

GEON

GEON Group Raw material catalog

Revision 1.0



Who we are



GEON GROUP

Neubruchstraße 12 F
85774 Unterföhring
GERMANY

GEON comprises a group of companies that, together with their strategic partners, cover the full value-chain in the domains of photovoltaic power generation, raw material trading, LED street lighting and sustainable construction technologies for fast-track, low-cost housing.

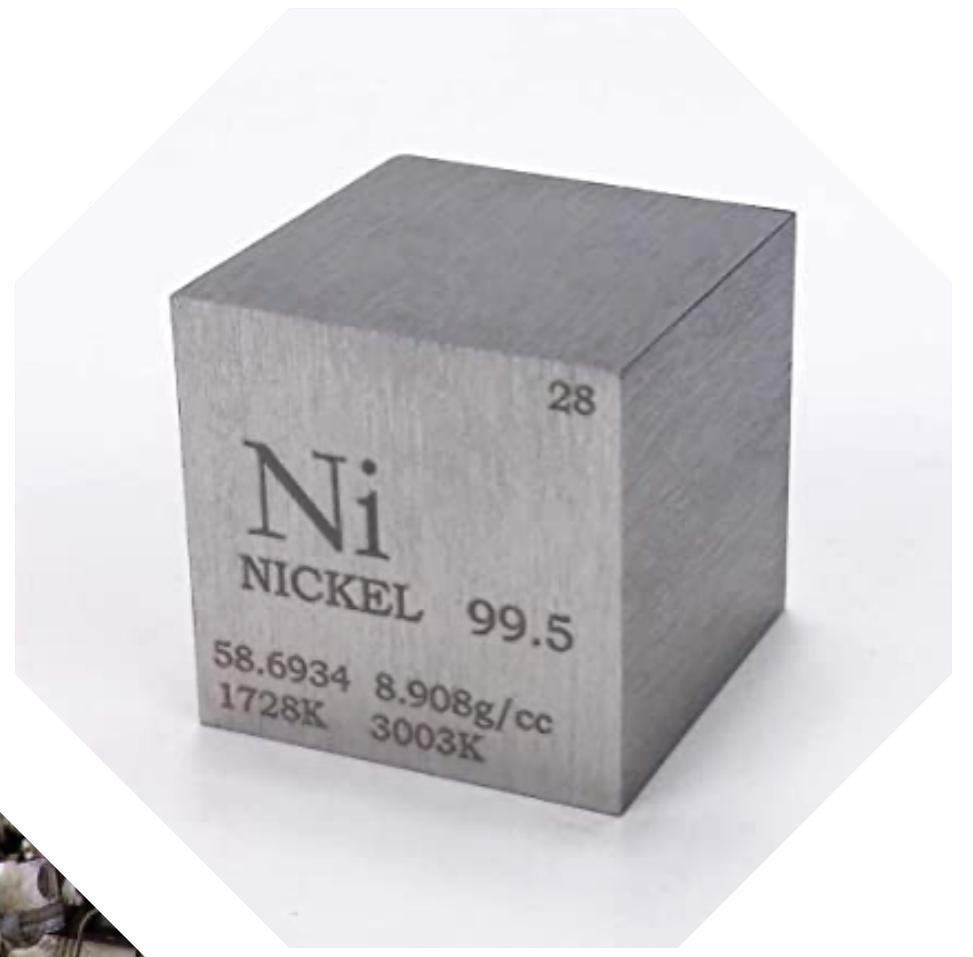
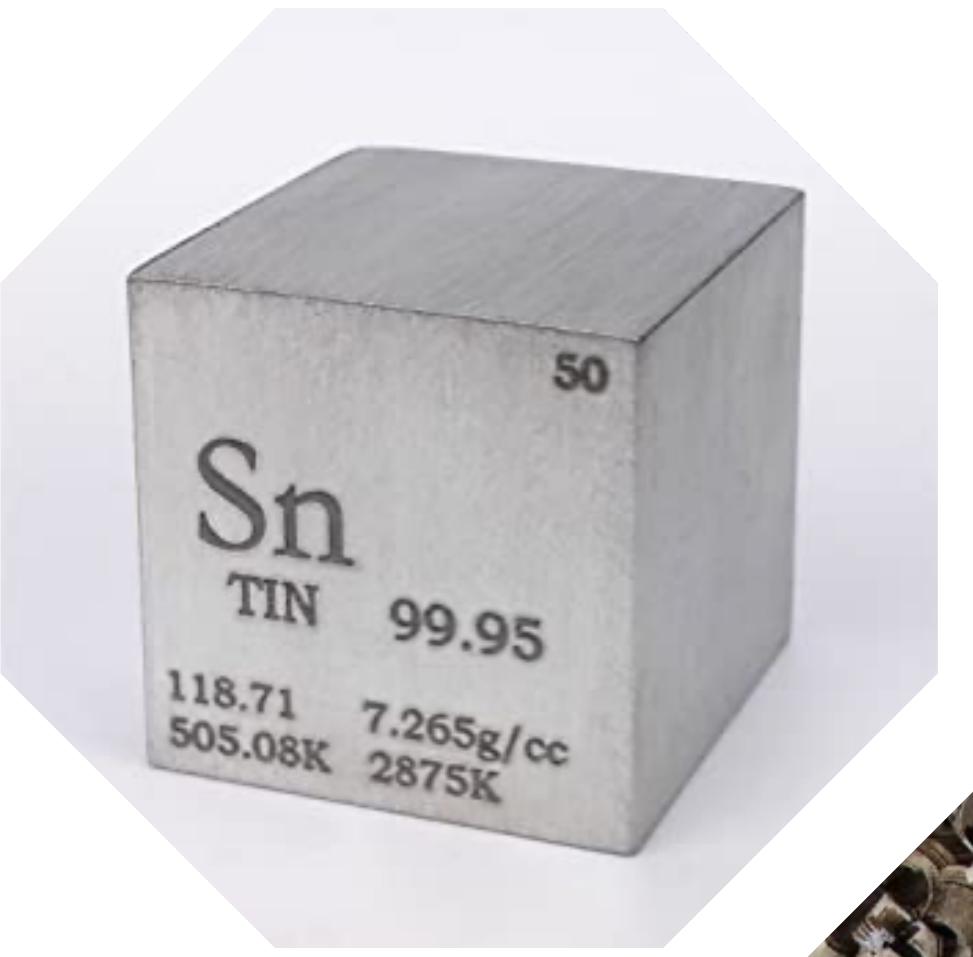
We offer following raw materials

GEON offers copper cathodes, aluminum powder, Steel in various of types.



We buy following raw materials

GEON is looking for raw materials like tin and nickel and scrap pistons for recycling proposes.



Cooper (Kupfer)

Electrolytic Copper Cathode



Product A

Cu	99.994	% Min	As	<1	PPM	Sb	<1	PPM
Fe	<2	PPM	Pb	<5	PPM	Zn	<3	PPM
Mn	<0.5	PPM	Co	<2	PPM	Ni	<1	PPM
S	<5	PPM	Cd	<0.2	PPM	Te	<1.2	PPM
O	<50	PPM	Se	<0.4	PPM	Sn	<1	PPM
Bi	<1	PPM	Si	<1	PPM	P	<1	PPM
Cr	<1	PPM	Ag	<10	PPM			

Dimension: Length: 990 mm, Width: 980 mm

Thickness: 5 - 20 mm

Weight: abt. 135 +/- 5 Kg Each Piece --- abt. 2,100 - 2,500 Kg Each Bundle.

Number of Sheets in Each Bundle: 15 +/- 3

Standard: ASTM-B115

Electrolytic Copper Cathode



Product C (Leaching - SX/EW Technology)

Cu	99.994	% Min	As	<1	PPM	Sb	<1	PPM
Fe	<2	PPM	Pb	<10	PPM	Zn	<2	PPM
Mn	<0.5	PPM	Co	<2	PPM	Ni	<1	PPM
S	<10	PPM	Cd	<1.5	PPM	Te	<1.2	PPM
Ag	<2.5	PPM	Se	<0.4	PPM	Sn	<1	PPM
Bi	<0.6	PPM	Si	<1	PPM	P	<1	PPM
Cr	<1	PPM						

Dimension: Length: 100 +/- 5 cm, Width: 101 +/- 5 cm

Thickness: 2.5 - 3.5 mm

Weight of Each Sheet: 28 - 30 Kg

Weight of Each Bundle: 2,000 - 2,300 Kg

Number of Sheets in Each Bundle: 60 - 80

Standard: ASTM-B115

Product B

Cu	99.994	% Min	As	<1	PPM	Sb	<1	PPM
Fe	<2	PPM	Pb	<5	PPM	Zn	<3	PPM
Mn	<0.5	PPM	Co	<2	PPM	Ni	<1	PPM
S	<5	PPM	Cd	<0.2	PPM	Te	<1.2	PPM
O	<50	PPM	Se	<0.4	PPM	Sn	<1	PPM
Bi	<1	PPM	Si	<1	PPM	P	<1	PPM
Cr	<1	PPM	Ag	<10	PPM			

Dimension: Length: 100 cm, Width: 100 cm

Thickness: 15 - 17 mm

Weight of Each Sheet: 140 +/- 10 Kg

Weight of Each Bundle: 1,500 - 2,500 Kg

Standard: ASTM-B115

Product D (Leaching - SX/EW Technology)

Cu	99.997	% Min	As	<1	PPM	Sb	<1	PPM
Fe	<5	PPM	Pb	<5	PPM	Zn	<2	PPM
Mn	<0.5	PPM	Co	<2	PPM	Ni	<1	PPM
S	<10	PPM	Cd	<0.5	PPM	Te	<1.2	PPM
Ag	<0.2	PPM	Se	<0.4	PPM	Sn	<1	PPM
Bi	<0.6	PPM	Si	<1	PPM	P	<1	PPM
Cr	<1	PPM						

Dimension: Length: 100 +/- 5 cm, Width: 101 +/- 5 cm

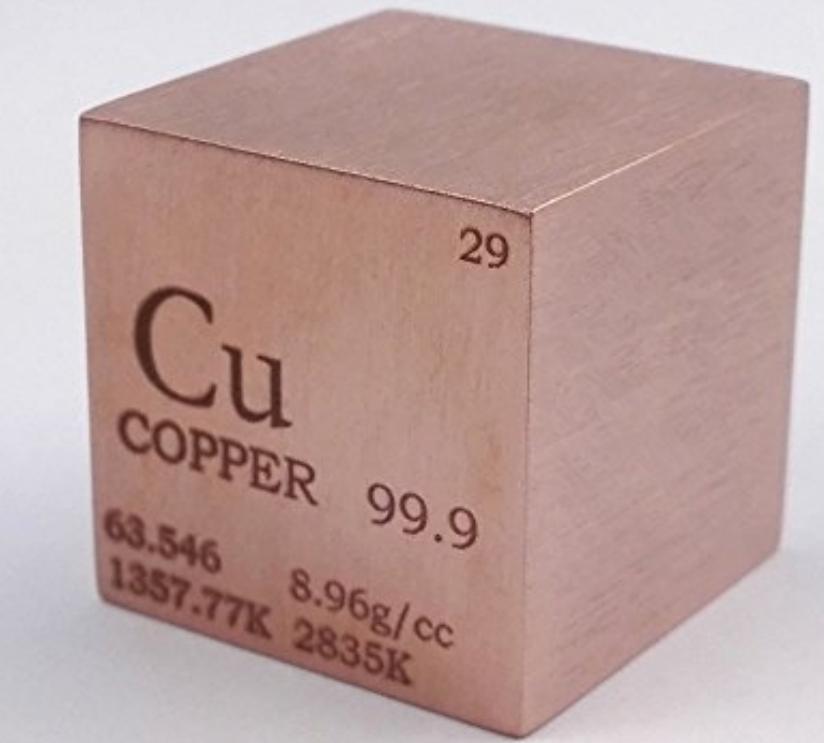
Thickness: 4 - 5.3 mm

Weight of Each Sheet: 43 - 44 Kg

Weight of Each Bundle: 1,600 - 1,700 Kg

Number of Sheets in Each Bundle: 40

Standard: ASTM-B115



Aluminum Powder (Irregular)



Method of Production

Atomizing by Dry Air (Air atomized – Irregular shape)

Chemical Composition¹

Aluminum Purity: %99.71

Bi	<0.001	V	<0.001	Ni	<0.001	K	<0.001	Cd	<0.001
Cr	<0.001	Ag	<0.001	Si	0.09	Mo	<0.001	Fe	0.12
In	<0.001	Ba	<0.001	Tl	<0.001	Pb	<0.001	Li	<0.001
Mn	<0.001	Co	<0.001	As	<0.001	Sn	0.02	Na	<0.001
P	<0.001	Ga	<0.001	Ca	<0.001	Zn	0.032	Sb	<0.001
Sr	<0.001	Mg	<0.001	Cu	0.02	B	<0.001	Ti	<0.001

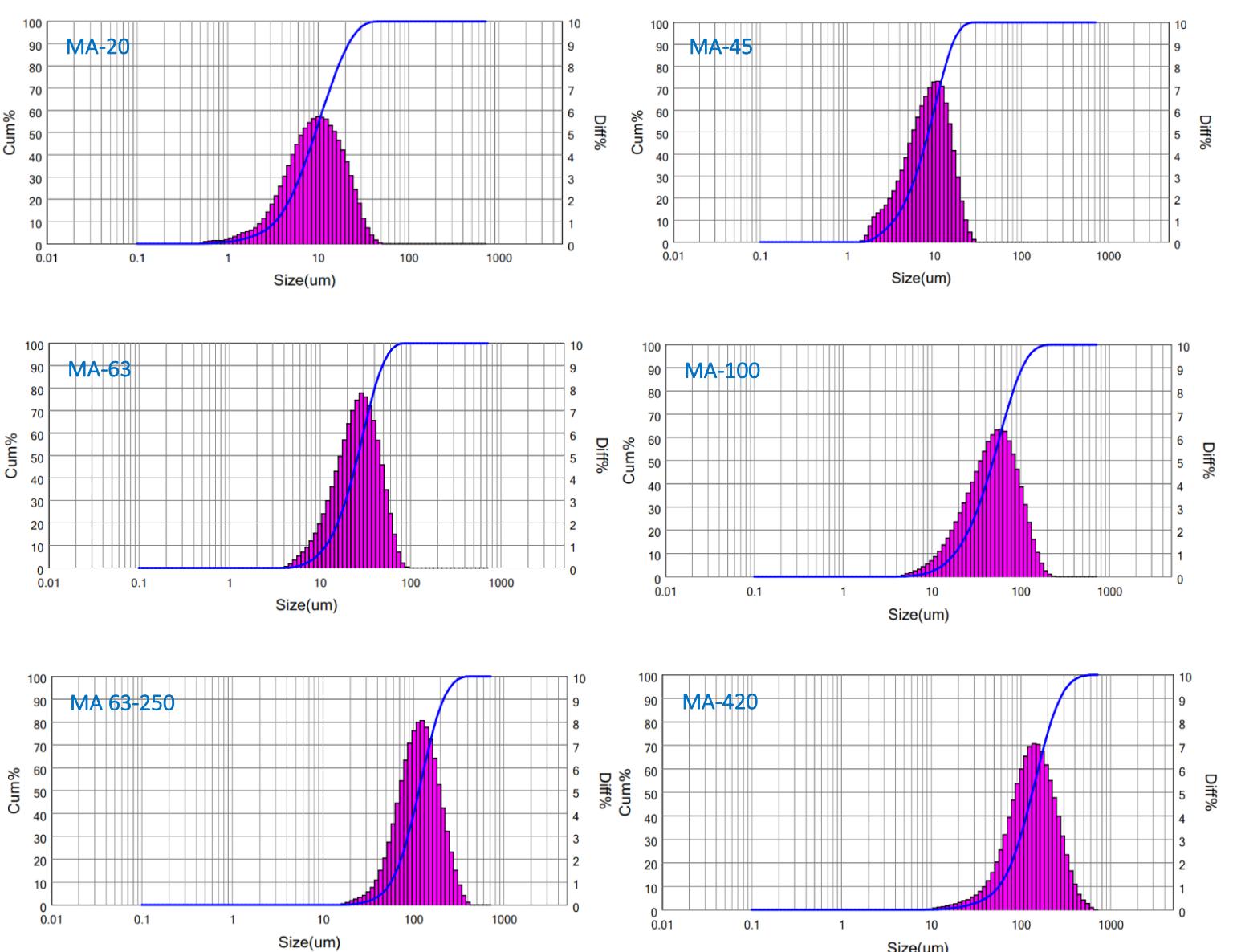
1. Verified by Inductively Coupled Plasma (ICP)

Particle Size Distribution²

Product Code	Median Size D50 (μm)	Apparent Density (g/cm ³)	Size Distribution Analysis (μm)									
			D3	D6	D10	D16	D25	D50	D75	D84	D90	D97
MA-20	9.34	1.14	1.77	2.58	3.36	4.31	5.58	9.34	15.06	18.4	21.73	29.15
MA-45	8.58	1.04	2.28	2.8	3.47	4.34	5.45	8.58	12.4	14.33	16.12	20.09
MA-63	26.2	1.06	7.80	9.68	11.67	14.17	17.47	26.2	37.21	43.01	48.64	61.05
MA-100	48.91	1.06	10.98	14.41	18.08	22.91	29.66	48.91	74.92	89.28	103.7	136.8
MA 63-250	114.7	1.01	38.49	47.89	56.55	66.79	79.92	114.7	161.2	188.6	215.1	275.3
MA -420	133.8	0.997	31.86	44.86	56.91	70.7	87.87	133.8	197.8	235.1	173.6	366.2

2. Analyzed by: Laser Practical Laser Particle Size Analyzer (LPSA, Model: Bettersizer S)

Particle Size Distribution Graph



Compliance with International Standards

ASTM D962 – 81 (Type III)

MIL-A-512A (Grade F: Class 6, Class 7, Class 8)

ISO 1247 (Type 3)

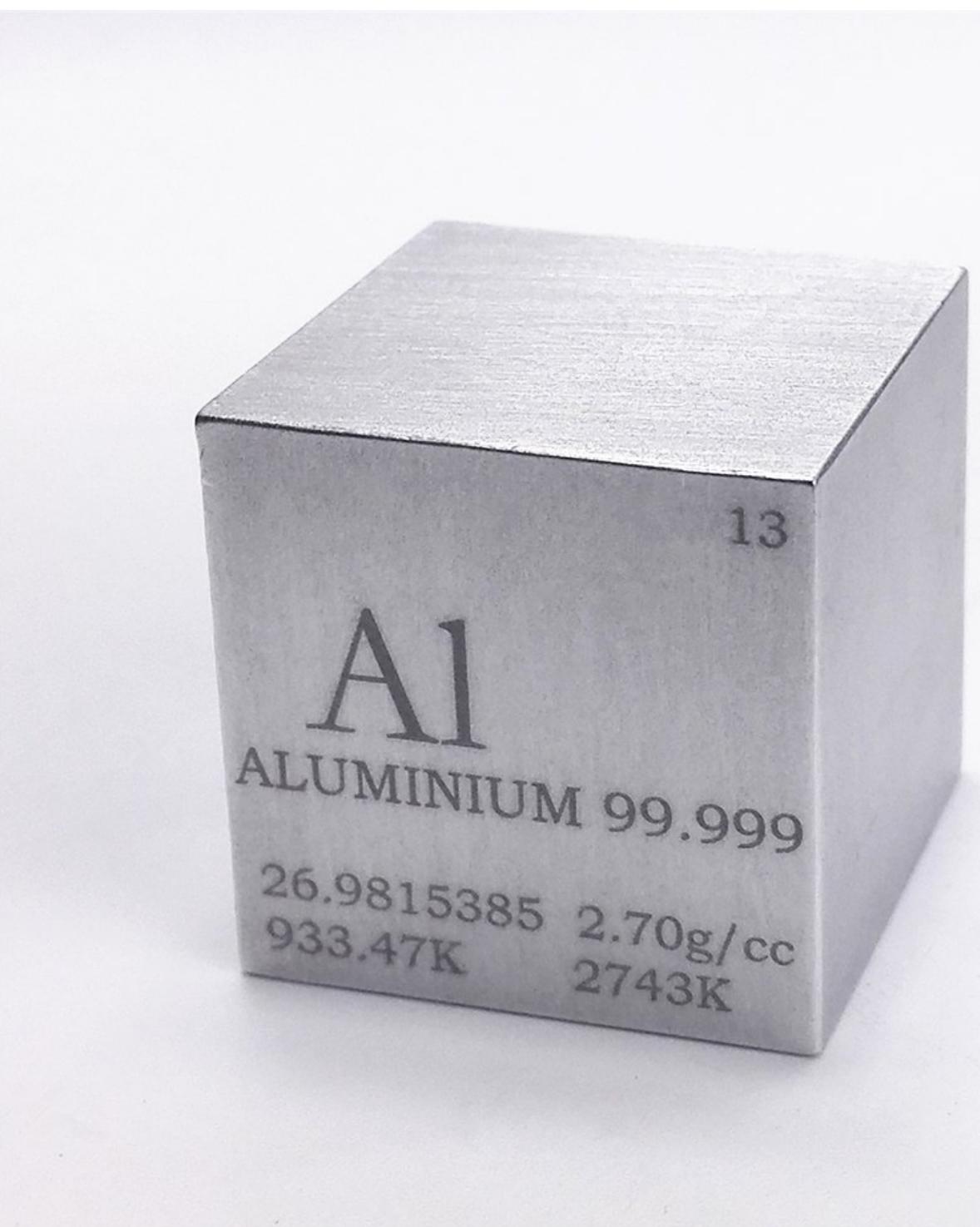
Packaging

25 Kg, 50 Kg, 500 Kg, 1000 Kg

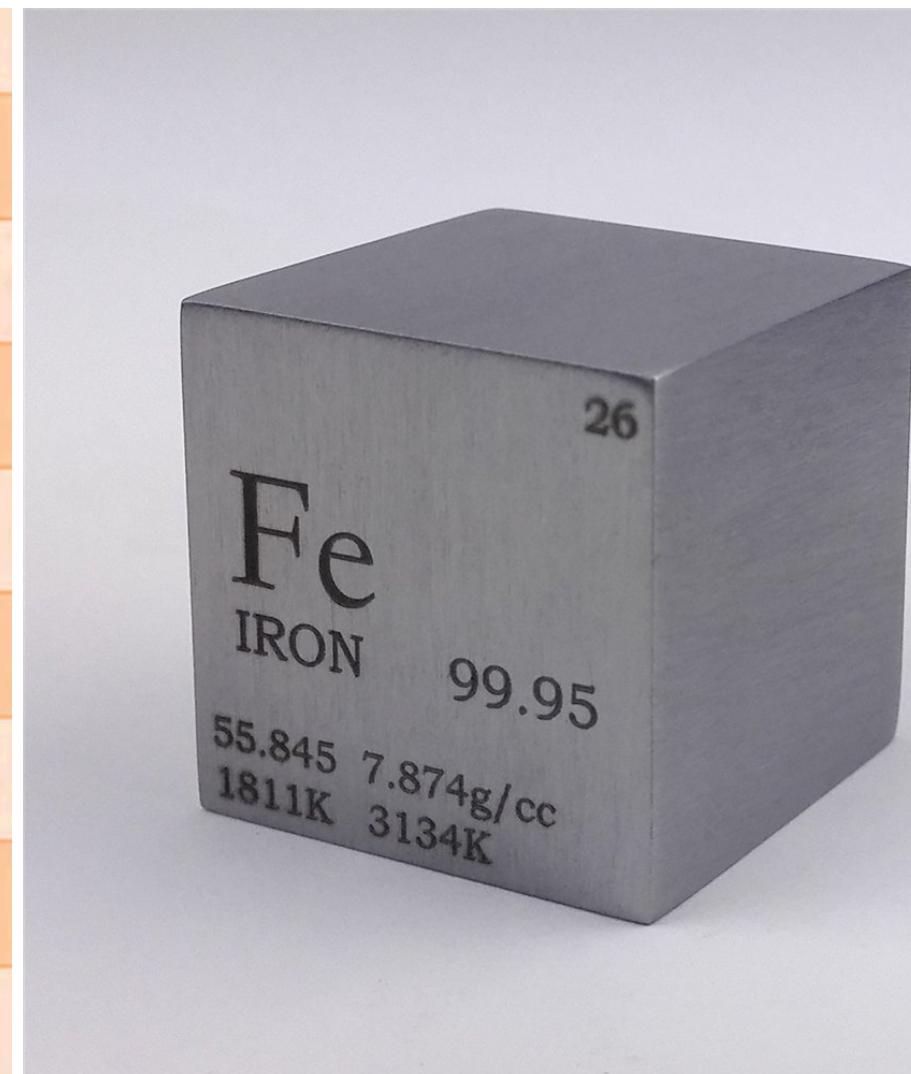
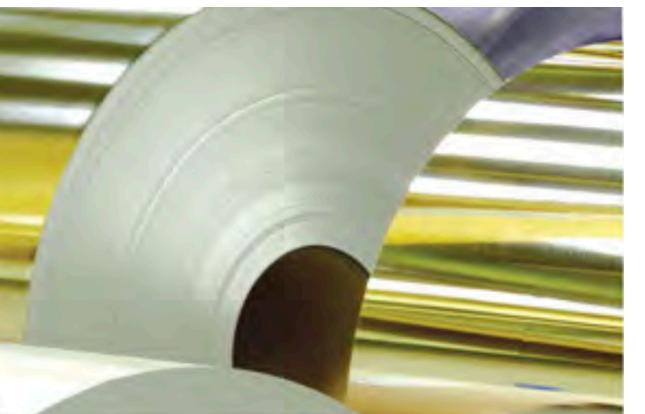
Special Orders

It's possible to produce *Irregular Aluminum Powder* with desired mesh size in accordance with customer requirements.

Aluminum (Aluminium)



Steel (Stahl)



Production method	Continuous Hot Dip Galvanizing
Entry coil	CRC (Full Hard)
Thickness	0.25 – 2 mm
Width	750 – 1510 mm
Inner diameter of exit coil	508 or 610 mm
Outer diameter of exit coil	900 – 2000 mm
Exit coil weight	3 – 23.8 MT
Zn coating mass (both sides)	100 – 350 g/m ²
Max oil film	0.5 – 2 g/m ²

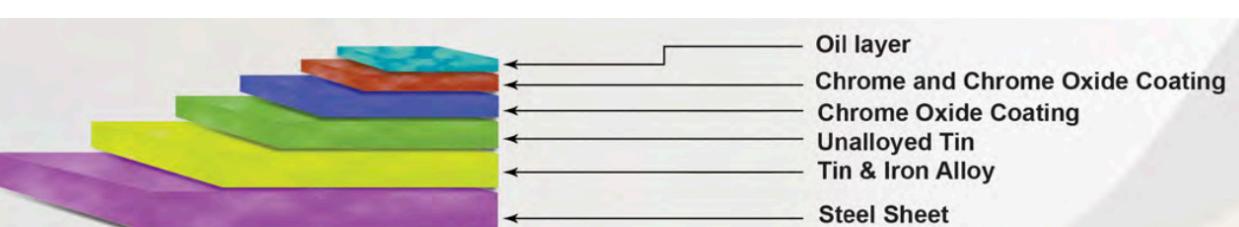
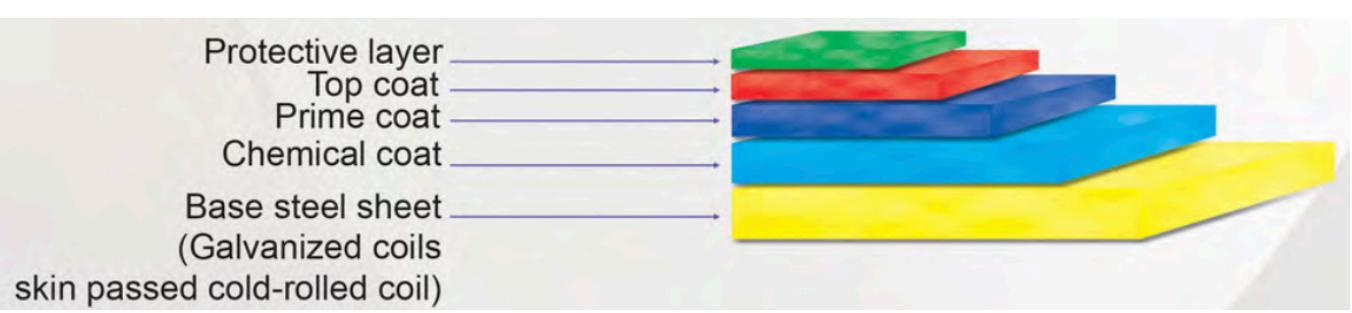
Capacity	100,000 MT per year
Entry steel strip	Galvanized coils, skin passed cold-rolled coil
Thickness	0.25 – 1.5 mm
Width	750 - 1500 mm
Inner diameter of coil	508 – 610 mm
Outer diameter of coil	915 – 1900 mm
Coil weight	3 – 12 MT
A- Preainted coil	
Primer coat thickness	5 microns
Top coat thickness	20 microns
Primer material	Polyester
Top coat material	Polyester (normal, VHP), polyvinylidene fluoride, epoxy, polyvinyl chloride, polyurethane
B- Embossed sheets	
Top coat thickness	100 – 200 microns
Top coat material	Plastisol (PVC)
C- Laminated sheets	
Film material	PET, PVC
PET film thickness	30 microns

Capacity	103,000 MT per year
Thickness	0.18 – 0.4 mm
Width (Coil)	600 – 1050 mm
Width (sheet)	600 – 1000 mm
Inner diameter of coil	420 mm
Outer diameter of coil	Max. 2000 mm
Weigh (Coil)	2 – 8 MT proportional with coil width
Weigh (sheet)	1 – 2 MT
Tin coat weigh (one side)	2.8 – 15.2 g/m ²
Oil layer	4 – 8 mg/m ²
Neutral layer	2.5 – 8 mg/m ²

Galvanized sheet products' quality & standards				
Standard \ Quality	ASTM	JIS-G3302	EN10142/91	EN10142/01
Commercial (CQ)	A526(90)	SGCC	FePO2G	DX51D
Lock Forming (LFQ)	A527(90)	-	-	-
Drawing (DQ)	A528(90)	SGCD	FePO3G	DX52D

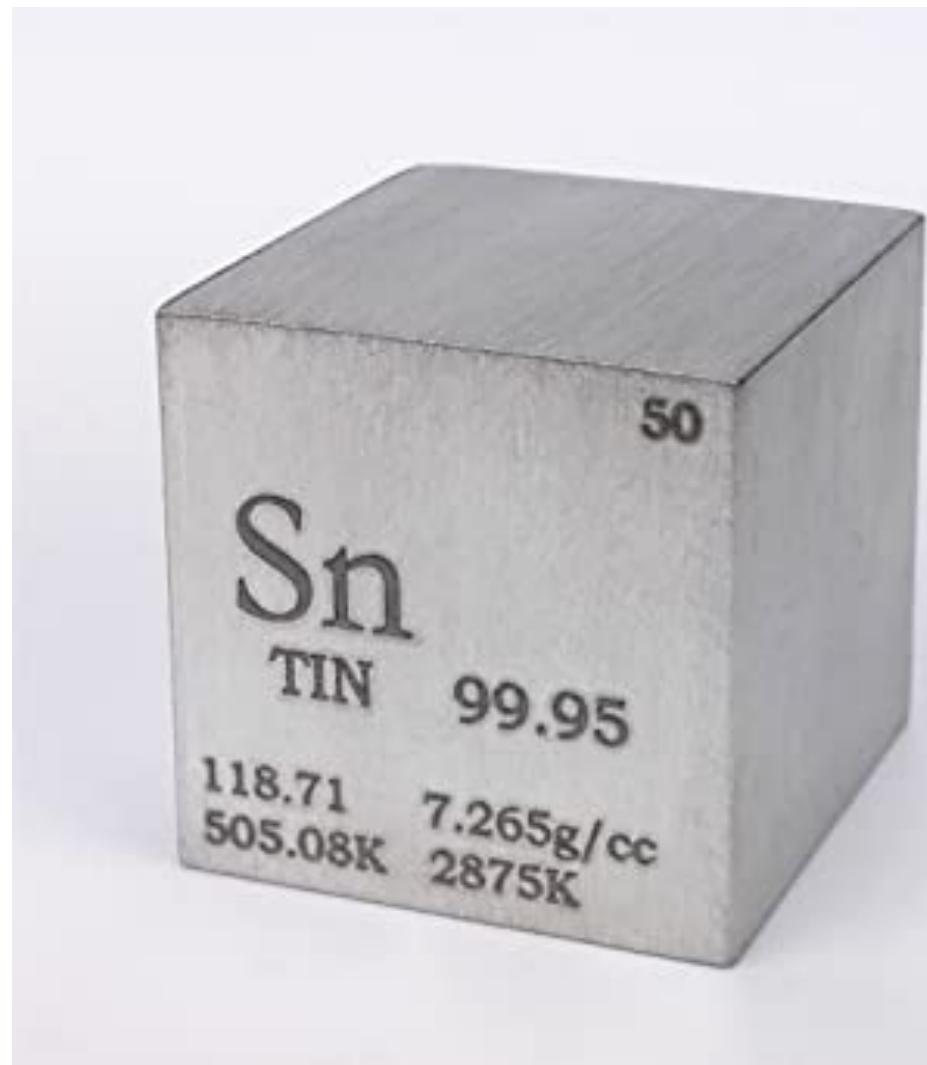
Prepainted sheets quality based on JIS G3312		
Sheet quality	Usage	Base steel sheet quality (hot-dipped galvanized)
CGCC	Commercial	SGCC
CGCD	Drawing	SGCD

ASTM A 623 M/92	JIS G 3303 / 87	EN 10203/91
T 2	SPTE (T 2)	T 52
T 3	SPTE (T 3)	T 57
T 4	SPTE (T 4)	T 61



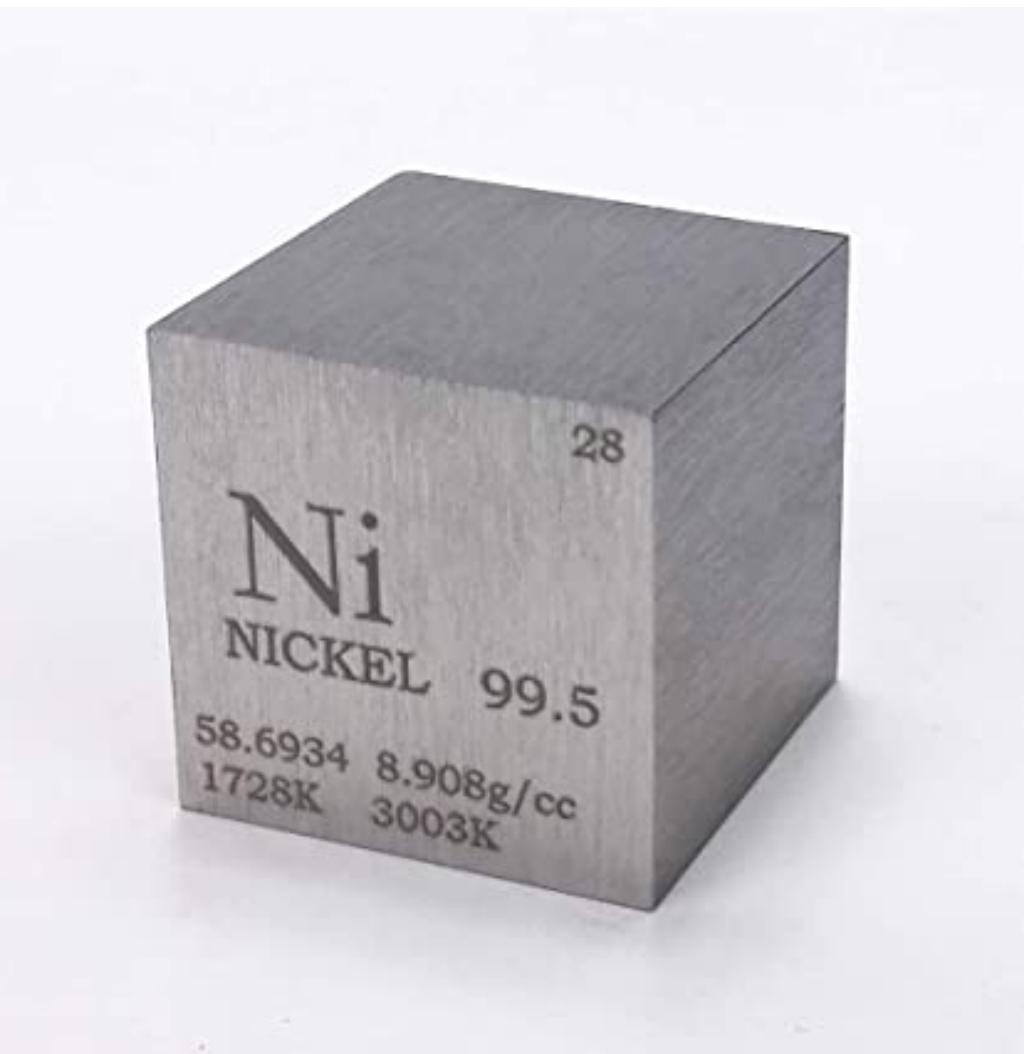
Tin (Zinn)

Sn min content	99.866	%
As max	0.017	%
Pb max	0.039	%
Bi max	0.025	%
Cu max	0.029	%
Sb max	0.013	%
Ni max	0.003	%
Co max	0.002	%
Fe max	0.006	%
Al max	< 0.0010	%
Cd max	< 0.0010	%
Zn max	< 0.0010	%
Total Impurities	0.134	%

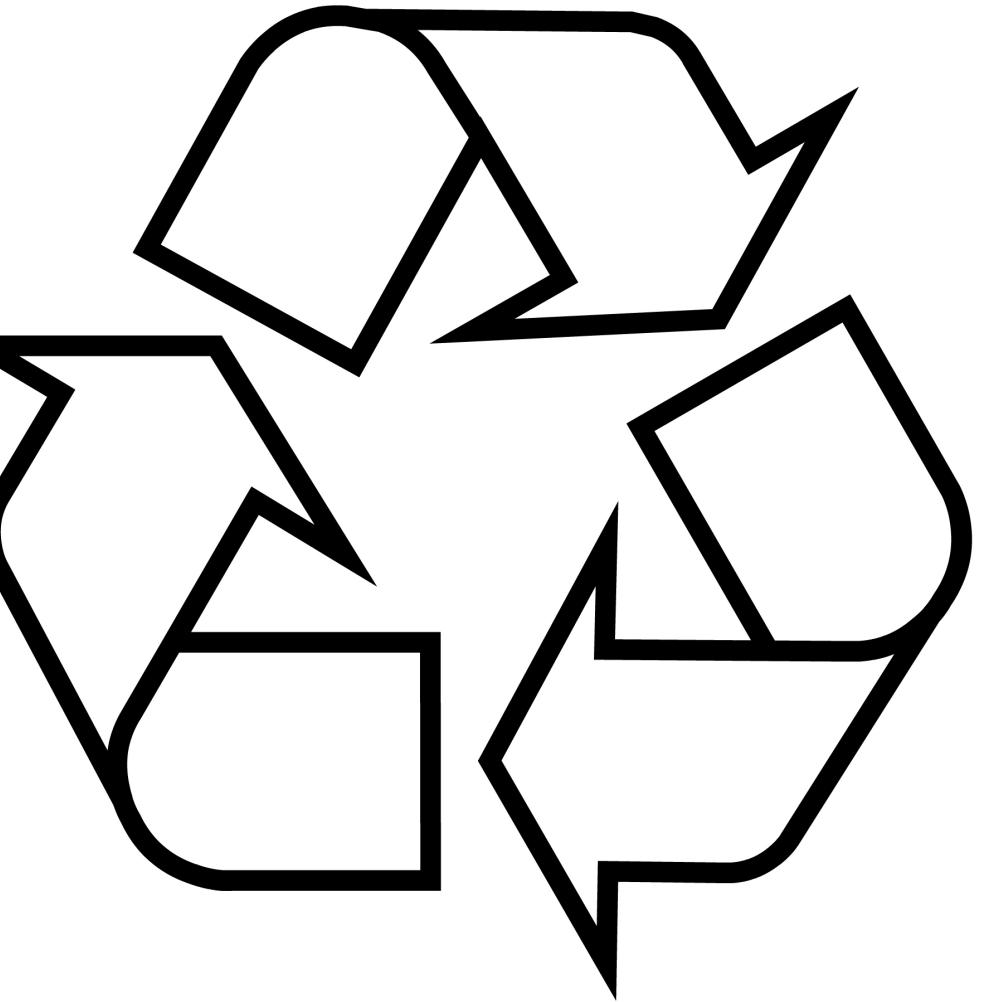


Nickel

(Nickel)



PISTONS (Kolben)





GEON GROUP
Neubruchstr. 12 F
85774 Unterföhring
GERMANY

Contact:

Mr. Sharam Roghani
sharam.roghani@geongroup.de
Tel. +49.171.7573757