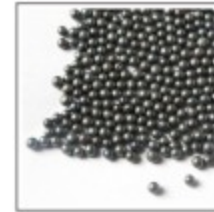




Steel Shot 鋼丸



Low Carbon Steel Shot 低碳鋼丸

Density 密度	>7.3g/cm ³
Hardness 硬度 (±3HRC)	HRC40-51
Chemical composition 化學成份	C碳:0.1-0.2%; Si矽:≥0.15-0.80%; Mn錳:0.50-1.2%; S硫:≤0.05%; P磷:≤0.05%
Microstructure 金相組織	Bainite 貝氏體

High Carbon Steel Shot 高碳鋼丸

Density 密度	>7.3g/cm ³
Hardness 硬度 (±3HRC)	HRC40-51 HRC50-65
Chemical composition 化學成份	C碳:0.85-1.2%; Si矽:≥0.4%; Mn錳:0.60-1.2%; S硫:≤0.05%; P磷:≤0.05%
Microstructure 金相組織	It should be uniformly tempered martensite with fine, Well distributed carbides. 均勻的回火馬氏體

Number of screen 篩網號	Standard (mm) 標準(毫米)	Screw mesh (inch) 篩孔尺寸(英寸)	S930	S780	S660	S550	S460	S390	S330	S280	S230	S170	S110	S70
			SS280	SS240	SS200	SS170	SS140	SS120	SS100	SS80	SS70	SS60	SS40	SS30
6	3.35	0.132	0											
7	2.8	0.111		0										
8	2.36	0.0937	≥85	0										
10	2.00	0.0787	≥97	≥85	0	0								
12	1.70	0.0661		≥97	≥85		≤5	0						
14	1.40	0.0555			≥97	≥85		≤5	0					
16	1.18	0.0469				≥97	≥85		≤5	0				
18	1.00	0.0394					≥97	≥85		≤5	0			
20	0.850	0.0331						≥96	≥85		≤10			
25	0.710	0.0278							≥96	≥85		≤10		
30	0.600	0.0234								≥96	≥75		0	
35	0.500	0.0197									≥97		≤10	
40	0.425	0.0165										≥85		0
45	0.355	0.0139											≥97	≤10
50	0.300	0.0117												≥80
80	0.180	0.007												≥90
120	0.125	0.0047												≥90

SS-JIS S-SAE O-ALL pass The Figure in the square indicates the percentage allowed to remain on the screen.

Steel Grit 鋼砂



Density 密度	>7.4g/cm ³
Hardness 硬度 (±3HRC)	HRC40-51 HRC54-61 HRC61Mn
Chemical composition 化學成份	C碳:0.80-1.2%; Si矽:≥0.4%; Mn錳:0.60-1.2%; S硫:≤0.05%; P磷:≤0.05%
Microstructure 金相組織	It should be uniformly tempered martensite with fine, Well distributed carbides. 均勻的回火馬氏體

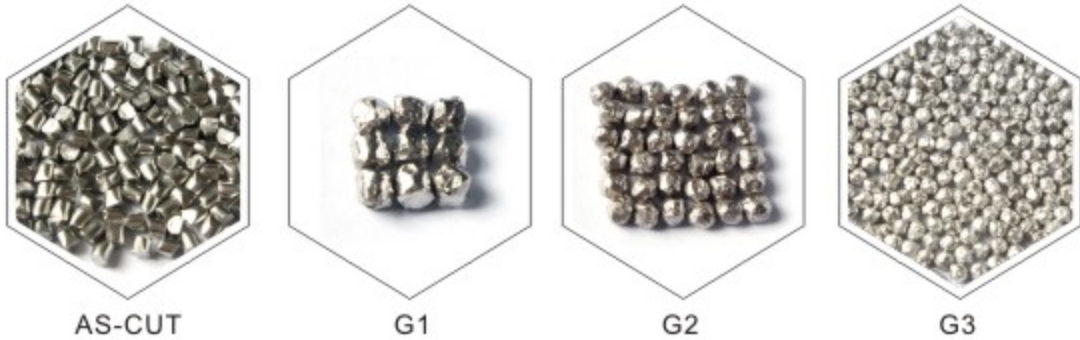
Number of screen 篩網號	Standard (mm) 標準(毫米)	Screw mesh (inch) 篩孔尺寸(英寸)	G10	G12	G14	G16	G18	G25	G40	G50	G80	G120
			SG240	SG200	SG170	SG140	SG120	SG100	SG70	SG50	SG30	SG20
7	2.8	0.111	0									
8	2.36	0.0937	-	0								
10	2.00	0.0789	80	-	0							
12	1.70	0.0661	90	80	-	0						
14	1.40	0.0555		90	80	-	0					
16	1.18	0.0469			90	85	-	0				
18	1.00	0.0394				85	75	-	0			
20	0.85	0.0331					-	-	-			
25	0.71	0.0278					85	70	-	0		
30	0.60	0.0234						-	-	-		
35	0.50	0.0197						-	-	-		
40	0.425	0.0165						80	70	-	0	
45	0.355	0.0139							-	-	-	
50	0.300	0.0117								80	65	-
80	0.180	0.007									75	65
120	0.125	0.0049										75
200	0.075	0.0029										70

SG-JIS G-SAE O-ALL pass The Figure in the square indicates the percentage allowed to remain on the screen.

CUT WIRE SHOT 切丸

カットワイヤー

Cut-wire shot is produced by cutting high quality wire into the form of cylinders with lengths approximately equal to the wire diameter. It's available in cylinder and conditioned (spherical) shape.



Standard (參考標準)

SAE J441, AMS 2431, DIN 8201, VDFI 8001, ISO 11124, MIL-S-13165

Wire Material (材質)

Carbon steel, Stainless steel, Aluminium, Zinc, Copper and Nickel alloys
 碳鋼, 不銹鋼, 鋁, 鋅, 銅, 鎳合金等

Advantage

- High durability can reduce the production cost and time
- Stable working effect due to high consistency in size, density, and hardness
- No breakdown and less dust are better to the environment
- Reduce the maintenance cost for machines
- Fatigue life of work pieces would be increased by using conditioned shot
- Varieties of wire material and hardness can be selected to match the work piece

優點

- 高持久性可減少生產成本及時間
- 型號大小, 密度, 硬度的高一致性決定其穩定的工作效應
- 低破碎, 低粉塵, 更環保
- 減少設備維護成本
- 使用磨圓的噴丸可增加工件的疲勞壽命
- 材料及硬度的多樣性可供選擇來與工件相匹配

Size (規格)

0.3mm-5.0mm, depends on the wire material

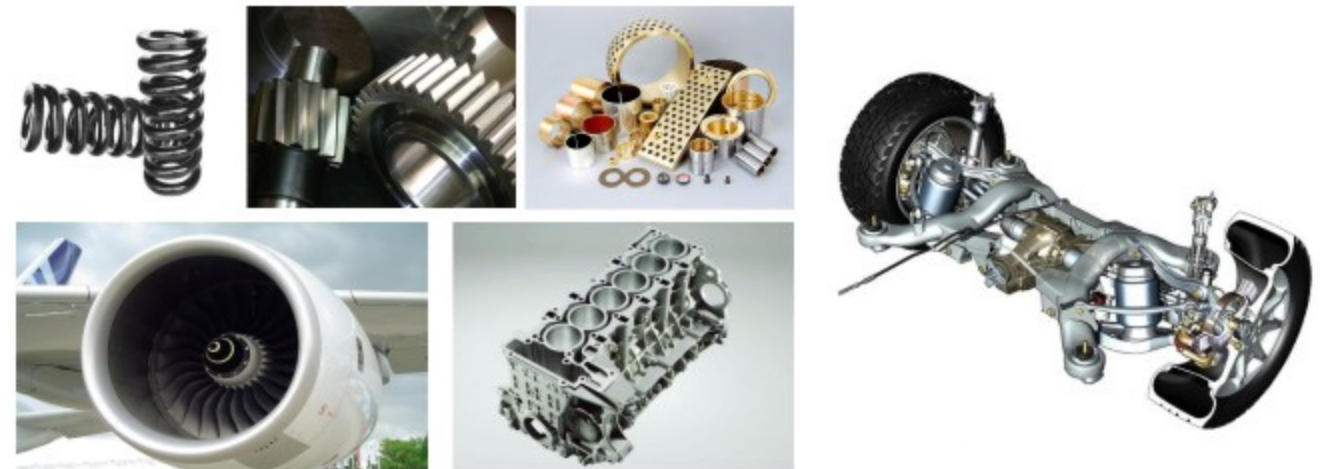
Equivalent Shot Sizes (相對應規格型號)

Cut-wire Size (Inches)	Cut-wire Shot Size (mm)	Cast steel Shot Size
0.012	0.30	S-70
0.017 / 0.018	0.40 / 0.45	S-110
0.020 / 0.023	0.50 / 0.60	S-170
0.028	0.70	S-230
0.032 / 0.035	0.80 / 0.90	S-280
0.035 / 0.041	0.90 / 1.00	S-330
0.041 / 0.047	1.00 / 1.20	S-390
0.054	1.40	S-460
0.062	1.60	S-550
0.080	2.00	S-660
0.090	2.30	S-780
0.126	3.20	S-1110

Application (應用)

Shot peening, blasting, tumbling and vibratory finishing
 噴丸強化, 表面清理, 拋光, 振動研磨

Industry: automotive, aerospace, foundry and forge, energy, shipyard, railway……
 汽車, 航空, 鑄造, 能源, 船舶, 鐵路……



STAINLESS STEEL CUT WIRE SHOT 不銹鋼丸

ステンレス

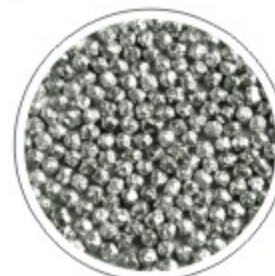
Stainless steel shot is used for cleaning, deburring, descaling and surface finishing of a wide variety of stainless steel, titanium, aluminum, or other non-ferrous alloy castings, molds and fabrications. The 316 type stainless steel has good resistance to chloride corrosion, It is suitable used in the marine environment. Due to non-magnetic, it is also used in tumbling or vibratory applications.

不銹鋼丸主要應用於不銹鋼，鋅，鋁，銅等金屬材質工件的表面處理，去毛刺，去氧化皮，掩蓋缺陷等表面修整加工。加工后的工件表面光亮不生銹，相比普通鋼丸具有壽命長，拋丸時間短，對拋丸機，噴砂機的設備磨損小等優點。

Size 規格	0.3mm-5.0mm
Density 密度	7.7g/m ³ Min
Hardness 硬度	HV200-450 HV400-600 HV600-700



Standard of Country					Chemical Composition 化學成份									Micro-Structure 金相組織
USA	German	UK	Japan		碳 C	矽 Si	錳 Mn	磷 P	硫 S	鎳 Ni	鉻 Cr	鉬 Mo	氮 N	
AISI	W-Nr	DIN KURZNAME	BS	JIS	Max	Max	Max	Max	Max				Max	
201	1.4372			SUS 201	0.15	1	5.5-7.5	0.06	0.03	3.50-5.50	16.00-18.00		0.25	Austenitic 奧氏體
202	1.4373			SUS 202	0.15	1	7.5-10.0	0.06	0.03	4.00-6.00	17.00-19.00		0.25	
301	1.4310	X12Cr Ni 177	301 S21	SUS 301	0.15	1	2	0.045	0.03	6.00-8.00	16.00-18.00			
304	1.4301	XDCr Ni 189	304 S16	SUS 304	0.08	1	2	0.045	0.03	8.00-10.50	18.00-20.00			
316	1.4401	X15Cr Ni Mo 1810	306 S16	SUS 316	0.08	1	2	0.045	0.03	10.00-14.00	16.00-18.00	2.0-3.0		Martensitic 馬氏體
410	1.4006	X10Cr 13	410 S21	SUS 410	0.15	1	1	0.04	0.03	0.6	11.50-13.50			
430	1.4016	X8Cr 17	430 S17	SUS 430	0.12	0.75	1	0.04	0.03	0.6	16.00-18.00			



STEEL CUT WIRE SHOT 鋼絲切丸

スチールカットワイヤー

Cylindrical cut wire shot mainly used for surface cleaning, and conditioned cut wire shot is more suitable for peening due to its round shape. They are widely used for cleaning and peening to gears, spring, Steering, structure parts, Axle and Axle Parts..etc

鋼絲切丸廣泛應用於飛機，汽車，船舶等交通工具的齒輪，彈簧，轉向裝置，鋼構，輪軸的清理和強化。

Size 規格	0.3mm-2.0mm
Density 密度	>7.7g/cm ³
Hardness 硬度	HV400-500 HV500-600 HV610-670 HV670-730
Chemical composition 化學成份	C碳: 0.45-0.85%; Si矽: 0.15-0.35%; Mn錳: 0.30-1.3%; S硫: ≤0.05%; P磷: ≤0.04%



Zinc cut wire shot 鋅丸

亜鉛

The softness of zinc shot is suitable for operation in deburring die castings, and removing impregnated sand from sand castings. It can remove coatings from soft alloy cast parts without damage, and leaves a thin film of zinc on the work pieces which provide corrosion resistance.

鋅丸主要應用於壓鑄件的除毛刺清理，在不損傷工件表面的同時，又可起到防腐的保護作用。並對工件表面有顯著增白效果。

Size 規格	0.6mm-3.0mm
Density 密度	7.1g/cm ³
Hardness 硬度	HV35-55
Chemical composition 化學成份	Zn鋅: 99.99%; Fe鐵: 0.004%; Al鋁: 0.003%; Cu銅: 0.001%; Co鈷: 0.002%

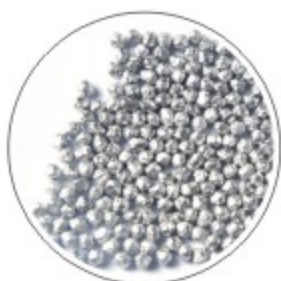


ALUMINUM CUT WIRE SHOT 鋁丸

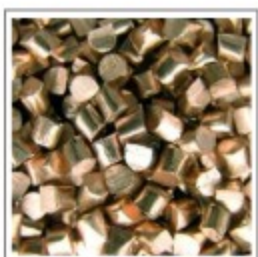
アルミ

Aluminum cut wire shot is an ideal material for cleaning and reinforcing the surface of aluminum, zinc or nonferrous casting parts.

鋁丸主要應用於鋁，鋅，和非鐵鑄件的表面清理，拋光，對工件表面有顯著增白效果。



Size 規格	0.6-3.0mm
Density 密度	2.7g/cm ³
Hardness 硬度	HV40-60 HV95-125
Chemical composition 化學成份	1070 Si矽:0.2%;Cu銅:0.04%;Mn錳:0.03%;Mg鎂:0.03%;Al鋁:99.7% 5056 Si矽:0.3%;Cu銅:0.1%;Mn錳:0.05-0.2%;Mg鎂:4.5-5.6%;Al鋁:remainder



Copper cut wire shot 銅丸

Copper shot is used for polishing, peening of hardware, Electrical accessories, precision casting, pump valve and other work pieces.

銅丸主要應用於五金，電器配件，精密鑄件，泵閥管件等的拋光，噴丸處理。



Size 規格	0.6mm-3.0mm
Density 密度	8.9g/cm ³
Hardness 硬度	HV100-200
Chemical composition 化學成份	Copper(紫銅): Cu銅 99% Brass(黃銅): Cu銅 65%, Zn鋅 35%

先進的檢測系統是金星品質的保證!

Quality Test System



- A 歐文試驗機做彈丸疲勞測試
Fatigue life tested on Ervin test machine
- B 化學分析
Chemical analysis
- C 物理測試 (硬度, 金相組織, 粒度)
Physical test (hardness, sieves, microstructure)