

	C	H	N	O	S	Others/Set Only	Size	Type	Alloy
ppm			427	57			0.5g (100)	RM	Pin
ppm			3896	21			0.5g (100)	RM	

Iron Base | Steel | Others | Pin

	C	H	N	O	S	Others/Set Only	Size	Type	Alloy
ppm			194	164			0.5g (100)	RM	
ppm			108	83			0.5g (100)	RM	
ppm			73	189			0.5g (100)	RM	
ppm			53	36			0.5g (100)	RM	
ppm			308	6			0.5g (100)	RM	
ppm			660	33			0.5g (100)	RM	
ppm			1790	43			0.5g (100)	RM	Pin

Iron Base | Steel | C,S,N,O,H Only | Chips

	C	H	N	O	S	Others/Set Only	Size	Type	Alloy
ppm			34	14			454g	RM	

Iron Base | Steel | Others | Chips

	C	N	S	Others/Set Only	Size	Type	Alloy
ppm	4		10		1g (454)	RM	
%	0.0152		0.032		454g	RM	
%	0.022		0.014		454g	RM	
%	0.075		0.011		454g	RM	
%	0.202		0.016		454g	RM	
%	0.462		0.032		454g	RM	

	%	0.95		0.018		454g	RM	
	%	0.683		0.025		454g	RM	
	%	0.06		0.224		454g	RM	
	%	1.3		0.014		454g	RM	
	%	0.102		0.02		454g	RM	
	%	0.045		0.04		1g (100)	RM	Pin

Iron Base Steel C,S,N,O,H Only Chips

		C	H	N	O	S	Others/Set Only	Size	Type	Alloy
	%	0.004				0.0029		1g (100)	RM	Pin
	%	1.5				0.005		1g (100)	RM	Pin
	%	0.55				0.009		1g (100)	RM	Pin
	%	0.27				0.02		150g	RM	Chips
	%	0.38				0.095		150g	RM	Chips
	%	0.52				0.089		150g	RM	Chips
	%	0.018		0.062		0.028		150g	RM	1005

Iron Base Steel Carbon Steel Chips

		Al	Al(sol)	Al(tot)	As	B	C	Ca	Co	Cr	Cu	Ga	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Te	Ti	V	W	Zn	Zr	Others/Set Only	Size	Type	Alloy
	%						0.071								0.0016					0.013											150g	RM	1018
	%						0.176								0.0087					0.024											150g	RM	1045
	%						0.449								0.0089					0.024											150g	RM	1095
	%						0.968								0.0078					0.013											150g	RM	4340

Iron Base Steel Low Alloy Chips

		Al	Al(sol)	As	B	C	Co	Cr	Cu	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Ti	V	W	Others/Set Only	Size	Type	Alloy
	%					0.389						0.0065					0.013								150g	RM	8620
	%					0.203						0.0085					0.021								150g	RM	1144
	%					0.45						0.006					0.279								150g	RM	1117
	%					0.18						0.0083					0.112								150g	RM	304

Iron Base Steel High Alloy Chips

Various		Al	As	B	C	Co	Cr	Cu	H	Mn	Mo	N	Ni	O	P	S	Sb	Si	Sn	Ti	V	Zr	Others/Set Only	Size	Type	Alloy
	%				0.057				0.0517							0.027								150g	RM	316
	%				0.055							0.0888				0.029								150g	RM	410
	%				0.103							0.0401				0.0005								150g	RM	316L
	%				0.0194							0.0499				0.0161								Ø45x75mm	SUS Wrought	

Iron Base Steel Setting-Up Samples (SUS) Rod

		Al	As	B	C	Ca	Ce	Co	Cr	Cu	Fe	Mn	Mo	N	Nb	Ni	O	P	Pb	S	Sb	Si	Sn	Ta	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.05	0.01	0.005	0.9			0.02	0.3	0.5		0.7	0.01			0.3		0.05		0.01	0.01	0.5	0.01		0.025					1g (500)	RM	

Iron Base Steel Others Pin

		C	H	N	O	S	Others/Set Only	Size	Type	Alloy
	%	0.1				0.24		1g (500)	RM	
	%	0.5				0.023		1g (500)	RM	
	%	0.62				0.018		1g (500)	RM	
	%	0.8				0.009		100g	CRM	

Iron Base Steel High Alloy Chips

CrNi		Al	As	B	C	Ca	Ce	Co	Cr	Cu	Fe	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Se	Si	Sn	Ta	Ti	V	W	Others/Set Only	Size	Type	Alloy
	%				0.0136			0.09	18.46	0.029		0.085	0.004			10	0.007		0.0078			1.08				0.041			1	CRM	

Various		N	O	Others/Set Only	Size	Type	Alloy
	%		0.01322		1	CRM	
	%		0.006		1	CRM	
	%	(0.0071)	0.00045		150g	CRM	

CrNi		Al	As	B	C	Ca	Ce	Co	Cr	Cu	Fe	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Se	Si	Sn	Ta	Ti	V	W	Others/Set Only	Size	Type	Alloy
	%				0.067			0.1	17.43	0.121		1.8	0.165			11.17	0.019		0.013			0.54			0.342				150g	CRM	
	%				0.056			0.12	17.4	0.103		1.75	0.22		0.65	11.34	0.024		0.014			0.59							150g	CRM	

Iron Base Steel Carbon Steel Chips

		Al	Al(sol)	Al(tot)	As	B	C	Ca	Co	Cr	Cu	Ga	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Te	Ti	V	W	Zn	Zr	Others/Set Only	Size	Type	Alloy
	%	(0.038)					0.407			0.074	0.073		0.842	0.006	0.006		0.032	0.018		0.027		0.235				0.003					150g	CRM	
	%	0.048					0.613			0.05	0.066		0.853				0.061	0.006		0.031		0.355				0.001					150g	CRM	
	%	0.06					0.753			0.07	0.072		0.41	0.013			0.053	0.009		0.039		0.172				0.002					150g	CRM	
	%						0.486			0.046	0.023		0.717	0.036			0.056	0.012		0.03		0.202	0.032			0.001					150g	CRM	
	%	0.061					0.076			0.018	0.013		0.373	0.009			0.017	0.005		0.019		0.008				<0.001					150g	CRM	

Iron Base Steel High Alloy Chips

CrNi		Al	As	B	C	Ca	Ce	Co	Cr	Cu	Fe	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Se	Si	Sn	Ta	Ti	V	W	Others/Set Only	Size	Type	Alloy
	%				0.044			0.101	18.45	0.172		1.64	2.38	0.039		12.26	0.02	0.001	0.016			0.509				0.047			9.5x9.5x10.2mm	CRM	

Iron Base Steel Low Alloy Rod

Various		C	N	O	S	Others/Set Only	Size	Type	Alloy
	%		0.0081	0.0024			150g	CRM	

Iron Base Steel Carbon Steel Chips

		Al	Al(sol)	Al(tot)	As	B	C	Ca	Co	Cr	Cu	Ga	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Te	Ti	V	W	Zn	Zr	Others/Set Only	Size	Type	Alloy
	%						0.395			0.016	0.032		0.824	0.003			0.01	0.012		0.014		0.163				0.001					150g	CRM	
	%	0.002					0.215			0.173	0.466		0.393	0.038			0.248	0.016		0.022		0.211				0.003					150g	CRM	
	%	0.04					0.162			0.036	0.034		0.665	0.008			0.034	0.012		0.028		0.305				0.002					150g	CRM	
	%						0.969													0.024											150g	CRM	

Iron Base Steel High Alloy Chips

CrNi		Al	As	B	C	Ca	Ce	Co	Cr	Cu	Fe	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Se	Si	Sn	Ta	Ti	V	W	Others/Set Only	Size	Type	Alloy
	%				0.052			0.096	17.42	0.199		0.738	0.248			8.89	0.129		0.013		0.247	0.654				0.058			150g	CRM	
	%				0.149			(0.04)	15.64	0.162		0.42	0.164	0.078	(0.01)	2.16	0.026	(<0.0001)	0.001			0.545			(<0.001)	0.056			150g	CRM	
	%	1.16			0.069				14.95	0.106		0.57	2.4			7.28	0.018		0.019			0.395			0.076	0.04			150g	CRM	
	%	(<0.01)		(<0.001)	0.04			0.099	15.52	3.39		0.79	0.43	0.031	0.27	4.27	0.024		0.012			0.61		0.002	(<0.01)	0.08			150g	CRM	
	%	0.24		0.0055	0.044			0.15	14.8	0.14	(55.2)	0.64	1.18		(0.07)	24.2	0.023		0.0007			0.43			2.12	0.23	(0.07)		150g	CRM	

Iron Base Steel Carbon Steel Chips

		Al	Al(sol)	Al(tot)	As	B	C	Ca	Co	Cr	Cu	Ga	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Te	Ti	V	W	Zn	Zr	Others/Set Only	Size	Type	Alloy
	%						0.089			0.03	0.01		0.82	0.003	0.1		0.008	0.084		0.132		0.007				0.001					100g	CRM	

Iron Base Steel High Alloy Chips

NiCo		Al	B	C	Co	Cr	Cu	Fe	Mn	Mo	Nb	Ni	P	S	Si	Ta	Ti	V	Others/Set Only	Size	Type	Alloy
	%	0.99	0.0078	0.022	16.1	0.077	0.022	4.05	0.052	0.014	2.99	37.78	<0.003	0.0025	0.097	0.003	1.48	0.077		40g	RM	

CrNi		Al	As	B	C	Ca	Ce	Co	Cr	Cu	Fe	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Se	Si	Sn	Ta	Ti	V	W	Others/Set Only	Size	Type	Alloy
	%				0.07				18			0.6	2	0.01		10						0.5							40g	RM	
	%				0.17				17			0.5	0.5	0.3		10						0.6							40g	RM	
	%				0.9				23			10		0.5	2.5	3						1							100g	RM	
	%				0.08				17	4		1.2	1	0.025	0.15	3.5	0.05		0.05			0.5							100g	RM	
	%				0.04				15	5.5		0.8	0.25	0.1	0.35	4	0.025		0.05			0.75							100g	RM	
	%				0.14				14	0.75		1.4	2.5	0.075	0.25	5.5	0.01		0.025			1.25							Pin, Ø6.35x95mm (2)	CRM	

Iron Base Steel C,S,N,O,H Only Pin

		O	Others/Set Only	Size	Type	Alloy
	%	0.0096		Ø12.7x127mm	CRM	
	%	0.0103		100g	RM	

Iron Base Steel High Alloy Chips

CrNi		Al	As	B	C	Ca	Ce	Co	Cr	Cu	Fe	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Se	Si	Sn	Ta	Ti	V	W	Others/Set Only	Size	Type	Alloy
	%				0.063			(0.037)	12.8	(0.1)		0.8				12.45	0.015		0.02			0.44				(0.02)			100g	RM	

Iron Base Steel Carbon Steel Chips

		Al	Al(sol)	Al(tot)	As	B	C	Ca	Co	Cr	Cu	Ga	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Te	Ti	V	W	Zn	Zr	Others/Set Only	Size	Type	Alloy
	%	(<0.01)					0.026			0.058	(0.03)		0.86	(0.01)		<0.004	0.034	0.012		0.015		0.004									100g	RM	
	%	(<0.01)					0.195			0.26	(0.06)		0.6	(0.01)		0.02	0.064	0.074		0.069		0.18									100g	RM	
	%	(<0.01)					0.41			0.055	(0.05)		1.49	(0.01)		0.078	0.044	0.05		0.027		0.31									100g	RM	
	%	(0.01)					0.52			0.14	(0.05)		0.41	(0.01)		0.039	0.06	0.033		0.031		0.54									100g	RM	
	%				0.041		0.051			0.104	0.47		0.62	0.039			0.016	0.009		0.014		0.116	0.002		0.105		0.099				100g	RM	
	%				0.015		0.323			0.067	0.22		1.3	0.054			0.19	0.035		0.017		0.055	0.094		0.031		0.054				100g	RM	
	%				0.052		0.16			0.26	0.099		1.38	0.081			0.11	0.044		0.026		0.34	0.022		0.073		0.3				100g	RM	
	%				0.07		0.376			0.062	0.051		0.8	0.2			0.069	0.061		0.047		0.31	0.054		0.01		0.15				100g	RM	
	%				0.026		0.598			0.21	0.038		0.4	0.14			0.35	0.052		0.055		0.25	0.085		0.022		0.2				100g	RM	
	%	0.009				0.0015	0.101		0.052				0.2			0.006		0.018	0.016	0.023	0.012	0.24				0.022			(0.026)		100g	RM	
	%	0.111				0.0025	0.324		0.023				0.3			0.022		0.01	0.004	0.042	0.038	0.051				0.166			0.006		100g	RM	
	%	0.023				0.0061	0.247		0.21				0.49			0.052		0.032	0.0078	0.033	0.072	0.54				0.108			0.05		100g	RM	
	%	0.012				0.0028	0.452		0.014				0.67			0.066		0.043	0.0013	0.012	0.0038	0.098				0.06			0.006		100g	RM	

Iron Base Steel High Alloy Chips

CrNi		Al	As	B	C	Ca	Ce	Co	Cr	Cu	Fe	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Se	Si	Sn	Ta	Ti	V	W	Others/Set Only	Size	Type	Alloy
	%		(0.003)		0.086			0.054	25.39			0.791				20.05	0.02	0.0004	0.028			0.57							100g	RM	
	%		0.004		0.082				18.09			0.788			0.99	9.21	0.018	0.004	0.019			0.52		0.0017					100g	RM	
	%				0.143			0.018	17.95			1.7				8.9	0.014		0.02			1.41							100g	RM	
	%	(0.006)	0.03		0.022			(0.02)	19.06	0.35		1.7	3.55			14.74	0.008		0.02			0.17				0.3			100g	RM	
	%	0.013			0.05			0.22	14.14	1.94		0.89	1.59			5.66	0.037		0.008			0.21	0.015						100g	RM	

Iron Base Steel Special Tool Chips

		Al	As	B	C	Co	Cr	Cu	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Ti	V	W	Others/Set Only	Size	Type	Alloy
	%				0.68	0.31	3.4		0.25	0.28			(0.09)	0.023		0.022		0.15			0.56	14		100g	RM	
	%				0.67	0.29	3.95		0.26	0.4			(0.16)	0.027		0.027		0.14			1.04	17.8		100g	RM	
	%				0.65	2.06	2.9		0.22	0.18			(0.08)	0.023		0.023		0.16			0.22	9.28		100g	RM	
	%	(0.005)	(0.023)		0.76	10	4.98		0.21	1.08			(0.16)	0.025		0.015		0.18	(0.024)		1.05	20.4		100g	RM	

Iron Base Steel Special Chips

High Mn		Al	C	Co	Cr	Cu	Mn	Mo	N	Ni	P	S	Si	V	Others/Set Only	Size	Type	Alloy
	%	0.042	0.92		1.45	(0.04)	16.1	0.6		0.05	0.026	0.012	0.9	(0.06)		100g	RM	
	%	0.004	1.24	(0.43)	0.56	(0.19)	13.55	0.078		0.69	0.04	0.005	0.26	(0.02)		100g	RM	
	%	0.17	0.81		1.93		13.1	0.11		1.13	0.054	0.026	0.58	(0.02)		100g	RM	
	%	0.103	0.82		1.93	(0.09)	13.6	0.035		1.05	0.036	0.014	0.46	(0.02)		Ø45x75mm	SUS Wrought	

Iron Base Steel Setting-Up Samples (SUS) Rod

		Al	As	B	C	Ca	Ce	Co	Cr	Cu	Fe	Mn	Mo	N	Nb	Ni	O	P	Pb	S	Sb	Si	Sn	Ta	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.07			0.02			0.01	0.01	0.02		0.16	0.005		<0.005	0.02		0.005		0.01		0.01	<0.005		<0.005	<0.005	0.005			Ø45x75mm	SUS Wrought	
	%	0.02	0.02	0.001	0.38			0.02	1.2	0.14		0.4	0.2		<0.005	1.4		0.01	<0.001	<0.005		0.3	0.01		0.005	0.01	0.01			Ø45x75mm	SUS Wrought	
	%	0.07			0.14			0.07	0.2	0.44		0.94	0.1		0.03	3.7		0.07		0.05		0.2	0.05		0.03	0.4	0.33	0.02		Ø45x75mm	SUS Wrought	
	%	0.2			0.81			0.28	3	0.09		0.32	1.3		0.06	0.1		0.01		0.03		0.83	0.01		0.12	0.11	0.2			Ø45x75mm	SUS Wrought	
	%	<0.005		0.001	0.11		0.02		4.2			0.75	1		0.95	28.5		0.02		<0.005		0.78			0.67	<0.005				Ø45x75mm	SUS Wrought	
	%	<0.0005	0.005	0.002	0.02			0.01	24.7		62.9	0.5	3.5	0.23	<0.005	7		0.02		<0.005		0.26	<0.001		<0.005	0.03	0.62			Ø45x75mm	SUS Wrought	
	%	0.03			0.06	0.005		0.2	16.9	0.51		2	3.7		0.06	8.9		0.03		0.03		1.3		0.23	0.2	0.28		0.11		Ø45x75mm	SUS Wrought	
	%	0.2	0.01	0.01	0.52	<0.005			1.3	0.39		1.5	0.42		0.11	1.1		0.04		0.03		1	0.03		0.34	0.33		0.03		Ø38-44x150mm	SUS Wrought	1020
	%	0.004			0.21				0.011	0.02		0.5	0.005	0.0037		0.012	0.014	0.006		0.026		0.047	0.002							Ø38-44x150mm	SUS Wrought	1117
	%	<0.001			0.18			0.02	0.18	0.27		1.15	0.04	0.011		0.11	0.0054	0.028		0.1		0.28	0.017				0.001			Ø38-44x150mm	SUS Wrought	
	%	0.028			0.39				0.2	0.09		1.02	0.09	0.0034		0.12	0.0024	0.016		0.072		0.17	0.006							Ø38-44x150mm	SUS Wrought	E52100
	%	0.012			1.03			0.09	1.55	0.199		0.35	0.034	0.0078		0.093	0.0028	0.013		0.016		0.235	0.012		0.003	0.006	(0.001)			Ø38x12mm	RM Wrought	203

Iron Base Steel High Alloy Disc

Cr Ni Mn		Al	C	Co	Cr	Cu	Mn	Mo	N	Nb	Ni	P	S	Si	Sn	Ti	V	W	Others/Set Only	Size	Type	Alloy
	%	(0.001)	0.048	0.06	16.75	1.88	5.99	0.18	0.032	(0.004)	5.5	0.026	0.3	0.46	0.007		0.054	0.03		32x32x19mm	RM Wrought	

Iron Base Steel Low Alloy Block

		Al	As	B	C	Co	Cr	Cu	Mn	Mo	N	Nb	Ni	O	P	S	Sb	Si	Sn	Ti	V	W	Others/Set Only	Size	Type	Alloy
	%	0.042	0.004		0.387	0.007	0.81	0.03	0.86	0.22	0.0048		0.052	0.0024	0.016	0.027		0.302	0.001		0.004	(0.002)		32x32x19mm	RM Wrought	
	%	0.02	0.022	0.0028	0.84	0.117	0.135	0.054	1.42	0.45	0.0045	0.006	0.105		0.036	0.051	0.05	0.39	0.027		0.108	0.001		32x32x19mm	RM Wrought	
	%	0.085	0.008	0.0005	0.032	0.007	0.112	0.049	0.44	0.55	0.0056	(0.002)	0.058		0.154	0.018		1.11	0.007	0.26	0.088			32x32x19mm	RM Wrought	
	%	0.04	0.004	(0.0003)	0.071	0.005	0.031	0.013	2.01	0.006	0.0107	0.04	0.018		0.022	0.0043		0.28	(0.001)	0.0017	0.103			32x32x19mm	RM Wrought	
	%	0.007	0.001	0.0037	0.312	0.004	0.64	0.049	0.75	0.1	0.0013	(0.001)	1.68		0.01	0.0018	(<0.002)	0.26		0.0014	0.009			35x35x19mm	RM Wrought	
	%	0.031	0.012	0.0104	0.195	0.01	0.108	0.082	0.3	0.032	0.0065		1.19	0.0038	0.083	0.056		0.106	0.012	0.163	0.191			35x35x19mm	RM Wrought	
	%	0.03	0.008		0.251	0.02	0.402	0.106	0.56	0.027	0.0099	0.033	0.088	0.004	0.05	0.033		0.215	0.01	0.027	0.015			1g (500)	RM	

Various		C	N	O	S	Others/Set Only	Size	Type	Alloy
	%	0.548	0.076		0.028		Ø35x19mm	RM Wrought	

Iron Base Steel Carbon Steel Disc

Ca Treated		Al	C	Ca	Co	Cr	Cu	Mn	Mo	N	Ni	P	S	Si	Sn	Ti	V	Others/Set Only	Size	Type	Alloy
	%	0.046	0.468	0.0033	(0.006)	0.072	0.073	0.6	(0.006)	0.0173	0.071	0.012	0.031	0.17	(0.006)	0.002	0.004		1g (500)	RM	

Iron Base	Steel	Low Alloy	Rod

Various		C	N	O	S	Others/Set Only	Size	Type	Alloy
	%	0.892	0.0047		0.0035		1g (500)	RM	

Iron Base	Steel	S.S.N.O. H Only	1g pin

		C	N	S	Others/Set Only	Size	Type	Alloy
	%	0.011	0.026	0.0008		100g	RM	

Iron Base	Steel	High Alloy	Chips

Various		Al	As	B	C	Co	Cr	Cu	H	Mn	Mo	N	Ni	O	P	S	Sb	Si	Sn	Ti	V	Zr	Others/Set Only	Size	Type	Alloy
	%				0.068							0.0081				0.305							/Y	44x44x13mm	RM	

Iron Base	Steel	Carbon Steel	Block

Low Carbon		Al	C	Cr	Cu	Mn	Ni	P	S	Si	V	Others/Set Only	Size	Type	Alloy
	%	(0.033)	0.014	(0.001)	(0.002)	(0.43)	(0.002)	(0.011)	0.00115	(0.025)	(<0.001)	/Y	44x44x13 mm	RM	
	%	(0.036)	0.0041	<0.002	(0.001)	(0.45)	(0.002)	(0.011)	0.0022	(0.026)	(<0.001)	/Y	44x44x13 mm	RM	
	%	(0.043)	0.0055	(<0.002)	(<0.002)	(0.45)	(<0.002)	(0.011)	0.0044	(0.024)	(<0.001)	/Y	44x44x13 mm	RM	
	%	(0.034)	0.0081	(<0.002)	(<0.002)	(0.46)	(<0.002)	(0.012)	0.0068	(0.024)	(<0.001)	/Y	44x44x13 mm	RM	
	%	(0.03)	0.0111	(0.003)	(<0.002)	(0.45)	(<0.002)	(0.012)	0.0086	(0.022)	(0.001)	/Y	44x44x13 mm	RM	
	%	(0.037)	0.0021	(0.002)	(<0.002)	(0.47)	(0.005)	(0.0008)	0.0007	(0.05)	<0.001	/Y	44x44x13 mm	SUS Wrought	

Iron Base	Steel	Drilling Up Samples (SUS)	Block

		Al	As	B	C	Ca	Ce	Co	Cr	Cu	N	Nb	Pb	Sb	Sn	Ta	Ti	V	W	Zr	Others/Set Only	Size	Type	Alloy
	%	0.05	0.024	0.0032	0.122	0.0016	(0.01)	0.023	27.85	0.095	0.0046	0.1	0.004	0.02	0.044	(0.002)	0.043	0.017	(0.014)	(0.028)	/Y	44x44x13mm	SUS Wrought	
	%	0.034	0.048	0.0022	0.328	0.0055		0.2	15.05	0.2	0.0027	0.52	0.011	0.011	0.012	0.24	0.15	0.1	0.1	0.012	/Y	44x44x13mm	SUS Wrought	
	%	0.034			0.073		<0.01	0.1	4.39	0.026	0.0017	1.31	0.003	(0.0003)	0.0008	0.12	0.5	0.06		0.052	<0.002		Ø38x40mm	SUS Wrought	316L
	%	0.005			0.021			0.21	17.58	0.405	1.68	2.09	0.091	12.27	0.035	0.025	0.39	0.044				Ø39x40mm	SUS Wrought	321
	%	0.19			0.055			0.16	17.18	0.21	1.67	0.22	0.012	10.15	0.016	0.023	0.63	0.004	0.45	0.13		Ø38x40mm	SUS Wrought	347
	%	0.005		0.0041	0.056			0.05	17.26	0.16	1.61	0.39	0.06	0.79	9.43	0.03	0.027	0.51	0.007			150g	CRM	

Iron Base	Steel	Carbon Steel	Chips

		Al	Al(sol)	Al(tot)	As	B	C	Ca	Co	Cr	Cu	Ga	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Te	Ti	V	W	Zn	Zr	Others/Set Only	Size	Type	Alloy
	%	0.028					0.112				0.01		0.48		(0.0034)			0.02		0.0067		0.22									150g	CRM	
	%	0.023					0.38				0.008		0.5		0.0029			0.013		0.0057		0.19									150g	CRM	
	%	0.03					0.52				0.006		0.55		0.003			0.017		0.0057		0.19									150g	CRM	
	%	0.03					0.63				0.008		0.48		0.0028			0.0058		0.0027		0.24									150g	CRM	
	%	0.022					0.8				0.008		0.73		0.006			0.0095		0.006		0.2									150g	CRM	

Iron Base	Steel	Carbon Steel	Chips

		Al	As	B	C	Co	Cr	Cu	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Si	Sn	Ti	V	W	Others/Set Only	Size	Type	Alloy
	%				1.33		0.86	0.041	0.41	0.107	0.01		0.055	0.0129		0.0164		0.31			0.04	4.4		150g	CRM	
	%				1.23		0.49	0.029	0.36	0.1	0.0103		0.037	0.0098		0.0112		0.22			0.31	3.43		150g	CRM	
	%				0.3		2.32	0.056	0.31	0.14	0.025		0.084	0.012		0.012		0.32			0.46	5.46		150g	CRM	
	%				0.37		4.92	0.062	0.35	1.07	0.207		0.17	0.019		0.012		1.05			0.51	0.016		150g	CRM	
	%				0.57		0.87	0.16	0.87	0.36	0.0144		1.5	0.016		0.0148		0.102			(0.007)	(0.004)		150g	CRM	
	%				0.76	0.12		4 0.027	0.31	0.58	0.029		0.065	0.016		0.0008		0.28			0.83	17.16		150g	CRM	
	%				0.78	4.59	3.98	0.025	0.35	0.54	0.027		0.052	0.026		0.0031		0.3			0.84	17.48		150g	CRM	
	%				0.8	9.09	3.99	0.017	0.33	0.41	0.032		0.044	0.025		0.0028		0.36			0.99	17.03		150g	CRM	
	%				0.92	4.63	4.01	0.048	0.3	4.85	0.0248		0.16	0.026		0.0007		0.32			1.87	6.1		150g	CRM	
	%				1.23	9.6	3.96	0.04	0.31	3.09	0.0354		0.1	0.026		0.0015		0.28			3.25	9.07		150g	CRM	

Iron Base	Steel	High Alloy	Chips

CrNi		Al	As	B	C	Ca	Ce	Co	Cr	Cu	Fe	Mn	Mo	N	Nb	Ni	P	Pb	S	Sb	Se	Si	Sn	Ta	Ti	V	W	Others/Set Only	Size	Type	Alloy
	%	(0.002)			0.046			0.17	18.26	0.12		1.19	0.11	(0.042)		9.03	0.027		0.0058			0.67							150g	CRM	
	%	(0.003)			0.063			0.27	22.48	0.084		1.71	0.066	0.0454		13.85	0.026		0.0011			0.67							150g	CRM	
	%	0.017			0.042			0.16	24.87	0.038		0.97	0.039	0.0393		19.12	0.015		0.0007			0.82							150g	CRM	
	%	(0.005)			0.045			(0.073)	17.53	0.045		0.96	0.033	0.0072	0.49	9.75	0.024		0.0005			0.63		(0.021)					Ø5x230mm (8)	SUS	

Iron Base	Steel	Drilling Up Samples (SUS)	Pin

		H	N	O	Others/Set Only	Size	Type	Alloy
	%	0.00017	0.0254	0.0046		Ø5x230mm (8)	SUS	
	%		0.0156	0.00146		Ø5x230mm (8)	SUS	
	%		0.0041	0.00385		Ø5x230mm (8)	SUS	
	%		0.0017	0.0136		1g (150)	SUS	
	%			0.00034		1g (150)	SUS	