



Shineworld



**Raw material  
Accessories  
Testing instrument** in cable industrial

Shineworld



Shanghai Shineoworld Group Co., LTD  
Add: Room 1603, No.950 DaLian Road,  
Yangpu District, Shanghai, China.  
Tel: +86-21-33773077 +86-21-55512500  
Fax: +86-21-23025769  
Website: [www.shineworldgroup.com](http://www.shineworldgroup.com)





## About Us

**Shanghai Shineworld Group Co., Ltd.** was built in 2004. Shineworld is a group, who collect research, production and sale into one body. Our philosophy is professional and industria for wire and cable field, Shineworld could control the whole purchase, design, and manufacture, service channel, that why we have the capability to control the cost, also can improve the work efficiency. We have Branch Company in Iraq, Iran, Mozambique and Nigeria. We devote ourselves to providing solution service for wire and cable plant. Our service includes: project proposal, production process design, factory design, machines recommendation, machine production, supervising the loading, installation and commissioning, offering after-sales service, offering the plant accessories, raw material and spare parts from head office and branch office. Shineworld is your professional project manager. **GUIDE YOU INVESTMENT, FAST MAKE MONEY!**

**Here, you could get more technical parameters and photos for:**

- Series of Raw Material used during the production.
- Series of Auxiliary Equipment used during the production.
- Series of Tesing Equipments.

What we could offer is not only the material listed here, here is just some representative products for your reference and understand what and which field we are working on. And feel free to contact us for any raw material or auxiliary parts and equipments inquiry. We will offer the more details accordingly.

### Company Contact information:

- Tel: 0086-21-33778841
- Tel: 0086-21-55512500
- Fax: 0086-21-23025769
- E-mail: sales@shineworldgroup.com
- Website: www.shineworldgroup.com
- Company Skype: shineworldchina

### ● Company Whatapp

Sale department: 13917785189, 15021054880  
 After-sales service department: 18317122982  
 Technical department: 15800928779

### ● Company Viber

Sale department: 13917785189, 15021054880  
 After-sales service department: 18317122982  
 Technical department: 15800928779

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## Galvanized Low Carbon Steel Armoring Wires

### General Description

This specification covers hot dip galvanized round mild steel wire as per BS 5467, BS EN 10257-1, BS EN 10257-2 and flat, rectangular shaped galvanized mild steel wires.



### Applications

The round galvanized mild steel wires covered by this specification are used for armoring of land energy, instrumentation and telecommunication cables (BS EN 10257-1 and BS 5467) and of submarine cables (BS EN 10257-2).

### Technical Specifications

- 3.1 The quality of the galvanized armoring wires meet the requirements of BS EN 10257-1, BS EN 10257-2 and BS 5467.
- 3.2 Wires will be made of (low carbon) steel, and will be galvanized with refined zinc of min. % 99,9 purity by the hot dip process.
- 3.3 Round wires will have a cylindrical shape and a uniform diameter all over the wire. The diameter of the wire will be within the limits given in the relevant tables.
- 3.4 The electrical equivalent resistivity for all wires have been based on  $13,8 \times 10^{-8}$  ohm.m. The result has been calculated from nominal diameters of all wires.
- 3.5 Sample length (Lo) for the Tensile Strength Test:  $Lo = 100 \times d$  ( $d \leq 2,00$  mm),  $Lo = 250$  mm ( $d > 2,00$ mm)

Table 3.1 – Technical Specifications of Armoring Wires According to BS 5467 (Land Cables)

Nom. Dia. (mm)	Diameter Tolerance (mm)		Torsion Test		Tensile Strength (N/mm <sup>2</sup> )	DC Resistance (ohm/km)	Zinc Coating (g/m <sup>2</sup> )
	Min	Max	Min Number of Turns	Sample Length (mm)			
0.9	0.85	0.95	33	75	340-500	227.0	112.0
1.25	1.18	1.32	24	75		118.1	150.0
1.60	1.51	1.69	37	150		72.2	172.0
2.00	1.90	2.10	30	150		46.2	180.0
2.50	2.37	2.63	24	150		29.7	195.0
3.15	2.99	3.31	19	150		18.90	206

Table 3.2 – Technical Specifications of Armoring Wires According to BS EN 10257-1 (Land Cables)

Nom. Dia. (mm)	Diameter Tolerance (mm)		Torsion Test		Tensile Strength (N/mm <sup>2</sup> )	DC Resistance (ohm/km)	Zinc Coating (g/m <sup>2</sup> )
	Min	Max	Min Number of Turns	Sample Length (mm)			
0.9	0.85	0.95	33	75	340-500	227.0	166.0
1.25	1.21	1.29	24	75		118.1	180.0
1.60	1.55	1.64	37	150		72.2	195.0
2.00	1.95	2.05	30	150		46.2	215.0
2.50	2.44	2.56	24	150		29.7	245.0
3.15	3.08	3.22	19	150		18.90	255.0

### Packing and Delivery

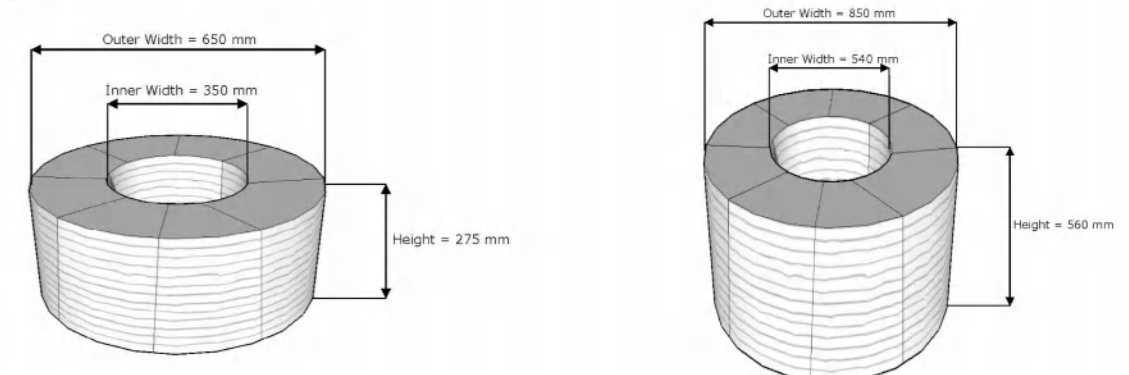
Armoring wires can be packed according to one of the below given three standard packing types. It is also possible to configure the packing according to customer requirements. Please note that, while all round armoring wires can be packed in all of the below mentioned packing types, flat rectangular shaped armoring wires can be packed only on reels or spools and in pattern laid coils.

#### 4.1 Rosette (or Orbit) Coils

Table 4.1.1 – Coil Type R350/650

Wire Diameter (mm)	Coil Ø Inner Dia. (mm)	Coil Ø Outer Dia. (mm)	Coil Height Aprx. (mm)	Coil Weight Aprx. (kg)
0.90	350 ± 30	650 ± 30	600 ± 100	350 ± 100
1.25				
1.60				
0.90	500 ± 50	700 ± 50	600 ± 100	500 ± 150
1.25				
1.60				
2.0	500 ± 50	900 ± 50	850 ± 100	850 ± 150
2.5				
3.15				
2.5	600 ± 50	1000 ± 50	1000 ± 50	1350 ± 150
3.15				

#### 4.2 Pattern Laid Coils







## Galvanized Low Carbon Steel Armoring Tape

### General Description

This specification covers hot dip galvanized round mild steel tape

### Technical Specification

Table 2.1 – Technical Specifications of Armoring tape (Land Cables)

Thickness (mm)	Thickness Tolerance (mm)		Width (mm)	Width Tolerance (mm)	Tensile Strength (N/mm <sup>2</sup> )	Elongation (%)	Zinc Coating (g/m <sup>2</sup> )
	Min	Max					
0.2	0.17	0.22	15	±0.50	≥295	17	200 (double layer)
			20				
			25				
0.3	0.27	0.33	15	±0.50	≥295	20	200 (double layer)
			20				
			25				
0.5	0.45	0.55	25	±1.00	≥295	20	200 (double layer)
			30				
			35				
			40				
			45				
			55				
			60				
0.8	0.75	0.85	45	±1.50	≥295	20	200 (double layer)
			50				
			60				

### Packing and Delivery

Armoring tape can be packed according to one of the below given three standard packing types. It is also possible to configure the packing according to customer requirements. Please note that, while all round armoring tape can be packed in all of the below mentioned packing types.

#### 3.1 Coils size

Table 3.1.1 – Coil size

Thickness (mm)	Coil Ø Inner Dia. (mm)	Coil Ø Outer Dia. (mm)	Coil Height Aprx. (mm)	Coil Weight Aprx. (kg)
0.2	195 ± 5	630 ± 5	Tape Width	35~50±5
0.3			Tape Width	35~50±5
0.5			Tape Width	40~70±5
0.8			Tape Width	70~90±5



## Plain Non Woven Binder Tape

This polyester non woven tape with its plain and smooth surface which comes in white color, can also be called "light non-woven tape" or "thin non-woven tape". Its characteristics such as high strength, light unit weight, low thickness, good softness, sulphide-resistance and suitable for wrapping and binding all kinds of cables.



### Specifications:

Specification	Unit	Typical Result					Test Method
Thickness	mm	0.05±0.01	0.06±0.015	0.08±0.015	0.10±0.02	0.22±0.03	ISO 9073/2
Mass per unit weight	g/m <sup>2</sup>	34±4	45±5	60±6	80±8	115±12	ISO 9073/1
Breaking strength	N/cm	≥15	≥26	≥33	≥50	≥55	ISO 9073/3
Elongation	%	≥10	≥12	≥12	≥12	≥12	ISO 9073/3
Short-term stability	°C	230	230	230	230	230	Star Material Method
Long-term stability	°C	90	90	90	90	90	IEC 216
Moisture content	%	≤5	≤5	≤5	≤5	≤5	ISO 287

Value are shown for reference only. For more accurate figures, please ask for technical data sheets.



## Embossed Non Woven Binder Tape

The star Material Polyester-Non-Woven-Tape has an embossed surface to wrap-up and bind the cable tighter so that it does not become to loose. This tape comes in white color, has characteristic such as high strength, light unit weight, low thickness, good softness, sulphide-resistance and suitable for wrapping and binding all kinds of cables.



### Specifications:

Specification	Unit	Typical Result					Test Method
Thickness	mm	0.15±0.03	0.17±0.03	0.20±0.04	0.25±0.04	0.30±0.05	ISO 9073/2
Mass per unit weight	g/m <sup>2</sup>	34±4	45±5	60±6	80±8	115±12	ISO 9073/1
Breaking strength	N/cm	≥20	≥30	≥40	≥50	≥60	ISO 9073/3
Elongation	%	≥10	≥12	≥12	≥12	≥12	ISO 9073/3
Short-term stability	°C	230	230	230	230	230	Star Material Method
Long-term stability	°C	90	90	90	90	90	IEC 216
Moisture content	%	≤5	≤5	≤5	≤5	≤5	ISO 287

Value are shown for reference only. For more accurate figures, please ask for technical data sheets.

### Winding Solutions for both Binder Tapes:

Type	ID(mm)	OD(mm)	Width(mm)	Core
Pad	52(2"),58, 76(3"),80,102(4"),152(6"),204(8")	UP to 600	≥5	Plastic,Paper
Spool	76(3")	250-400	Up to 350	Paper





## Polypropylene Foamed Tape

The Star Material Foamed Polypropylene Tape is a binding film which has a foam structure and high tenacity. It also has low basis weight, good tensile strength and can hold the cable firm. It is widely used in low and medium voltage cables (from 10 to 35Kv).



### Specifications:

Specification	Unit	PPF-12	PPF-15	PPF-18
Thickness	mm	0.12 ±0.02	0.15 ±0.02	0.18 ±0.02
Mass per unit weight	g/m <sup>2</sup>	60 ±10	75 ±10	90 ±10
Tensile strength	Mpa	≥80	≥80	≥80
Elongation at breaking	%	≥10	≥10	≥10
Melting point	°C	225	225	225
Heat shrinkage(100°C,10min)	%	≤6	≤6	≤6

Types & Sizes: Each type determined by thickness of laminates and tape width.

### Winding Solutions:

Type	ID(mm)	OD(mm)	Width(mm)	Core
Pad	52(2"),58,76(3"),80,102(4"),152(6")	Up to 600	≥10	Plastic,Paper



## Polyester Tape

Star Material Polyester Tape (also called PET tape or Mylar tape) is a transparent film which has good tensile strength and good heat resistance attributes. The melting point is at around 255°C. We can also provide different colors of polyester tapes.

These tapes are widely used in power cables,communication cables,coaxial cables,-magnetic wires and other special cables.



### Specifications:

Specification	Unit	Typical Result
Thickness	micron	12-75
Density	g/m <sup>3</sup>	1.40±5%
Tensile Strength(MD)	Mpa	≥150
Elongation at break(MD)	%	≥50
Melting Point	°C	255
Heat Shrinkage(150°C,30min)	%	≤3.5

### Colors:

Natural,Red,Yellow,Blue,Green,Black,etc.

### Winding Solutions:

Type	ID(mm)	OD(mm)	Width(mm)	Core
Pad	52(2"),58,76(3"),80,102(4"),152(6")	Up to 600	≥5	Plastic,Paper
Spool	76(3")	250-350	Up to 350	Paper







### Polypropylene (pp) Filler Yarn

Star Materials offers different grades of polypropylene filler yarn. Each grade is suitable depending on the cables demand:

- Normal Grade is suitable for large cables, with lower price. For example, power cables, aerial cables or rubber cables.
- High Grade is suitable for all kinds of cable with the lower unit weight, a reasonable price and no joint inside.
- Super Grade is made by 100% virgin PP and has the best tensile strength without joint. Due to the twisting, it has an accurate diameter and can easily make the cable round and smooth. It is suitable for all kinds of cables especially submarine cables and elevator cables. The original color is transparent however we also offer different colors.



#### Specifications:

Specification	Unit	Normal Grade	High Grade	Super Grade	Super Grade Twisted
Linear Density	Denier(D)	20,000-800,000	3,800-300,000	2,000-20,000	2,000-50,000
Diameter	mm	1-30	0.5-10	0.5-8	0.5-5
Breaking Strength	g/D	0.2-0.6	0.6-1.4	2-3.5	2.3-3.8
Elongation	%	≥20	≥20	≥20	≥20
Heat Shrinkage(1000C,1min)	%	6	4.5	3	3
Color	White	White	White	Transparent, Blue Black etc.	Transparent, Blue Black etc.

#### Note:

9Denier=1g/km

#### Tube & Bobbin Size:

Size	A	B	C	D
ID(mm)	38,50,76	38,50,76	76	38
Tube Height(mm)	255	310	450	220
OD(mm)	180-250	200-350	300-500	180-250
Weight(kg)	2.5-8	5-15	15-40	2.5-5

Sample

### FR PP Filler Yarn & LSHF FR PP Filler Yarn

Star Materials offers both - Flame Retardant Polypropylene Filler Yarn and Low-Smoke Halogen-Free Flame Retardant Polypropylene Filler Yarn to meet the different demands of FR cables:

- FR PP Filler Yarn is an environmentally friendly flame retardant material with light weight, excellent tensile strength and it can easily make the wire & cable round and smooth. This material includes Halogen.
- LSHF FR PP Filler Yarn is an environmentally friendly flame retardant material, without halogen and asbestos free.



#### Specifications:

Specification	Unit	FR PP Filler	LSHF FR PP Filler
Linear Density	Denier(D)	3800-300000	5000-300000
Diameter	mm	0.5-10	1-10
Breaking Strength	g/D	2-3.5	2-3.5
Elongation	%	≥20	≥20
Oxygen Index	%	≥30	≥30
Halogen	-	yes	Free
Color	-	White, Blue, etc.	White, Blue, etc.

#### Note:

9Denier=1g/km

#### Tube & Bobbin Size:

Size	A	B	C	D
ID(mm)	38,50,76	38,50,76	76	38
Tube Height(mm)	255	310	450	220
OD(mm)	180-250	200-350	300-500	180-250
Weight(kg)	2.5-8	5-15	15-40	2.5-5

Sample



### Phlogopite Glass Mica Tape

The Star Material Phlogopite Glass Mica Tape consist of Phlogopite mica paper and is reinforced with alkali-free fiberglass cloth with a precise amount of special silicone resin adhesive in-between. This tape has great flexibility, high tensile strength and shows outstanding high temperature resistance towards fire and flame. It can resist temperatures of up to 800 °C and therefore it is used for fire resistant cables, flame retardant cables and high temperature resistant cable.



#### Specifications:

Specification	Unit	P90G32	P115G32	P130G32
Construction	-	Phlogopite mica paper/Fiberglass	Phlogopite mica paper/Fiberglass	Phlogopite mica paper/Fiberglass
Thickness	mm	0.10±0.015	0.12±0.02	0.14±0.02
Total Weight	g/m <sup>2</sup>	135±15	170±15	190±20
Mica Paper	g/m <sup>2</sup>	90±5	115±5	130±5
Fiberglass	g/m <sup>2</sup>	32±3	32±3	32±3
Bonding Agent	g/m <sup>2</sup>	17±2	17±2	17±2
Tensile Strength	N/cm	≥80	≥100	≥100
Dielectric Strength	KV/layer	>1.2	>1.2	>1.2
Asbetors	-	Free	Free	Free



### Muscovite Glass Mica Tape

The Star Material Muscovite Glass Mica Tape(or so called Calcined Glass Mica Tape) consist of Muscovite mica paper and is reinforced with alkali-free fiberglass cloth with a precise amount of special silicone resin adhesive in-between. This tape has great flexibility, high tensile strength and shows outstanding high temperature resistance towards fire and flame. This tape can resist temperatures of up to 950 °C and is widely be used for fire resistant cables, flame retardant cables and high temperature resistant cable. It comes as two different types.



#### Specifications:

Specification	Unit	M90G32	M115G32	M130G32
Construction	-	Muscovite mica paper/Fiberglass	Muscovite mica paper/Fiberglass	Muscovite mica paper/Fiberglass
Thickness	mm	0.10±0.015	0.12±0.02	0.14±0.02
Total Weight	g/m <sup>2</sup>	135±15	170±15	190±20
Mica Paper	g/m <sup>2</sup>	90±5	115±5	130±5
Fiberglass	g/m <sup>2</sup>	32±3	32±3	32±3
Bonding Agent	g/m <sup>2</sup>	17±2	17±2	17±2
Tensile Strength	N/cm	≥80	≥100	≥100
Dielectric Strength	KV/layer	>1.2	>1.2	>1.2
Asbetors	-	Free	Free	Free



### Synthetic Glass Mica Tape

The Star Material Synthetic Glass Mica Tape consist of white synthetic mica paper and is reinforced with alkali-free fiberglass cloth with a precise amount of special silicone resin adhesive in-between. This tape has great flexibility, high tensile strength and shows outstanding high temperature resistance towards fire and flame. These tape can resist temperatures between 800-950 °C and are widely used for fire resistant cables, flame retardant cables and high temperature resistant cable.



#### Specifications:

Specification	S90G32	S115G32	S130G32
Construction	Synthetic mica paper/Fiberglass	Synthetic mica paper/Fiberglass	Synthetic mica paper/Fiberglass
Thickness	0.10±0.015	0.12±0.02	0.14±0.02
Total Weight	135±15	170±15	190±20
Mica Paper	90±5	115±5	130±5
Fiberglass	32±3	32±3	32±3
Bonding Agent	17±2	17±2	17±2
Tensile Strength	≥80	≥100	≥100
Dielectric Strength	>1.2	>1.2	>1.2
Asbetors	Free	Free	Free

Values shown are for references only. For more accurate figures, please ask for technical data sheets.

#### Winding Solutions for all 3Mica Types:

Type	ID(mm)	OD(mm)	Width(mm)	Core
Pad	52(2"),76(3")	250-400	≥5	Plastic, Paper
Spool	76(3")	200-300	Up to 350	Paper







### Copper Polyester Tape

The Star Material Copper Polyester Tape(CU/PET), is used as a shielding foil for cables which must be free of electromagnetic or electrostatic interference. The copper layer has excellent mechanical and shielding characteristics where as the polyester layer provides the electric insulation characteristics and makes the tape softer to wrap. Copper polyester tape is used for example in low and medium voltage cables,- control cables,coaxial cables,and more...



#### Specifications:

Structure	Thickness (micron)	Weight (g/m <sup>2</sup> )	Yield (m <sup>2</sup> /kg)	Tensile strength (N/mm <sup>2</sup> )	Elongation(%)
CU15/PET18	36	161.7	6.2	≥80	≥10
CU15/PET30	48	178.5	5.6		
CU18/PET23	44	195.4	5.1		
CU25/PET30	58	267.5	3.7		
CU50/PET50	103	518	1.9		

Values shown are for references only. For more accurate figures, please ask for technical data sheets.

#### Winding Solutions:

Type	ID(mm)	OD(mm)	Width(mm)	Core
Pad	52(2"),76(3"),152(6")	Up to 500	10-400	Plastic,Paper



### Aluminum Polyester Tape

The star material aluminum polyester tape (AL/PET or ALU/PET), occasionally also called " Single side Aluminum Polyester Tape" is used as a shielding foil for cables which must be free of electromagnetic electrostatic interference. It is used for instance in:electronic cables,data cables,coaxial cables,LAN cables, (CAT5/CAT6/CAT7), signal cables and more...



#### Specifications:

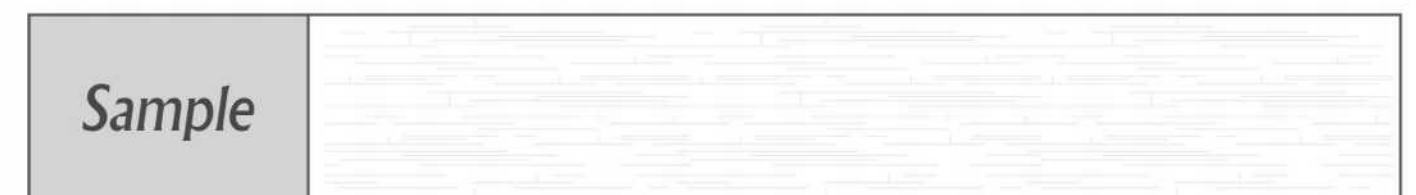
Structure	Thickness (micron)	Weight (g/m <sup>2</sup> )	Yield (m <sup>2</sup> /kg)	Tensile strength (N/mm <sup>2</sup> )	Elongation(%)
AL7/PET12	22	38.7	25.8	≥75	≥15
AL7/PET15	25	42.9	23.3		
AL9/PET12	24	44.1	22.7		
AL9/PET18	30	52.5	19.0		
AL9/PET23	35	59.5	16.8		
AL9/PET25	37	62.3	16.1		
AL9/PET30	42	69.3	14.4		
AL9/PET38	50	80.5	12.4		
AL12/PET25	40	70.4	14.2		
AL15/PET18	36	68.7	14.6		
AL15/PET30	48	58.5	11.7		
AL15/PET36	54	93.9	10.6		
AL20/PET25	48	92	10.9		
AL25/PET12	40	87.3	11.5		
AL25/PET23	51	102.7	9.7		
AL25/PET30	58	112.5	8.9		
AL25/PET40	68	126.5	7.9		
AL38/PET40	81	161.6	6.2		
AL45/PET18	66	149.7	6.7		
AL50/PET15	68	159	6.3		

#### Colors:

Natural (Silver), Blue, Red, Copper, Green, Gold, Pink

#### Winding Solutions:

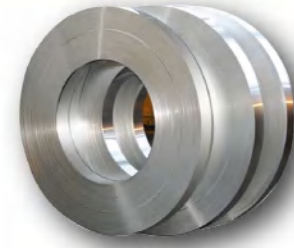
Type	ID(mm)	OD (mm)	Width(mm)	Core
pad	52(2"),58,76(3"),80,102(4"),152(6")	Up to 600	≥5	Plastic, Paper
spool	76(3")	250-350	Up to 350	Paper







## Aluminum Polyester Aluminum Tape



The star material aluminum polyester tape (AL/PET/AL or ALU/PET/ALU), occasionally also called "Double side Aluminum Polyester Tape" is used as a shielding foil for cables which must be free of electromagnetic or electrostatic interference. It is widely used in different communication cables for example :data cables,coaxial cables,LAN cables, signal cables ,etc.

### Specifications:

Structure	Thickness (micron)	Weight (g/m <sup>2</sup> )	Yield (m <sup>2</sup> /kg)	Tensile strength (N/mm <sup>2</sup> )	Elongation(%)
AL7/PET15/AL7	35	64.8	15.4	≥60	≥15
AL9/PET15/AL9	39	75.6	13.2		
AL9/PET25/AL9	49	89.6	11.2		
AL9/PET36/AL9	60	105	9.5		
AL20/PET20/AL20	66	142	7.0		
AL25/PET20/AL25	76	169	5.9		

### Colors:

Nature (Silver)



## Cable Identification Tape

The Star Material cable identification tape is a colored tape for binding and color identification purpose. We can have your company logo or various letters printed on it. The base material is PET and can resist the high temperature below 230 C . The color does not fade after extruding.



### Specifications:

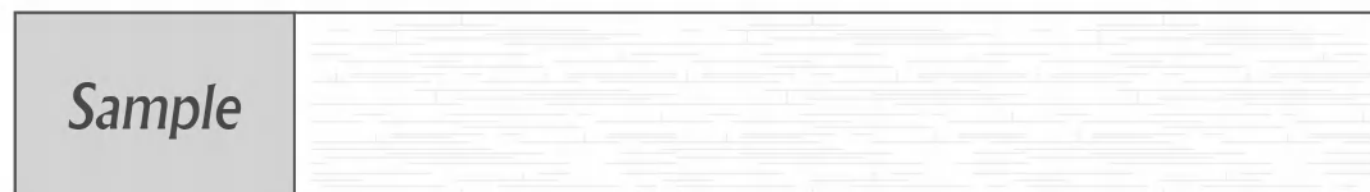
Specification	Unit	Typical result		
Width	mm	3±0.5	4.5±0.5	7±0.5
Thickness	um		40±5	
Density	g/cm <sup>3</sup>		1.40±5%	
Tensile Strength	Mpa		≥150	
Elongation at break	%		≥80	
Melting Point	°C		255	
Heat Shrinkage(150 C ,30min)	%		≤3.5	

### Colors:

Red, Yellow, Blue, Green, Black, White, Grey, Brown, Orange and many more...

### Winding Solutions:

Spool ID(mm)	Spool Flange OD(mm)	Spool Height (mm)	Material
24	120	115	Plastic



## Cable Factory Dies

### Tolerance

Scope of size	Standard Tolerance	Roundness
0.020	0.0005	0.0003
0.021-0.050	0.0007	0.0004
0.051-0.100	0.0010	0.0005
0.101-0.200	0.0010	0.0007
0.201-0.400	0.0015	0.0010
0.401-0.600	0.0020	0.0010
0.601-1.000	0.0030	0.0015
1.001-1.500	0.0040	0.0025
1.501-2.000	0.0050	0.0035
2.001-3.000	0.0060	0.0040

### Usage Time based on Different Material

Material	Die size mm	Hard alloy material	Natural diamond	Polycrystalline
Steel	0.180	1	200	600
Steel	1.000	1	150	600
Zinc- clap steel	0.175	1	10	60
Copper- clap steel	1.200	1	50	120
Stainless steel pipe	0.250	1	100	200
Stainless steel pipe	0.415	1	100	200
Brass- clap steel	0.175	1	6	30
Zinc- clap steel	0.200	1	50	250

### Necessary Information

- dies size
- die tolerance
- die holder size
- drawing material
- the drawing machine elongaration rate.
- quantity





### Technical Parameter

Dies type	Images	Material	Discription	Scope of die	Application features
Drawing dies		Natural diamond	Density: 3.515g/cm <sup>3</sup> ; Hardness : Mohs: 10 ;MOE Modulus Of Elasticity: 1.25-10.76 GPa	0.015mm -2.00mm	Electromagnetic wire, enamelled wire, tungsten filament, tin ning filament, copper plating filament, copper filament , stainless steel filament, gold filament, silver filament , aluminum filament, copper-clad aluminum filament.
		Artificial diamond	Nitrogen content: 100-150PPM; The metallic impurity contents: <50PPM; Density: 3.52 g/cm <sup>3</sup> ; MOE Modulus Of Elasticity: 1.50GPa; Thermostability: >1100°C	0.025mm -0.70mm	
		Imported polycrystalline	Imported polycrystalline is made by diamond tiny powder with metal(cobalt) as catalyst in high temperature and high pressure.	0.100mm -20.00mm	
		Domestic polycrystalline	Domestic polycrystalline made by diamond tiny powder, takes cobalt or silicon as catalyst in high temperature and high pressure .	0.20mm -8.00mm	
		Hard alloy	Cheap price is its most obviously feature, it's suitable for black metal and big prize material and in bad working condition.	0.15mm -45.00mm	
Enamling wire dies		Tungsten carbide	/	» 0.25mm	More accurate than felt coating, longer insulation, Longer working life, Easily wire-drawing, better cost performance
		Red diamond	/	0.025mm -0.70mm	Abrasion resistant, economical
Tin coating dies		Natural diamond	/	Depends on the order	Smoothy surface, accurate size, average galvanized layer. Avoid staining tin and blocking up by tin.
		Artificial polycrystalline	/	Depends on the order	Abrasion resistant, economical
Stranding dies		Artificial polycrystalline	with dies and die holder	Depends on the order	Abrasion resistant, economical
		Hard alloy	with dies and die holder	Depends on the order	Economical
Sector conductor dies		#45 STEEL	with up and down rollers	Up to 3*400mm 2 and 4*400mm 2	Economical
Extruder line dies		#45 Steel+ tungsten steel	fixable and adjustable type.	for 45, 65, 90, 120, 150, 200 type extruder line.	For house wire, telephone cable, lab cable and fabric cable, insulation cable, power cable, coaxial cable.
Laying up machine dies		#45 STEEL	with dies and die holder	up to 4*400mm 2	Economical

### Cold Welder

#### Cold Welder for the Rod

Shineworld type	Pictures	Scope of welding		Size(mm)	Weight(g)	Machine material
		Copper Rod	Alu Rod			
SWJO		(Cu) 0.05mm-0.15mm	(Al) 0.07mm-0.15mm	150*40*155	500	stainless steel
Dies used for SWJO TYPE						
SWJ1-W		(Cu) 0.10mm-0.50mm	(Al) 0.10mm-0.50mm	160*50*160	650	stainless steel
SWJ1-B		(Cu) 0.10mm-0.50mm	(Al) 0.10mm-0.50mm	105*60*145	800	stainless steel
SWJ1-C		(Cu) 0.10mm-0.50mm	(Al) 0.10mm-0.50mm	180*50*60	550	stainless steel
SWJ1-A		(Cu) 0.10mm-0.50mm	(Al) 0.10mm-0.50mm	105*60*145	500	alu alloy
SWJ1		(Cu) 0.10mm-0.50mm	(Al) 0.10mm-0.50mm	200*80*80	1800	stainless steel
Dies used for SWJ1 series						
SWJS2S-A		(Cu) 0.30mm-0.90mm	(Al) 0.30mm-1.00mm	250*80*80	1400	stainless steel
SWJ2-A		(Cu) 0.30mm-1.20mm	(Al) 0.30mm-1.40mm	220*130*200	9500	casting steel
SWJ2-B		(Cu) 0.30mm-1.20mm	(Al) 0.30mm-1.40mm	220*160*230	11000	casting iron
Dies used for SWJ2 series						
SWJ3-A		1.00mm-3.25mm	1.00mm-5.00mm	300*180*300	36000	casting steel
SWJ3-B		1.00mm-3.25mm	1.00mm-5.00mm	280*180*300	33000	casting iron
SWJ3-C		1.00mm-3.25mm	1.00mm-5.00mm	280*180*300	335000	casting iron
SWJ3-D		1.00mm-3.25mm	1.00mm-5.00mm	280*180*300	33000	casting iron
Dies used for SWJ3 series						
SWLS3TY		1.00-4.00mm	1.0-4.00mm	550*550*920	130000	0.75kw, 6.5MPa
SWLS4TY		2.00-5.00mm	2.00-8.00mm	620*550*1000	220000	1.5kw, 6.5MPa
SWLS5TY-B		4.00-8.00mm	4.00-14.00mm	1190*570*1100	650000	5.5kw 6.5MPa
SWLS5TY-A		3.00-6.00mm	3.00-10.00mm	1200*600*1200	600000	3.0kw 6.5MPa
SWLS6TY		7.00-13.00mm	7.00-25.00mm	1300*750*1000	1750000	7.5kw 8.0MPa
Dies used for SW/TY series						





### Cold Welder for the Inter Lock Material

Shineworld type	Pictures	Width	Thickness	Thickness	Size	Weight
SWJ3-INTERLOCK		0.25-21mm	1.00-6.0mm	1.00-6.0mm	550*550*920	130000
SWJ4-INTERLOCK		0.25-35mm	0.25-6.0mm	0.25-6.0mm	620*550*1000	220000

### Cold Welder for the Conductor

Type	Pictures	Welding range	Rate pressure	Maximum power	Clamping system
SWCW-1		0.5-8mm <sup>2</sup>	220V/50Hz	3KVA	Mechanical
SWCW-1A		0.5-10mm <sup>2</sup>	220V/50Hz	3KVA	Mechanical
SWCW-2		16-120mm <sup>2</sup>	380V/50Hz	40KVA	Pneumatic
SWCW-3		95-240mm <sup>2</sup>	380V/50Hz	80KVA	Pneumatic
SWCW-5		200-400mm <sup>2</sup>	380V/50Hz	200KVA	Pneumatic
SWCW-6		400-630mm <sup>2</sup>	380V/50Hz	300KVA	Pneumatic

### Butt Welder



Series	Application	SN	Model	Rated capacity (KVA)	Input Voltage (V)	Input current (A)	Duty cycle	Welding Dia(mm)		
								Low carbon steel	Aluminum	Cooper
The UN series used for Rod wire	UN series butt-welders are widely used in the butt welding with the materials such as the steel, iron, copper and aluminum in the industries such as electric wire, drawbench, filler metal and the artecture.	1	UN-1	1	220	4.5	8	0.5-2.0	0.5-1.5	0.5-1.2
		2	UN-3	3	220	13.6	15	1.0-4.0	1.0-3.0	1.0-2.5
		3	UN-5	5	380	13.2	15	1.5-6.0	1.5-5.0	1.5-4.0
		4	UN-25	25	380	65.8	20	6.0-12.0	4.0-10.0	4.0-8.0
		5	UN-30	30	380	78.9	20	6.0-16.0	5.0-12.0	4.0-1.0
		6	UN-50	50	380	131.6	20	8.0-18.0	6.0-14.0	5.0-12.0
		7	UN-75	75	380	197.4	20	8.0-25.0	8.0-20.0	6.0-16.0
		8	UN-100	100	380	263.2	20	10.0-35.0	10.0-22.0	8.0-20.0
		9	UN-160	160	380	421.1	20	12.0-40.0	12.0-28.0	10.0-25.0
The UN1 series used for Rod	UN1 series butt-wlders are widely used for abutting joint with the materials such as steel,iron,copper and aluminum rod.	1	UN1-5	5	380	13.2	15	1.5-6.0	1.5-5.0	1.5-4.0
		2	UN1-10	10	380	26.3	20	3.0-8.0	2.5-6.0	2.5-5.0
		3	UN1-16	16	380	42.1	20	4.0-10.0	3.0-7.0	3.0-6.0
		4	UN1-25	25	380	65.8	20	6.0-12.0	4.0-10.0	4.0-8.0
The UN2 series used for Rod	UN2 series butt-wlders is widely used in abutt joint of such materials as steel,iron,copper and aluminum rod.It is also used in the butt joint of flat bar, flat aluminum,steel tube and steel tube.What is more, it can be used to joint thr alloy copper and alloy tools.	1	UN2-5	5	380	13.2	15	1.5-6.0	1.5-5.0	1.5-4.0
		2	UN2-10	10	380	26.3	20	3.0-8.0	2.5-6.0	2.5-5.0
		3	UN2-16	16	380	42.1	20	4.0-10.0	3.0-7.0	3.0-6.0
		4	UN2-25	25	380	65.8	20	6.0-12.0	4.0-12.0	4.0-8.0
		5	UN2-30	30	380	78.9	20	6.0-16.0	5.0-12.0	4.0-10.0
		6	UN2-50	50	380	131.6	20	8.0-18.0	6.0-14.0	5.0-12.0
The UN3 series used for wire	UN3 series welder sre applicable to the abutting joint with the steel, iron, copper and aluminum wires.	5	UN3-3	3	380	7.9	15	1.0-4.0	1.0-3.0	1.0-2.5
		6	UN3-5	5	380	13.2	15	1.5-6.0	1.5-5.0	1.5-4.0
		7	UN3-10	10	380	26.3	15	3.0-8.0	2.5-6.0	2.5-5.0



Spot Welder



Series	Application	SN	Model	Rated capacity (KVA)	Input Voltage (V)	Input current (A)	Duty cycle	Electrode arm length (mm)	Reference to welding steel tape
DN Series for steel and copper tape	DN and DN1 series mesh welders are widely used in the welding of low carbon steel strip, corrosion resistant plate, wires, silver contact and lots of non-ferrous metals.	1	DN-10	10	380	26.3	20	240	1.0+1.0
		2	DN-16	16	380	42.1	20	270	1.5+1.5
		3	DN-25	25	380	65.8	20	280	2.5+2.5
DN1 Series for steel and copper tape	DN and DN1 series mesh welders are widely used in the welding of low carbon steel strip, corrosion resistant plate, wires, silver contact and lots of non-ferrous metals.	1	DN1-10	10	380	26.3	20	350	0.5+0.5-1.0+1.0
		2	DN1-16	16	380	42.1	20	350	0.5+0.5-1.5+1.5
		3	DN1-25	25	380	65.8	20	350	1+1-2.5+2.5
DN3 Series for steel and copper tape	DN3 series spot welder is widely utilized in the spot welding of mild steel, corrosion resistant plate and round wire in the industries such as panel beating, light fittings and hardware appliances.	1	DN3-10	10	380	26.3	20	380	(0.5-1.5)x2
		2	DN3-16	16	380	42.1	20	380	(0.5-2.0)x2
		3	DN3-25	25	380	65.8	20	380	(1.0-2.5)x2
		4	DN3-30	30	380	78.9	20	380	(1.0-3.0)x2
		5	DN3-50	50	380	131.6	20	380	(1.5-3.5)x2
DN4 Series for steel and copper tape	DN4 series spot welder is widely utilized in the spot welding with steel wires and iron wires, particularly applicable to the manufacture industries such as the bicycle basket, mesh enclosure and the mesh.	1	DN4-10	10	380	42.1	20	380	φ5.0+φ5.0
		2	DN4-25	25	380	65.8	20	380	φ6.5+φ6.5
		3	DN4-30	30	380	78.9	20	380	φ8.0+φ8.0
DN5 Series for steel and copper tape	DN5 series mesh welders are applicable to the welding of ordinary steel plate, corrosion resistant plate, thin aluminum sheet and sheet copper. Functions of up/down adjustment and left/right rotation of electrode arm have been added to DN5B series, which are more suitable to those work pieces on which the ordinary welders cannot operate, such as medical devices.	1	DN5-10	10	380	26.3	20	400	0.5+0.5-1.5+1.5
		2	DN5-16	16	380	42.1	20	400	0.5+0.5-2.0+2.0
		3	DN5-25	25	380	65.8	20	400	0.5+0.5-2.5+2.5
		4	DN5-30	30	380	78.9	20	400	1+1-3+3
		5	DN5-50	50	380	131.6	20	400	1+1-3.5+3.5
SDN Series spot welding machine for copper tape	SDN series is applicable to the spot welding of various metal materials such as the mild steel, stainless, copper stripe and aluminum stripe.	1	SDN-5	5	220	22.7	15	50	0.05+0.05-0.18+0.18
		2	SDN-10	10	220	45.5	20	50	0.1+0.1-0.25+0.25

AC Spark Tester

General Description:

Commercial Frequency AC Spark Tester is a special purpose test apparatus to detect fault or insulation on wire and cable. Intergrated with the technology of solid-state AC voltage regulation and single piece microprocessor control, the machine features steady voltage output (unaffected by variation), high sensitivity of fault detection, versatility, user-friendly safety and reliability, new construction and beautiful appearance.



Technical Parameter

Type	SW-15A	SW-25A
Voltage output	1.0-15.0kV	2.0-25.0kV
Voltage indication error	<5%	<5%
Detection sensitivity	<6004A	<6004A
Stability	Complying with the requirements of GB3048.9-1994 and JB/T 4782.10	
Detection Resolution	0.05s	0.05s
Transient breakdown current	100mA	50mA
Steady short-circuit current	<20mA	<20mA
Detection speed, Max	300m/min	350/min
Overall diameter of tested wire or cable, max	≤30mm	≤55mm
Working Conditions	Supply voltage	AC220V+10%
	Supply frequency	50+2Hz
	Ambient temperatures	0-40℃
Breakdown indication	Relative humidity, max	85% (without condensed water)
	Mode of operation	continuous operation
	Mode of indication	Breakdown count and voice/light alarm
Safety interlock	Count range	0-999
	Time duration for voice/light alarm	0.5-15 adjustable

In order to ensure safety for operators, the probe is provided with an switch and discharge rod. When the front hood is opened, the high voltage is cut off first, then the discharge rod touches the electrode section to discharge the remaining electricity.

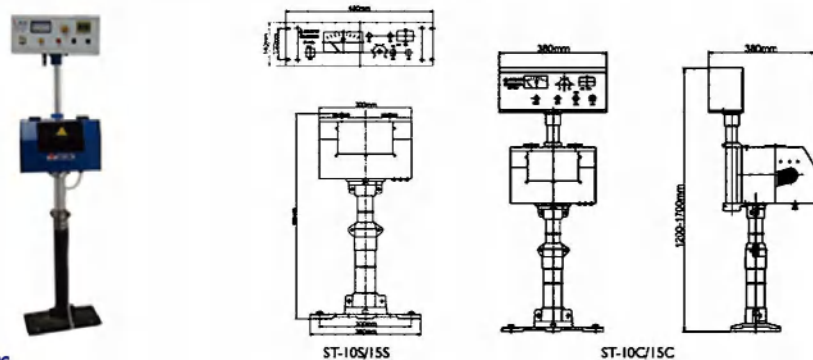




## DC Spark Tester

### General Description:

SW-10DC Spark Tester is a useful tool for detection of surface damage as well as for spark test for wire and cable with a diameter below 10mm. The DC high voltage tester recommended internationally is characterized by advanced design, new construction, steady voltage output, high sensitivity, adaptability, easy operation, versatile mounting, safety and reliability. It may be used for unline testing in combination with a pair twister or an extruder as well as for intermediate testing and testing for finished products.



### Technical Parameter

Type	ST-10C/ST-10S/ST-10D	ST-15C/ST-15S
Voltage output	DC 0-10000V	DC0-15000V
Effective test voltage	DC 500-10000V	DC 500-15000V
AC pulse ratio	<5%	
Voltage stability	Voltage of power +15%, output voltage is not change	
Breakdown sensitivity	I=600+50uA, I≤0.005S	
Current range for breakdown sensitivity	500-20004A	
Steady-state short circuit current	3-4mA	
Max.frequency of breakdown counting	10/s	
Max. diameter of tested wire	10mm	
Max.moving speed of the tested wire	2800m/min	
Operation conditions	line voltage	AC220V+15%
	Power frequency	50+2Hz
	Power input	50 VA
	Ambient temperatures	-10-45 C
	Relative humidity	<85%(without condensed water)
Breakdown indication	Mode of operation	Continuous
	Auto Mode	Audio/visual alarm and breakdown counting
	Manual Mode:	Audio/visual alarm, breakdown counting and control signal output
Safety interlock	In order to ensure safety for operators, the probe is provided with an switch and discharge rod. When the front hood is opened, the high voltage is cut off first, then the discharge rod touches the electrode section to discharge the remaining electricity.	

## Accessories

### Concentric Taping Device



### Specifications

1	Applicable cable diameter	Φ6 ~ Φ14mm
2	Package reel diameter (aperture provided by the demand side)	Φ500mm
3	Package width	30 ~ 60mm
4	Taping thickness	0.008 ~ 0.025mm
5	Lead pack maximum speed	600r / min
6	Wrapping Pitch	Stepless
7	Taping material	polyester film and other non-tape
8	Package lead structure	concentric
9	Voltage rating	380V, AC, three-phase, 50Hz
10	CVT package can lead, and has left and right rotation and neutral function	
11	Adopts 5.5KW AC motor drives, Danfoss inverter control	
12	Electric control device containing a set	
13	Using Chinese famous brand motor and bearings	



### Vertical Meter Counter

### Specifications

1	Meters circumferential length	500mm
2	Meter accuracy	± 3 ‰
3	Meter maximum length	9999m
4	Dual active, upper and lower pressure wheel form, the meter wheel with spring buffer, both incoming and outgoing wire rack	
5	Mechanical meter and electronic meter function	



## Fiber Laser Marker

### Summary:

It uses the fiber laser to output the laser light. The E/o convert ratio is high, the cubage is small, and the light beam is high-quality. The fiber laser's lifetime is more than 100,000 hours nowadays. If the machine works 24 hours everyday, there are 365 days a year, its lifetime can be more than 12 years. So we can say it is really free of maintenance.

Fiber laser marker is as small as a host computer. Its electric power is less than 500w. The build-in air-cooled method has replaced the water-cooled way which is more unwieldy and fragile. It can use 24V storage battery, and realise energy efficiently and conveniently.

The facula model of fiber laser marker is very good. Because of the thinner single line, the machine is more suitable for the refined process. The area of process of 10W fiber laser marker has already covered 50W diode laser's, while the system's integration level is high, and has less faults, so it suits for processing industry. If using our high accurate bitmap software, the effect will be excellent.



### Technical Parameters:

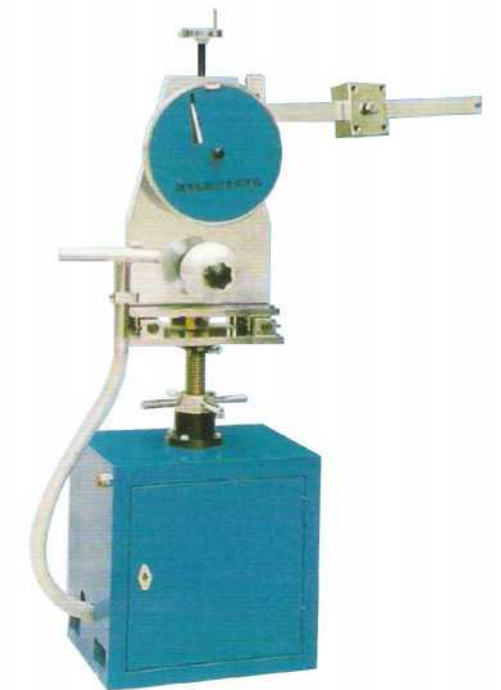
1	Output Power:	20W
2	Wavelength:	1060nm
3	Beam quality:	<1.2
4	Repeating frequency:	20KHz ---100KHz
5	Marking scope:	100mm×100mm / 150mm×150mm
6	Linear speed :	character/s
7	Marking Speed:	≤12000mm/s
8	Marking Depth:	≤0.4mm
9	Min. line width:	0.012mm
10	Min. character size:	0.15mm
11	Repeating accuracy:	±0.003mm
12	Electrical source:	0.5KW

## Accessories

## Cable Thermal Marking Machine

### Summary:

This machine is a passive towed cable stamping equipment, suitable for the factory name, product models, specifications and manufacturing meter length size identification logo embossed pipe products in the cable sheath surface and other rubber, plastic and other surface. Mark the words using the insert assembly mode, insert can be arbitrarily adjusted replacement. Digital machine can be measured by meters length imprinted on the cable surface, and through the manual quick return to zero.



### Standards:

RJM

### Technical Parameters:

S/N	Specification	
1	work height:	900-1100mm
2	the highest printing speed:	200m/min
3	wall before and after adjusting the distance:	65mm
4	cable diameter:	10-150mm
5	case inserts groove angle:	110° 10'
6	insert angle and number:	10° /1 block, /2 block, 15° 20° /2, 30° /1 block
7	press wheel shaft diameter length:	φ 20 (-0.021 or -0.041) and *80.1 (0.20 or 0.10) m
8	imprint line size range:	Diameter of more than 16mm
9	size:	1470*500*420mm





## Meter-measuring Printer

### Summary:

The meter-measuring printer is a dedicated equipment for wire and cable industry. As a passive hot-padding equipment and featuring in precision measurement and reliable performance, the YYJ-1 and YYJ-2 meter-measuring printer adopts the hot-padding mode to print words (characters) on the exterior diameter of cables. The YYJ-1 and YYJ-2 meter-measuring printer is the new generation printer to substitute for the ink printer.



### Features:

- Precision measurement: The speed ratio between the meter-measuring roller and the word-printing roller is 1:1, which can ensure the meter measurement precision to be within  $\pm 0.3\%$ .
- Easy to print: The printer can easily print color and words; the words to be printed are legible, with high adhesion and hard to wear; the printing quality is better than that of the ink printer.
- Electronic control mode: The letter block and the measuring digit of the printer adopts the electronic heating mode, with the temperature control adjustment system equipped; which is easy to adjust, and can control temperature accurately and offer stable printing quality.
- Easy to operate: The printer can be operate

### Technical Parameters:

S/N	Specification	
1	Operating power	50Hz, 230V, 3-phase cables
2	Main power	230V & 1.1kw for fan and 220V & 0.5kw for heating
3	Temperature control scope's precision	Room temperature $\sim 200^{\circ}\text{C}$ , ( $\pm 5^{\circ}\text{C}$ )
4	Diameter of applicable cable	10~120mm
5	Measuring scope's precision	0-9999m, $\pm 0.3\%$
6	Digital display and pre-setting warning length	1~9999m (this function is only available for the YYJ-2 type)
7	Height of working center	1000mm, $\pm 60\text{mm}$ (adjustable)
8	Standard meter-measuring speed	$< 150\text{m}/\text{min}$
9	Noise of whole equipment (sound pressure level)	85dB(A)
10	Exterior dimension and weight	900x540x1580mm
11	Net weight	238kg

## Ink Printing Machine

### Standards:

100\*20\*15mm

### Technical Parameters:

S/N	Specification	
1	work height	900-1000mm
2	the highest printing speed	200m/min
3	wall before and after adjusting the distance	65mm
4	cable diameter	10-120mm
5	wheel size	$\leq 120\text{mm}$
6	Weight	30Kg



## Digital Bridge with Bridge Fixture

### Summary:

QJ36B - 2 type digital bridge is a new generation Dc resistance test instruments, the update products is Kelvin bridge. It can be manually choose according to different types of cable test current, with the fastest speed according to the test results. Equipped with RS - 232 interface communication with the computer, big screen LCD monitor for the equipment is good man-machine interface, simple and convenient operation, dc resistance test in the work is the preferred equipment.



### Characteristics:

1. Use 5 LCD display, easy to operate, does not need to match galvanometer, power supply, standard resistance, such as accessories, easy to carry. Read directly, high measurement precision, good stability.
2. Measuring range: 0~2 k $\Omega$  minimum resolution: 0.01 $\mu\Omega$  accuracy: 0.05%
3. According to the thermometer to measure temperature, bridge automatically converted to 20  $^{\circ}\text{C}$  resistance standard.
4. The user may need to measure the resistivity of 1 meter.
5. Bridge plastic chassis, aesthetically pleasing, easy to carry.

### Technical Indicators:

Table 1

Range	Current	Resolution	Range	Error
200 $\mu\Omega$	10A	0.01 $\mu\Omega$	0-199.99 $\mu\Omega$	$\pm(0.4\%R_x + 0.15\%R_m)$
2m $\Omega$	10A	0.1 $\mu\Omega$	0-1.9999m $\Omega$	$\pm(0.2\%R_x + 0.1\%R_m)$
20m $\Omega$	1A	1 $\mu\Omega$	0-19.999m $\Omega$	$\pm(0.1\%R_x + 0.05\%R_m)$
200m $\Omega$	0.5A	10 $\mu\Omega$	0-199.99m $\Omega$	$\pm(0.04\%R_x + 0.015\%R_m)$
2 $\Omega$	100mA	100 $\mu\Omega$	0-1.9999 $\Omega$	$\pm(0.04\%R_x + 0.015\%R_m)$
20 $\Omega$	100mA	1m $\Omega$	0-19.999 $\Omega$	$\pm(0.04\%R_x + 0.015\%R_m)$
200 $\Omega$	10mA	10m $\Omega$	0-199.99 $\Omega$	$\pm(0.04\%R_x + 0.015\%R_m)$
2k $\Omega$	1mA	100m $\Omega$	0-1.9999k $\Omega$	$\pm(0.04\%R_x + 0.015\%R_m)$

Table 2

1	Power supply	AC220V 50Hz
2	Overall dimensions	420x300x200mm
3	The weight	8kg
4	YN62112-A is applied to the round and Round wire conductors whose volume is 630mm <sup>2</sup>	
5	YN62112-B is applied to the round and Round wire conductors whose volume is less than 1200mm <sup>2</sup>	



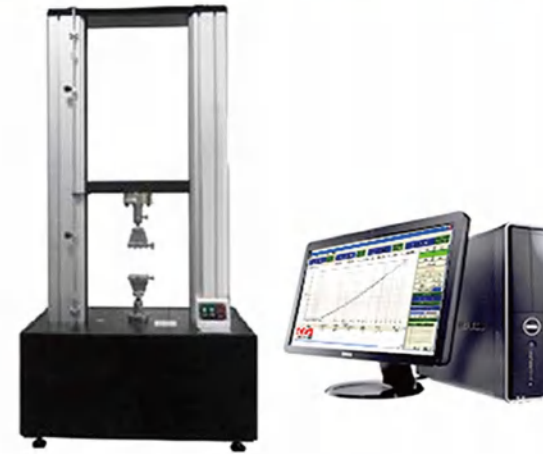




### Computer Control Servo-type Universal Tester (double columns)

#### Summary:

This machine uses the advanced machinery, electronic PCI acquisition card and computer technology, which can record the whole test process's test piece's load, variable displacement and through the relationship between the change of time by the form of curve, for studying the materials' nature or manufacturing process quality control, and so on. This machine is mainly used for various materials' tensile, compression, bending, shearing test.



#### Standards:

IEC60227

#### Technical Parameters:

1	Testing Force	5KN	10KN	20KN	50KN
2	Testing Relative Error	≤±1%			
3	Displacement Resolution	0.01mm			
4	Testing Force Resolution	0.1N	0.1N	1N	1N
5	Speed(mm/min)	0.1-500	0.1-350	0.1-200	0.1-200
6	Testing Displacement(mm)	600	550	500	500
7	Motor(KW)	0.75	0.75	1.5	1.5
8	Testing Displacement(mm)	600			
9	Control System	AC frequency servo control			
10	Display	Digital LCD or Windows XP testing software + computer			
11	Transmission Yoke Plate	High carbon steel,			
12	Transmission Screw	High precision seamless ball screw,			
13	Clip Surface	All the clips are made of hard chromium plating processing.			
14	Guide Rod	Its surface is of high temperature and hard chromium plating processing, above HRC60 above			
15	Speed-reduction Device	Italy's European precision vacuum casting aluminum			
16	Main Bearing	NSK			
17	Power	AC 220V, 50/60Hz, 5A			
18	Computer	Customers' optional provide			

### Natural Ventilation Aging Oven with Test Device (three groups)

#### Summary:

It's used for Wire, cable, rubber and plastic industry as natural ventilation thermal aging test.

#### Features:

The temperature control adopts digital instrumentation, which is easy for operating.

It's equipped with observation windows, and the operation room is made of stainless steel.

The shell adopts the high quality thin steel, and the surface is after the treatment of spray paint anticorrosion.

The door seals use heat-resistance silicone rubber, which is Healthy and Safety.



#### Standards:

IEC60227

#### Technical Parameters:

1	Temperature range	RT~250℃
2	Temperature fluctuation	±0.5℃
3	Temperature uniformity	±2℃
4	Heating up time	RT~300℃, about 40Min
5	Ventilation volumes	8~20
6	Inner dimension	450(L)*500(W)*550(H) mm
7	Overall dimension	870(L)*800(W)*1300(H) mm
8	Inner material	SUS#304 stainless steel
9	Outer material	Stoving varnish
10	Thermal insulation material	80mm high-density rock wool

#### Test Device (three groups) parameter

1	Weight	1g(1), 2g(1), 5g(1), 10g(1), 20g(1), 50g(1), 100g(1),
2	Max number of specimen testing in the same time	3





## High Temperature and Constant Temperature Tank

### Summary:

It's widely used in distillation, drying, enrichment and impregnated chemical or biological products, is an ideal testing machine for environmental protection units, scientific research institutions, health and epidemic prevention institutions, electric wire and cables, petroleum, metallurgy, chemical industry, medical treatment, and other units.

### Features:

Microcomputer intelligent control system, heating up rapidly, stable temperature, easy for operation. Heating up speed is adjustable, which can control the temperature effectively, making the testing result more ideal.

Can use both water and oil, temperature can reach 300°C.

LED double windows show the temperature testing value and temperature set value, touch screen making the operation much easier.



### Technical Parameters:

1	Volume	15L-200L
2	Temperature Control	RT~98°C
3	Temperature Fluctuation	±0.1°C
4	Electric Power	2~6KW
5	Power Supply	220V~240v-50~60HZ
6	Material	Stainless Steel
7	Outside	Electrostatic Painting
8	Inside	Stainless Steel

## Single Cable Vertical Burning Tester

### Summary:

It's used for gaining and determining cable's capability of preventing the fire from spreading. Be applied to the Standard GB/T18380.(11-12)-2008, "Cable and optical fiber cable under the condition of the flame burning experiment • single insulated wire and cable vertical flame spreading test".

### Standards:

IEC60227



### Technical Parameters:

1	Control box, fume cupboard, and the metal cover are designed as one-piece. Material is stainless steel	
2	Metal cover	1200*300*450mm
3	Blowtorch	standard power: 1kw
4	Control mode	Set when the burning time reaches the preset time, the machine stops supplying the fire automatically
5	Burning device	automatic high pressure ignition
6	Flow-meter	Air flowmeter: 1~15L/min; Gas flowmeter, 0.1~1L/min
7	Install a single controlled exhaust fan on the top	
8	Flame testing device	∅0.5, K type imported thermocouple, copper cathode block ∅9mm, 10g±0.05g, each one set of temperature and time display device
9	Overall dimension	600*600*2200mm
10	Power	AC 220V, 56/60Hz, 2A
11	Gas	Propane, air (customer self-provided).



## High Voltage Test System

### Summary

#### 1. System Feature:

The testing voltage, current, withstand voltage time are pre-settable. It can be operated automatically and manually.

The voltage can be regulated continuously; the wave form isn't distortion and abnormality.

With zero position function, voltage upper limit, low limit, over-current, over voltage breakdown protective function.

The Alarm has sound and light.

When the test is over, it can return to zero automatically.

After withstand high voltage test, it can be discharged apace.

It can be connected with internet, and transmit all the data to one computer.

#### 2. System Component and Function

S/N	Specification	Qty (Set)
1	Test transformer YD—20kV/5kV/50kVA	1
2	Digital control desk JTKZ-1	1
3	Contact type regulator TDGZ-50Kva	1
4	Capacitance divider CVD—20kV/100pF	1

#### 3. Technical Parameters

S/N	Specification
1	Capacity: 50kVA
2	Input voltage: 415V±10%
3	Output voltage: 5kV 20kV
4	Output Current: 10.0A 2.5A
5	Voltage accuracy: 1.0%
6	Ambient Temperature: 5---50 ℃ (for operating) - 10---50 ℃ (for storage)
7	Controls and measuring: +10---+35 ℃
8	Relative Humidity: ≤90% (No Condensation)
9	Altitude: ≤1500 m
10	Frequency: 50-60Hz
11	Withstand voltage time: 1s~99 hours
12	Environment: Indoor (Stationary)
13	Working time: continuous 30min, 8 times 1 day

## Testing Instrument

### Control Panel Outline and Dimension

long 800mm\*width 600mm\*height 1200mm weight: 60 kg (1)

#### Contact Type Regulator

Parameters	Rated Capacity:	TDGZ-50kVA
	Input Voltage:	415V
	Output Voltage:	0—420V
	Output Current:	119.0A
Dimensions	700mm×800mm×1400mm	
	Length with bushing is 980mm	
	Weight:	420kg
	Cooling:	N
Features:	Change the speed in step less, Fast/slow also can be regulated smoothly	
	Exact sine wave in output	
	Exact zero start	
	Operation: long time operation	



#### Testing Transformer YD- 50kVA/5kV /20kV

Parameters	Rated Capacity:	50kVA
	Input Voltage:	0-400V
	Output Voltage:	5kV 20kV
	Output Current:	10.0A 2.5A
	Distortion:	< 8.0%
	Operation:	continuous 30min, 1 day 8 times
Dimensions	650mm (L) ×560mm (W) ×780mm (H)	
	Length with bushing is 980mm	
	Weight:	590 kg
	Cooling:	ONAN



#### CVD-20KV HV Divider

Parameters	Voltage:	20kV
	Measuring:	the voltage can be indicated on the control panel
	Accuracy:	AC: 1.0 class
	Capacitance:	100pF
	Appearance of Divider	See picture
	Dimensions:	base 500mm×W500mm Voltage divider: φ120mm×H600mm
	Weight:	9kg

