



OPTIMA TECH SOLUTIONS
Complete Winding Solutions

PRODUCT CATALOGUE

Winding Tooling • Tensioners • Tension Measuring Instruments • Process Accessories

Delivering Innovative Solutions in Winding Technology

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About Us

Optima Tech Solutions (OTS) is a Bengaluru-based company dedicated to delivering innovative, reliable solutions in winding technology. We specialize in meeting the industry's needs for copper and magnetic winding accessories, related processes, and automation.

Our team supports customers across the full lifecycle of winding operations — from precision tooling such as carbide and ceramic winding nozzles, to servo and magnetic tensioners, tension measuring instruments, enamel removers, and the broader ecosystem of process accessories that keep a winding line running smoothly.

Beyond off-the-shelf products, we provide comprehensive support for winding and process-related issues, along with a wide range of simple automation solutions tailored to each customer's process. Our services also include precision tooling job work, 3D design and drafting (using CATIA and CREO), reverse engineering, and custom fabrication — ensuring precision, efficiency, and high-quality results for every manufacturing need.

As an authorized India distributor for AT&CT (a registered trademark of PQS Engineering & Trading Pte. Ltd., Singapore), we bring globally engineered precision winding tooling and tensioning systems to manufacturers across India, backed by responsive local sales and technical support.

We are proud to serve a growing list of esteemed clients across the automotive, electronics, and electrical component industries, including Denso, Yamaha, Hitachi, Hella, Yuken, and many more — a testament to the trust placed in our products and people.

What We Offer	Tooling Services	Global Partnership
Winding tooling, tensioners, tension instruments, process accessories & automation	Precision job work, 3D design (CATIA/CREO) & reverse engineering	Authorized India distributor for AT&CT (Singapore)



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Magnetic Tensioners

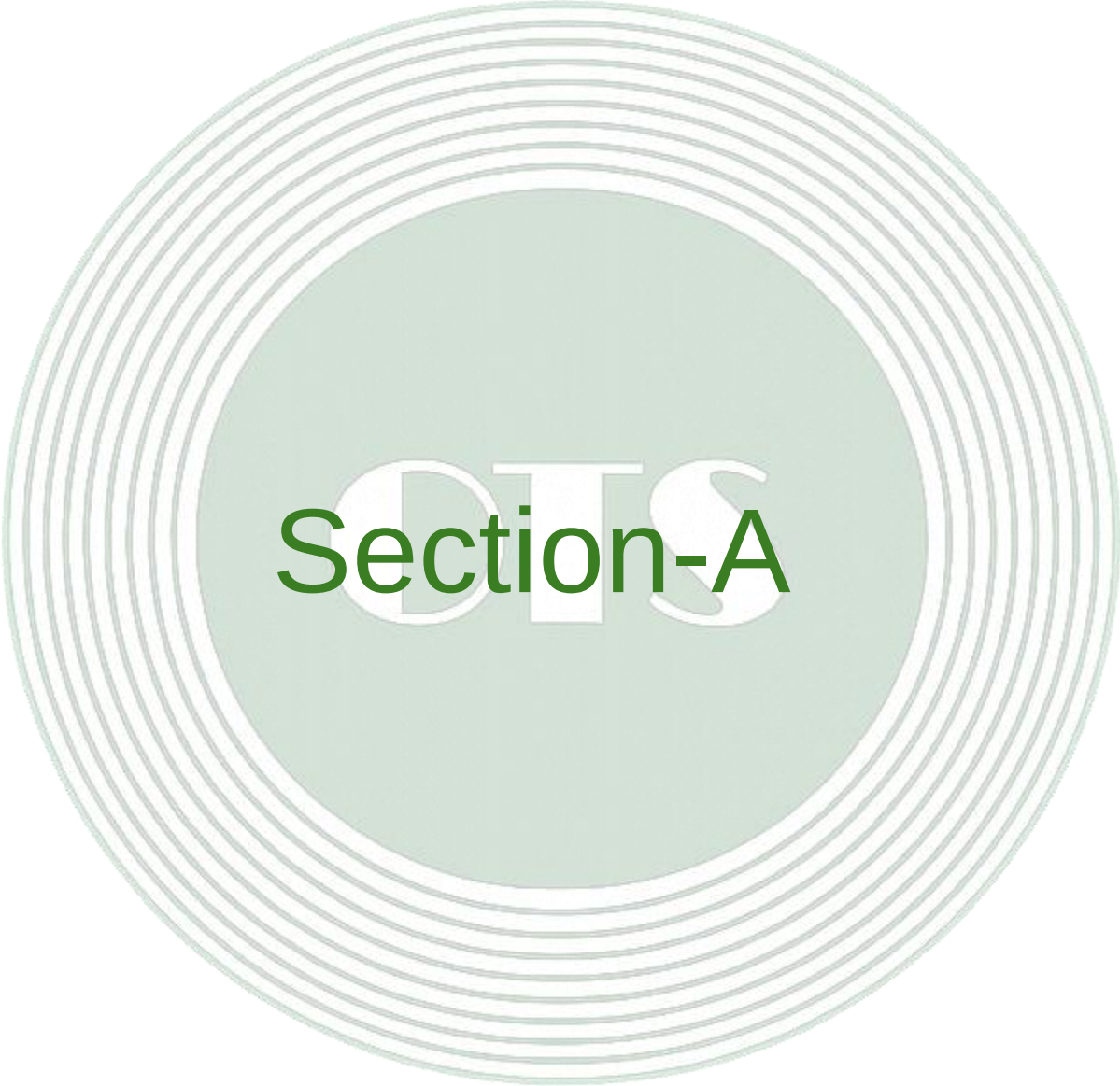
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Tension Measuring Instruments

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Section B — OTS Complete Winding Solutions Catalogue

Winding Nozzles (Hard Alloy, Ruby-Tipped, Motor Nozzle)
Winding Tensioner Catalogue (Magnetic, Mechanical, Servo Tensioner Series)
Tension Measuring & Controlling Instruments
Ceramic Items (Beads, Wheel Rollers, Guides, Retainers)
Enamel Removers (Blade, Collet, Brush/Fibre-Stone Types)
Cutters & Strippers
Felts, Glue Dispensing Needles & Mixture Barrels
Probes & Receptacles
Soldering Stations, Irons & Spares
Tape Dispensers, Heaters, Trolleys & ESD Workstation Products
Precision Tooling Job Work, 3D Designing & Fabrications
Our Esteemed Clients

A large, light green circular graphic with many concentric rings. In the center of the circle is a solid light green circle containing the letters 'OTS' in a large, white, serif font. Overlaid on this 'OTS' is the text 'Section-A' in a bold, dark green, sans-serif font.

Section-A

AT&CT Precision Winding Tooling, Tensioners & Tension Measuring Instruments

WINDING NOZZLES

Carbide Coil Winding Nozzles (AT&CT 15)



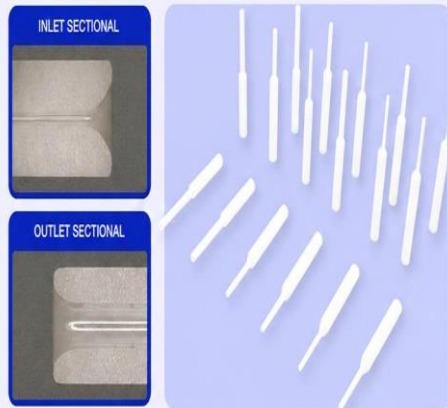
Details

Carbide nozzles made of tungsten carbide material with a hardness of up to HRA90 and above, and bending resistance of up to 2300 N/mm. Each nozzle is a single solid piece with no joints, ensuring a smooth path for wire travel. The inner bore is ground and polished to Ra0.1, with inlet and outlet radii processed to Ra0.025 for minimal wire stress during winding.

Advantages

High impact resistance, high rigidity and high hardness.

Fine Ceramic Coil Winding Nozzles (AT&CT 17)



Model	CN-0308	CN-0410	CN-0510	CN-0714	CN-0714
I.D.	Ø0.30	Ø0.40	Ø0.50	Ø0.70	Ø0.80
L	Ø0.30	Ø0.30	Ø0.30	Ø0.30	Ø0.30
O.D.	Ø3.00	Ø3.00	Ø3.00	Ø3.00	Ø3.00
SD	Ø0.80	Ø1.00	Ø1.00	Ø1.40	Ø2.00
L1	7	10	10	10	14

Specifications may be subject to changes without notice

Details

Fine ceramic nozzles made of Nano-Zirconia material, designed for advanced, ultra-high-speed coil winding with high accuracy requirements. Hardness of 1500HV and bending resistance of up to 1700N/mm². All radii are scientifically calculated and processed for smooth travel and minimal wire stress.

Advantages

Applicable to precision coil winding.

Precision Motor (Odd-Shape) Nozzles (AT&CT 18)



Details

Motor/odd-shaped nozzles made of tungsten carbide or hardened SKD-11, depending on requirements, balancing wear resistance and toughness. Each nozzle is a single solid piece, widely used for winding fan coils, micro-motor coils, stator coils and rotor coils.

Advantages

Twelve-stage fine grinding and polishing to mirror finish; inspected under 80X digital magnification to guarantee scratch-free surfaces before shipment.

DSX High-Speed Servo Tensioner (AT&CT 3)



Model	DSX-TT- A15-45S200Y	DSX-TT- A15-45S400Y	DSX-TK- C15-45S200Y	DSX-TK- C15-45S400Y	DSX-CF- C15-45S400Y
Tension Range (g)	1 - 200	2 - 400	1 - 200	2 - 400	2 - 400
Tension Setting	1	1	2	2	2
Suitable Wire Size (Ø mm)	0.01 - 0.18	0.01 - 0.25	0.01 - 0.18	0.01 - 0.25	0.01 - 0.25
Max. Wire Travel Speed	15m/s	15m/s	15m/s	15m/s	15m/s
Current Consumption	2.5A	2.5A	2.5A	2.5A	2.5A
Power Source	DC24V	DC24V	DC24V	DC24V	DC24V
Current Consumption	5kgf/cm ²	5kgf/cm ²	5kgf/cm ²	5kgf/cm ²	5kgf/cm ²

Specifications may be subject to changes without notice

Details

Non-contact mechanism design requiring less maintenance, delivering stable, consistent and precise tension. Built-in adaptive speed control software responds quickly to rapid changes in coil winding speed, with dual spring tension control, wide tension range and wire-break detection alarm.

Advantages

Simple LED indicator; ECF model adds built-in real-time tension measurement and display.

ETC-L Open-Loop Electronic Tensioner (AT&CT 9.1)



Model	ETC L-5000
Tension Range (g)	600 - 5000
Tension Setting	2
Suitable Wire Size (Ø mm)	0.30 - 1.20
Power Source	DC24V, 0.3A
Specifications may be subject to changes without notice	

Details

Uses an advanced precision hysteresis brake, managed electronically to generate output tension. Provides precise, stable and consistent tension for high-speed or irregular-shape coil winding, with two pre-set tensions and easy adjustment of main and second tension.

Advantages

Wide tension range, built-in wire-break detection alarm, and RS485 communication port.

ETC Open-Loop Electronic Tensioner (AT&CT 9)



Model	ETC-300	ETC-500	ETC-1000	ETC-2000
Tension Range (g)	100 - 1000	200 - 2000	300 - 3000	500 - 5000
Tension Setting	2	2	2	2
Suitable Wire Size (Ø mm)	0.06 - 0.21	0.08 - 0.30	0.10 - 0.45	0.15 - 0.65
Power Source	DC24V, 0.2A	DC24V, 0.2A	DC24V, 0.3A	DC24V, 0.3A

Specifications may be subject to changes without notice

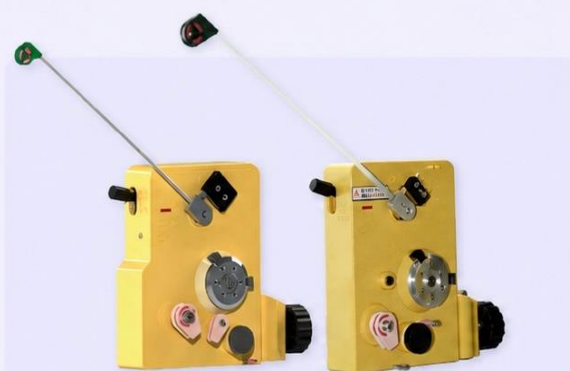
Details

Available in ETC-300/500/1000/2000 models, each using an electronically managed precision hysteresis brake for stable, consistent tension during high-speed or irregular-shape coil winding. Allows two pre-set tensions with easy main/second tension adjustment.

Advantages

Wide tension range, built-in wire-break detection alarm output, RS485 communication port.

NMTC / NMTE Closed-Loop Electronic Tensioner (AT&CT 10.1)



Model	Tension Range (g)	Suitable Wire Size (Ø mm)	Wire Break Detection	Power Source
NMTC 004-S120	4 - 120	0.03 - 0.14	Micro Switch	N.A
NMTC 014-M400	14 - 400	0.06 - 0.25	Micro Switch	N.A
NMTC 050-L800	50 - 800	0.08 - 0.40	Micro Switch	N.A
NMTE004-S120-C	4 - 120	0.03 - 0.14	Micro Switch	N.A
NMTE014-M400-C	14 - 400	0.06 - 0.25	Micro Switch	N.A
NMTE050-L800-C	50 - 800	0.08 - 0.40	Micro Switch	N.A

Specifications may be subject to changes without notice

Details

Uses permanent magnets to control tension strength by varying the gap between the magnets and the main tension wheel. The main tension wheel braking system is interlinked with the back tension mechanism for stable, precise tension, with low-maintenance non-contact design.

Advantages

Back tension adjustment and wire-break detection switch included; suitable for a wide range of winding applications.

NMA / MTA Magnetic Tensioner (AT&CT 10.2)



Model	Tension Range (g)	Suitable Wire Size (Ø mm)
NMA 004-S120	4 - 120	0.03 - 0.14
NMA 014-M400	14 - 400	0.06 - 0.25
NMA 050-L800	50 - 800	0.08 - 0.40
MTA 800	100 - 800	0.14 - 0.40
MTA 1200	200 - 1200	0.25 - 0.50
MTA 2000	300 - 2000	0.30 - 0.70
MTA 2500	300 - 2500	0.30 - 1.20

Specifications may be subject to changes without notice

Details

Uses permanent magnets to control tension strength by varying the magnet-to-wheel gap, with a non-contact, low-maintenance design. Features a pneumatic cylinder-assisted tension-release mechanism for special operations such as pin termination and wire hooking.

Advantages

Stable, consistent, precise tension with back tension adjustment and wire-break detection switch.

T1 Handheld Tension Meter (AT&CT 12.1)



Model	Tension Range (g)	Min. Scale on Dial (g)	Accuracy (g)
T1-01-050	0 - 50	1.0	1
T1-01-100	0 - 100	2.0	2
T1-01-200	0 - 200	4.0	4
T1-01-300	0 - 300	6.0	6
T1-01-500	0 - 500	10.0	10
T1-02-1000	0 - 1000	20.0	20
T1-02-2000	0 - 2000	40.0	40
T1-02-3000	0 - 3000	60.0	60

Specifications may be subject to changes without notice

Details

For accurate measurement of running line tension on copper, aluminium, plastic wires, cotton thread and fibres. Precise jewelled (ruby bushing) movements with precision ball-bearing mounted rollers, and a built-in damper that eliminates vibration and instrument-induced resistance.

Advantages

Reliable, accurate and steady tension readings even as tension fluctuates.

T8 Mount-On Digital Tension Meter (AT&CT 12.8)



Model	T8-200	T8-500	T8-1000	T8-2000	T8-3000	T8-5000
Measurement Unit	Grams (g) or Newtons (N)					
Measurement Range (g)	1 - 200g	1 - 500g	1 - 1000g	100 - 3000g	100 - 3000g	200 -5000g
Accuracy	± 1% of Full Scale			± 2% of Full Scale		
Roller Span	30mm			100mm		
Roller Type	OD Ø 10mm Hardened Stainless Steel			OD Ø 13mm Hardened Stainless Steel		
Display	320x240 Colour LCD					
Memory	Max. & Min. Measured Values, Final Measurement Value / Micro SD Card to Record Data					
Max. Wire Speed	25m/s			20m/s		
Power	Standard Rechargeable Lithium Battery 18650, 3.7V – 3350 mAh					
Operation Environment	Temperature: 10 to 45°C / Humidity: Less than 90% RH					
Specifications may be subject to changes without notice						

Details

Accurate measurement of running line tension for metal wires, plastic filaments, cotton threads and fibres, with a 320×240 colour LCD and high-brightness backlight. Selectable measurement units (grams or Newtons), adjustable upper/lower limits with colour alerts, and Micro SD data logging.

Advantages

Ergonomic handheld design; rechargeable 18650 battery with Type-C charging; includes a protective hard case.

TD Mount-On Digital Tension Meter (AT&CT 12.3)



Model	Measurement Range (g)	Power Source	Functions
TD-J100Y	1 - 100	DC24V	Real-time tension value display
TD-J1000Y	1 - 999	DC24V	Real-time tension value display

Specifications may be subject to changes without notice

Details

Designed to mount directly on winding machines for accurate, real-time display of travelling wire tension. Compact and simple to install, with independent operation for both single-spindle and multi-spindle machines.

Advantages

Direct, clear real-time tension display in a compact form factor.

TD-R Mount-On Digital Tension Meter (AT&CT 12.5)



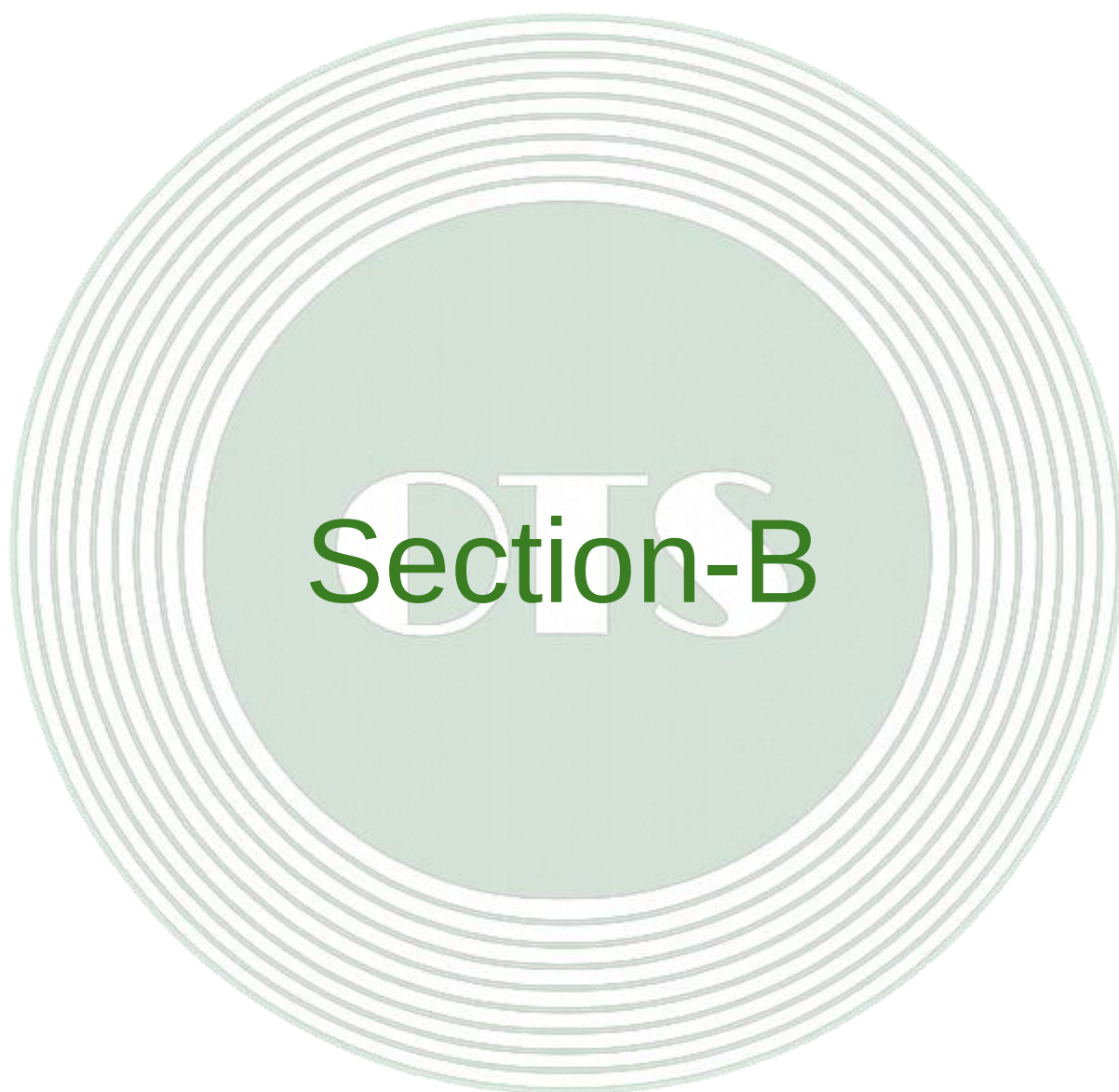
Model	TD-R500	TD-R1000	TD-R5000	TD-R10000
Tension Range (g)	100 - 500	10 - 999	500 - 5000	1000 - 9999
Power Source	DC24V, 0.5A		DC24V, 1.2A	
Suitable Wire Size (Ø mm)	RS485 / Standard Modbus RTU			
Specifications may be subject to changes without notice				

Details

Mounts on winding machines for accurate, real-time tension display, with over-limit output alarm, RS485 communication protocol and full tension data collection functions for integration with data acquisition systems.

Advantages

Compact, simple installation; supports Standard Modbus RTU for system integration.



Winding Nozzles

Hard Alloy Winding Nozzle



The product is made of high and precision quality tungsten carbide materials. High Hardness HRC90", Bending strength is as high as more than 2300 n/mm. using a dedicated process equipment at both ends of the hold and the outlet port products into the mirror polished. Inner holde surface roughness is Ra0.1 both ends of the curvature of the surface roughness of up Ra0.025.

Processing limit: $D1 \geq 0.15\text{mm}$, wall thickness of 0.10mm, can be customized as per requirements

High Hardness, Resistance to flexure block and impact

Ruby tipped Nozzle



Application: high speed winding of fine coils and superfine enamelled wires. Processing limit: $d1 \geq 0.3\text{mm}$, this product is made of high quality stainless steel and super hardness ruby. Roughness of inner and outer hole and R more than Ra0.25. Damage probability is very low. Wire coiling of fine coil and thin coil of various automatic winding machines

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Motor Nozzle



The product adopts hard alloy or carbon steel heat treatment and receives precision grinding and polishing by professional processing equipment.

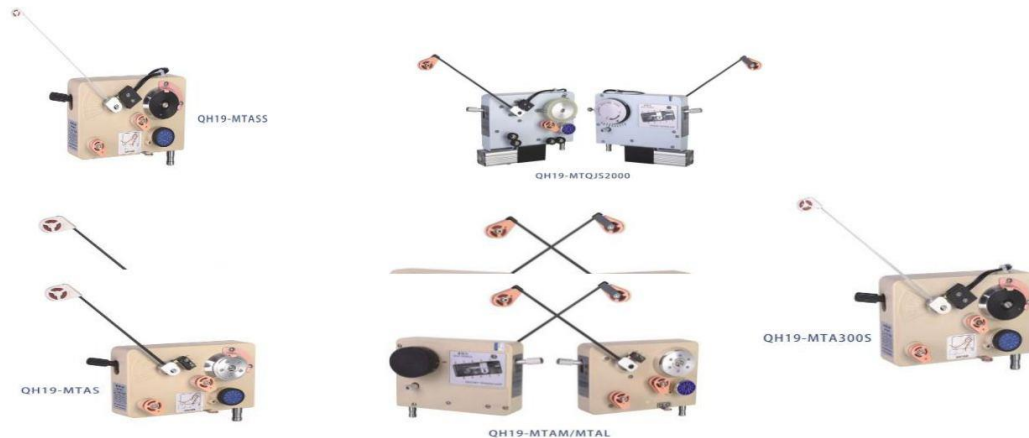
It boasts high resistance to flexure and to wear and is extensively applied in fields of series, fan, micro-motor and motor for wire coiling of stator and rotor

.Mirrors 80 times under a magnifying glass to detect no scratches to ensure the safety to use.

Winding Tensioner Catalogue

Magnetic Tensioner

MTA Series



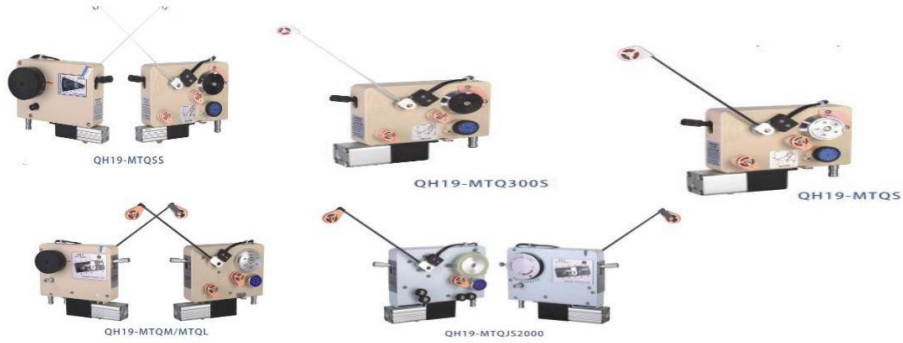
Product Series	Model	Tension Arm	Tension Range	Wire Range	Product Weight
MTA Series	QH19-MTASS	CL-1"	4-100	0.025-0.12	0.45
	QH19-MTA300S	CL-2"	14-400	0.06-0.30	0.48
	QH19-MTAS	CL-3"	50-900	0.10-0.50	0.51
	QH19-MTAM	CL-7" 8"	300-1500	0.25-0.80	0.79
	QH19-MTAL	CL-8"	400-2000	0.39-1.0	0.8

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MTQ Series



Product Series	Model	Tension Arm	Tension Range	Wire Range	Product Weight
MTQ Series	QH19-MTQSS	CL-1"	4-100	0.025-0.12	0.6
	QH19-MTQ300S	CL-2"	14-400	0.06-0.30	0.73
	QH19-MTQS	CL-3"	50-900	0.10-0.50	0.77
	QH19-MTQM	CL-7" 8"	300-1500	0.25-0.80	1.17
	QH19-MTQL	CL-8"	400-2000	0.30-1.0	1.18
	QH19-MTQJS2000	CL-8'	400-2000	0.30-1.0	2.1



Product Series	Model	Tension Arm	Tension Range	Wire Range	Product Weight
MTQ Series	QH19-MTCSS	CL-1"	4-100	0.025-0.12	0.42
	QH19-MTC300S	CL-2"	14-400	0.06-0.30	0.45
	QH19-MTCS	CL-3"	50-900	0.10-0.50	0.48



Product Series	Tension Range	Wire Range	Product Weight
QH19-MTLL	1000-4000	0.5-1.5	5.1

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MTC Series



Specification parameter table					
Product Series	Model	Tension Range	Wire Range	Tension Arm	Product Series
MTC Series (Vertical type)	QH19-MTCSS	4-100	0.25-0.12	CX-1" -,2"	0.42
	QH19-MTC300S	14-400	0.06-0.30	CX-3" -,4"	0.45
	QH19-MTCS	50-900	0.10-0.50	CX-6" -,7"	0.48

1. Wool felt is easily dirty after using for a period of time , it can mark the rotating position according the area
2. Damping wheel structure is more reasonable material quality of O-ring is improved, wear resistance is not easy to slip.
3. Adjust the back tension to make the tension bar work within the indication of the working range of the tension bar

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Mechanical Tensioners



Model	Use Wire Range	Tension Range
TC3S	0.02-0.04	2.0-11
TCSS-X	0.03-0.06	7.0-30
TCSS	0.04-0.08	9.0-50
TCSS-W	0.03-0.08	6.0-5.0
TCS-E	0.06-0.13	20-130
TCS	0.08-0.16	40-200
TCM	0.16-0.25	90-500
TCMM	0.12-0.40	70-600
TCL	0.20-0.60	200-2000
TCLL	0.50-1.20	1000-5000
TCLLL	0.60-2.00	2000-1000

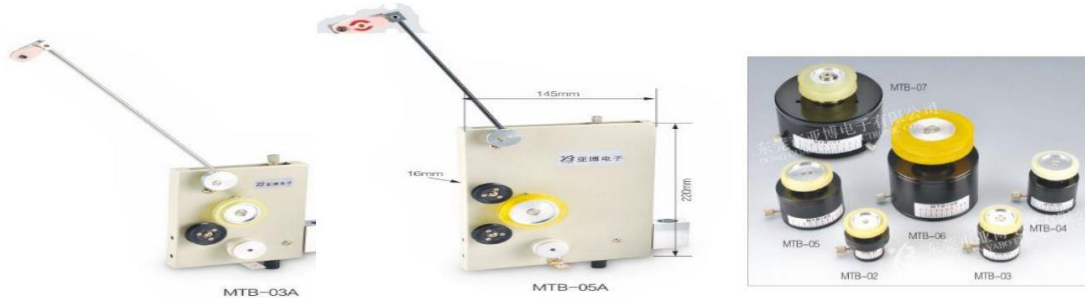
Tension Control is a key part that produces adjustable tension during winding to bestow enamelled wire with appropriate tension during winding and guarantee reasonable firmness of wire coil wound and there the consistence of technical indexes of wire coil.

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Magnetic Dampers & Tensioner



Model	Use Wire Range	Tension Range
MTB-02(A)	0.04-0.08	5-100
MTB-03(A)	0.06-0.25	20-300
MTB-04(A)	0.16-0.40	150-500
MTB-05(A)	0.40-0.80	200-1600
MTB-06(A)	0.80-4.0	600-4000
MTB-07(A)	1.0-5.0	800-10000

Servo Tensioner Series



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Tension model	Tension Range(gf)	Reference wire Dia(mm)Range	Maximum line speed(m/s)	Power input	Number of Tension Segments
600 type	1-450	0.02-0.35	15	DC48V 100W	1 paragraph
800 type	1-800	0.02-0.40	25	DC48V 100W	1 segment, 2 segments, multiple segments
2000type	70-2000	0.12-0.7	9	DC48V 200W	1 segment, 2 segments, multiple segments
3000type	300-3000	0.3-1.0	9	DC48V 400W	1st segment, 2nd segment, multiple paragraphs
5000type	500-5000	0.5-1.2	5	DC72V 500W	Multiple paragraphs
7000type	1000-7000	0.5-1.2	5	DC72V 800W	Multiple paragraphs
15000type	3000-15000	0.5-1.6	3	DC72V 1000W	Multiple paragraphs

Servo Tensioner



SF600



SF800-CL/CT



SF800(JS)-CL/CT



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Tension model	Tension rod Specification Tension Arm	Tension Spring	Tension Range(gf)	Reference wire Dia(mm)Range	Wool Felt Outer diameterX inner diameter X thickness(mm)
SF600	SF -1#-150	T1-T2	1-20	0.02-0.8	25X6X4
SF600	SF -2#-200	T2-T5	5-100	0.04-0.18	25X6X4
SF600	SF -3#-150	T5-T9	35-450	0.10-0.28	25X6X4
SF800	SF -4#-150	T10,ST-11	70-800	0.12-0.40	25X6X4



Tension model	Tension rod Specification Tension Arm	Tension Spring	Tension Range(gf)	Reference wire Dia(mm)Range	Wool Felt Outer diameterX inner diameter X thickness(mm)
SFD800	SF -1#-150	T1 T2	1-20	0.02-0.10	25X6X4
SFD800	SF -2#-200	T2, T4, T5	5-100	0.03-0.15	25X6X4
SFD800	SF -3#-150	ST-10	55-450	0.10-0.28	25X6X4
SFD800	SF -4#-150	T10,ST-11	70-800	0.12-0.40	25X6X4
SFD2000	SF -4#-150	ST-17	180-2000	0.20-0.70	28X10X5



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Tension Arm	Tension Spring	Tension Range	Wire Range	Tension Arm Head Structure	Rod size
SF-1#	T1,T2,T3	2-50	0.02-0.10	Ruby Wire Roller(S)	0.8-2-150
SF-2#	T2,T4,T5	5-100	0.03-0.15	Ruby Wire Roller(M)	1.5-2-200
SF-3#	T5,,T8,T9	30-450	0.06-0.28	Ruby Wire Roller(L)	2-3-200
SF-4#	T7,T9,T10	100-800	0.12-0.40	Ceramic Pulley(L)	4-150

- 800 servo tensioner can achieve tension range of 2gl-800gl by replacing tension arm and spring
- Online tension measurement, high efficiency and energy saving.
- Stable tension fast response, the acceleration can reach 0.3S and the tension adjust by controlling air pressure



Tension model	Tension rod Specification Tension Arm	Tension Spring	Tension Range(gf)	Reference wire Dia(mm)Range	Wool Felt Outer diameterX inner diameter X thickness(mm)
STD800	SF -1#-150	T1 -3	1-32	0.02-0.08	25X6X4
STD800	SF -2#-200	T2-6	6-150	0.04-0.18	25X6X4
STD800	SF -3#-150	ST-10	55-450	0.10-0.28	25X6X4
STD800	SF -3#-200	ST-10	30-330	0.08-0.25	25X6X4
STD800	SF -4#-150	ST-11	70-800	0.12-0.40	25X6X4
STD800	SF -4#-200	ST-11	60-660	0.12-0.32	25X6X4
STD2000	SF -4#-150	ST-14	70-870	0.12-0.45	28X10X5
STD2000	SF -4#-200	ST-14	45-650	0.10-0.35	28X10X5
STD2000	SF -4#-150	ST-17	180-2000	0.20-.70	28X10X5
STD2000	SF -4#-200	ST-17	120-1500	0.18-0.55	28X10X5
STD3000	SF -6#-165	ST-18	300-3000	0.0.30-1.00	28X10X5

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Tension model	Tension rod Specification Tension Arm	Tension Spring	Tension Range(gf)	Reference wire Dia(mm)Range	Wool Felt OuterdiameterX innerdiameter X thickness(mm)
SFS800-19	SF -1#-150	T1 ,T2	2-20	0.02-0.08	25X6X4
SFS800-19	SF -2#-200	T2,T4,T5	3-100	0.03-0.15	25X6X4
SFS800-19	SF -3#-150	ST-10	55-450	0.10-0.28	25X6X4
SFS800-19	SF -3#-150	T7,T9,T10	100-800	0.12-0.40	25X6X4
SFS2000-19	SF -4#-150	ST-17	180-2000	0.20-0.70	28X10X5



Tension model	Tension rod Specification Tension Arm	Tension Spring	Tension Range(gf)	Reference wire Dia(mm)Range	Wool Felt OuterdiameterX innerdiameter X thickness(mm)
SFS800 -19	SF -1#-150	T1 ,T2	2-20	0.02-0.10	25X6X4
SFS800 -19	SF -2#-200	T2,T4,T5	3-100	0.03-0.15	25X6X4
SFS800 -19	SF -3#-150	ST-10	55-450	0.10-0.28	25X6X4
SFS800 -19	SF -4#-150	T7,T9,T10	100-800	0.12-0.40	25X6X4
SFS2000 -19	SF -4#-150	ST-17	180-2000	0.20-0.70	28X10X5

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Tension model	Tension rod Specification Tension Arm	Tension Spring	Tension Range(gf)	Reference wire Dia(mm)Range	Wool Felt Outer diameter X inner diameter X thickness(mm)
SFS800 -23	SF -1#-150	T1 -3	1-32	0.02-0.08	25X6X4
SFS800 -23	SF -2#-200	T2-6	6-150	0.04-0.18	25X6X4
SFS800 -23	SF -3#-150	ST-10	55-450	0.10-0.28	25X6X4
SFS800 -23	SF -3#-200	ST-10	30-330	0.08-0.25	25X6X4
SFS800 -23	SF -4#-150	ST-11	70-800	0.12-0.40	25X6X4
SFS800 -23	SF -4#-200	ST-11	60-660	0.12-0.32	25X6X4
SFS2000 -23	SF -4#-150	ST-14	70-870	0.12-0.45	28X10X5
SFS2000 -23	SF -4#-200	ST-14	45-650	0.10-0.35	28X10X5
SFS2000 -23	SF -4#-150	ST-17	180-2000	0.20-.70	28X10X5
SFS2000 -23	SF -4#-200	ST-17	120-1500	0.18-0.55	28X10X5
SFS3000 -23	SF -6#-165	ST-18	300-3000	0.0.30-1.00	28X10X5



ZST5000 / 7000 / 15000

Tension model	Tension Range(gf)	Reference wire Dia(mm)Range	Power (W)	Voltage(V)	Mango line speed(m/s)
ZST5000	500-5000	0.5-1.2	500	DCT2	5
ZST7000	1000-7000	0.6-1.2	800	DCT2	8
ZST15000	3000-15000	0.8-1.6	1000	DCT2	3

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Servo Tensioner Tension Arm



Part No.	Tension Arm	Tension Arm Head Structure Jewelry(5010) Ruby	Wire Range	Tension Range	Rod Material
1	SF-1#-150	Pulley(h31ss) Wire Roller St	0.02-0.10	1-10	Carbon Fiber
1	SF-1#-150	Pulley(h31ss) Wire Roller St	0.02-0.10	2-30	Carbon Fiber
2	SF-2#-200	Wire Roller (51)	0.03-0.15	6-150	Carbon Fiber
3	SF-3#-150	Pulley(h4833ts) Wire Koller Mi	0.10-0.28	55-450	Carbon Fiber
4	SF-3#-200	Pulley(h4833ts) Wire RollenM	0.06-0.28	30-400	Carbon Fiber
5	SF-4#-150	Pulley(h4815ts) Wire RollertL	0.20-0.70	180-2000	Carbon Fiber
6	SF-5#-150	Pulley(h4815ts) Wire Rollert	0.30-0.80	500-2000	Metal Mace

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Tension Arms



Part No.	Tension Arm	Tension Arm Head Structure	Tension Range	Wire Range	Application Tension Model	Rod Material
1	CL-1"-200	Ceramic Eyelet	4-100	0.025-0.12	SS	Glass Fibre
		Wire Roller (S)				
2	CL-2"-200	Wire Roller(M)	14-400	0.06-0.30	300S	Glass fibre/Carbon fibre
3	CL-3"-200	Wire Roller(L)	50-900	0.10-.50	S	Glass fibre/Carbon fibre
4	CL-7"-200	Wire Roller(M)	50-900	0.10-.50	M	Carbon fibre
5	CL-8"-200	Ceramic Pulley(008")	300-2000	0.25-1.0	M/L	Carbon fibre

Product Features

The Tension arm for the magnetic tensioner consists of a wire head, rod and fixed block.

There are three kinds of wire head: Ceramic Eyelet, Wire Rollers and Ceramic pulley;

The rod is made of high quality carbon fibre and glass fibre

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Servo Tensioner Springs



Tension spring model	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	TA	TB	TC	TD	ST-10	ST-11	ST-14	ST-17	ST-18
Wire diameter(mm)	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.8	1	1.1	1.2	1.3	1	1.1	1.4	1.7	1.8
Simple diameter(mm)	5.8	7	5.6	7	6	6.3	6.7	7.9	8.7	7.5	13	12.6	12.9	13.3	9	8.3	11	12	11.8
Tube diameter																			
Number of effective circles	129	91	98	73	77	60	62	50	42	47	29	28	27	26	52	41	44	36	34
Free length(mm)	49.4	49.2	49.2	49	49	49	48.8	48.6	48.4	48.6	48	47.8	47.6	47.4	70	70	80	80	80
150 long tension rod(gf)	1-5	10-20	15-40	30-70	35-110	50-180	105-245	100-305	110-375	290-750	150-410	290-750	480-1200	600-1600	55-400	70-800	70-870	180-2000	300-3000
200 long tension rod (gf)	-	6-18	11-30	25-60	25-80	35-135	80-205	75-270	100-350	215-590	140-330	260-610	380-900	570-1270	30-330	60-660	45-650	120-1500	

Note: T- Series short spring match with SF, SFD Series tensioner, ST- Series long spring match with STD and SFS -23 series tensioner.

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Tension measuring and Controlling Instrument



Model No.	Tension Range(gf)	Passing Wheel Crossing Wheel	Measurement accuracy (%)
CKY100	0-100	QH-M	2
CKY500	0-500	QH-M	2
CKY1000	0-1000	QH-L	3
CKY2000	0-2000	QH-L	3
CKY3000	0-3000	QH-008	5
CKY5000	0-5000	QH-008	5

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Mechanical Tension Meter



Model	Measuring Range(gf)	Min.Scale (gf)
QH-TM-05	0-50	1.0
QH-TM-10	0-100	2.0
QH-TM-20	0-200	4.0
QH-TM-50	0-500	10.0
QH-TM-100	0-1000	20.0
QH-TM-200	0-2000	40.0
QH-TM-300	0-3000	50.0

Note:

1. Read the User Manual carefully before using.
2. Keep it in the package box if long time no use
3. Proofreading the tension meter after two years of use

Digital Tension Meter



Product Features

1. Built in lithium battery: battery power 1000ma, voltage DC3. 7V
2. 1.54-inch OLED screen: Micro USB interface charging port

Model	Tension Range	Measuring accuracy
CLY-500-1	0-500	2
CLY-1000-5	0-1000	3
CLY-5000-5	0-5000	5

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Ceramic Items

Ceramic Bead/Ceramic Bush/Eyelet



1. Material: 99% AL2O3.
2. The Hardness: HRC88° or more
3. Density: 3.85g/cm³
4. Color: pink, ivory white
5. A wire part roughness: fine polishing above Ra0.2

(Specification)

序号	规格	(公差 ± 0.05MM)				
		D1	D2	d	H	h
1	QH99-1511	4.5	2.7	0.9	3.0	1.0
2	QH99-1277	4.2	3.0	1.0	4.0	1.0
3	QH99-1447	4.2	3.0	2.0	5.0	1.0
4	QH99-1573	5.0	3.5	2.4	3.6	1.0
5	QH99-1496	5.5	4.0	1.9	4.3	1.3
6	QH99-1315	5.9	4.0	2.0	8.0	1.2
7	QH99-1578	6.0	4.2	2.5	4.8	1.2
8	QH99-1410	6.0	4.5	2.1	5.0	1.5
9	QH99-1407	6.7	4.7	2.6	3.2	1.2
10	QH99-1545	7.0	5.0	3.0	6.0	1.4
11	QH99-1497	7.8	5.9	3.4	8.0	1.6
12	QH99-1534	7.7	6.0	3.3	6.0	2.0
13	QH99-1575	10.2	6.2	4.1	10	2.0
14	QH99-1576	10	6.8	4.0	10	2.0
15	QH99-2351	10	7.0	4.5	8.0	2.0
16	QH99-1526	9.6	7.2	4.0	7.5	2.5
17	QH99-1572	11	8.0	3.6	9.0	3.0
18	QH99-1349	13	9.0	4.0	7.0	2.0
19	QH99-1350	11.7	9.5	5.5	8.2	2.4
20	QH99-1558	12	9.8	6	8.0	2.0
21	QH99-1470	14	10	6.5	9.8	3.0
22	QH99-1530	8	5.6	2.5	5.6	1.6
23	QH99-1450	6	3.6	1.7	5	1

Ceramic Wheel Roller



Serial Number	Specifications	A	B	C
1	11-2-4	2	11	4
2	11-3-4	3	11	4
3	15-3-4	3	15	4

Metal Wheel Guide (Roller)



Number	Specifications	A	B	C
1	10-2-4	2	10	4
2	13-4-6	4	13	6

Combined Wheel Roller (Ceramic and Plastic)



serial umber	Product number	D1	D2	D	L1	L2	R	Weight(g)
1	QH001-B03	20	15	3	6	3	1	2.4
2	QH002-B04	29	20	4	6.5	4	1	7
3	QH002-B05	29	20	5	6.5	4	1	7
4	QH005-B05	45	30	5	10	6	2	20
5	QH005-B06	45	30	6	10	6	2	20
6	QH005-B07	45	30	7	10	6	2	20
7	QH005-B08	45	30	8	10	6	2	20
8	QH1006-C08	60	40	8	13	6	2	40
9	QH1008-B10	80	50	10	15	9	3	95

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Ceramic wheel: ceramic wheel used for enamel insulated wire or silk thread appropriate amount guiding, the ceramic circle makes form precise ceramics, the surface smoothness that the ceramic marks with a circle reaches Ra0.2, moves up and down when rotating being smaller than 0.15, material selects and uses 99%'s

Ceramic Snail Guide



1. Material: Al_2O_3 99%
2. The hardness: HRA88²
3. Density : 3.85g/cm²
4. Colour : pink, ivory white
5. A wire part roughness fine polishing above Ra0.2 other ceramics and ceramic tube,

Ceramic Wire Retainer



Used Speed Bearing for long life

Wire roll on middle ceramic made with precise polishes ceramic for smooth run

All Wire jump preventers made aligned with proper Gap so that wire should not jump

For All Ceramic item Specifications and Details please refer Catalogue

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Enamel Remover (Blade Type)

Hand Held Enamel Remover (Blade Type)



Direct plug-in for 230V AC , working wire size 0.3mm to 3mm optical for wire size 0.5 to 2mm wire removing length 3 to 50 mm, Blades auto swing to centre no need to adjust just change speed according to wire size or to get optimal removal of enamel. Comes with acrylic guard ensures removed particles are not scattered and falls in only one side.

Abhisofix Enamel Remover (Germany) (Blade Type)



Electric handled device with rotating cutter head, twisting jaws or milling cutter

Very compact and handy device, Abisofix consists of motor unit and cutter head.

Type A1 tool MK1	For diameter	0.2-0.8mm
Type A3 tool MK3	diameter	0.6-0.2.0mm
Type A5 MK5 tool	For diameter	1.2-4.5mm

Servo Controlled Enamel remover (NHE) (Blade Type)



Servo Controlled Enamel Remover

1. With high precision servo motor
2. Equipped with 'QIANHE' adjustable stripping blade. The speed is adjustable from 0-8000rpm

Table top Enamel Remover (Blade Type)



Direct plug-in for 230V AC , working wire size 0.3mm to 3mm optical for wire size 0.5 to 2mm wire removing length 3 to 50 mm, Blades auto swing to centre no need to adjust just change speed according to wire size or to get optimal removal of enamel. Comes with acrylic guard ensures removed particles are not scattered and falls in only one side.

Other type Enamel Removers

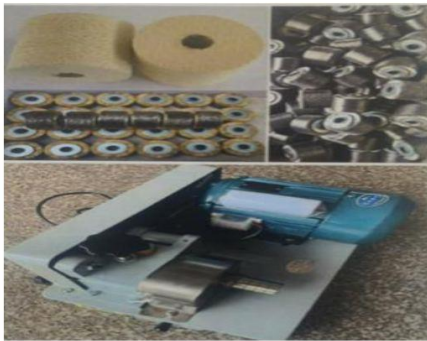
Collet Type



C1	C2	C3	C4
0.3-1.0	0.6-1.4	1.1-1.9	1.6-2.4



Metal Brush/Fiber stone type enamel remover OTX1



Machine size	470X280X255mm	Use voltage:	220v/50Hz
Motor power	370-550W	Speed	1200-330r/min
Machine Weight	20Kg	Select accessories	Nylon Fiber wheel or wire Wheel
Belt Size	780X30X2 mm	Stripping length	3mm - unlimited

- Enamelled Wire Scraping Machine enamel Paint Copper Aluminium Coil Grinding
- Completely removes any hard insulating enamel, suitable for round and square wires, easy to operate

Metal Brush Wheels And Fibre stones



Enamel wire stripper for high range wire up to 5mm



Model	ZHX-340A four - claw new model	Applicable wire dia	About 0.5-6mm
Machine size	280*200*150mm	use voltage	220V/50HZ
Motor power	120W	Motor speed	2800r/min
Machine weight	5.5KG	Tool material	made of tungsten steel alloy
Brand	revitalize	stripping length	5mm-90mm

- This products adopts latest processing technology and unique Design.
- This product solves the problem of one time paint stripping that is not clean when the wire diameter is slightly bent.
- It can remove any hard insulating paint, enamel paint, ML, Isonel etc. On the wire surface without damaging copper wire itself
- The ZHX-340A four claw new paint scraper, it can accurately control the paint stripping length.

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Enamel remover for fine wire/ Conical Fibre stone Type (OTX2)

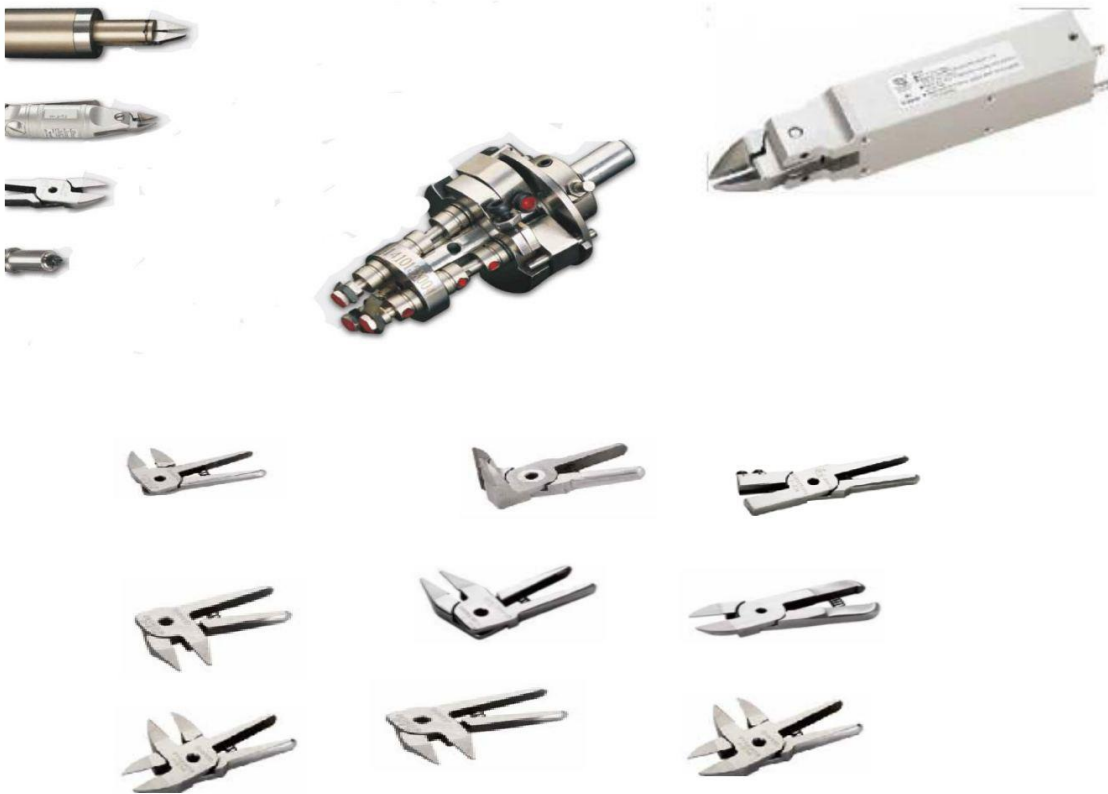


Model	OTX2	Applicable wire dia	0.04 - 0.38mm
Machine size	300*200*200mm	use voltage	220V/50HZ
Motor power	90w - 150w	Speed	2800-6110r/min
Machine weight	8.5KG	optional wheels	Conical nylon fiber grinding wheel
Belt size	3X65mm	stripping length	2mm unlimited

- The latest design enamelled stripping machine's "full contact" tapered paint stripping grinding wheel has a remarkable effect and can completely remove hard insulating paint, ML, Isonel etc without damaging the copper wire
- suitable wire diameter :0.04-0.38mm suitable for smaller thin wires
- it can handle multiple strands of enamelled wire at the same time

Cutters and stripper

All Cutter Blade will be made with carbide to give long life for further specification Please refer Individual catalogue of the same.



Nile (Japan) Make Carbide Cutters



Nile (Japan) Make MSP Air Nipper

SQUARE AIR CUTTERS

The square main body has numerous holes for setting bolts .
No tool is needed for blade replacement.

MACHINE-FITTING TYPE



MACHINE-FITTING TYPE



MACHINE-FITTING TYPE



Nile Make MSP SS Type Cutters



NILE MAKE MRM-MPM Air Nippers

MACHINE-FITTING TYPE

MR-M Type
Standard

MP-M Type
Heavy-duty



Quicher (Thiwan)MAKE Cutters and Air Nippers



Vessel (Japan) make carbide blade



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Air Nipper Cutters



	Size(mm)															Weight	Material		
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P		(g)	
C30Y	92	±30	7	76	—	—	29	—	—	M5	5	—	18	7	—	—	114	Aluminium alloy	
C45Y	129	±45	9	109	—	—	30	—	—	M5	M10	5	—	26	12	—	—	284	Aluminium alloy

	Size(mm)																Weight (g)	Material
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P		
C40H	132	±24	7	102	-	-	M6	-	M5	M6	5	-	14.5	7	-	-	93	Aluminium alloy
C40	115	±24	7	89	-	-	18	-	M3	M10	4	-	14.5	7	-	-	76	Aluminium alloy
C50	99	±20	7	82	-	-	14	-	M3	-	4	-	14	7	-	-	48	Aluminium alloy

Air Nipper Blades – CS5



	Size(mm)															Weight (g)	Material
	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P		
CS-5	38.5	39	9	25	3	8	-	-	-	13	-	25	19	-	2.4	144	Hard alloy steel

	Size(mm)							Weight (g)	Material
	a	b	c	d	e	f	L		
WIS-A	27	7	16	12	4.2	4	67	32	Tungsten steel blade
WIS-A2	31	7	16	16	4.8	4	71	38	Tungsten steel blade
WIS-E2	23	7	12	12	-	4	57	30	Tungsten steel blade

	Size(mm)							Weight (g)	Material
	a	b	c	d	e	f	L		
WIS-B	27	7	16	12	4.2	4	67	32	Tungsten steel blade

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WLS-AB-L/R

WLS-AB-R/L

	a	b	c	Size(mm)			L	Weight (g)	Material
WLS-AB-L/R	27	7	40	13	35	Φ4	48	32	Tungsten steel blade



WLS-H

	a	b	c	Size(mm)			L	Weight (g)	Material
WLS-H	32	7	18.5	14	16	4	72	42	Tungsten steel blade



WLS-I

	a	b	c	Size(mm)			L	Weight (g)	Material
WLS-I	27	7	16	12		4	67	42	Tungsten steel blade



WLS-I4

	a	b	c	Size(mm)			L	Weight (g)	Material
WLS-I4	27	7	40	16	35	4	48	39.5	Tungsten steel blade

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Felts

Woollen Felts available for all customized sizes



Round Felt



FlatFelt

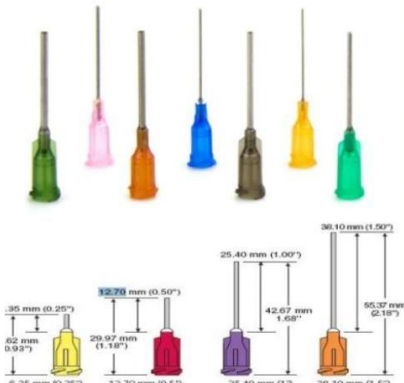


U-CLIP

Glue Dispensing Needles

Plastic SS Needle Hub Dispensing Tips

General Purpose plastic steel needle, stainless steel tube after rigorous polishing without burr processing, plastic seat part made of PP material, unique double thread design to facilitate the joint lock, not loose, avoid the traditional glue needle glue is easy to be some liquid corrosion, can greatly improve its service life.



Gauge	Color	ID(mm)	OD(mm)	6.35mm (1/4")	12.7mm (1/2")	25.4mm (1")	38.1mm (3/2")
14	Olive	1.54 (0.06")	1.83 (0.072")	9018029	9018043	9018032	9018035
15	Amber	1.36 (0.053")	1.65 (0.065")	9018056	9018068	9018059	9018062
16	Grey	1.19 (0.047")	N/A	9018072	9018073	9018074	9018075
18	Green	0.84 (0.033")	1.27 (0.05")	9018107	9018122	9018110	9018113
20	Pink	0.61 (0.024")	0.91 (0.036")	9018163	9018716	9018166	9018169
21	Purple	0.51 (0.02")	0.82 (0.032")	9005005	9018233	9018222	9018225
22	Blue	0.41 (0.016")	0.72 (0.028")	9018260	9018272	9018263	9018266
23	Orange	0.33 (0.013")	0.65 (0.025")	9018302	9018314	9018305	9018308
25	Red	0.25 (0.01")	0.52 (0.02")	9018333	9018345	9018336	9018339
27	Clear	0.2 (0.008")	0.42 (0.016")	9018395	9005008	N/A	N/A
30	Lavender	0.15 (0.006")	0.31 (0.012")	9018424	9018433	N/A	N/A
30	Black	0.15 (0.006")	0.31 (0.012")	7018448	N/A	N/A	N/A
32	Yellow	0.1 (0.004")	0.24 (0.009")	9018452	N/A	N/A	N/A

Black 30G is ESD safety dispensing tips

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Plastic SS Bend Needle Dispensing Tips

These nozzles are bent 45 or 90 degrees for special dispensing requirements.
Special steel pipe bending process to ensure that there is no additional resistance to the flow through the bend.



Gauge	Color	ID(mm)	OD(mm)	12.7mm (45°)	12.7mm (90°)	38.1mm (45°)
14	Olive	1.54(0.06")	1.83(0.072")	9018044	9018045	9016906
15	Amber	1.36(0.053")	1.65(0.065")	9018069	9018070	N/A
16	Grey	1.19(0.047")	N/A	9018076	9018077	N/A
18	Green	0.84(0.033")	1.27(0.05")	9018123	9018124	9016908
20	Pink	0.61(0.024")	0.91(0.036")	9018179	9018180	N/A
21	Purple	0.51(0.02")	0.82(0.032")	9018234	9018235	9016910
22	Blue	0.41(0.016")	0.72(0.028")	9018273	9018274	N/A
23	Orange	0.33(0.013")	0.65(0.025")	9018315	9018316	N/A
25	Red	0.25(0.01")	0.52(0.02")	9018346	9018347	N/A
27	Clear	0.2(0.008")	0.42(0.016")	9018404	9018405	N/A
30	Lavender	0.15(0.006")	0.31(0.012")	9018434	9018435	N/A
32	Yellow	0.1(0.004")	0.24(0.009")	N/A	N/A	N/A

Plastic Taper dispensing Tips

Tapered tips funnel type design can make the fluid flow effect Apply many fluid, including solder paste, gel, epoxy adhesive, grease, sealing silicone compounds, such as, the double helix design ensures that with all the syringe and the safety of the rubber valve.



No.	Gauge	Color	Length(mm)	ID(mm)
T1	14	Olive	31.6	1.55
T2	16	Grey	31.6	1.35
T3	18	Green	31.6	0.84
TE01	18	Black	31.5	0.84
T4	20	Pink	31.6	0.6
TE02	20	Black	31.5	0.58
T5	22	Blue	31.6	0.41
T6	25	Red	31.6	0.3
TE03	25	Black	31.5	0.25
T7	27	Clear	31.6	0.2
TE04	27	Black	31.5	0.2
T8	30	Lavender	31.6	0.16

Black is the antistatic needle

4

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Brush Needles

Brush needle, do not lose hair, anti-static, there are white soft bristles and yellow hard bristles two types; The unique design is simple and convenient, to ensure that the glue is accurate and consistent, used for all glue guns, dispensing machines.

Suitable for primer, catalyst, coating material, lubricating oil, solvent, flux, radiating cream, silica gel, ink and paint. Not suitable for quick drying glue and high viscosity colloid.



Gauge	Color	Round(mm)						Flat(mm)			
14	Olive	NA	NA	4	5	6	NA	4	5	6	6
15	Amber	NA	NA	4	5	6	NA	4	5	6	6
16	Grey	NA	NA	4	5	6	NA	4	5	6	6
18	Green	NA	NA	4	5	6	3	4	5	6	6
20	Pink	2	3	4	5	6	3	4	5	6	6
21	Purple	2	3	4	5	6	3	4	5	6	6
22	Blue	2	3	4	5	6	3	4	5	6	6
23	Orange	2	3	4	5	6	3	4	5	6	6
25	Red	2	3	4	5	6	3	4	5	6	6
27	Clear	2	3	4	5	6	3	4	5	6	6
30	Lavender	2	3	4	5	6	3	4	5	6	6
32	Yellow	2	3	4	5	6	3	4	5	6	6

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OPTIMA TECH SOLUTIONS

Complete Winding Solutions



SS Needles

precision manufacturing high-precision single pipe with stainless needles, strong corrosion resistance, resistance to heavy load, the most suitable for high speed, high precision, high operation, automation machinery, needles all internal and external precision polishing, any special size can be custom.



Gauge	ID(mm)	OD(mm)	6.35mm (1/4")	12.7mm (1/2")	25.4mm (1")	38.1mm (3/2")
10	2.8	3.5	SS 10025	SS 10050	SS 10100	SS 10150
11	2.5	3	SS 11025	SS 11050	SS 11100	SS 11150
12	2.27	2.77	SS 12025	SS 12050	SS 12100	SS 12150
13	1.94	2.4	SS 13025	SS 13050	SS 13100	SS 13150
14	1.65	1.81	SS 14025	SS 14050	SS 14100	SS 14150
15	1.43	1.81	SS 15025	SS 15050	SS 15100	SS 15150
16	1.25	1.63	SS 16025	SS 16050	SS 16100	SS 16150
17	1.1	1.49	SS 17025	SS 17050	SS 17100	SS 17150
18	0.84	1.28	SS 18025	SS 18050	SS 18100	SS 18150
19	0.71	1.06	SS 19025	SS 19050	SS 19100	SS 19150
20	0.6	0.91	SS 20025	SS 20050	SS 20100	SS 20150
21	0.51	0.81	SS 21025	SS 21050	SS 21100	SS 21150
22	0.41	0.71	SS 22025	SS 22050	SS 22100	SS 22150
23	0.33	0.63	SS 23025	SS 23050	SS 23100	SS 23150
24	0.31	0.56	SS 24025	SS 24050	NA	NA
25	0.26	0.51	SS 25025	SS 25050	SS 25100	SS 25150
26	0.25	0.45	SS 26025	SS 26050	SS 26100	N/M
27	0.21	0.41	SS 27025	SS 27050	SS 27100	SS 27150
30	0.16	0.32	SS 30025	SS 30050	SS 30100	SS 30150
32	0.09	0.25	SS 32025	SS 32050	NA	NA
34	0.06	0.25	SS 34025	SS 34050	NA	NA

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Mixture Barrels

Square static mixing tube is based on the circular static mixing tube innovation, with high efficiency, economy, durable high-end products. It is composed of the left and right blades of the top and bottom arranged in order, when two or more kinds of fluid pass through each blade, will be cut into four parts. This makes the fluid mix more uniform.



No.	Part No.	Elements	I.D. (mm)	L (mm)	O.D. (mm)	A (mm)	Inner-core Color
A4	PMF6.0-16	16	5.3	83	7.5	1.8	Green/Gold
A6	PMF6.0-24	24	5.3	115	7.5	1.8	Green/Gold
B1	PMF06-24	24	5.3	127	7.5	1.8	Green
B2	PMF08-24	24	8.7	150	12	3.5	Green
B3	PMF08-24	24	8.7	165	12	3.5	Green
B4	PMF08-32	32	8.7	188	12	3.5	Green

No.	Part No.	Elements	I.D. (mm)	L (mm)	O.D. (mm)	A (mm)	Inner-core Color
F6	MBQH05-16(10:1)	16	5.3	90	7	1.5	Orange
F7	MBQH05-16(1:1)	16	5.3	90	7	1.5	Green
F8	MBQH05-24(1:1)	24	5.3	123	7	1.5	Green
F9	MBQH05-24(10:1)	24	5.3	123	7	1.5	Orange
F10	MBQH08-24(10:1)	24	8.7	157	12	3.5	Green

13:24

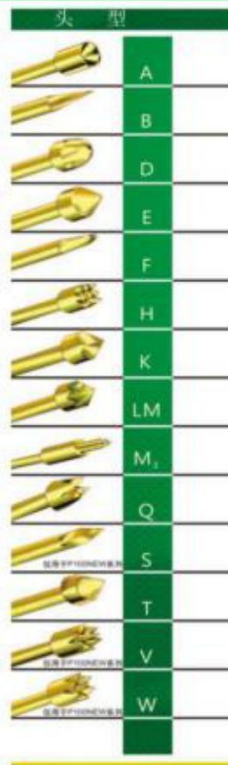


No.	Part No.	Elements	I.D(mm)	L(mm)	O.D(mm)	A(mm)	Inner color
D1	RM12-16	16	12	128	16	2.8	Red
D2	RM12-16	16	12	128	16	2.8	Green
D3	RM12-26	26	12	182	16	4.5	Red
D4	RM12-26	26	12	182	16	4.5	Green
D5	RM17-26	26	17	216	21	4.5	Red
D6	RM17-26	26	17	216	21	4.5	Green
D7	RS12-16	16	12	128	16	2.8	Red
D8	RS12-16	16	12	128	16	2.8	Green
D9	RS12-26	26	12	182	16	4.5	Red
D10	RS12-26	26	12	182	16	4.5	Green
D11	R10-12S	12	10	155	14	3	Green
D12	R13-12S	12	13	197	17	4	Green
D13	SEC13-25	23	13	178	18	4.5	Red

Probes and Receptacles for all Makes

We provide most trusted brand Probes and Receptacles (Testing Pins) below are some of the Braded Probes listed for reference

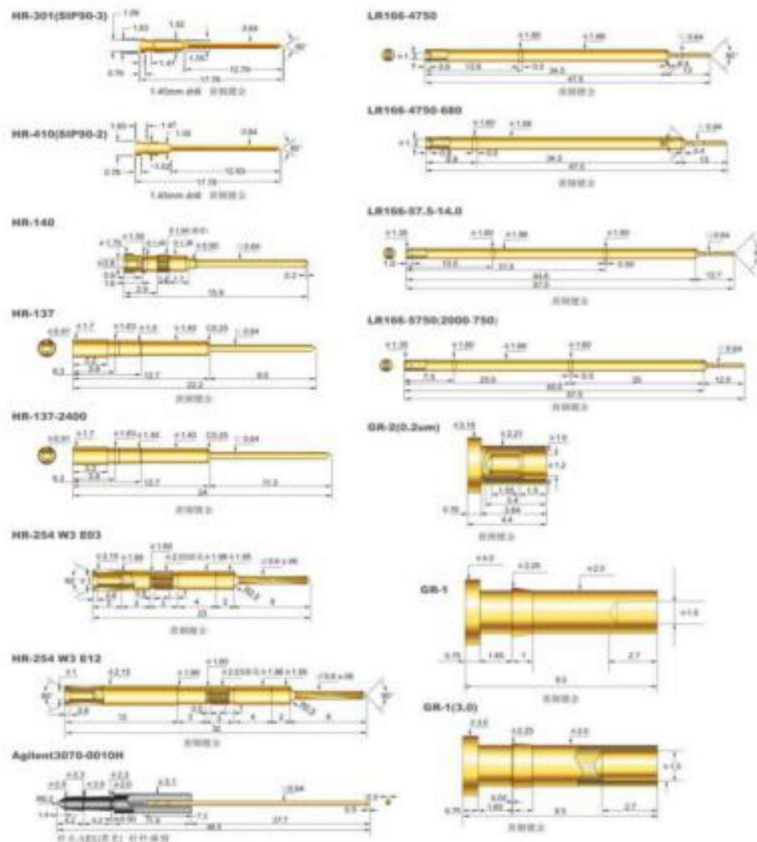
Probes



1. Centallic Probes
2. Ingun Probes
3. VPC Probes
4. Q&A Probes
5. Leeno Probes
6. Denshin Probes
7. Everett- Charles Technologies – ECT Probes
8. ITT Canon Probes

Please refer individual catalogue for more details and specifications

Receptacle



Soldering Station

OTS Soldering Station



Soldering Station with Imported Alumina Ceramic Heater model No- 937 Temperature Range- 50-450°C / 180-480°C I/P Voltage- 190-270vAC O/P Voltage- 24vA/c Max Power- 90 / 100 / 120 Watts (Optional) Time to Temperature Rising from ambient- 350°C 25 Sec. Heater Type- Alumina Ceramic Tip to ground Resistance<0.02hms Tip to ground potential <2mV Auto Sleep Function- Yes (Optional) Temperature Lock mode- (Optional) Application- General / PV Module Soldering And High Mass Components

Soldering Station Bakon



Bakon BK2000
Display - Digital

Power Consumption - 120 Watt
Temperature Range - 200° - 480°C
Password lock function - Yes
Input Voltage - 220V AC, 50 Hz
Applicable Tip - 200 Series



Bakon BK3300A
Display - Digital

Power Consumption - 150 Watt
Temperature Range - 50° - 600°C
Applicable Tip - 500 Series
Input voltage - AC230V / 50HZ
Auto sleep - Yes



Bakon BK3500
Automatic Feeder Soldering Station

Power Consumption - 120 Watt
Temperature Range - 200° - 480°C
Tin Adjustable - Yes
Input Voltage - 220V AC
Feeding Volume - Auto Mode

OPTIMA TECH SOLUTIONS

Complete Winding Solutions



Soldering Station Hakko



Hakko FX-888D
Display - Digital

Power Consumption - 70 Watt
Temperature Range - 50° - 480°C
Heater Type - Ceramic Heater
Input Voltage - 220V AC
ESD Safe - Yes
Applicable Tip - T18 Series



Hakko FX-951
Display - Digital

Power Consumption - 70 Watt
Temperature Range - 200° - 480°C
Applicable Tip - T12 Series
Power Rating - 75W, 120V
ESD Safe - Yes



Goot® 80W RX-802AS
Display - Digital

Power Consumption - 80 Watt
Temp range: 100 - 450 degC
Voltage - 240V AC 50/60Hz
Weight - 2 Kg Appx.
ESD Safe - Yes
Heater - Nichrome

Soldering station Weller



Weller 1010
Display Digital LC Display

Power Consumption - 85 Watt
Temp range: 100 - 450 degC
Password-protected
Input Voltage - 230V AC
ESD Safe - Yes
Intuitive Navigation



Weller 1012
Display Backlit LCD

Power Consumption - 95 Watt
Temp range: 50°C - 450°C
Password-Lock function, Offset
Input Voltage - 230 V, 50/60 Hz
ESD Safe - Yes



Quick 205
Display - Digital

Power Consumption - 150 Watt
Temperature Range - 50° - 600°C
Temperature Lock Mode - Passcode
Input Voltage - 36VAC 400KHz
Applicable Tip - 500 Series

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Desoldering Station



Desoldering Station SS-331B
LCD Display

SS-331B

Power Consumption -140Watt
Temperature Range – 160 -480°C
Vaccum Pressure ->60mm hg
Input Voltage -100-240V AC, 50 Hz
Heating Element – Ceramic Heater



Desoldering Station Yihua - 948
LCD Display

Yihua -948

Power Consumption -140Watt
Temperature Range – 160 -480°C
Vaccum Pressure ->60mm hg
Input Voltage -100-240V AC, 50 Hz
Heating Element – Ceramic Heater



MetroQ MTQ 915

Power Consumption -80Watt
Temperature Range – 180 -480°C
Vaccum Pressure ->60mm hg Input
Voltage -200-240V AC,
Heating Element – Ceramic Heater

Temperature Control Soldering Iron



Soldering Iron 985
Display - Digital



Soldering Iron 985
Display - Digital



Goot TQ-95

Soldering Iron 985

Power Consumption – 120W

Voltage – 110/220V

Temperature Range – 200-600°C Heating Element – Plug-in Ceramic Cord Length -1.35M

Soldering Iron 985

Power Consumption – 150W

Voltage – 110/220V

Temperature Range – 200-600°C Heating Element – Plug-in Ceramic Cord Length -1.35M

Goot TQ-95

Power Consumption – 200W

Voltage – 220-240V AC 50/60Hz

Temperature Range – 50-480°C

Heating Element – TQ-95H Cord Length – 1.5M

OPTIMA TECH SOLUTIONS

Complete Winding Solutions



SMT Nozzle Soldering Spare

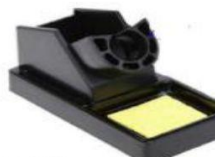
//////////////////// **SMT Nozzel** //////////////////////



Soldering Spares



ROHS Solder Wire
Hemraj - 22Swg



Soldering Stand

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OPTIMA TECH SOLUTIONS

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Tip Enclosure
90 Watt



Nut & Nipple
90 Watt



Tip Enclosure
120 Watt



Nut & Nipple
120 Watt



Tip Enclosure
120 Watt



Nut & Nipple
120 Watt



Tweezer ESD - 10
Vetus



Tweezer ESD - 11
Vetus



Tweezer ESD - 12
Vetus



Tweezer ESD - 13
Vetus



Tweezer ESD - 14
Vetus



Tweezer ESD - 15
Vetus

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Tap Dispenser

Tap Dispenser M1000



Tap Dispenser M1000

Tap Dispenser M1000

Available Width: 7 ~ 50mm

Available Length: 20 ~ 999mm

Display: 3 digit LED

Power Supply: AC220V 50Hz

Tape Dispenser Z CUT 9



Tape Dispenser Z CUT 9

Available Width: 6-60 mm

Available Length: 5-999 mm

Diameter of Roll: 300mm

Feeding Speed: 200 mm /sec

Soldering

Heating Plate For SMD Devices



Heating Plate JF-956C
JJ Tool



Heating Plate BK946L
Bakon



Heating Plate BK946
Bakon

OPTIMA TECH SOLUTIONS

Complete Winding Solutions



Hot Tweezer



YIHUA 938D Hot Tweezers

Power - 44W(Max:240W)
Temp. - 200~480°C
Voltage - 230V/240V Opt.
Display - Digital
Work temperature: 0~40°C



YIHUA 938BD+ Soldering Station
Display - Digital

Power Consumption: 66W
Temp range - 100°C~480°C
Voltage - 230V/240V Opt.
Display - Digital LCD
Temp.stability: ±2°C (static)



Hoki Hot SMD Tweezer
48 Watt

MegnifyingLamp



Table Top Lamp 10X Or 20X

Lens Size : 5 Inch (127mm)
Lens Material : Glass
Light Source : 60Pcs SMD LED
Voltage : 5D+20D
Power : 12W



Clamp fitted Lamp 10X

Lens Size : 5 Inch (127mm)
Lens Material : Glass
Light Source : 60Pcs SMD LED
Voltage : 5D+20D
Power : 12W



9005LED-ESD LED Magnifying Lamp

Lens Size : 127mm 8D green lamp
Lens Material : Glass
Light Source : 60pcs LED
ESD safe coating and antistatic function
Power : 14W

Microscope



G1200 Digital Microscope with 7" LCD Display

Pixel: HD 12-megapixel
Display Screen: 7-inch HD LCD display
Magnification: 1-1200X Zoom
Sixteen Language Systems
Package Weight: 1200g



Portable LCD Digital Microscope 4.3 Inch



USB Digital Microscope

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Lead Cutters



Multitec - 06
Body - Metal



Multitec - 07
Body - Metal



Multitec - 010
Body - Metal



Multitec - 012
Body - Metal



Multitec - 06
Body - Steel



Multitec - 012
Body - Steel



Multitec - 010
Body - Steel



Multitec - MT-02DX
Body - Metal



Cutting Pliers TR3



Cutter 68C

PCB Trolley



ESD PCB Trolley

- Surface resistance: $10^6 \sim 10^9$
- Overall Size: 850 mm X 650 mm X 1300 mm.
- Total PCB Capacity: 300pcs.
- Slot width: 5mm
- Slot Depth: 4mm
- Pitch: 10mm



SMT Magazine Rack

- External Size 355*320*563 mm
- Adjustable Type Handle
- Width 5 mm
- Depth 3.5 mm
- Pitch 10 mm
- PCB Slot 50
- Adjustable Width 35-254
- Sideboard Structure 5 Sheets
- Base Material Metal
- Temperature resistance 100/120/150°C
- Weight 6 kg

OPTIMA TECH SOLUTIONS

Complete Winding Solutions



Electric Screw Driver



BSD 101
Brand - KiLews

Power Consumption - 36 Watt
Torque - 0.51-15.3kgf.cm
Rotation Speed - Max 1000 RPM
Battery Voltage - 220V AC
Applicable Screw Type - 1.4 - 4 mm



BSD 102
Brand - KiLews

Power Consumption - 36 Watt
Torque - 4.08-35.71kgf.cm
Rotation Speed - Max 1000 RPM
Battery Voltage - 220V AC
Applicable Screw Type - M6 (Ø5mm)



ESD 01
Siron

Power Consumption - 24 - 36 V DC
Torque - 2 - 35 kgf.cm
Rotation Speed - Max 1400 RPM
Cable Length - 150cm
Applicable Screw Type - 5MM



ESD 02
Siron



TKG PH515
TKG



TKG PH635
TKG



BSD B5019L
Brand - KiLews

Power Consumption - 55 Watt
Torque - 3 - 19 kgf.cm
Rotation Speed - Max 1000 RPM
Battery Voltage - 220V AC



BSD BN5017PF
Brand - KiLews

Power Consumption - 55 Watt
Torque - 3 - 17 kgf.cm
Rotation Speed - Max 2000 RPM
Battery Voltage - 220V AC



SKD-BN519LB
Brand - KiLews

Power Consumption - 60 Watt
Brushless - 0.3-1.86Nm
Rotation Speed - 700 - 1000 RPM
Shut off: automatic
Applicable Screw Type - 1/4 HEX



Siron 801
Siron

Power Consumption - DC 36V
Torque - 2.5 - 18 kgf.cm
Rotation Speed - Max 800 RPM
Applicable Screw Type - 5MM



Siron 802
Siron

Power Consumption - DC 36V
Torque - 3.5 - 25 kgf.cm
Rotation Speed - Max 850RPM
Applicable Screw Type - 6MM



BSD - TKS 1500
Brand KiLews

Voltage - AC 220V-240V
Torque - 2-15(kgf.cm)
Rotation Speed - Max 1000 RPM
Power Consumption - 48W
Applicable Screw Type - 6mm

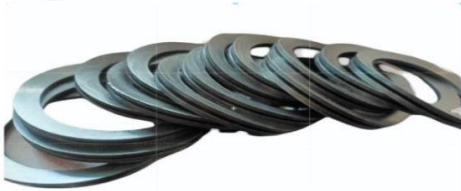
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Rubber O Ring (V- groove)



ITEM: V-Groove O-Ring Material: Polyurethane (For sample might increase prize) Dimensions: Id-100mm Od-130mm Thick-12mm we also make Customized O-Ring

Winding Machine Nozzle Alignment Jig



Winding Machine Spindle break unit



Acrylic Spool Jars



The wire barrel is made of acrylic Plexiglas, which is made of precision equipment and advanced polishing technology to make the surface smooth and beautiful, mainly by dust and beautiful lines, etc., for covering the enamelled coil. Products of other specification and technical requirement can be tailored according to the drawing provided by clients

Industrial Heaters



Band Heaters



Infrared Heaters



Air Heaters



Cartridge
Heaters



Thermocouple



PID Controllers



Temperature
Controllers

Soldering bit

////////// Soldering Tip 900M Series //////////



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////////// Soldering Tip T12 Series //////////



////////// Soldering Tip T18 Series //////////



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OPTIMA TECH SOLUTIONS

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////////// Soldering Tip 200 Series //////////

200-4.2D
Chisel (4.2mm / 0.165")



200-4.2D
120 Watt Station



200-B
120 Watt Station

200-0.8D
Chisel (0.8mm / 0.031")



200-0.8D
120 Watt Station



200-2C
120 Watt Station



200-K
120 Watt Station



200-5C
120 Watt Station



200-2.4D
120 Watt Station



200-1.6D
120 Watt Station

////////// Soldering Tip 500 Series //////////



500-8D
150 Watt Station



500-USB
150 Watt Station



500-SK
150 Watt Station



500-5C
150 Watt Station



500-K
150 Watt Station



500-3C
150 Watt Station



500-4C
150 Watt Station



500-B
150 Watt Station

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Precision Tooling Job Work & 3D Designing Services

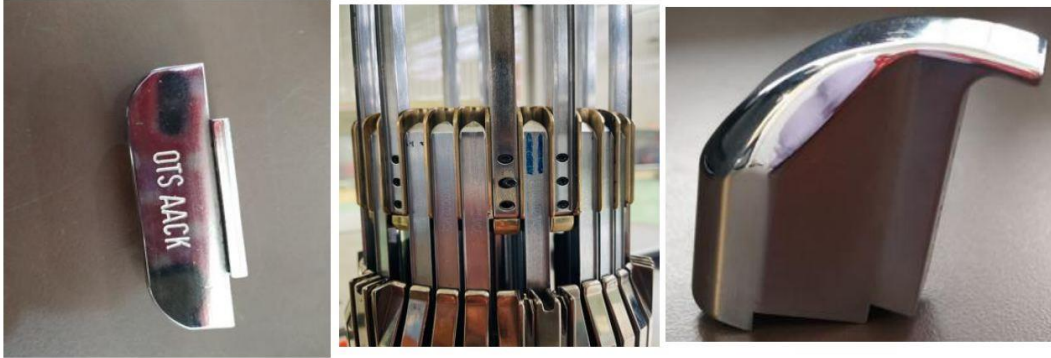


Our expertise includes

- Operations such as turning, milling, boring, laser welding, brazing, hardening, grinding, wire cut(EDM) and buffing
- We tailor to specifications, ensuring high-precision machining for various components.
- We also offer 3D Model Designing & Drafting using CATIA and CREO for Prototypes and Production
- We Provide Drafting and technical drawings that meet industry standards
- We Do Reverse engineering to recreate or improve existing parts

Sample Products Designed:





Fabrications



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Electronic Work Station products (ESD Work stations)

ESD Products



Aprons



White Shoes



Shoe Cover



White Cap



Blue Cap



Pink Cap



ESD Cap



Cordless Wrist Band



With Wire Wrist Band



Cordless Wrist Band
Brother



With Wire Wrist Band
Leko



ESD Gloves



Palm Coted Gloves



ESD Slippers



L Type PCB Tray



Sticky Mat



ESD Grounding



Floor ESD Mat



Table ESD Mat

OPTIMA TECH SOLUTIONS

Complete Winding Solutions



OUR ESTEEMED CLIENTS



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