

SGT Product Catalogue

All 38 products manufactured by Silver Gain Technology Co., Limited, grouped into 9 categories. Specifications are as published by the manufacturer; items marked TBC are quoted against the application.

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Cold Welding Machines (12)

Hand-held and bench machines that join non-ferrous wire by pressure alone, from 0.05 mm hair-fine wire up to 4.50 mm copper.

DA10 Table Cold Welder for 0.10-0.50 mm Copper

A 3.3 kg ductile cast iron table welder in a carry case, for fine wire in a narrow space.

Specification	Value
Table cold welder Model	DA10
Material	ductile cast iron
Capacities	Copper/Aluminum wire: 0.10mm-0.50mm
External dimension	L255mm*W65mm*H145mm
Net weight	3.3kgs

DA10 Desk Cold Welder for 0.10-0.50 mm Copper

The bench-mounted DA10 build at 3.5 kg, for fine copper and aluminium wire from 0.10 mm.

Specification	Value
Desk cold welder Model	DA10
Material	ductile cast iron
Capacities	Copper/Aluminum wire: 0.10mm-0.50mm
External dimension	L255mm*W65mm*H145mm
Net Weight	3.5kg

DB100 Desk Cold Welder for 1.00-4.00 mm Copper

Bench or trolley mounted, copper 0.90-4.00 mm and aluminium 1.00-5.50 mm on a 36 kg ductile cast iron frame.

Specification	Value
Desk cold welder Model	DB100
Material	ductile cast iron.
Copper wire	0.90mm-4.00mm Aluminum wire: 1.00mm-5.50mm
External dimension	L310mm*W190mm*H310mm
Net weight	36.0kgs

DB30 Desk Cold Welder for 0.35-1.30 mm Copper

Double cavity dies as standard, copper 0.35-1.30 mm and aluminium 0.30-1.40 mm at 13 kg.

Specification	Value
Desk cold welder Model	DB30
Material	ductile cast iron.
Copper wire	0.35mm-1.30mm Aluminum wire: 0.30mm-1.40mm
External dimension	L250mm*W70mm*H155mm
Net weight	13.0kgs

DB30 Cold Pressure Welder for 0.30-1.30 mm Copper

The 0.30 mm entry build of the DB30 desk welder, for copper aluminium and other non-ferrous wire.

Specification	Value
Desk cold pressure welding machine Model	DB30
Material	ductile cast iron.
Copper wire	0.30mm-1.30mm Aluminum wire: 0.30mm-1.40mm
External dimension	L250mm*W70mm*H155mm
Net weight	13.0kgs

DJ100 Desk Cold Welder for 1.00-4.50 mm Copper

The largest desk machine — copper to 4.50 mm and aluminium to 6.00 mm on an 80 kg frame with oversized dies.

Specification	Value
Desk cold pressure welding machine Model	DJ100
Material	ductile cast iron body
Copper wire	1.00mm-4.50mm
Aluminium wire	1.00mm-6.00mm
External dimension	L370mm*W200mm*H380mm
Net weight	80kgs
Package	packed in strong plywood case.

PA30 Portable Cold Welder for 0.30-0.90 mm Wire

A 1.30 kg cast stainless steel hand welder in a carry case, for narrow spaces.

Specification	Value
Portable cold pressure welding machine Model	PA30
Material	cast stainless steel.
Copper wire	0.30mm-0.90mm
Aluminium wire	0.30mm-0.90mm

Specification	Value
External dimension	L245mm*W85mm*H85mm
Net weight	1.30kgs
Package	packed in strong carry case.

PB10 Portable Cold Welder for 0.12-0.50 mm Wire

The smallest frame in the portable range at 160 mm long, in cast stainless steel with a carry case.

Specification	Value
Portable cold pressure welding machine Model PB10	
Material	cast stainless steel.
Copper/Aluminium wire	0.12mm-0.50mm
External dimension	L160mm*W70mm*H95mm
Net weight	950kgs
Package	packed in strong carry case.

PB35 Portable Cold Welder for 0.35-1.30 mm Wire

The largest portable, in an aluminium alloy body at 3.5 kg, copper to 1.30 mm and aluminium to 1.50 mm.

Specification	Value
Portable cold pressure welding machine Model PB35	
Material	aluminum alloy body.
Copper wire	0.35mm-1.30mm
Aluminium wire	0.35mm-1.50mm
External dimension	L230mm*W165mm*H200mm
Net weight	3.5kgs
Package	packed in strong carry case.

PW10 Portable Cold Welder for 0.05-0.50 mm Wire

The finest machine in the range — 0.05 mm copper at 820 g in cast stainless steel.

Specification	Value
Portable cold welder Model	PW10
Material	cast stainless steel.
Capacities	Copper/Aluminum wire: 0.05mm-0.50mm
External dimension	L170mm*W55mm*H60mm
Net weight	820g

DA100 Desk Cold Welder for 1.00-3.25 mm Copper

Cast steel bench or trolley machine, copper 1.00-3.25 mm and aluminium 1.00-5.00 mm at 37 kg.

Specification	Value
Model	DA100
Material	cast steel.
Copper wire	1.00mm-3.25mm
Aluminium wire	1.00mm-5.00mm
External dimension	L310mm*W190mm*H315mm
Net weight	37.0kgs
Package	packed in strong wooden case.

DA30 Desk Cold Welder for 0.30-1.20 mm Copper

A 10 kg cast steel bench or trolley machine for copper 0.30-1.20 mm and aluminium 0.30-1.40 mm.

Specification	Value
ITEM	Desk cold pressure welding machine
Model	DA30
Material	cast steel.
Copper wire	0.30mm-1.20mm
Aluminium wire	0.30mm-1.40mm
External dimension	L225mm*W125mm*H210mm
Net weight	10.0kgs
Package	packed in strong wooden case.

Hydraulic Pressure Welders (8)

The CHY series covers copper from 1.00 mm to 20.00 mm and aluminium to 25.00 mm, including rectangular strip.

CHY400 Hydraulic Cold Welder for 8.0 mm Copper Rod

Rectangular strip as well as round wire, copper to 8.00 mm and aluminium to 15.00 mm on a 660 kg frame.

Specification	Value
Hydraulic pressure welding machine Model	CHY400
Copper wire	4.00mm-8.00mm
Aluminium wire	4.00mm-15.00mm
External dimension	L1200mm*W580mm*H1100mm
Net weight	660kgs
Motor power	5.5KW
Working pressure	6.5MPa
Oil temperature	■75°C
Operating voltage	cusotmized the customer's industrial voltage in your country.
Package	packed in strong plywood case.

CHY200-B Hydraulic Pressure Welding Machine

Copper 2.00-6.00 mm and aluminium 2.00-8.00 mm on a 380 kg frame with a 1.5 kW motor.

Specification	Value
Hydraulic pressure welding machine Model	CHY200-B
Pure copper wire	2.00mm-6.00mm
Pure aluminium wire	2.00mm-8.00mm
External dimension	L1050mm*W560mm*H900mm
Net weight	380kgs
Motor power	1.5KW
Working pressure	5.5-6.0 MPa
Oil temperature	■70°C

CHY400-B Hydraulic Pressure Welding Machine

Copper 4.00-9.00 mm and aluminium 4.00-12.00 mm, supplied 3P 380 V 50 Hz on a 760 kg frame.

Specification	Value
Hydraulic pressure welding machine Model	CHY400-B
Pure copper wire	4.00mm-9.00mm
Pure aluminium wire	4.00mm-12.00mm

Specification	Value
External dimension	L1200mm*W800mm*H1200mm
Net weight	760kgs
Motor power	4.0KW
Working pressure	5.5-6.0 MPa
Oil temperature	■70°C
Operating voltage	3P, 380V, 50Hz

CHY700-B Hydraulic Pressure Welding Machine

Copper 7.00-12.00 mm and aluminium 7.00-20.00 mm on a 1500 kg frame at up to 8.0 MPa.

Specification	Value
Hydraulic pressure welding machine Model	CHY700-B
Pure copper wire	7.00mm-12.00mm
Pure aluminium wire	7.00mm-20.00mm
External dimension	L1500mm*W800mm*H1400mm
Net weight	1500kgs
Motor power	7.50KW
Working pressure	5.5-8.0 MPa
Oil temperature	■70°C

CHY800 Hydraulic Pressure Welding Machine

The largest frame in the range — copper rod 8.00-20.00 mm and aluminium rod 8.00-25.00 mm.

Specification	Value
Hydraulic pressure welding machine Model	CHY800
Pure copper rod	8.00mm-20.00mm
Pure aluminium rod	8.00mm-25.00mm
External dimension	L1300mm*W1000mm*H1300mm + L800mm*W1000mm*H1300mm
Net weight	2000kgs+ 300kgs

CHY100 Hydraulic Pressure Welding Machine

The smallest hydraulic welder — copper 1.00-4.00 mm and aluminium 1.00-6.00 mm at 130 kg.

Specification	Value
Hydraulic pressure welding machine Model	CHY100
Copper wire	1.00mm-4.00mm
Aluminium wire	1.00mm-6.00mm

Specification	Value
External dimension	L560mm*W560mm*H950mm
Net weight	130kgs
Motor power	0.75KW
Working pressure	6.5MPa
Operating voltage	according to the customer's industrial voltage in your country.
Package	packed in strong wooden case.

CHY700 Hydraulic Pressure Welding Machine

Copper 7.00-13.00 mm and aluminium 7.00-25.00 mm at 8.0 MPa on a 1780 kg frame.

Specification	Value
Hydraulic pressure welding machine Model	CHY700
Copper wire	7.00mm-13.00mm
Aluminium wire	7.00mm-25.00mm
External dimension	L1350mm*W780mm*H1000mm
Net weight	1780kgs
Motor power	7.5KW
Working pressure	8.0MPa
Operating voltage	according to the customer's industrial voltage in your country.
Package	packed in strong wooden case.

CHY200 Hydraulic Welder for Aluminium Strip and Wire

Designed for rectangular strip as well as wire, copper 2.00-5.00 mm and aluminium 2.00-8.00 mm at 230 kg.

Specification	Value
Hydraulic pressure welding machine Model	CHY200
Copper wire	2.00mm-5.00mm
Aluminium wire	2.00mm-8.00mm
External dimension	L650mm*W560mm*H1000mm
Net weight	230kgs
Motor power	1.5KW
Working pressure	6.5MPa
Operating voltage	according to the customer's industrial voltage in your country.
Package	packed in strong wooden case.

Cold Welding Dies (5)

Industry-standard dies for wire from 0.10 mm to 25.0 mm, single or double cavity, round or profile.

CHY Welding Dies for Hydraulic Pressure Welding Machines

Matched die sets for CHY100 CHY200 CHY400 and CHY700, covering copper 1.00-13.00 mm and aluminium 1.00-25.00 mm.

Specification	Value
CHY100 dies	Copper 1.00-4.00 mm, aluminium 1.00-6.00 mm
CHY200 dies	Copper 2.00-5.00 mm, aluminium 2.00-8.00 mm
CHY400 dies	Copper 4.00-8.00 mm, aluminium 4.00-14.00 mm
CHY700 dies	Copper 7.00-13.00 mm, aluminium 7.00-25.00 mm
Tolerance to wire	-1% to +2% of the wire diameter
Rectangular sections	Calculated from the cross-sectional area

SD1 Single Cavity Welding Dies

Industry standard single cavity dies matched to PB10 PC10 and PW10 cold welding machines.

Specification	Value
Matched machines	PB10, PC10, PW10
Cavity	Single
Die programme range	0.10 mm to 25.0 mm
Tolerance to wire	-1% to +2% of the wire diameter
Wire form	Round or profile wire and rod to the customer's specification
Compatibility	Industry standard type, also suits comparable welders from other manufacturers

SD2 Double Cavity Welding Dies

Two cavities per die set for PA30 DA30 and DB30, copper 0.30-1.20 mm and aluminium 0.30-1.40 mm.

Specification	Value
Matched machines	PA30, DA30, DB30
Cavity	Double
Range of copper wire	0.30 mm to 1.20 mm
Range of aluminium wire	0.30 mm to 1.40 mm
Die programme range	0.10 mm to 25.0 mm
Tolerance to wire	-1% to +2% of the wire diameter
Wire form	Round or profile wire and rod to the customer's specification

Welding Dies for DA100 and DB100 Cold Welders

Single cavity to 3.25 mm copper and double cavity to 2.50 mm, matched to the DA100 and DB100 machines.

Specification	Value
Matched machines	DA100, DB100
Single cavity copper range	1.00 mm to 3.25 mm
Single cavity aluminium range	1.00 mm to 5.00 mm
Double cavity range	1.00 mm to 2.50 mm copper and aluminium
Tolerance to wire	-1% to +2% of the wire diameter
Rectangular sections	Calculated from the cross-sectional area

Cold Welding Die Programme From 0.10 mm to 25.0 mm

The full die matching chart — SD1 SD2 DA100/DB100 and CHY sets across every machine in the range.

Specification	Value
Die programme range	0.10 mm to 25.0 mm
Cavity options	Single or double
Wire form	Round or profile wire and rod to the customer's specification
Tolerance to wire	-1% to +2% of the wire diameter
Compatibility	Industry standard type, also suits comparable welders from other manufacturers
Rectangular sections	Calculated from the cross-sectional area

Diamond Drawing Dies (4)

Drawing and stranding dies from 0.015 mm to 40.00 mm, chosen by wear rate rather than by price per die.

Nano Diamond Coated Drawing Dies

Zero wear across the die life, from ϕ 0.50 mm to ϕ 120 mm, for stranding bunching compacting and drawing.

Specification	Value
Size range	ϕ 0.50 mm to ϕ 120 mm
Wire and tube drawing range	ϕ 0.50 mm to ϕ 40 mm
Cable compacting and stranding range	ϕ 0.50 mm to ϕ 120 mm
Die life against tungsten carbide	At least 10 times longer
Die life on aluminium wire	Over 30 times tungsten carbide
Compacting performance	Over 500 km of conductor against 20-30 km for tungsten carbide
Wear	Zero wear during the entire life of the die
Coating	Nano diamond coating
Applications	Cable stranding, bunching and compacting, wire drawing, tube drawing

PCD Wire Drawing Dies

Polycrystalline diamond dies from ϕ 0.03 mm to ϕ 20.00 mm for drawing and to ϕ 40.00 mm for stranding.

Specification	Value
Wire drawing range	ϕ 0.03 mm to ϕ 20.00 mm
Cable stranding range	ϕ 0.50 mm to ϕ 40.00 mm
Process	Wet and dry wire drawing
Die material	Polycrystalline diamond
Die life	Longer than tungsten carbide, natural diamond and single crystal diamond dies
Surface finish	Predictable along the run
Best suited to	Highly abrasive wire materials

Polycrystalline Diamond Drawing Dies for Wet and Dry Drawing

PCD dies for any wet or dry drawing process, ϕ 0.03-20.00 mm for wire and ϕ 0.50-40.00 mm for stranding.

Specification	Value
Wire drawing range	ϕ 0.03 mm to ϕ 20.00 mm
Cable stranding range	ϕ 0.50 mm to ϕ 40.00 mm
Process	Any type of wet and dry wire drawing process
Die material	Polycrystalline diamond
Die life	Longest of any die material; longer than tungsten carbide, natural diamond and single crystal diamond dies

Specification	Value
Typical wire	Saw wire, stainless steel, carbon steel, welding wire, aluminium, copper, tyre cord

Tungsten Carbide Wire Drawing Dies

TC dies from 0.015 mm to 32.0 mm, in a large range of nib and hole sizes.

Specification	Value
Size range	0.015 mm to 32.0 mm
Die material	Tungsten carbide
Availability	Large range of nib and hole sizes
Typical applications	Bunching and stranding large diameter cable, steel and non-ferrous drawing
Chosen when	Diamond dies are not economical or hole tolerance is not critical

Extrusion Dies and Tips (2)

Compression tooling engineered for concentricity, so the insulation wall can be run thin without breaking through.

Extrusion Dies for Insulated Wire and Cable

Compression dies engineered for concentricity so the insulation wall can be run thin.

Specification	Value
Process technology	Heat treatment, tungsten carbide or diamond insert
Function	Controls the shape and thickness of the insulating layer
Applied to	Single or stranded wires
Key property	Superior concentricity, allowing a thin insulating layer
Service life	Tungsten carbide tooling for long life under harsh conditions
Engineering	Each die customised to the application for proper wire centering

Extrusion Tips for Insulated Wire and Cable

Carbide and diamond insert tips from 0.050 mm to 12.50 mm and stainless tips from 0.50 mm to 25.0 mm.

Specification	Value
Tip insert material	Tungsten carbide insert or diamond insert
Insert tip range	0.050 mm to 12.50 mm
Stainless steel tip range	0.50 mm to 25.0 mm
Function	Guides and centres the conductor entering the crosshead
Process technology	Heat treatment, tungsten carbide or diamond insert
Supplied as	Matched pair with the extrusion die

Conductor Butt Welding Machines (2)

Chamber welding for copper conductors from 1.0 mm² to 120 mm², using a quartz crucible instead of ceramic.

HD016 Conductor Butt Welding Machine for 1.0-16.0 mm²

Single phase 220 V chamber welder with 12 gears and a quartz crucible, for bunched copper conductor.

Specification	Value
Conductors butt welding machine Model	HD016
Copper bunched wire welding range	1.0mm ² to 16.0mm ²
Main application	Bond the stranded or bunched conductor
Rated Voltages	Single phase, 50Hz, 220V
Max Power	3KVA
Multiple gears	12
Clamping system	Mechanical
Extrusion and pushing system	Mechanical
Heat removal type	Natural cooling
Dimension	600*500*1200mm

HD120 Conductor Butt Welding Machine for 35-120 mm²

Three phase 380 V 50 kVA chamber welder with pneumatic clamping, for large stranded conductor and cable.

Specification	Value
Conductors butt welding machine Model	HD120
Copper conductors welding range	35.0mm ² to 120mm ²
Main application	Bond the stranded or bunched conductor and cables
Rated Voltages	Three phase, 50Hz, 380V
Max Power	50KVA
Clamping system	Pneumarcic
Extrusion and pushing system	Pneumarcic
Dimension	1100*500*1200mm
Net weight	190kgs.

Quartz Glass Tubes (2)

Hole diameter 0.300 mm to 8.200 mm, held to ± 0.02 mm standard and ± 0.01 mm high precision.

Quartz Glass Tube for Welding Copper Strand Conductor

A welding aid for butt welding copper conductor that replaces the ceramic tube completely.

Specification	Value
Application	Copper conductor butt welding aid for wire and cable plants
Replaces	Ceramic welding tube
Hole diameter	0.300 mm to 8.200 mm across the programme
Hole diameter tolerance	± 0.01 mm high precision against ± 0.1 mm for ceramic
Hole wall	Smooth and transparent, so the joint can be observed
Softening point	1300 °C
Consumable	Shattered to release the finished joint

Quartz Glass Tube Welding Crucibles

Hole diameter 0.3-8.2 mm, length and outside diameter 6-20 mm, ± 0.01 mm on the high precision grade.

Specification	Value
Hole diameter A	0.3 mm to 8.2 mm
Hole diameter tolerance	± 0.02 mm normal, ± 0.01 mm high precision
Length B	6 mm to 20 mm, ± 0.05 mm
Outside diameter C	6 mm to 20 mm, ± 0.05 mm
Cone angle at hole mouth	Ground and inverted at 45° or 30°
Softening point	1300 °C against 960 °C for ceramic
Hole wall	Smooth and transparent
Insulation degree	Ten thousand times more than ceramic
Thermal shock	Excellent against poor for ceramic

Wire Pointing Machines (2)

Conical points rather than triangular, on wire from $\phi 3.55$ mm down to $\phi 0.66$ mm and on 8.0 mm copper rod.

SGT450 Copper Rod Pointing Machine for 8.0 mm Rod

Points 8.0 mm copper rod and 13.0 mm aluminium rod down to a $\phi 1.00$ mm outlet on a 450 mm block.

Specification	Value
Copper rod pointing machine Model	SGT450
Application	Wire pointer for 8.0mm copper rod and 13.0mm aluminum rod
Diameter of its rolls	100mm
Rotation speed of its roll	23.5R/min
The number of eccentric	3mm
Diameter of block	450mm
Power of motor	3kw
Rotation speed of motor	960R/min
Dimension size	1100*845*1250mm
Net weight	655kg

SGT170 Wire Pointing Machine for Intermediate Drawing

Conical points from $\phi 3.55$ mm in to $\phi 0.66$ mm out, on eight grooves with nitrided 38CrMoAl rolls.

Specification	Value
ITEM	Wire pointing machine for intermediate wire drawing machine
Model	SGT170
3. Wide range of wire pointing	Inlet wire is $\phi 3.55$ mm, outlet wire is $\phi 0.66$ mm.

Electrical Butt Welders (1)

The UN series from 1 kVA to 40 kVA, for steel, aluminium, brass and pure copper wire and rod.

UN Series Electrical Butt Welding Machines

Resistance butt welding from 1 kVA to 40 kVA for steel aluminium brass and pure copper.

Specification	Value
Process	Resistance butt welding
Models	UN-1, UN-3, UN-10, UN-16, UN-25, UN-40
Rated capacity	1 kVA to 40 kVA
Supply voltage	220 V, 380 V, or 380/36 V by model
Steel range	0.6 mm to 4.5 mm across the series
Aluminium range	0.5 mm to 20.0 mm across the series
Brass range	0.5 mm to 18.0 mm across the series
Pure copper range	0.5 mm to 18.0 mm across the series
Transformer	Shell structure, low power consumption
Pressure system	Spring on UN-1 to UN-10, lever on UN-10 to UN-25