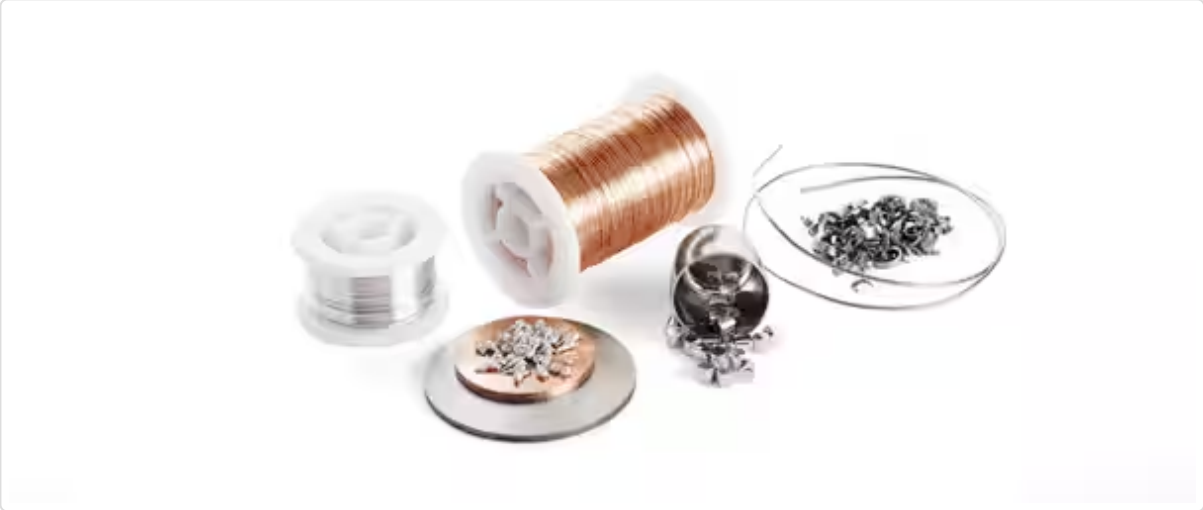
Alloys



A material composed of two or more metals, or a metal and a non-metal is commonly known as an alloy. It may be of single phase (solid solution) or a mixture of metallic phases (two or more solutions) or an intermetallic compound without separate boundary between the phases.

Alloys are used extensively in various fields like aircraft making, military, industrial, medical, and manufacturing. Alloys with aluminum, copper, nickel, stainless steel, and titanium have specific applications in a wide range of equipment, machinery, vehicles, structures, and many industries. Aluminum alloys are used in making furniture for home, the packing industry, and containers for medical storage. Aluminium alloys find specialized applications in high altitude flights. Copper alloys are less expensive than gold and platinum. Copper alloys have incomparable electric and thermal performance, and have good corrosion resistance. Nickel alloys are widely used in aircraft gas turbines, and chemical and petrochemical industries. Stainless steel alloys are widely used in underwater sea cables due to their high corrosion resistance. Alloys can be classified based on their usage in the industry such as Babbitt meta, Bell metal, coin metal, Solder metal, and Gun metal.

Shape memory alloys, such as Nickel Titanium (also known as Nitinol)□□, have gained commercial interest due to their unique property of memorizing their previous form when subjected to certain stimulus such as thermomechanical or magnetic variations (Jani, J. M. □A review of shape memory alloy research, applications and opportunities□. Materials & Design 2014, 56, 1078-□1113).

Alphabetical listing of Alloys

Here below is our list of alloys listed alphabetically.

Alloys are used extensively in various fields like aircraft making, military, industrial, medical, and manufacturing. Alloys with aluminum, copper, nickel, stainless steel, and titanium have specific applications in a wide range of equipment, machinery, vehicles, structures, and many industries. Aluminum alloys are used in making furniture for home, the packing industry, and containers for medical storage. Aluminium alloys find specialized applications in high altitude flights. Copper alloys are less expensive than gold and platinum. Copper alloys have incomparable electric and thermal performance, and have good corrosion resistance. Nickel alloys are widely used in aircraft gas turbines, and chemical and petrochemical industries. Stainless steel alloys are widely used in underwater sea cables due to their high corrosion resistance. Alloys can be classified based on their usage in the industry such as Babbitt metal, Bell metal, coin metal, Solder metal, and Gun metal.

88320	Aluminum Cobalt powder, -100 mesh, 99% (metals basis)
42035	Aluminum Copper spheres, alloy 2017, 12.7mm (0.5in) dia
42032	Aluminum Copper spheres, alloy 2017, 1.59mm (0.063in) dia
42036	Aluminum Copper spheres, alloy 2017, 19.0mm (0.75in) dia
42103	Aluminum Copper square bar, alloy 2024, 1.27cm (0.5in) x 1.27cm (0.5in)
42105	Aluminum Copper square bar, alloy 2024, 1.91cm (0.75in) x 1.91cm (0.75in)
45149	Aluminum foil, alloy 6061, 0.81mm (0.032in) thick
45192	Aluminum foil, alloy 6061, 1.0mm (0.04in) thick
45226	Aluminum foil, alloy 6061, 1.27mm (0.05in) thick
45212	Aluminum foil, alloy 6061, 1.6mm (0.063in) thick
45171	Aluminum foil, alloy 6061, 2.0mm (0.08in) thick
42121	Aluminum Magnesium foil, alloy 5052, 0.79mm (0.03in) thick
46714	Aluminum Magnesium gauze , alloy 5056, 16 mesh woven from 0.24mm (0.0095in) dia wire
46579	Aluminum Magnesium gauze , alloy 5056, 20 mesh woven from 0.23mm (0.009in) dia wire

40906	Aluminum Magnesium gauze, alloy 5056, 30 mesh woven from 0.23mm (0.009in) dia wire
45528	Aluminum Magnesium plate, alloy 5052, 2.29mm (0.090in) thick
42124	Aluminum Magnesium plate, alloy 5052, 3.18mm (0.125in) thick
45942	Aluminum Manganese tubing, alloy 3003, 7.14mm (0.281in) OD, 6.43mm (0.253in) ID
45193	Aluminum plate, alloy 6061, 2.3mm (0.09in) thick
45232	Aluminum plate, alloy 6061, 3.18mm (0.125in) thick
42125	Aluminum plate, alloy 6061, 4.76mm (0.19in) thick
42128	Aluminum plate, alloy 6061, 9.53mm (0.375in) thick
42053	Aluminum rod, alloy 6061, 12.7mm (0.5in) dia
42055	Aluminum rod, alloy 6061, 25.4mm (1.0in) dia
42051	Aluminum rod, alloy 6061, 3.175mm (0.125in) dia
42052	Aluminum rod, alloy 6061, 6.35mm (0.25in) dia
88322	Aluminum Silicon powder, -325 mesh, 99% (metals basis)
39672	Aluminum Silicon slug, 12.7mm (0.5in) dia x 12.7mm (0.5in) length, Puratronic®, 99.999% (metals basis)
38492	Aluminum Silicon slug, 6.35mm (0.25in) dia x 12.7mm (0.5in) length, Puratronic®, 99.999% (metals basis)
42322	Aluminum Silicon slug, 6.35mm (0.25in) dia x 6.35mm (0.25in) length, 99.99% (metals basis)
40340	Aluminum, silver coated powder, -200 mesh, 99.9% (metals basis), Ag 19-21 wt%
18143	Bismuth Indium Lead Tin eutectic ingot, alloy 136, 99.9% (metals basis)

46895	Bismuth Indium Tin ingot (Field's metal)
40949	Bismuth Lead eutectic ingot, 99.9% (metals basis)
44238	Bismuth Lead eutectic wire, 0.79mm (0.031in) dia
40951	Bismuth Lead Tin Cadmium eutectic ingot, 99.9% (metals basis)
33218	Bismuth Lead Tin Cadmium ingot (Wood's metal)
40516	Bismuth Lead Tin ingot (Rose's metal)
12480	Bismuth Tin eutectic lump, 99.95% (metals basis)
13505	Brass foil, alloy 260, 0.025mm (0.001in) thick, 15.2x45cm (6.0x18in)
47224	Brass foil, alloy 260, 0.025mm (0.001in) thick, 7.2x45cm (3.0x18in)
13503	Brass foil, alloy 260, 0.25mm (0.01in) thick, 15x45cm (5.9x18in)
45135	Brass foil, alloy 260, 0.3mm (0.012in) thick
45160	Brass foil, alloy 260, 0.41mm (0.016in) thick
45181	Brass foil, alloy 260, 0.51mm (0.02in) thick
13502	Brass foil, alloy 260, 0.51mm (0.02in) thick, 15x45cm (5.9x18in)
45203	Brass foil, alloy 260, 0.64mm (0.025in) thick
45138	Brass foil, alloy 260, 0.81mm (0.032in) thick

45205	Brass foil, alloy 260, 1.6mm (0.064in) thick
45137	Brass foil, alloy 260, 2.0mm (0.08in) thick
45208	Brass gauze, alloy 260, 100 mesh woven from 0.11mm (0.0045in) dia wire
45143	Brass gauze, alloy 260, 20 mesh woven from 0.41mm (0.016in) dia wire
45187	Brass gauze, alloy 260, 80 mesh woven from 0.14mm (0.0055in) dia wire; Cu:Zn; 70:30 wt%
45229	Brass plate, alloy 260, 2.4mm (0.093in) thick
45182	Brass plate alloy 260, 6.35mm (0.25in) thick
45139	Brass spheres, alloy 260, 3.18mm (0.125in) dia
45162	Brass spheres, alloy 260, 6.35mm (0.25in) dia
45188	Bronze gauze, alloy 220, 100 mesh woven from 0.11mm (0.0045in) in dia wire
45145	Bronze gauze, alloy 220, 150 mesh woven from 0.066mm (0.0026in) in dia wire
45223	Bronze gauze, alloy 220, 200 mesh woven from 0.053mm (0.0021in) in dia wire
45144	Bronze gauze, alloy 220, 20 mesh woven from 0.41mm (0.016in) in dia wire
45166	Bronze gauze, alloy 220, 40 mesh woven from 0.25mm (0.01in) in dia wire
45230	Bronze gauze, alloy 220, 60 mesh woven from 0.19mm (0.0075in) in dia wire
45209	Bronze gauze, alloy 220, 80 mesh woven from 0.14mm (0.0055in) in dia wire
88359	Bronze powder, -100 mesh, 99.0% (metals basis)
43994	C-276 foil, 0.2mm (0.008in) thick

46415	Carpenter 20® gauze, 100 mesh woven from 0.1mm (0.004in) dia wire
46526	Carpenter 20 gauze, 12 mesh woven from 0.58mm (0.023in) dia wire
46339	Carpenter 20® gauze, 40 mesh woven from 0.25mm (0.01in) dia wire
45783	Cobalt Chromium Iron Nickel Molybdenum Manganese wire, 0.25mm (0.01in) dia
41912	Copper Beryllium foil, alloy C17200, 0.15mm (0.006in) thick
41913	Copper Beryllium foil, alloy C17200, 0.25mm (0.01in) thick
41914	Copper Beryllium foil, alloy C17200, 0.4mm (0.016in) thick
41911	Copper Beryllium foil, alloy C172, 0.13mm (0.005in) thick
42479	Copper Beryllium rod, alloy C17200, 2.38mm (0.094in) dia
42480	Copper Beryllium rod, alloy C17200 3.18mm (0.125in) dia
42481	Copper Beryllium rod, alloy C17200, 4.76mm (0.188in) dia
42482	Copper Beryllium rod, alloy C17200, 6.35mm (0.25in) dia

43188	Copper Manganese Nickel wire, 0.1mm (0.004in) dia
43191	Copper Manganese Nickel wire, 1.0mm (0.04in) dia
43269	Copper Nickel wire, 0.075mm (0.003in) dia
43270	Copper Nickel wire, 0.13mm (0.005in) dia
43271	Copper Nickel wire, 0.25mm (0.01in) dia
43272	Copper Nickel wire, 0.5mm (0.02in) dia
43273	Copper Nickel wire, 1.6mm (0.064in) dia
88357	Copper Phosphorus shot
43767	Copper Silicon bar, 3.8x3.8x30cm
45526	Devarda's Alloy, granular
46416	Duplex 2209, 20 mesh woven from 0.3mm (0.012mm) dia wire
46525	Duplex 2209, 60 mesh woven from 0.15mm (0.006mm) dia wire
44240	Gallium Indium alloy, 99.99% (metals basis)
12478	Gallium Indium eutectic, 99.99% (metals basis)

36311	Gold Germanium foil, 0.1mm (0.004in) thick x 43.8mm (1.72in) wide, Premion®, 99.99% (metals basis)
41557	Gold Germanium pieces, 1-3mm (0.04-0.12in), 99.85% (metals basis)
42983	Gold Germanium slug, 3.175mm (0.125in) dia x ≈3.175mm (0.125in) length, Premion®, 99.998% (metals basis)
14172	Gold Germanium slug, 6.35mm (0.25in) dia x 6.35mm (0.25in) length, Premion®, 99.9997% (metals basis)
14173	Gold Germanium slug, 6.35mm (0.25in)dia x 6.35mm (0.25in) length, Premion®, 99.999% (metals basis)
36451	Gold Nickel wire, 0.5mm (0.02in) dia, annealed, 99.85% (metals basis)
41206	Gold Palladium wire, 0.2mm (0.008in) dia, annealed, 99.9% (metals basis)
89726	Gold Platinum Palladium powder, APS <5 micron, 99.9% (metal s basis)
36310	Gold Tin eutectic foil, 0.1mm (0.004in) thick x 43.8mm (1.72in) wide, 99.99% (metals basis)
40328	Gold wire, 14kt, red, 1.63mm (0.064in) dia, Au 58.3% min
40329	Gold wire, 14kt, yellow, 1.63mm (0.064in) dia, Au 58.3% min
43470	Gold Zinc slugs, 3.175mm (0.125in)dia x 3.175mm (0.125in) length, 99.95% (metals basis)
43469	Gold Zinc slugs, 3.175mm (0.125in) dia x 3.175mm (0.125in) length, 99.99% (metals basis)
43468	Gold Zinc slugs, 6.35mm (0.25in) dia x 6.35mm (0.25in) length, 99.99% (metals basis)
43215	Graphite powder, nickel coated, -100 mesh, Ni 60%
40940	Hastelloy C® gauze, 100 mesh woven from 0.102mm (0.004in) dia wire
46563	Hastelloy C® gauze, 10 mesh woven from 0.64mm (0.025in) dia wire

40938	Hastelloy C® gauze, 20 mesh woven from 0.23mm (0.009in) dia wire
46690	Hastelloy C® gauze, 40 mesh woven from 0.19mm (0.0075in) dia wire
40939	Hastelloy C® gauze, 60 mesh woven from 0.112mm (0.0044in) dia wire
46815	Hastelloy C® gauze, 80 mesh woven from 0.1mm (0.004in) dia wire
46610	Haynes® 25 gauze, 100 mesh woven from 0.076mm (0.003in) dia wire
46645	Haynes® 25 gauze, 20 mesh woven from 0.13mm (0.005in) dia wire
46892	Haynes® 25 gauze, 30 mesh woven from 0.28mm (0.011in) dia wire
45069	Inconel® 600 gauze, 100 mesh woven from 0.102mm (0.004in) dia wire
46453	Inconel® 600 gauze, 10 mesh woven from 0.64mm (0.025in) dia wire
46791	Inconel® 600 gauze, 200 mesh woven from 0.05mm (0.002in) dia wire
46510	Inconel® 600 gauze, 20 mesh woven from 0.41mm (0.016in) dia wire
46745	Inconel® 600 gauze, 40 mesh woven from 0.25mm (0.01in) dia wire
46584	Inconel® 600 gauze, 60 mesh woven from 0.19mm (0.0075in) dia wire
18159	Indium Tin eutectic ingot, 99.95% (metals basis)

	44600	Invar®, Iron Nickel powder, -325 mesh, 99.9% (metals basis)
	47233	Iron aluminide, 97.5% (metals basis)
	88380	Iron Nickel composite, -100 mesh
	36683	Iron Nickel powder, -325 mesh, 99.5+% (metals basis)
	43500	Iron Titanium powder, -40 mesh
	13399	Lanthanum Nickel eutectic pieces, REacton®, 99.9% (REO)
	89133	Lanthanum nickel powder, -100 mesh, 99.5% (metals basis)
	11271	Lanthanum nickel, REacton®, 99.9% (REO)
	10224	Lead Antimony shot, 2mm (0.08in)
	41024	Lead Tin, solder alloy, 1.6mm (0.06in) dia, with rosin core
	41023	Lead Tin, solder alloy, 3.18mm (0.125in) dia
	44009	Magnesium Aluminum Zinc foil, 1mm (0.04in) thick
	14066	Magnesium Aluminum Zinc plate, alloy AZ31B, 6.35mm (0.25in) thick
	44915	Magnesium Aluminum Zinc plate, alloy AZ31B, 9.52mm (0.375in) thick

45064	Monel® 400 gauze, 200 mesh woven from 0.05mm (0.0021in) dia wire
45141	Monel® 400 gauze, 20 mesh woven from 0.41mm (0.016in) dia wire
45163	Monel® 400 gauze, 40 mesh woven from 0.25mm (0.01in) dia wire
45207	Monel® 400 gauze, 80 mesh woven from 0.14mm (0.0055in) dia wire
45065	Monel® 400 wire, 0.25mm (0.01in) dia
45066	Monel® 400 wire, 0.50mm (0.02in) dia
13642	Neodymium Boron Iron, REacton®
39828	Nickel Aluminum
22890	Nickel aluminum, 99.0% min (metals basis)
87676	Nickel Aluminum, Raney® type non-activated
43635	Nickel Chromium Aluminum Copper wire, 0.025mm (0.001in) dia, annealed (Evanohm®)
40941	Nickel Chromium gauze, 40 mesh woven from 0.25mm (0.01in) dia wire
36604	Nickel Chromium Iron powder, -325 mesh
44888	Nickel Chromium Iron powder, -325 mesh

36298	Nickel Chromium lump, 99.9% (metals basis)
40437	Nickel Chromium pieces, 1.0mm (0.04in) dia x 3.18mm (0.125in) length, 99% (metals basis), Si nominal 1.5%
13108	Nickel Chromium powder, -140+325 mesh, 97% (metals basis)
42368	Nickel Chromium slug, 3.175mm (0.125in) dia x 3.175mm (0.125in) length, 99.95% (metals basis)
42367	Nickel Chromium slug, 3.175mm(0.125in) dia x 6.35mm (0.25in) length, 99.95% (metals basis)
42365	Nickel Chromium slug, 6.35mm (0.25in) dia x 12.7mm (0.5in) length, 99.95% (metals basis)
42366	Nickel Chromium slug, 6.35mm (0.25in) dia x 6.35mm (0.25in) length, 99.95% (metals basis)
40870	Nickel Chromium, sputtering target, 50.8mm (2.0in) dia x 3.18mm (0.125in) thick, 99.95% (metals basis)
40871	Nickel Chromium, sputtering target, 50.8mm (2.0in) dia x 6.35mm (0.250in) thick, 99.95% (metals basis)
40872	Nickel Chromium, sputtering target, 76.2in (3.0in) dia x 3.18mm (0.125in) thick, 99.95% (metals basis)
44187	Nickel Chromium wire, 0.05mm (0.002in) dia
13966	Nickel Chromium wire, 0.143mm (0.0056in) dia

42195	Nickel Chromium wire, 0.25mm (0.01in) dia
45057	Nickel Chromium wire, 0.2mm (0.008in) dia
42196	Nickel Chromium wire, 0.41mm (0.016in) dia
13967	Nickel Chromium wire, 0.51mm (0.02in) dia
40438	Nickel Chromium wire, 1.0mm (0.04in) dia, 99% (metals basis)
42838	Nickel Chromium wire, 1.6mm (0.064in) dia
45148	Nickel Copper foil, alloy 400, 0.51mm (0.02in) thick
45169	Nickel Copper foil, alloy 400, 0.81mm (0.032in) thick
45225	Nickel Copper foil, alloy 400, 1.0mm (0.04in) thick
45231	Nickel Copper foil, alloy 400, 1.6mm (0.062in) thick
45170	Nickel Copper foil, alloy 400, 1.98mm (0.078in) thick
36597	Nickel Copper Iron Manganese powder, plasma spray grade, 99.8% (metals basis)

36457	Nickel Copper Iron Manganese rod, 1.27cm (0.5in) dia
43399	Nickel Iron Copper Molybdenum foil, 0.125mm (0.005in) thick, annealed (Mumetal®)
45610	Nickel Iron Molybdenum flake, -200 mesh
45092	Nickel Iron Molybdenum foil, 0.102mm (0.004in) thick, annealed
40886	Nickel Iron, sputtering target, 50.8mm (2.0in) dia x 3.18mm (0.125in) thick, 99.95% (metals basis)
40887	Nickel Iron, sputtering target, 50.8mm (2.0in) dia x 6.35mm (0.250in) thick, 99.95% (metals basis)
40888	Nickel Iron, sputtering target, 76.2mm (3.0in) dia x 3.18mm (0.125in) thick, 99.95% (metals basis)
13793	Nickel spheres, silver coated, -250 mesh, Ni typically 99.8% (metals basis)
45578	Nitinol compression coil spring, wire diameter 1.0mm (0.039in), mean coil diameter 7.0mm (0.27in), Alloy M
45663	Nitinol foil, 0.05mm (0.002in) thick, shape memory, flat annealed, pickled surface
45492	Nitinol foil, 0.05mm (0.002in) thick, superelastic, flat annealed, pickled surface
45514	Nitinol foil, 0.127mm (0.005in) thick, shape memory, flat annealed, pickled surface

44952	Nitinol foil, 0.127mm (0.005in) thick, superelastic, flat annealed, pickled surface
44953	Nitinol foil, 0.25mm (0.01in) thick, superelastic, flat annealed, pickled surface
44954	Nitinol foil, 0.38mm (0.015in) thick, superelastic, flat annealed,pickled surface
45655	Nitinol tension coil spring, wire diameter 0.75mm (0.030in), mean coil diameter 5.55mm (0.22in), Alloy M
44947	Nitinol wire, 0.25mm (0.01in) dia, superelastic, Alloy N, straight annealed, oxide surface
44948	Nitinol wire, 0.33mm (0.013in) dia, superelastic, Alloy N, straight annealed, oxide surface
44951	Nitinol wire, 0.58mm (0.023in) dia, superelastic, Alloy N, straight annealed, oxide surface
44950	Nitinol wire, 0.5mm (0.02in) dia, superelastic, Alloy N, straight annealed, oxide surface
45658	Nitinol wire, 1.0mm (0.039in) dia, shape memory, Alloy M, straight annealed, oxide surface
45087	Nitinol wire, 1.0mm (0.039in) dia, superelastic, Alloy N, straight annealed, oxide surface
44698	Palladium Nickel gauze, 50 mesh woven from 0.1578mm (0.0062in) dia wire
45003	Palladium Silver foil, 0.025mm (0.001in) thick
42187	Palladium Silver foil, 0.025mm (0.001in) thick, 99.9% (metals basis excluding Pt)
42682	Palladium Silver foil, 0.05mm (0.002in) thick, 99.9% (metals basis excluding Pt)
44731	Palladium Silver foil, 0.10mm (0.004in) thick, 99.9% (metals basis excluding Pt)
12575	Palladium Silver foil, 0.127mm (0.005in) thick, 99.9% (metals basis excluding Pt)
42683	Palladium Silver foil, 0.25mm (0.01in) thick, 99.9% (metals basis excluding Pt)
42684	Palladium Silver foil, 0.5mm (0.02in) thick, 99.9% (metals basis excluding Pt)

42891	Platinum 10 wt% Rhodium wire, 0.076mm (0.003in) dia, ISA Type S Standard Grade Thermocouple
42893	Platinum 10 wt% Rhodium wire, 0.127mm (0.005in) dia, ISA Type S Standard Grade Thermocouple
42894	Platinum 10 wt% Rhodium wire, 0.203mm (0.008in) dia, ISA Type S Standard Grade Thermocouple
10065	Platinum 10 wt% Rhodium wire, 0.25mm (0.01in) dia, ISA Type S Standard Grade Thermocouple
13372	Platinum 10 wt% Rhodium wire, 0.5mm (0.02in) dia, ISA Type S Standard Grade Thermocouple
45129	Platinum 10 wt% Rhodium wire, 1.0mm (0.04in) dia
42902	Platinum 13 wt% Rhodium wire, 0.076mm (0.003in) dia, ISA Type R Standard Grade Thermocouple
42903	Platinum 13 wt% Rhodium wire, 0.102mm (0.004in) dia, ISA Type R Standard Grade Thermocouple
42904	Platinum 13 wt% Rhodium wire, 0.127mm (0.005in) dia, ISA Type R Standard Grade Thermocouple
42905	Platinum 13 wt% Rhodium wire, 0.203mm (0.008in) dia, ISA Type R Standard Grade Thermocouple
10062	Platinum 13 wt% Rhodium wire, 0.25mm (0.01in) dia, ISA Type R Standard Grade Thermocouple
13018	Platinum 13 wt% Rhodium wire, 0.5mm (0.02in) dia, ISA Type R Standard Grade Thermocouple
43274	Platinum 20 wt% Rhodium wire, 0.25mm (0.01in) dia, 99.9% (metals basis)
10079	Platinum 30 wt% Rhodium wire, 0.076mm (0.003in) dia, ISA Type B Standard Grade Thermocouple
10063	Platinum 30 wt% Rhodium wire, 0.25mm (0.01in) dia, ISA Type B Standard Grade Thermocouple
45571	Platinum 30 wt% Rhodium wire, 0.33mm (0.013in) dia, ISA Type B Standard Grade Thermocouple
12576	Platinum 30 wt% Rhodium wire, 0.5mm (0.02in) dia, ISA Type B Standard Grade Thermocouple
14156	Platinum 6 wt% Rhodium/Platinum 30 wt% Rhodium wire, 0.5mm (0.02in) dia, ISA Type B Stand. Thermocouple (2-bare wires)

42912	Platinum 6 wt% Rhodium wire, 0.076mm (0.003in) dia, ISA Type B Standard Grade Thermocouple
42913	Platinum 6 wt% Rhodium wire, 0.25mm (0.01in) dia, ISA Type B Standard Grade Thermocouple
43025	Platinum 6 wt% Rhodium wire, 0.33mm (0.013in) dia, ISA Type B Standard Grade Thermocouple
42914	Platinum 6 wt% Rhodium wire, 0.5mm (0.02in) dia, ISA Type B Standard Grade Thermocouple
41805	Platinum Iridium foil, 0.025mm (0.001in) thick, 99.9% (metals basis)
41802	Platinum Iridium foil, 0.025mm (0.001in) thick, 99.9% (metals basis)
41803	Platinum Iridium foil, 0.05mm (0.002in) thick, 99.9% (metals basis excluding precious metals)
43813	Platinum Iridium foil, 0.15mm (0.006in) thick, 99.9% (metals basis)
41804	Platinum Iridium foil, 0.1mm (0.004in) thick, 99.9% (metals basis)
41807	Platinum Iridium foil, 0.1mm (0.004in) thick, 99.9% (metals basis)
40934	Platinum Iridium gauze, 150 mesh woven from 0.043mm (0.0017in) dia wire
43019	Platinum Iridium wire, 0.127mm (0.005in) dia, annealed, 99.9% (metals basis excluding precious metals)
43330	Platinum Iridium wire, 0.127mm (0.005in) dia, hard, 99.9% (metals basis excluding precious metals)
43331	Platinum Iridium wire, 0.152mm (0.006in) dia, hard, 99.9% (metals basis excluding precious metals)

43275	Platinum Iridium wire, 0.25mm (0.01in) dia, annealed
39383	Platinum Iridium wire, 0.25mm (0.01in) dia, annealed, 99.9+% (metals basis)
39526	Platinum Iridium wire, 0.2mm (0.008in) dia, annealed, 99.9+% (metals basis)
10056	Platinum Iridium wire, 0.5mm (0.02in) dia, hard
10054	Platinum Iridium wire, 0.5mm (0.02in) dia, hard
10055	Platinum Iridium wire, 0.5mm (0.02in) dia, hard
42678	Platinum Iridium wire, 1.0mm (0.04in) dia
44732	Platinum Iridium wire, 1.0mm (0.04in) dia, hard
44812	Platinum Iridium wire, 1.5mm (0.06in) dia
14155	Platinum/Platinum 13 wt% Rhodium wire, 0.5mm (0.02in) dia, ISA Type R Standard Grade Thermocouple
41808	Platinum Rhodium foil, 0.025mm (0.001in) thick, 99.9% (metals basis)
41811	Platinum Rhodium foil, 0.025mm (0.001in) thick, 99.9% (metals basis)
41809	Platinum Rhodium foil, 0.05mm (0.002in) thick, 99.9% (metals basis)
41623	Platinum Rhodium foil, 0.1mm (0.004in) thick, 99.9% (metals basis)
41810	Platinum Rhodium foil, 0.1mm (0.004in) thick, 99.9% (metals basis)
12217	Platinum Rhodium gauze, 80 mesh woven from 0.076mm (0.003in) dia wire, 99.9% (metals basis)
12216	Platinum Rhodium Palladium gauze, 80 mesh knitted from 0.076mm (0.003in) dia wire, 99.9% (metals basis)
41171	Platinum Ruthenium black, nominally Pt 50%, Ru 50% (Atomic wt%), HiSPEC® 6000

42686	Platinum Ruthenium foil, 0.05mm (0.002in) thick
12608	Samarium Cobalt powder, -30 mesh
42732	Samarium cobalt, REacton®, Sm 33%
41026	Silver, brazing alloy, 0.8mm (0.03in) dia
41027	Silver, brazing alloy, 1.6mm (0.06in) dia
41355	Silver, brazing flux, white paste
41032	Silver, solder alloy, 1.6mm (0.06in) dia
41030	Silver, solder alloy, 3.0mm (0.13in) dia
44461	Silver wire, 0.05mm (0.002in) dia, annealed, 99.99% (metals basis)
45581	Soldering flux, liquid
45161	Stainless Steel disc, 102mm (4.0in) dia x 12.7mm (0.5in) thick, Type 304
45183	Stainless Steel disc, 152mm (6.0in) dia x 12.7mm (0.5in) thick, Type 304
45136	Stainless Steel disc, 76mm (3.0in) dia x 12.7mm (0.5in) thick, Type 304
42486	Stainless Steel flake, -150 mesh, 1.2 micron thick, Type 316-L
13787	Stainless Steel flake, -325 mesh, 0.4-1.2 micron thick, Type 316-L
41580	Stainless Steel foil, 0.025mm (0.001in) thick, Type 304

41582	Stainless Steel foil, 0.05mm (0.002in) thick, Type 304
41583	Stainless Steel foil, 0.1mm (0.004in) thick, Type 304
41584	Stainless Steel foil, 0.25mm (0.01in) thick, Type 304
42255	Stainless Steel foil, 0.2mm (0.008in) thick, Type 304
41585	Stainless Steel foil, 0.5mm (0.02in) thick, Type 304
46628	Stainless Steel gauze, 100 mesh woven from 0.025mm (0.001in) dia wire, Type 304
46703	Stainless Steel gauze, 100 mesh woven from 0.11mm (0.0045in) dia wire, Type 316
42010	Stainless Steel gauze, 150 mesh woven from 0.066mm (0.0026in) dia wire, Type 304
13476	Stainless Steel gauze, 200 mesh woven from 0.05mm (0.002in) dia wire, Type 304
45002	Stainless Steel gauze, 200 mesh woven from 0.05mm (0.002in) dia wire, Type 316
40943	Stainless Steel gauze, 20 mesh woven from 0.102mm (0.004in) dia wire, Type 316
40942	Stainless Steel gauze, 20 mesh woven from 0.382mm (0.015in) dia wire, Type 304
46715	Stainless Steel gauze, 325 mesh woven from 0.036mm (0.0014in) dia wire, Type 316
42012	Stainless Steel gauze, 400 mesh woven from 0.028mm (0.0011in) dia wire, twilled weave, Type 304
13478	Stainless Steel gauze, 40 mesh woven from 0.25mm (0.01in) dia wire, Type 304

13477	Stainless Steel gauze, 80 mesh woven from 0.127mm (0.005in) dia wire, Type 304
46574	Stainless Steel gauze, 80 mesh woven from 0.14mm (0.0055in) dia wire, Type 316
11085	Stainless Steel powder, -100 mesh, Type 304-L
11089	Stainless Steel powder, -100 mesh, Type 316-L
43458	Stainless Steel powder, -10+20 mesh, Type 316-L
11084	Stainless Steel powder, -140 mesh, Type 303-L
43457	Stainless Steel powder, -16+25 mesh, Type 316-L
43460	Stainless Steel powder, -20+35 mesh, Type 316-L
88390	Stainless Steel powder, -325 mesh, Type 316-L
47290	Stainless Steel powder, -325 mesh, Type 430-L
42944	Stainless Steel powder, -40+80 mesh, Type 316
13475	Stainless Steel rod, 3.175mm (0.125in) dia, Type 303
13473	Stainless Steel rod, 6.35mm (0.25in) dia, Type 303
42707	Stainless Steel rod, 9.5mm (0.375in) dia, Type 303

42015	Stainless Steel spheres, 1mm (0.04in) dia, Type 302
42018	Stainless Steel spheres, 1mm (0.04in) dia, Type 316
42016	Stainless Steel spheres, 2mm (0.08in) dia, Type 302
42019	Stainless Steel spheres, 2mm (0.08in) dia, Type 316
42017	Stainless Steel spheres, 3mm (0.12in) dia, Type 302
42020	Stainless Steel spheres, 3mm (0.12in) dia, Type 316
42021	Stainless Steel spheres, 4mm (0.16in) dia, Type 316
13468	Stainless Steel tubing, 0.82mm (0.032in) OD, 0.51mm (0.02in) ID, Type 304
13469	Stainless Steel tubing, 1.65mm (0.065in) OD, 1.19mm (0.047in) ID, Type 304
40944	Stainless Steel wire, 0.127mm (0.005in) dia, Type 304
43300	Stainless Steel wire, 0.25mm (0.01in) dia, annealed, Type 304
40945	Stainless Steel wire, 0.25mm (0.01in) dia, Type 304
43301	Stainless Steel wire, 0.38mm (0.015in) dia, annealed, Type 304
40946	Stainless Steel wire, 0.51mm (0.02in) dia, Type 304
40947	Stainless Steel wire, 1.0mm (0.04in) dia, Type 304
44234	Steel shot, non-spherical, 0.25mm (0.0098in) dia

44235	Steel shot, non-spherical, 0.5mm (0.02in) dia
44236	Steel shot, non-spherical, 1mm (0.039in) dia
88393	Titanium aluminide, -325 mesh, 99.5% (metals basis)
22895	Titanium aluminide, 99.5% (metals basis)
46328	Titanium Aluminum, sputtering target, 76.2mm (3.0in) dia x 6.35mm (0.250in) thick, 99.95% (metals basis)
88384	Titanium Nickel powder composite, -325 mesh
22955	Tungsten carbide Cobalt, 99% (metals basis)
40926	Tungsten gauze, gold plated, 50 mesh woven from 0.025mm (0.001in) dia wire
10073	Tungsten Rhenium wire, 0.25mm (0.01in) dia, 99.95% (metals basis)
41040	Tungsten wire, chromium plated, 1.8mm (0.07in) min dia, W 96.5+%, Cr 99.888% (metals basis)
41038	Tungsten wire, gold plated, 0.025mm (0.001in) dia, W 99.95% (metals basis), Au 99.99%
41039	Tungsten wire, gold plated, 0.05mm (0.002in) dia, W 99.95% (metals basis), Au 99.99%
13630	Tungsten wire, platinum coated, 0.25mm (0.01in) dia
12949	Yttrium Aluminum lump, 99.9% (metals basis excluding Ca), Ca 1% max
12952	Yttrium Cobalt lump, REacton®, 99.9% (REO)
44013	Zinc Copper composite, -100 mesh, 99% (metals basis)
47306	Zirconium Nickel powder, -325 mesh, Zr:Ni; 30:70 wt%, packed under argon

Brazing Alloys

Brazing is a metal-joining process whereby a filler metal or brazing alloy is heated above its melting point and distributed between two or more close-fitting parts by capillary action. The filler metal is brought slightly above its melting temperature while protecting with a suitable atmosphere, usually a flux.

47230	B Bronze strip, 7.5mm (0.3in) width x 0.8mm (0.032in) thick x random length coil
41026	Silver, brazing alloy, 0.8mm (0.03in) dia
41027	Silver, brazing alloy, 1.6mm (0.06in) dia
41355	Silver, brazing flux, white paste
47299	Tenacity No. 125 Flux Powder, working range 750-1200°C (1382-2102°F)
47289	Tenacity No. 125 Paste, a high temperature flux paste, working range 800-1100°C (1472-2012°F)
47269	Tenacity No. 6 Flux Powder
47254	Tri-Foil, ArgoBraze 49LMT, 7.0mm w x 0.4mm thick foil strip
47265	Tri-Foil, ArgoBraze 49LMT, 9.0mm w x 0.4mm thick foil strip

Nitinol□ Nickel Titanium Shape Memory Alloys

Nickel Titanium (also known as Nitinol™□□) is the unique class of materials known as **shape memory alloys**. A thermoelastic martensitic phase transformation in the material is responsible for its extraordinary properties. These properties include the shape memory effect, superelasticity, and high damping capability. The properties of Nitinol□ can be modified to a great extent by changes in alloy composition, mechanical working, and heat treatment. In most cases a trial and error process is required to optimize these factors for a particular application.

45528	Aluminum Magnesium plate, alloy 5052, 2.29mm (0.090in) thick
45526	Devarda's Alloy, granular
45489	Gold Beryllium pieces, 99.9% (metals basis)
45589	Misch Metal, 99.0% min. rare earth content
45610	Nickel Iron Molybdenum flake, -200 mesh
45578	Nitinol compression coil spring, wire diameter 1.0mm (0.039in), mean coil diameter 7.0mm (0.27in), Alloy M
45951	Nitinol compression coil spring, wire diameter 1.0mm (0.039in), mean coil diameter 7.0mm (0.28in), Alloy M
45663	Nitinol foil, 0.05mm (0.002in) thick, shape memory, flat annealed, pickled surface
45492	Nitinol foil, 0.05mm (0.002in) thick, superelastic, flat annealed, pickled surface
45514	Nitinol foil, 0.127mm (0.005in) thick, shape memory, flat annealed, pickled surface
44952	Nitinol foil, 0.127mm (0.005in) thick, superelastic, flat annealed, pickled surface
44953	Nitinol foil, 0.25mm (0.01in) thick, superelastic, flat annealed, pickled surface
44954	Nitinol foil, 0.38mm (0.015in) thick, superelastic, flat annealed,pickled surface

45655	Nitinol tension coil spring, wire diameter 0.75mm (0.030in), mean coil diameter 5.55mm (0.22in), Alloy M
44947	Nitinol wire, 0.25mm (0.01in) dia, superelastic, Alloy N, straight annealed, oxide surface
44948	Nitinol wire, 0.33mm (0.013in) dia, superelastic, Alloy N, straight annealed, oxide surface
44951	Nitinol wire, 0.58mm (0.023in) dia, superelastic, Alloy N, straight annealed, oxide surface
44950	Nitinol wire, 0.5mm (0.02in) dia, superelastic, Alloy N, straight annealed, oxide surface
45658	Nitinol wire, 1.0mm (0.039in) dia, shape memory, Alloy M, straight annealed, oxide surface
45087	Nitinol wire, 1.0mm (0.039in) dia, superelastic, Alloy N, straight annealed, oxide surface
45571	Platinum 30 wt% Rhodium wire, 0.33mm (0.013in) dia, ISA Type B Standard Grade Thermocouple
47290	Stainless Steel powder, -325 mesh, Type 430-L

OFHC (Oxygen-Free High Conductivity)

Oxygen-Free High thermal conductivity Copper, also referred to as Oxygen-free copper (OFC), is a group of high conductivity copper alloys that are refined electrolytically to keep the level of oxygen to as low as 0.001% or below. Characteristics of OFHC copper are more ductility, high thermal & electrical conductivity, high impact strength, more resistance and an easier welding process. Conductivity in ordinary metals, such as copper or silver, is limited by the presence of impurities and other defects. By reducing the extremely low level of impurities the inherent properties of copper are enhanced to a high degree. The OFHC metals thus obtained have a copper content of 99.99%.

45147	Copper foil, Oxygen-Free High Conductivity (OFHC), alloy 101, 0.81mm (0.032in) thick
45168	Copper foil, Oxygen-Free High Conductivity (OFHC), alloy 101, 1.6mm (0.064in) thick
45210	Copper plate, Oxygen-Free High Conductivity (OFHC), alloy 101, 2.4mm (0.093in) thick
45190	Copper plate, Oxygen-Free High Conductivity (OFHC), alloy 101, 6.35mm (0.25in) thick
45146	Copper rod, Oxygen-Free High Conductivity (OFHC), alloy 101, 3.175mm (0.125in) dia
45167	Copper rod, Oxygen-Free High Conductivity (OFHC), alloy 101, 6.35mm (0.25in) dia
45189	Copper rod, Oxygen-Free High Conductivity (OFHC), alloy 101, 9.53mm (0.375in) dia
45943	Copper Thinfoil, Oxygen-Free High Conductivity (OFHC), 0.008mm (0.0003in) thick, 99.99% (metals basis)