

Forged & Hot Rolling Ball Chemical Composition and Physical Specifications
(锻球和轧球化学成分和力学性能)

Can be customized according to customer material requirements
(可根据客户材质要求定做)

硬度 Hardness 直径 重量 Diameter/Weight		C45		60Mn				B2			B3				B6		
		C:0.42-0.5, Si:0.17-0.37, Mn:0.5-0.8, Cr:≤0.25, P:≤0.035, S:≤0.035, Ni:≤0.25, Cu:≤0.25		C:0.55-0.65, Si:0.17-0.37, Mn:0.7-1.0, Cr:≤0.25, P:<0.04, S:<0.04, Ni:≤0.3, Cu:≤0.25				C:0.72-0.85, Si:0.17-0.37, Mn:0.7-1.0, Cr:0.4-0.6, P:≤0.025, S:≤0.025, Ni:≤0.02, Cu:≤0.02, Mo:0.01-0.06			C:0.58-0.66, Si:1.3-1.9, Mn:0.65-0.8, Cr:0.7-0.9, P:≤0.025, S:≤0.025, Ni:≤0.02, Cu:≤0.02, Mo:0.05-0.12				C:0.97-1.03, Si:0.2-0.3, Mn:1.0-1.1, Cr:0.5-0.6, P:≤0.025, S:≤0.025, Ni:≤0.05, Cu:≤0.06, Mo:≤0.02		
Diameter 直径(MM)	Weight/PC 单重(kg)	Surface Hardness 表面硬度(HRC)	Core Hardness 芯部硬度(HRC)	Surface Hardness 表面硬度(HRC)	Core Hardness 芯部硬度(HRC)	Surface Hardness 表面硬度(HRC)	Core Hardness 芯部硬度(HRC)	Surface Hardness 表面硬度(HRC)	Core Hardness 芯部硬度(HRC)	Surface Hardness 表面硬度(HRC)	Core Hardness 芯部硬度(HRC)	Surface Hardness 表面硬度(HRC)	Core Hardness 芯部硬度(HRC)	Surface Hardness 表面硬度(HRC)	Core Hardness 芯部硬度(HRC)		
20	0.033	55-58	55-58	58-62	58-62	60-64	60-64	62-65	62-65	62-65	62-65	62-65	62-65	62-65	62-65		
25	0.064	55-58	55-58	58-62	58-62	60-64	60-64	62-65	62-65	62-65	62-65	62-65	62-65	62-65	62-65		
30	0.111	55-58	45-55	58-62	55-60	60-64	60-64	62-65	62-65	62-65	62-65	62-65	62-65	62-65	60-65		
40	0.261	55-58	40-55	58-62	55-60	60-64	58-62	62-65	60-65	62-65	60-65	62-65	60-65	62-65	60-65		
50	0.512	55-58	40-45	58-62	50-55	60-64	58-62	62-65	60-65	62-65	60-65	62-65	60-65	62-65	60-65		
60	0.883	55-58	30-35	58-62	40-45	60-64	56-60	62-65	60-65	62-65	60-65	62-65	60-65	62-65	60-65		
70	1.402	53-56	30-35	58-62	40-45	60-64	55-60	61-63	60-65	61-63	60-65	61-63	60-65	61-63	60-65		
75	1.73	53-56	30-35	58-62	40-45	60-64	55-60	61-63	58-63	61-63	58-63	61-63	58-63	61-63	58-62		
80	2.092	53-56	30-35	58-62	40-45	59-63	50-55	60-65	58-63	61-63	58-63	61-63	58-63	61-63	58-62		
90	2.98	50-55	25-30	58-62	30-35	57-61	45-49	60-65	58-63	61-63	58-63	61-63	58-63	61-63	58-62		
100	4.087	48-52	25-30	57-61	30-35	56-60	44-48	60-65	58-62	61-63	58-62	61-63	58-62	61-63	58-62		
110	5.44	48-52	25-30	57-61	30-35	55-60	40-45	58-64	53-60	61-63	58-64	61-63	53-60	61-63	55-60		
120	7.062	48-52	25-30	57-61	30-35	55-60	40-45	56-63	53-60	61-63	56-63	61-63	53-60	61-63	55-60		
125	8.008	48-52	25-30	57-61	30-35	55-60	38-42	56-63	54-61	61-63	56-63	61-63	54-61	61-63	55-60		
130	9.008	48-52	25-30	57-61	30-35	55-60	38-42	56-63	50-55	61-63	56-63	61-63	50-55	61-63	50-55		
140	11.25	48-52	25-30	57-61	30-35	55-60	38-42	56-63	50-55	61-63	56-63	61-63	50-55	61-63	50-55		
150	13.83	48-52	25-30	57-61	30-35	55-60	38-42	56-63	50-55	61-63	56-63	61-63	50-55	61-63	50-55		
冲击值 Impact		≥12Ak.J/cm2		≥12Ak.J/cm2				≥12Ak.J/cm2			≥15Ak.J/cm2				≥15Ak.J/cm2		
跌落次数 Drop Test		>10000		>10000				>10000			>12000				>12000		
公称直径 Diameter		20mm	25mm	30mm	40mm	50mm	60mm	70mm	80mm	90mm	100	110	120	125	130mm	140mm	150mm
允许偏差 Tolerance		+1/-0.5 mm		+2/-2 mm				+3/-2 mm			+4/-3 mm				+5/-4 mm		
不圆度 Out of Roundness		≤1%		≤2%				≤3%			≤4%				≤5%		
金相组织 Microstructure		M+B+C (M-马氏体; B-贝氏体; C-碳化物) (M- Martensite; B- Bainitic; C- Carbide)															