

Shineworld



WIRE AND CABLE EQUIPMENT



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Here, you could get the solution for how to build a new cable factory, how to run the High-Middle-Low voltage cable factory. Including: production process design, factory design, selecting the machines, following the production, supervising the loading, assisting the commission and offering the aftersales service. You will get the professional comments and suggestion and have a project manager to control your whole project running.

Brief introduction

Shineworld group, established in 2002, the predecessor is Logistics Company, mainly is cooperate with CSCL, COSCO to do the General Contract Project Logistics . In 2005, Shineworld jointed venture factory in Anhui province together with Anhui Prius extruder machine Co.. LTD., then began to march on wire and cable equipment field. In 2006 Shineworld invested petrochemical industry, cooperated with Wuhai Runzhida company and professionally worked on petrochemical equipment. In the same year, Shineworld international window set up, then in 2011, the invested manufactures, trading company and logistics company integrated into Shineworld Group.

Shineworld is a group that collects research, production and sales into one body. We insist on professional and industrial. Whatever for wire and cable equipment or petrochemical equipment, our factory locals in the special area and we could make sure the purchase, design, and manufacture, service

are all in the same industry channel, thus, we can control the cost, improve the work efficiency.

In 2006, Shineworld opened the international window, besides provided the whole project solution for wire and cable equipment and petrochemical equipment, also worked on building materials, electrical parts and cabinet system. As well as we are agent of some famous brand for the correlative products in Iraq, Brazil and Nigeria market. We invested trading company in Iraq joint with the Iraq Company and set up office in Nigeria.

Technology internationalization, capital internationalization, talent internationalization is our tragedy aims. From 2011, we began to set up office and joint company in Iraq and Nigeria, in order to realize the localization sales, localization production and management. Finally, realize the internationalization brand.

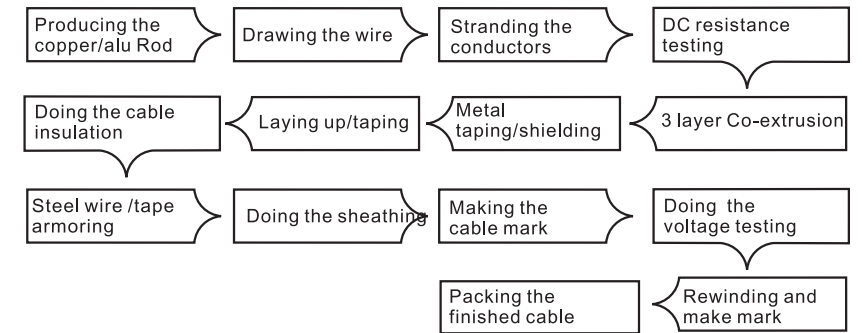
What we can do

Produce process design	04
Factory design	05
Machine matching and sourcing	
A Series of conforming line	
Copper /Aluminum or aluminum alloy continuous casting and rolling line	06
Upward continuous casting line	08
Copper/Aluminum continuous confirming line	12
Continuous extrusion line for aluminum sheath	16
B Series of drawing line	
Copper /Aluminum rod breakdown drawing machine &annealer	18
Non-sliding type aluminum rod drawing machine (individual motor driven)	22
Intermediate drawing machine with annealer	24
Fine wire drawing machine	28
C Series of stranding line	
Rigid frame stranding machine	32
Tubular type strander	36
Planetary stranding machine with armoring	38
Double twist bunching line	40
D Series of stranding line for cable core	
Drum twister with caterpillar & steel wire armoring	42
Cradle type laying up machine	46
E Series of extrusion line	
Extruder line for Fluoroplastic/Silicone rubber/PVC/PE	48
3 -layer Co-extrusion CCV-line	52
F Miscellaneous equipment	
Cradle type steel wire armoring line	56
Steel taping armoring and copper tape screening line	58
Coiling, wrapping, shrinking machine series	60
Testing machine for wire and cable	62
G The accessoires used in the cable factory	66
H The series material used for wire and cable producing	68
Follow the production and strict QC control	72
Commissioning and aftersales service	72



Production process design

Based on what kind of the cable you will do and based on the factory situation, our professional engineer could help you to do the production process design. And give you the professional consultant. Including: the power cable, the control cable, optical cables, telecom cables, rubber power cables, overhead wires, plastic power cables, cross-link power cables, lan cables.



One case for middle-voltage cable producing

Refer to the producing process design, based on the factory surrounding and the real situation, the professional RD team could assist you to do the factory artitecher design, structure design, including: water, air and power , lighting design. The service for the building up the steel fabrication , doing the foundation, assembling the workshop are all available here.



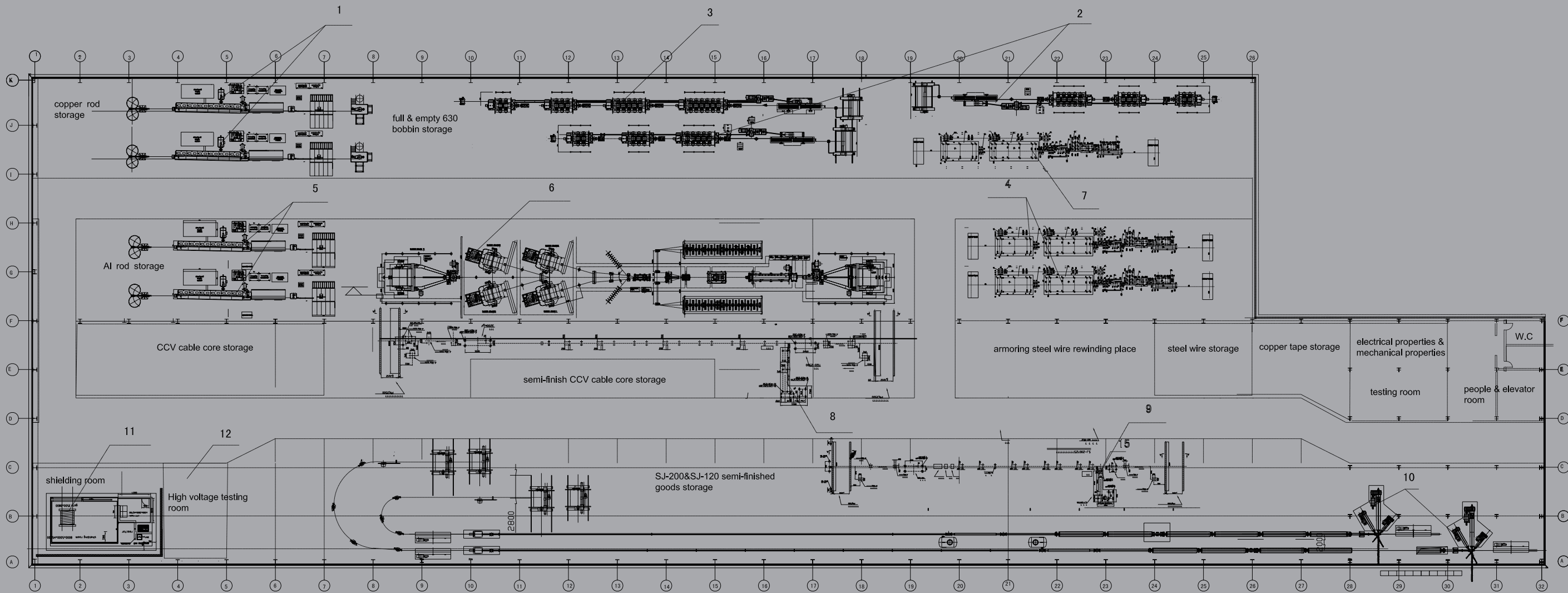
Semi-finished workshop



Steel fabrication



Assembling



Copper continuous casting and rolling line
Aluminum or aluminum alloy continuous casting and rolling line



Refining furnace



The line for Aluminum rod



Shaft furnace

General description

- The series equipment used for producing copper rod through melting, casting and continuous rolling process from the raw material of cathode or copper scrap.
- The series equipment used for producing Ø 9.5mm aluminum or aluminum alloy rod through melting, casting and continuous rolling process from the raw aluminum ingot.

The necessary information to fix the machine model

- What is the expected usual output per year?
- What is the raw material, cathode or copper scrap? What is the percentage? Aluminum or aluminum alloy?
- What is the fuel? Natural gas, lpg, lpo, fo, coal oil?
- What is the finished rod size?
 - for copper rod, max, Ø20mm,
 - for aluminum rod, max Ø15mm,
 - for aluminum alloy rod, max Ø12mm
- What is the final wire size?
- What the machine operation direction?
- What is the machine color?
- To use AC or DC control system is the option.
- Any special requirement for the parts, motor, bearing or electrical parts?

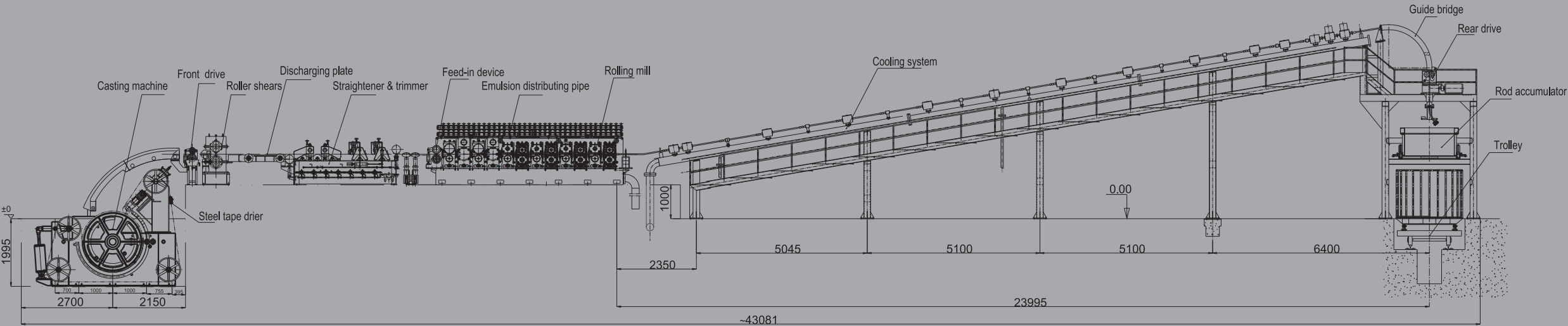
Produce the technological process for aluminum rod continuous casting and rolling production line

Feeding raw materials, melting and refining -holding furnacefilter and degassing device flumecasting ladle continuous casting (casting die)forward hauling casting ingot treatment unit (shearer, conveyor, straightening) induction heater-> rolling mill continuous rolling (aluminum rod refuel bag and leading pipe, rod quenching device)—backward hauling—dual taking —up basket (connection trolley) aluminum (aluminum alloy) rod coilerfinal products



Main technical parameter

Casting Equipment	Rolling Mill					
	Raw material	Type of rolling stand	No. of stand	Roller dia. (mm)	Finishing rod dia. (mm)	Max. Finishing speed (m/s)
Ø1800	Copper	2-roller	12	Ø270	Ø8	8.5
Ø1800	Copper	2-roller+3-roller	2+12	Ø255	Ø8	8.5
Ø1800	Aluminum	2-roller	12	Ø270	Ø9.5	9.6
Ø1800	Aluminum	2-roller+3-roller	2+12	Ø255	Ø9.5	6
Ø1800	Aluminum alloy	2-roller+3-roller	2+12	Ø255	Ø9.5	6



Upward continuous casting line



Take up device



Cathode



Scrap

General description

- This upward continuous casting system is used to produce bright and long oxygen-free copper rod, copper tube, flat copper bar and other special shaped copper material.

The necessary information to fix the machine model

- What is the annual production capacity?
- What is the raw material?
- What is the final products shape?
- What is the final rod quantity?
- What is the final rod diameter?
- What is kind of take up? Single layer or double layer?
- What is the normal working temperature to fix the type of cooling tower ?
- Cooling tower or cooling system is the option.
- The material to rebuild the furnace is the option.
- What the machine operation direction?
- What is the machine color?
- To use AC or DC control system is the option.
- Any special requirement for the parts, motor, bearing or electrical parts?

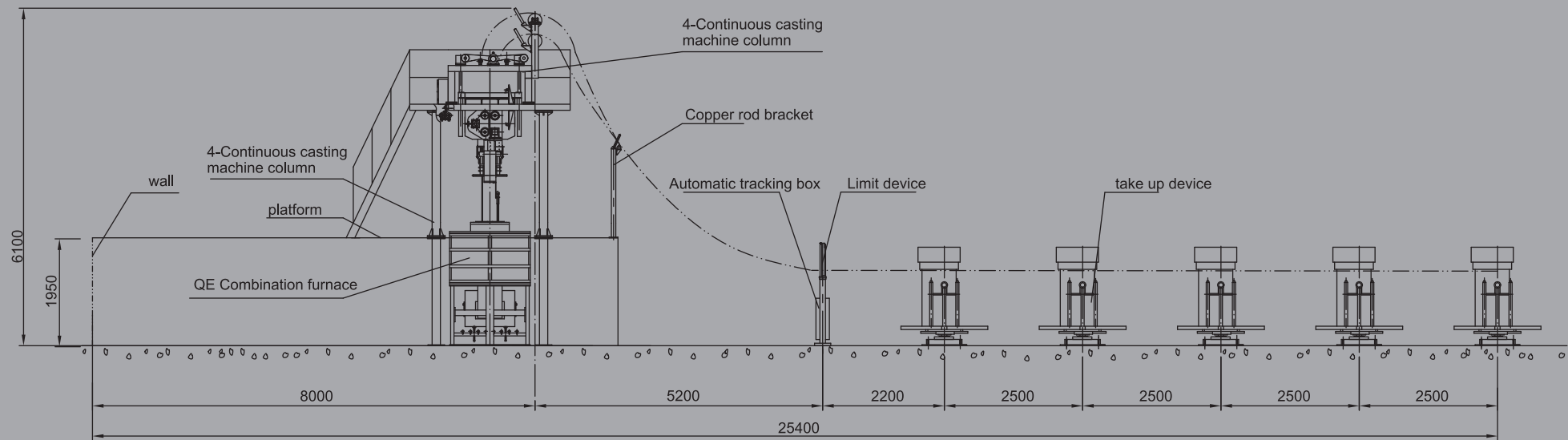
Main model type

Annual production capacity	1000T, 2000T, 3000T, 4000T, 5000T, 6000T, 8000T, 10000T.
The raw material	Pure copper, Silver-bearing copper, Magnesium copper, Brass, Phosphor copper and etc.
The final products shape	Round Rod, Round Tube, Flat Billet.
The final rod quantity	4-20pcs



Main technical parameter

Annual out put	5000(ton)	10000(ton)
Induction furnace	Triple furnaces combined	Triple furnaces combined
Casting strands	10 pcs	20 pcs
Rod Dia(mm)	Ø8-Ø17	Ø8-Ø17
Speed of draw-up(mm /min)	0-3000	0~3000
Annual operation time(hour)	8000	8000
Accuracy of the following the tracks of the liquid level(mm)	±2	±2
Specification of taking-up(mm)	Ø700×Ø1500	Ø700×Ø1500
Type of taking-up	Curvature auto-adjustment	Curvature auto-adjustment
Speed of melting copper(kg/h)	650	>1250
Consumption rate of melting copper(kwh/ton)	350	300 (full-loading with cathode)
Installed capacity (KVA)	450	800



Upward continuous casting line

Production (RMB) cost for 10000 tons of equipment
(producing one ton of oxygen-free copper rod)

SN	DESCRIPTION	Quantity	Unit / price / (RMB)	Total / (RMB)	Cost / Per ton / (RMB)
1	Power consumption	290°	0.70	203.00	203.00
2	Copper loss	0.3kg	60.00	60.00	18.00
3	Graphite mold	0.1pc	32.00	3.20	3.20
4	Insulation sleeve	0.1pc	7.00	0.70	0.70
5	Protective sleeve	0.1pc	35.00	3.50	3.50
6	Flake graphite	0.6 kg	25.00	25.00	15.00
7	Charcoal	6 kg	4.00	24.00	24.00
8	Thermocouple	two thermocouples a year;RMB11000.00/pcs			2.20
9	Labor costs	RMB200 per worker (including management fees); 2 workers per class; Work 12 hours per class			26.40
10	Maintenance materials	An average of 1 year maintenance; total 110,000.00			11.00
Total: Each production cost of one ton of oxygen-free copper rod (Reference price) about RMB 307.43, and the exchange rate for USD: RMB=1: 6.35					



Casting device



Given material



Copper rod

The preparation list before installation and commissioning

- Steel Operation plate
- Steel take up plate
- Cooling water system and all the pipes
- Wire and cable connection used inside the machine
- Air compressor, 2 cbm air storage tank and the air pipe
- Graphite flake
- Wooden charcoal



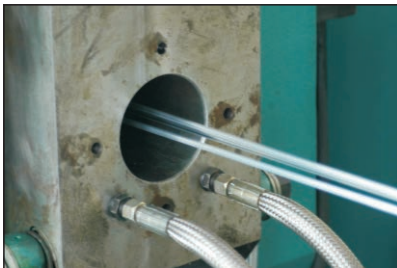
Aluminum continuous conforming line
Copper continuous conforming line



Aluminum continuous conforming line



One rod inlet



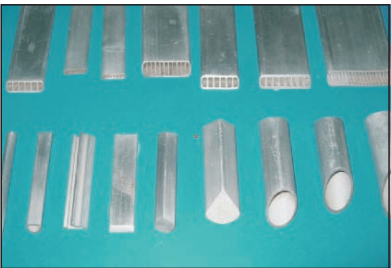
Wires out

General description

- The machine is used for producing Al and Al-alloy flat wires, irregular wires, aluminum bus-bar, aluminum tube, aluminum flat tube, ACS and AL clad cables Etc.
- The machine is used for producing copper, Al and Al-alloy flat wires, irregular wires, as well as copper bus-bar, copper tube, aluminum bus-bar, aluminum flat tube, ACS and AL clad cables Etc.

The necessary information to fix the machine model

- What kind of material you will produce copper or Alu ?
- The finished products section range, min. and max.
- The finished products max width.
- What is the annual capacity?
- The Automatic drawing bench machinery is the option.
- The Automatic on-line cutting machine is the option.
- The Winding machine is the option.
- The Pointing machine is the option.
- What is the machine color?
- AC or DC control system is the option.
- Any special requirement for the parts, motor, bearing or electrical parts?
- What is the machine operation direction?

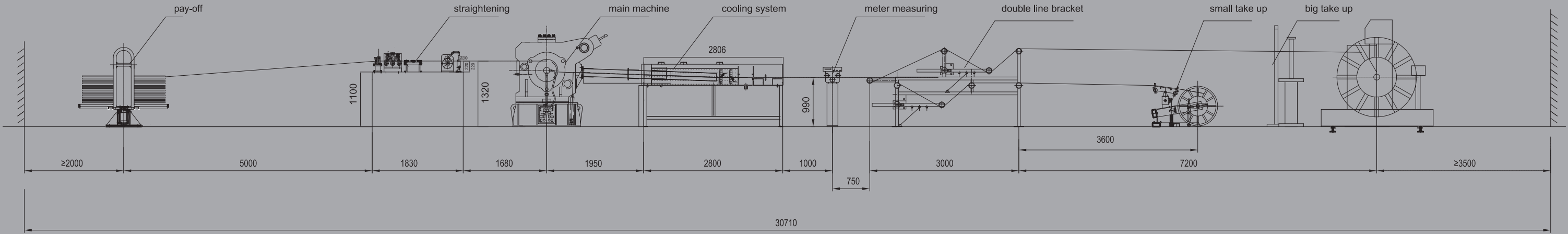


Final products



Main technical parameter for Alu continuous conforming line

T. P	Φ300mm	Φ350mm	Φ400mm	Φ450mm
Dia. Of the groove wheel (mm)	300	350	400	450
Max. Width of products (mm)	40	80	180	250
Section of product (mm²)	10-240	15-800	15-2400	15-2800
Dia. of tube (mm)	5-32	6-50	20-80	50-170
Thickness of tube (mm)	0.5-5	0.5-5	1.4-5	1.4-5
Output capacity (kg/h)	180	250-500	250-800	250-1000
Size of raw material rod (mm)	Φ9.5/12.5	Φ9.5/12.5	Φ12.5/15	Φ12.5/15



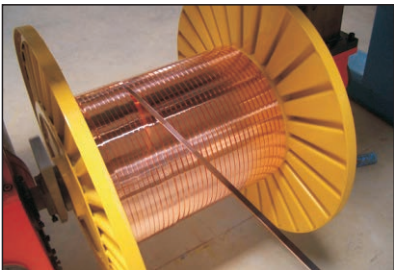
Aluminum continuous conforming line
Copper continuous conforming line



Final products



Extrusion showing



Take up device



Main technical parameter for Copper continuous conforming line

Dia. Of the groove wheel(mm)	Φ630	Φ550	Φ400	Φ350	Φ300
Max. speed(r/min)	8.5	8.5	14	14	18
The range to adjust the speed(r/min)	1-8.5	1-8.5	0-14	0-14	0-18
Main motor power(KW)	600	450	250	160	90
Installed capacity(KW)	650	500	285	185	115
Inlet raw material Dia.(mm)	Φ30	Φ25	Φ20	Φ16	Free oxygen Copper rod Φ12.5 alu rod Φ9.5
Section of the products(mm²)	Copper bus-bar 1000 ~ 6500	Copper bus-bar 300 ~ 5000	Copper bus-bar 100 ~ 2400	Copper bus-bar 20 ~ 800	Alu flat wire 5 ~ 150 Copper flat wire 5 ~ 200
Max width of the finished products(mm)	Copper bus-bar 320 Copper rod Φ110	Copper bus-bar 260 Copper rod Φ90	Copper bus-bar 170 Copper rod Φ80	Copper bus-bar 80 Copper rod Φ40	Copper flat wire 50 Copper rod Φ25 alu flat wire 26
Output capacity(kg/h)	3000	2000	1200	800	Copper 480 alu 180
Lose material rate(%)	5~8	3~5	3~5	1~3	copper1~3 alu 0.1~0.3
Installation area LxWxH(m)	30×7.5×3	30×7×3	30×6.5×3	25×6.5×3	25×6.5×3
Take up bobbin size(mm)	Φ1250-Φ2500	Φ1250-Φ2500	Φ1600	≤Φ1600	≤Φ1250
Main extruder weight(kg)	53000	45000	18000	11000	6500
Total weight(kg)	65000	57000	22000	18000	10500



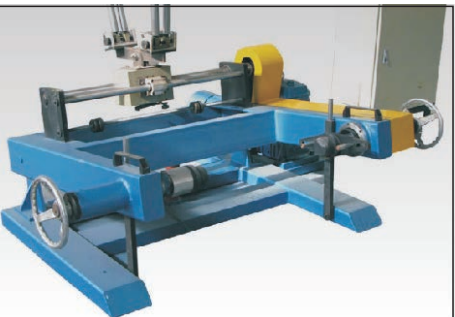
Automatic on-line cutting machines



The Automatic drawing bench machinery

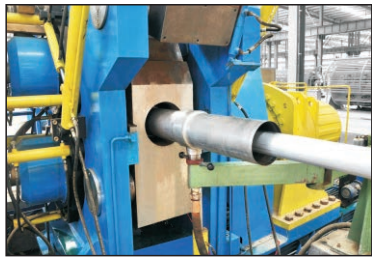


The Pointing machine



Winding machine

Continuous extrusion line for aluminum sheath



Main body



Hydraulic system



Main extrusion machine

General description

- The machine is used for seamless Al cladding for MV, HV or EHV power cable. For example, 350×2 Al tube cladding continuous extrusion line is mainly used for extrudingΦ9.5 Aluminum rod into Aluminum tube of or below Φ160mm and coating on the surface of cable, then through the corrugation unit to corrugate the aluminum tube as protection metal sheath for cable.

The necessary information to fix the machine model

- What is the inlet rod diameter?
- What is the Alu tube O.D?
- What is the Al Tube Thickness?
- What is the corrugating pitch?
- What is the corrugating depth?
- What the machine operation direction?
- What is the machine color?
- To use AC or DC control system is the option.
- Any special requirement for the parts, motor, bearing or electrical parts?

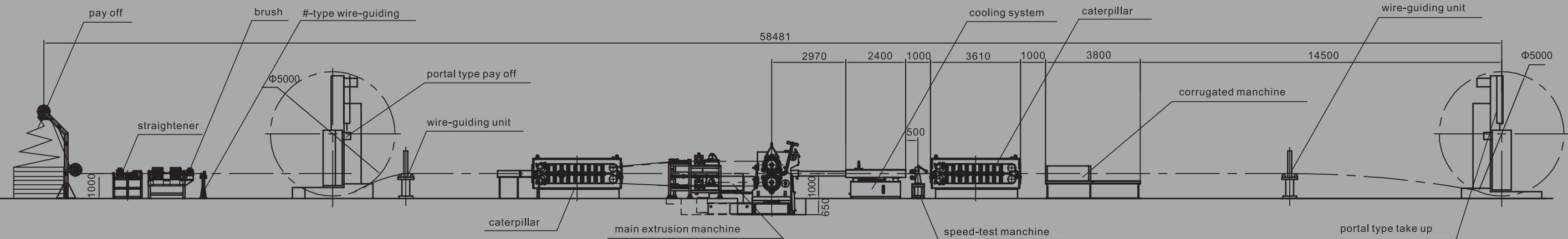


The whole production line

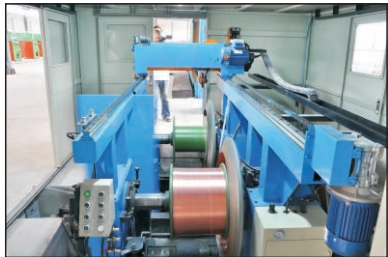


Main technical parameter

Description	Model no.	
Nominal Dia. of extrusion wheel(mm)	350	400
Inlet rod diameter(mm)	Φ9.5	Φ9.5
Alu tube O.D.(mm)	Φ65 ~ Φ150	Φ70 ~ Φ165
Al Tube Thickness(mm)	2 ~ 4	2 ~ 4
Corrugating pitch(mm)	10~50	10~50
Corrugating depth(mm)	2~8	2~8
Extrusion wheel Rotation(rpm)	0~15	0~15
Range of speed(m/min)	0 ~ 8	1.2~6
Average produce efficiency(kg/h)	250 ~ 500	250~500
Product line power(KW)	560	620



Copper rod breakdown drawing machine & annealer
Al rod breakdown drawing machine



Dual spooler take up



Wire package spooler take up



Coiler take up

General description

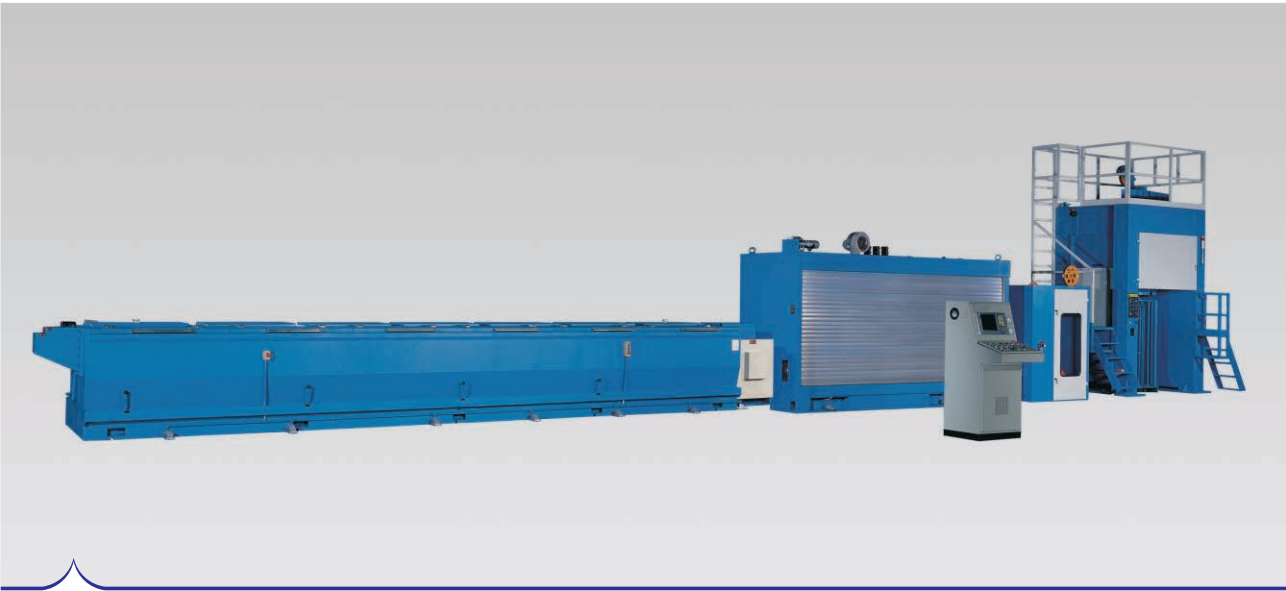
- The machine is used for drawing $\Phi 8$ copper rod, complete with continuous annealer, dual spooler or coiler.
- The machine is used for drawing $\Phi 9.5$ aluminum or al-alloy rod and $\Phi 12$ aluminum rod complete with continuous annealing, coiled by dual spooler or single spooler.

The necessary information to fix the machine model

- What is kind of raw material, copper, alu or alloy?
- It is single wire or double wire drawing?
- The outlet wire diameter range?
- What is the die holder size
- The drawing dies are the option parts and the material for the parts is: PCD. Diamond.
- The electrical welding machine is the option parts.
- The cooling tower is the option parts.
- The pointing machine is the option parts.
- The filter for the drawing liquid is the option parts.
- The coiler take up, the spooler for wire packages and pneumatic type double spooler is the option parts for the take up.
- What the machine operation direction.
- What is the machine color?
- Ac or dc control system is the option.
- Any special requirement for the parts, motor, bearing or electrical parts?

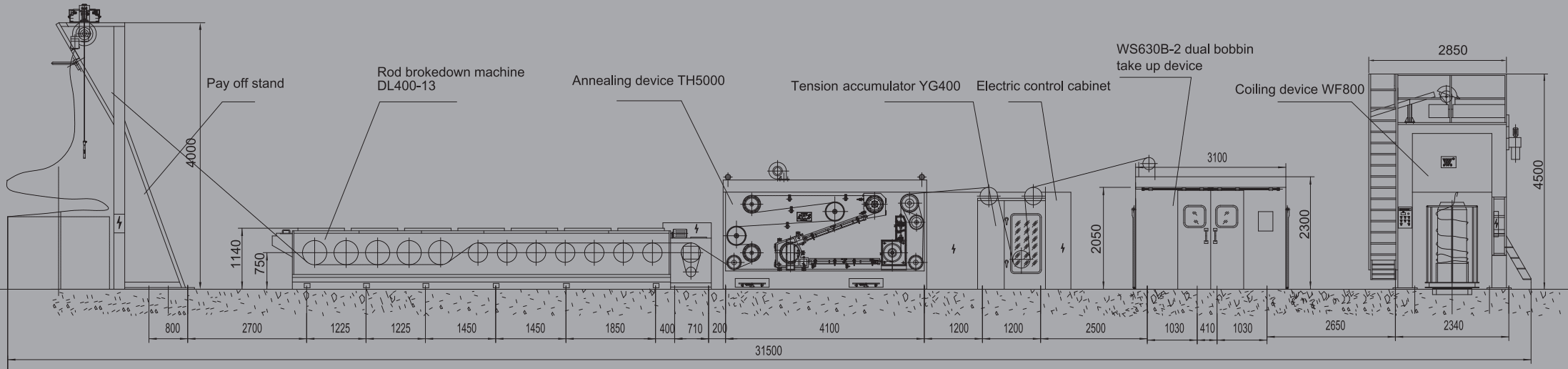


Copper powder filter device

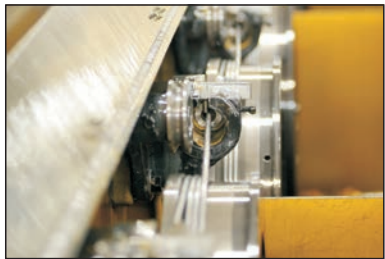


Main technical parameter for the drawing main body

Model	Single Cooper wire		Single Alu wire		Double copper wire	Double Alu wire
Max. No. of dies	9	13	9	13	13	13
Inlet Dia. range(mm)	$\Phi 8$	$\Phi 8$	$\Phi 9.5$	$\Phi 9.5$	2x $\Phi 8$ 1x $\Phi 10$	2x $\Phi 9.5$ 1x $\Phi 12$
Outlet Dia. range(mm)	$\Phi 2.0\sim 4.5$	$\Phi 1.2\sim 3.5$	$\Phi 2.4\sim 4.5$	$\Phi 1.6\sim 4.5$	2x($\Phi 1.2\sim 3.5$) 1x $\Phi 4.5$	2x($\Phi 1.2\sim 3.5$) 1x $\Phi 5$
Max. Mechanical speed(m/min)	1200	1500	1200	1500	1500	1500
Die holder size(mm)	$\Phi 55$	$\Phi 55$	$\Phi 53$	$\Phi 53$	$\Phi 50$	$\Phi 50$
Drawing main motor power(KW)	DC185 AC220	DC280 AC220	DC200 AC200	DC280 AC200	DC510	DC510
Capstan motor power(KW)	DC75 AC55	DC75 AC55	DC75 AC55	DC75 AC55	DC90	DC90
Annealing capacity(KW)	283	—	—	280	568	--
Mechanical elongation(%)	8-46	8-46	8-46	8-46	8-46	8-46



Copper rod breakdown drawing machine &annealer
Al rod breakdown drawing machine



Drawing capstan and dies



The drawing main body for Alu rod



Finished Alu rod coiler



Production speed

Description	Copper wire		Alu wire	Double copper wire	Double Alu wire	Elongation(%)
	TY	TR	TY	TR	TY	
1.20mm(m/min)	1200	1200	—	1200	—	18~25
1.60mm(m/min)	—	—	1200	—	1100	18~25
2.00mm(m/min)	950	90	1200	1000	1000	18~25
2.60mm(m/min)	850/1000	750		800	800	18~25
3.00mm(m/min)	700/800	600	1000	650	650	18~25
3.50mm(m/min)	500	400	—	400	400	18~25

Main technical parameter for the take up

Description	Wf800 spooler	WS1000 spooler	630-B-2 pneumatic type double-bobbin spooler
The take up wire range(mm)	Φ1.2~3.5	Φ2.0~3.5	Φ1.2~3.5
Max mechanical speed(m/min)	1500	1500	1500
Installed power(KAV)	22.75	45	48
Max take up capacity(kg)	AL500	AL600	AL150
	Cu1800	Cu2000	Cu500

The preparation list before installation and commissioning

- Foundation building accordingly to our foundation drawing and layout drawing
- Drawing die: depends on the wire size the clients needed. (At least one set, total 13pcs)
- Drawing liquid for drawing (At least 10 barrel, 180KG/barrel)
- Lubrication oil for die and gears (At least 2-3 barrel, 180KG/barrel)
- Cooling water
- PND bobbins (To take up the wires)
- Power supplier (depends on the machine total power and the factory whole power)
- Air supplier: prepare air compressor (1m3, 0.6Mpa)
- According to our Interlink drawing--issued with the instruction sheet to finish all kinds of pipe: compress air pipe, lubrication pipe, drawing liquid pipe, cooler water pipe is well prepared and assembled.
- Well lay all the power wire and cable used in equipment
- Copper Rod (Dia. is 8mm) Alu rod material (Dia. Is 9.5mm)
- Cold welder machine (One set to weld the broken wire)
- Traveling crane (Loading more than 10T, to install the equipment)
- Steel plate: 120mm*80mm*10mm 120mm*80mm*6mm 120mm*80mm*2mm (100pcs per size)--to make the equipment stable
- Turn buckle: 2 pcs
- One piece spirit level
- Hammer, crowbar, spanner, Etc...tooling
- Cement (to do the foundation and to improve the foundation)

Non-sliding type aluminum rod drawing machine (individual motor driven)



Back of drawing main body



Drawing capstan



Individual motor driven

General description

- The machine is mainly used for drawing $\Phi 9.5$ mm aluminum or alu-alloy rod into round aluminum single wire with different sizes or same section through different drawing drafts, and then coiled by dual spooler or single-spooler.

The necessary information to fix the machine model

- The inlet wire Dia. Is 9.5mm or 12mm
- What is the final wire Dia?
- The final wire is round wire or shaped wire.
- The drawing dies are the option parts and the material for the parts is: PCD, diamond.
- The electrical welding machine, the cooling tower is the option parts.
- What the machine operation direction?
- What is the machine color?
- AC or DC control system is the option.
- Any special requirement for the parts, motor, bearing or electrical parts?

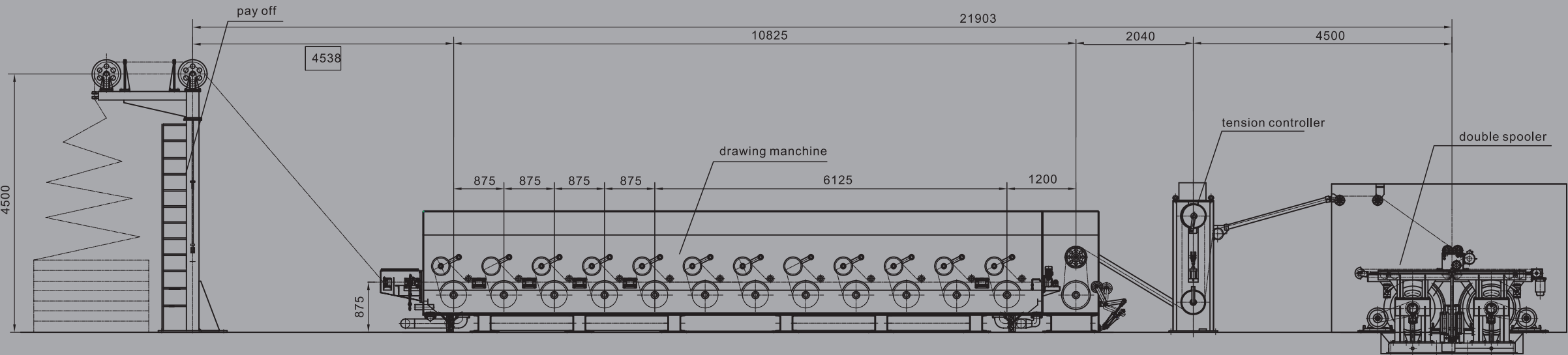
Main technical parameter

Inlet diameter(mm)	$\Phi 9.5$	$\Phi 9.5$
Intensity of aluminum rod(N/mm ²)	≤ 160	≤ 160
Outlet diameter(mm)	Aluminum: $\Phi 1.8 \sim \Phi 5.0$	Aluminum: $\Phi 2.2 \sim \Phi 5.0$ Shaped Wire: $\Phi 2.2 \sim \Phi 5.0$
Diameter of drawing capstan(mm)	$\Phi 450$	$\Phi 450$
Number of dies	13	11
Max. outlet line speed(m/s)	25(at $\Phi 1.8$ mm) 20($\Phi 3.6$ mm)	25(at $\Phi 2.2$ mm) 20($\Phi 3.6$ mm)
Accumulating length(m)	6	6
Take-up reel(mm)	$\Phi 630$ 、 $\Phi 500$	$\Phi 630$ 、 $\Phi 500$
Drawing motor(KW)	12 \times 30(AC inverter motor) 1 \times 75 (AC inverter motor)	10 \times 30(AC inverter motor) 1 \times 75(AC inverter motor)
Dual-wheel take-up motor(KW)	2 \times 30(AC inverter motor)	2 \times 30(AC inverter motor)
Coiler motor(KW)	15(AC inverter motor)	/
Total power(KVA)	530	455

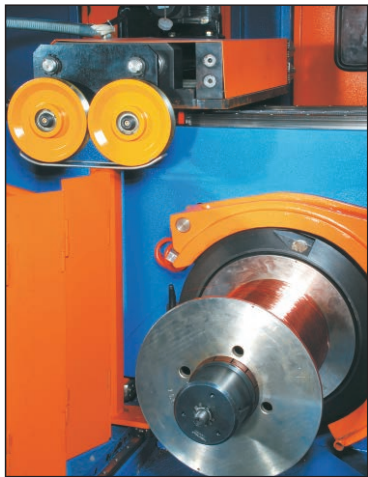


The preparation list before installation and commissioning

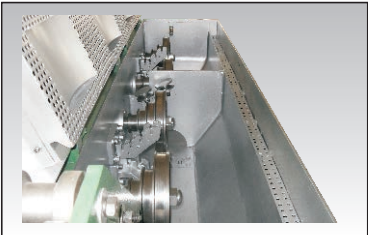
- Foundation building accordingly to our foundation drawing and layout drawing
- Drawing die: depends on the wire size the clients needed. (At least one set, total 13pcs)
- Drawing oil for drawing (At least 10 barrel, 180KG/barrel)
- Lubrication oil for die and gears (At least 2-3 barrel, 180KG/barrel)
- Cooling water/tower
- PND bobbins (To take up the wires)
- Power supplier (depends on the machine total power and the factory whole power)
- Air supplier: prepare air compressor (1m3, 0.6Mpa)
- According to our Interlink drawing—issued with the instruction sheet to finish all kinds of pipe: compress air pipe, lubrication pipe, drawing liquid pipe, cooler water pipe is well prepared and assembled.
- Well lay all the power wire and cable used in equipment
- Alu rod (Diameter is 8mm)
- Cold welder machine (One set to weld the broken wire)
- Traveling crane (Loading more than 10T, to install the equipment)
- Steel plate: 120mm*80mm*10mm 120mm*80mm*6mm 120mm*80mm*2mm (100pcs per size)—to make the equipment stable
- Turn buckle: 2 pcs
- One piece spirit level
- Hammer, crowbar, spanner, Etc...tooling
- Cement (to do the foundation and to improve the foundation)



Intermediate drawing machine with annealer



Take up spooler



Main drawing body



Single spooler take up

General description

- This machine is used to draw low oxygen or no oxygen round copper rod to copper wire, from $\Phi 0.4-2.76\text{mm}$. it is fully submersible drawing lubricant. This line is with tungsten carbide drawing cone, capstan. The machine is with high accuracy helical gear driven, short oil protection.
- The annealer is DC controlled, and automatic traces annealing, with steam/nitrogen protection.

The necessary information to fix the machine model

- What is the inlet wire Dia?
- What is the outlet wire Dia. Range?
- What is the die holder size?
- DC or AC control system is the option.
- With or with the annealing device is the option.
- Pointing machine is the option.
- Cold Welding machine is the option.
- Coiler, single spooler or dual spooler is the option.
- The machine color
- Any special requirement for the parts, motor, bearing or electrical parts?

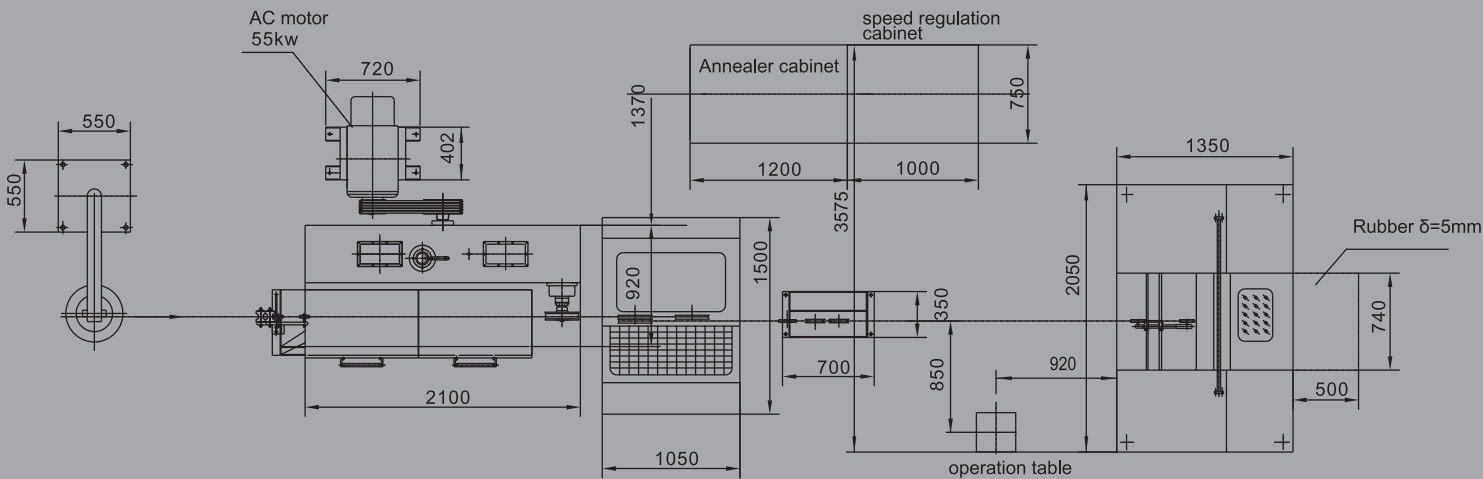
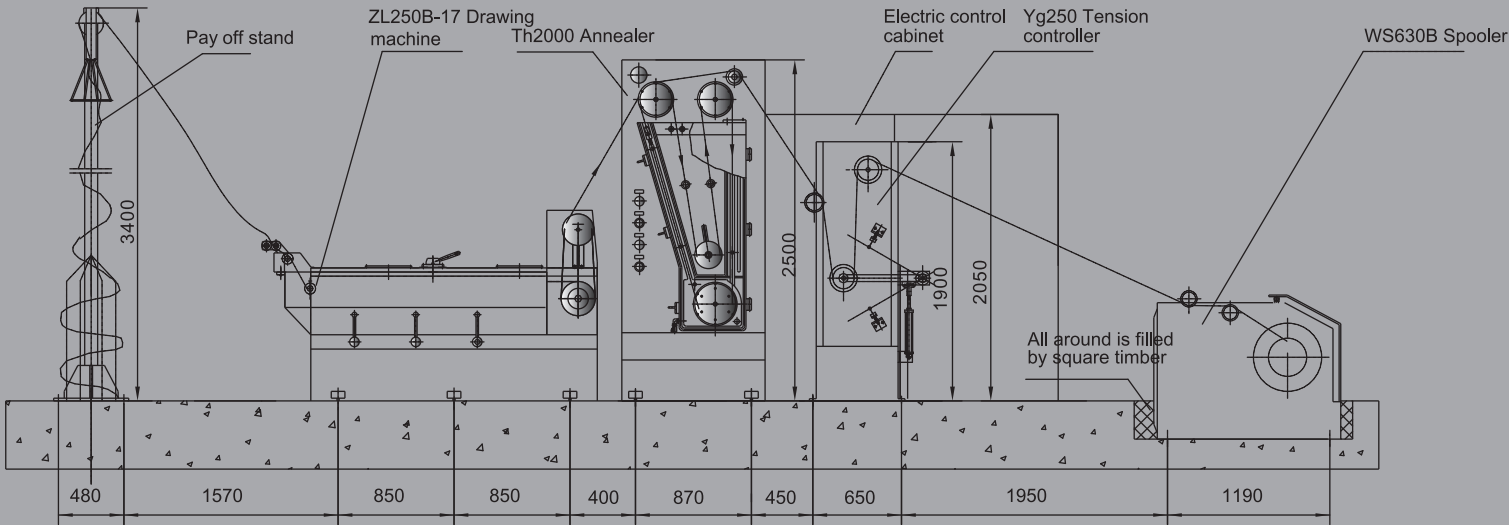


Whole production line



Production speed

Description	ZL250-17(m/min)		ZL250B-17(m/min)		ZL250B-13(m/min)		ZL280B-13(m/min)		Elongation(%)
	TY	TR	TY	TR	TR	TY	TR	TY	
0.40mm	1400	1400	—	—	—	—	—	—	18~25
0.50mm	1500	1400	1600	1500	—	—	—	—	18~25
1.0 mm	1200	1000	1300	1200	1400	1300	1300	1200	18~25
1.6mm	800	600	1000	800	1200	1000	1000	1000	18~25
2.0mm	—	—	600	500	800	500	600	500	18~25
2.5mm	—	—	—	—	500	300	350	350	18~25
2.76mm	—	—	—	—	—	—	300	250	18~25



Intermediate drawing machine with annealer



Dual spooler take up device



Main drawing body



Annealing device



Main technical parameter for the annealing device

Description	TH1000	TH2000	TH2000A	TH3000
The annealed wire range (mm)	Φ0.40~1.20	Φ0.40~1.60	Φ0.60~2.00	Φ1.00~2.76
Mechanical speed (m/min)	Max2000	Max2000	Max2000	Max1500
Annealing current (A)	0~1200	0~2000	0~2000	0~1500
Annealing voltage (V)	Max60	Max60	Max70	Max50
Annealing capacity (KVA)	84	173	195	195
Installed power of steam generator (kw)	9	9	9	9
Quantity of steam (kg/h)	12	12	12	12

Main technical parameter for main drawing body

Description	ZL250-17	ZL250B-17	ZL250B-13	ZL280B-13
Inlet diameter (mm)	MaxΦ3.00	MaxΦ3.50	MaxΦ3.50	MaxΦ3.50
Outlet Diameter (mm)	Φ0.40~1.60	Φ0.45~2.00	Φ0.80~2.50	Φ1.00~2.76
Mechanical speed (m/min)	Max1800	Max2000	Max2000	Max1500
Number of die	17	17	13	13
Outer Diameter of die (mm)	Φ25	Φ25	Φ25	Φ25
Mechanical elongation (%)	Last Die 18.6; Others 25		Last Die 13.38; Others 18.18	
Cone diameter (mm)	Φ250	Φ250	Φ250	Φ280
Capstan diameter (mm)	Φ250	Φ250	Φ250	Φ280
Main motor power (kw)	DC75 or AC55 (driven by inverter)			
Dimension of drawing unit (L*W*H) (mm)	2400x1250x1400			
Net weight (Kg)	3260			

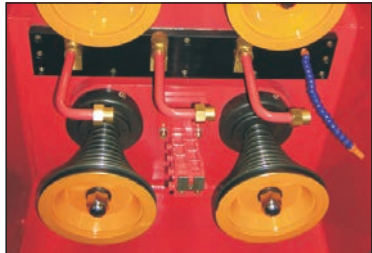
Main technical parameter for the take up device

Description	650mm coiler	Single spooler	Dual spooler
Take up wire range (mm)	Φ1.00~2.00	Φ0.40~2.00	Φ0.40~2.00
Mechanical speed (m/min)	Max1500	Max2000	Max1800
Capacity of spool (kg)	Max1000	Max 500	Max 500

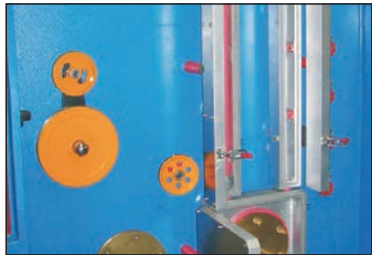
Fine wire drawing machine



Double wires fine wire drawing machine



Annealing device for double wires drawing machine



Annealing device for double wires drawing machine

General description

- The machine is used to drawing $\Phi 0.1-0.8\text{mm}$. Easy to maintain, simple to operate and low noise, high efficiency.

The necessary information to fix the machine model

- What is the inlet wire range?
- What is the outlet wire range?
- The annealing device is the option parts.
- The pointing machine is the option parts.
- The dies is the option parts
- The cold welding is the option parts.
- Single wire or 8 pcs wire drawing is the option.
- What the machine operation direction?
- What is the machine color?
- AC or DC control system is the option.
- Any special requirement for the parts, motor, bearing or electrical parts?

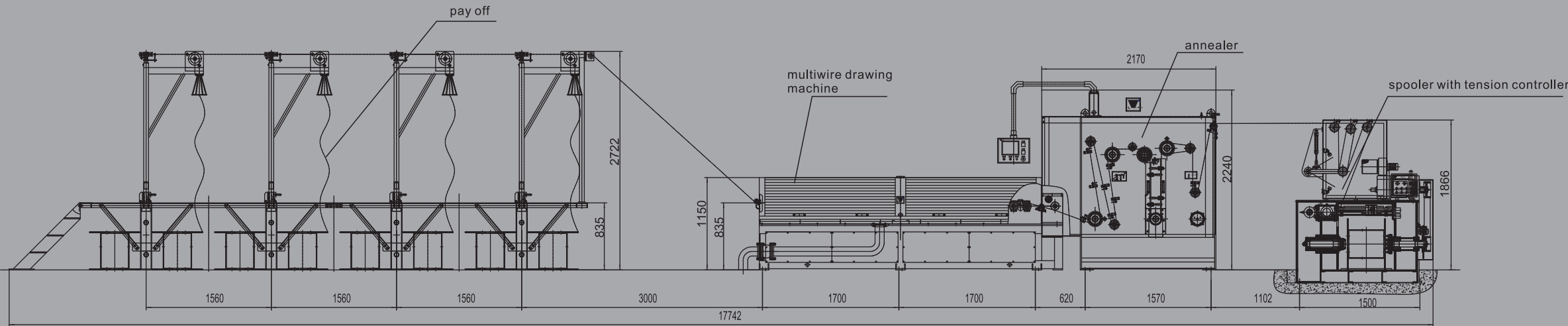
Production speed for the line without annealer

Wire Diameter (mm)	Wire speed (m/min)				
	BS22/BS22-2	B22/B22-2	BS24/BS24-2	B16-2	B18-2
0.08	—	—	—	—	—
0.10	2000	2000	2000	—	—
0.15	2200	2200	2200	—	—
0.20	2200	2200	2200	2200	—
0.25	2000	2200	2200	—	—
0.32	—	1500	1500	1800	—
0.40	—	—	—	1800	1500
0.60	—	—	—	1500	1100
0.80	—	—	—		700



Production speed for the line with annealer

Wire Dia. (mm)	Wire speed (m/min)		Elongation rate(%)
	TY (hard wire)	TR (Soft wire)	
0.10	1500	1000	15 ~ 20
0.15	2000	1300	15 ~ 20
0.20	2000	1300	20 ~ 25
0.32	1500	1000	20 ~ 25
0.40	1200	750	20 ~ 25
0.45	1000	500	20 ~ 25
2*0.15	1500	1200	15 ~ 20
2*0.20	1800	1500	20 ~ 25
2*0.35	1800	1500	25 ~ 30
2*0.50	800	800	25 ~ 30
1*0.60	1000	800	25 ~ 30



Fine wire drawing machine



Muti-wires fine wire drawing machine



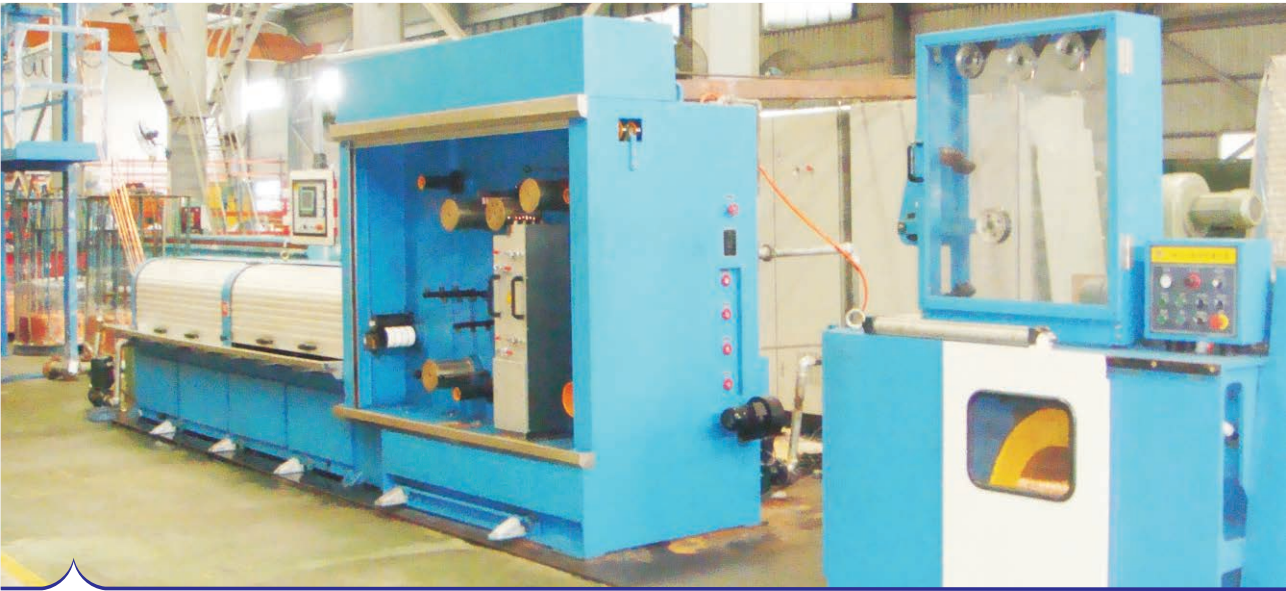
Muti-wires fine wire drawing machine



Annealing device

Main technical parameter for Single/Muti-wire fine wire drawing machine with annealer

Description	Single wire drawing machine			Double wires drawing machine	Muti-wire (8 wires) drawing machine
	BT22-2	BT24-2	BT18-2	BT18-2	DBT21-8
Inlet diameter (mm)	MaxΦ1.2	MaxΦ1.2	MaxΦ1.6	Single wire: MaxΦ2.05 (TR) MaxΦ1.83 (TY) Dual wire: MaxΦ1.6 (TR)	8xMaxΦ1.8
Outlet diameter (mm)	Φ0.10 ~ 0.40	Φ0.10 ~ 0.40	Φ0.20 ~ 0.45	Single wire: Φ0.15~0.6 Dual wire: Φ0.15~0.5	8x(Φ0.15~Φ0.40)
Mechanical speed (m/min)	Max2400	Max2400	Max2000	Max1800	Max1800
Drawing cone diameter (mm)	Max190	Max190	Max190	Max200	Max80
Capstan diameter (mm)	Φ150	Φ150	Φ200	Φ200	Φ100
Number of die	Max22	Max22	Max22	Max17	Max21
Mechanical elongation(%)	Last die 17.6 Other 15.4	Last die 8 Other 13	Last die 17.6 Other 15.4	Last die 18.6 Other 25	
Main motor power (kw)	15	15	15	18.5	90
Winding motor (kw)	3	3	3	3	37
Steam generator (Kw)	6	6	6	6	15
DC annealer current (A)	0 ~ 240	0 ~ 240	0 ~ 240	0 ~ 500	0 ~ 1500
DC annealer voltage (V)	0 ~ 50	0 ~ 50	0 ~ 50	0 ~ 50	0 ~ 53
Total power (kw)	41			63	260
Standard spool	PND300 or PND400			PND400	PND630
Suitable capacity of spool (kg)	Max. 100	Max. 100	Max. 100	Max. 100	Max. 500
Overall size of machine (mm)	2800x1550x2100	2800x1550x2100	2800x1550x2100	3160x1450x1850	2170x1015x2240
Net weight (kg)	4000	4000	4000	4100	2600
Traverse method	Line guide with screw shaft reversal device driven by an independent motor				
Wire cooling method	Fan Spray	Fan Spray	Fan Spray	Fan Spray	Fan Spray
Brake method	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic



Main technical parameter for Single wire fine wire drawing machine without annealer

Description	Specification				
	B22/B22-2	B24/B24-2	BS22/BS22-2	B16-2	B18-2
Max. Inlet diameter (mm)	Φ1.2	Φ1.2	Φ1.2	Φ1.6	Φ2.0
Outlet Dia. (mm)	Φ0.10~0.32	Φ0.08~0.32	Φ0.10~0.25	Φ0.20~0.60	Φ0.35~0.80
Max. mechanical speed(m/min)	2400	2400	2400	2400	2400
Max. drawing cone diameter (mm)	Φ190	Φ190	Φ190	Φ190	Φ190
Capstan diameter (mm)	Φ150	Φ150	Φ150	Φ200	Φ200
Number of die	22	24	22	16	18
Mechanical elongation(%)	17.6;last die 15	13.0;last die 8	17.6;last die 15	17.6;last die 15	17.6;last die 15
Main motor power (kw)	AC11	AC11	AC7.5	AC15	AC18.5
Winding motor (kw)	AC3	AC3	AC3	AC3	AC4
Suitable dimension Of spool (mm) (Out diameter X Barrel diameter X Hole diameter X stroke)	Φ300xΦ220xΦ125xΦ250			Φ400xΦ280xΦ125xΦ250	
Suitable capacity of Spool (kg)	50	50	50	100	100
Overall size of Machine (mm)	200x1300X1900	200x1300X1900	200x1300X1900	200x1300X1900	200x1300X1900
Net weight (kg)	2000	2000	2100	2200	2300
Traverse method	Screw shaft reduction device/Screw shaft slippery-rai traverse				
Wire cooling method	Spray	Spray	Spray	Spray	Spray
Brake method	Magnet	Magnet	Magnet	Pneumatic	Pneumatic

Rigid frame stranding machine



Individual motor control strander with side bottom loading device



Steel wire armoring



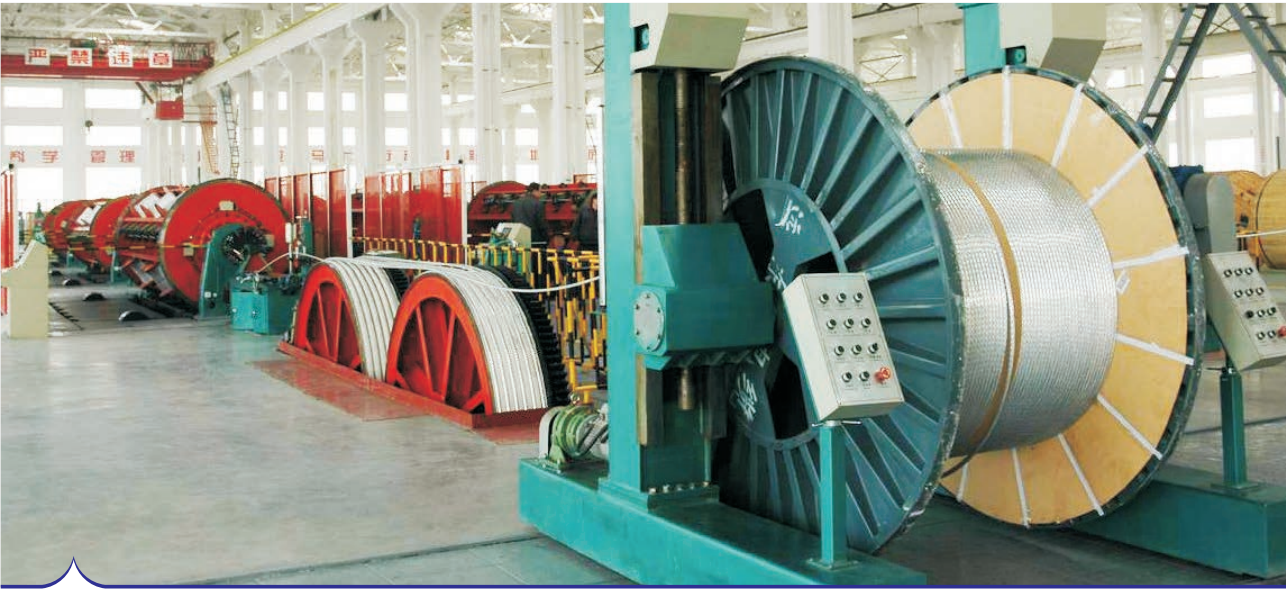
Shaped conductor stranding

General description

- The machine is used for stranding aluminum wire or copper wire, it also can be used for making round compacting, spiral sector compacting conductor, as well as pre- spiraling milliken conductor.
- The machine is used for stranding soft aluminum wire, semi-hard aluminum wire, aluminum wire, aluminum-alloy wire and ACSR, as well as S-type, Z-type, T-type expanded diameter conductor or other type wire.

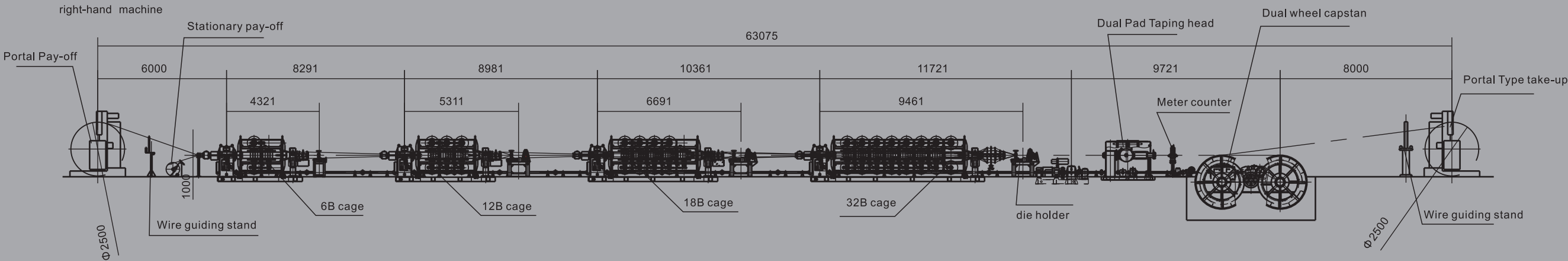
The necessary information to fix the machine model

- What is kind of material to produce, copper, alu, and alloy?
- Pay off wire dia. Range.
- What is the final conductor section?
- How many wires?
- Shaft control or separately motor control is the option.
- Non-metal tapping is the option.
- Pre-spiral device is the option.
- Ac or dc control is the option.
- Portal type/column type is the option.
- Steel wire armoring function is the option.
- Kind of protection cover is the option.
- Monitoring system is the option.
- The round or shaped conductor standing is the option.
- Hoist loading device is the option.
- Side loading or side bottom loading is the option.
- Three division or four division is the option.
- What the machine operation direction.
- What is the machine color?
- Any special requirement for the parts, motor, bearing or electrical parts?

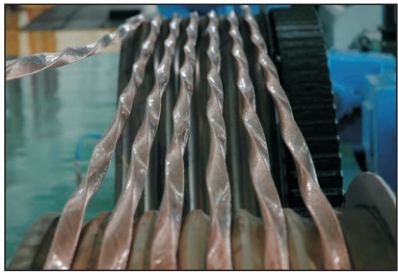


Main technical parameter

Description	500mm			630mm		
	37B	54B	61B	37B	54B	61B
Stranding single wire Dia.(mm)	Cu:Φ1.5 ~ 5.0 Al:Φ1.8 ~ 5.0	Cu:Φ1.5 ~ 5.0 Al:Φ1.8 ~ 5.0	Cu:Φ1.5 ~ 5.0 Al:Φ1.8 ~ 5.0	Cu:Φ1.5 ~ 5.0 Al:Φ1.8 ~ 5.0	Cu:Φ1.5 ~ 5.0 Al:Φ1.8 ~ 5.0	Cu:Φ1.5 ~ 5.0 Al:Φ1.8 ~ 5.0
Max. O.D of cable stranded(mm)	MaxΦ35	MaxΦ45	MaxΦ45	MaxΦ35	MaxΦ35	MaxΦ55
Stranding pitch (mm)	6B:49 ~ 629 12B:55 ~ 706 18B:62~791	12B:55~706 18B:62~791 24B:70~888	6B:47 ~ 816 12B:54 ~ 920 18B:61 ~ 1047 24B:70~1191	6B:41 ~ 575 12B:47 ~ 653 18B:53~739	12B:47~653 18B:53~739 24B:60~838	6B:41~575 12B:47~653 18B:53~739 24B:60~838
Haul off speed(m/min)	Max68	Max68	Max68	Max61	Max61	Max61
Main motor(KW)	55(DC)	75(DC)	90(DC)	90(DC)	132(DC)	185(DC)
Total power(KW)	67	90	105	105	155	200



Rigid frame stranding machine



Pre-spiral conductor stranding



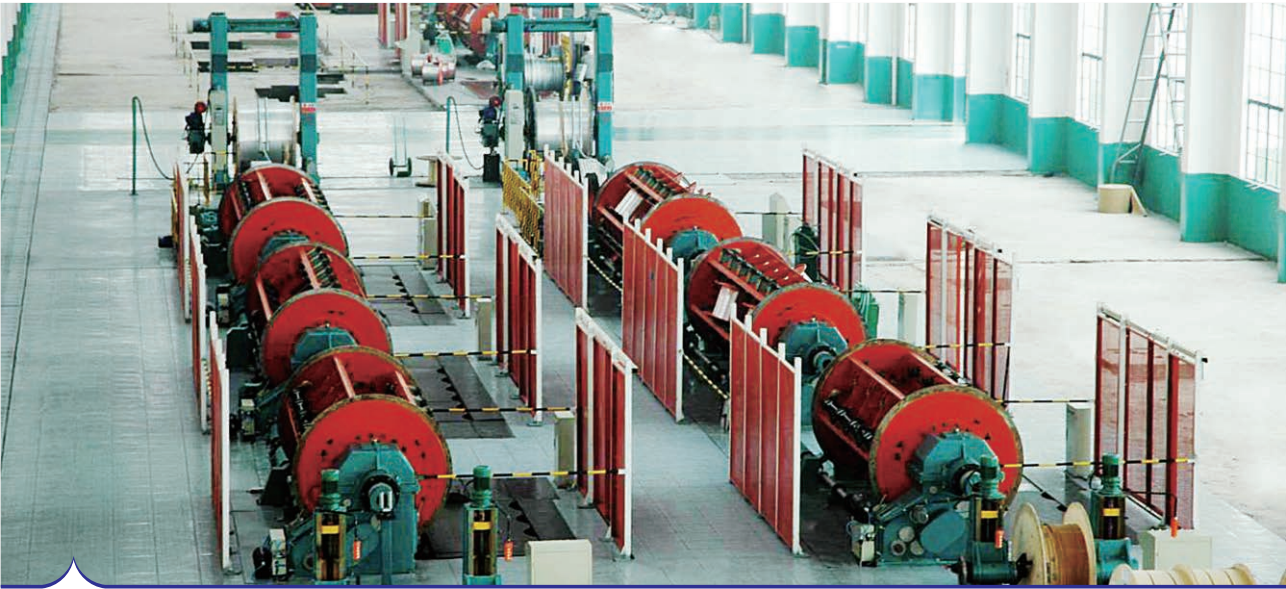
Side loading device



Hoist loading device

The preparation list before the installation and commissioning

- Foundation building accordingly to our foundation drawing and layout drawing
- Stranding die: depends on what kinds of conductor you will do—round one or sector one. For round conductor, there is 1pc after each cage.
For sector conductor, there is one set (2pcs) roll after each cage.
- Lubrication oil for gears box (At least 2-3 barrel, 180KG/barrel)
- Gear oil for capstan: Omega 73
- PND 630 bobbins with full wire (More than 122pcs)
- PND2000-2500 empty bobbin for take up (At least one or two pieces)
- Power supplier (depends on the machine total power and the factory whole power)
- Air supplier: prepare air compressor (0.8-1m3, 0.6Mpa)
- According to our Interlink drawing—issued with the instruction sheet to finish all kinds of pipe: compress air pipe, lubrication pipe, drawing liquid pipe, cooler water pipe is well prepared and assembled.
- Well lay all the power wire and cable used in equipment
- Cold welder machine (At least one set)
- Traveling crane (Loading more than 10T to assemble the equipment, to move the finished take up bobbins).
It is ok to prepare the left fork to move the take up bobbins with full wire.
- Steel plate: 120mm*80mm*10mm 120mm*80mm*6mm 120mm*80mm*2mm (100pcs per size)
- Steel wire: one line—diameter 1mm, length: 100-120m
- Turn buckle: 2 pcs
- One piece of spirit level
- Hammer, crowbar, spanner, Etc...tooling
- Cement (to do the foundation and to improve the foundation)



The production speed

Description	Pay off wire	6B Max rotated speed(rpm)	12B Max rotated speed(rpm)	18B Max rotated speed(rpm)	24 B Max rotated speed(rpm)	30B Max rotated speed(rpm)
500mm	Copper wire	242	199	175	153	153
	Alum wire	273	225	198	173	151
630mm shaft control	Copper wire	190	167	147	129	115
	Alum wire	215	189	166	146	130
630mm separately motor control	Copper wire	220	195	170	145	128
	Alum wire	325	290	250	215	185



Tubular type strander



Hoist loading device



Bow standing+tubular stranding



Preforma device

General description

- The machine is used for stranding copper, aluminum and steel wires, as well as steel rope.

The necessary information to fix the machine model

- The machine is based on roller support or bearing support?
- If it is based on bearing support, how many piece bearing is expected?
- What is pay off single wire dia.?
- What is the max-finished cable dia.?
- The loading system is the option.
- The welding machine is the option.
- Portal type/column type pay off and take up is option.
- Non-metal taping is the option.
- Grease heater device is the option.
- The straight device is the option.
- Different protection cover is the option.
- What the machine operation direction?
- What is the machine color?
- Ac or dc control system is the option.
- Any special requirement for the parts, motor, bearing or electrical parts?

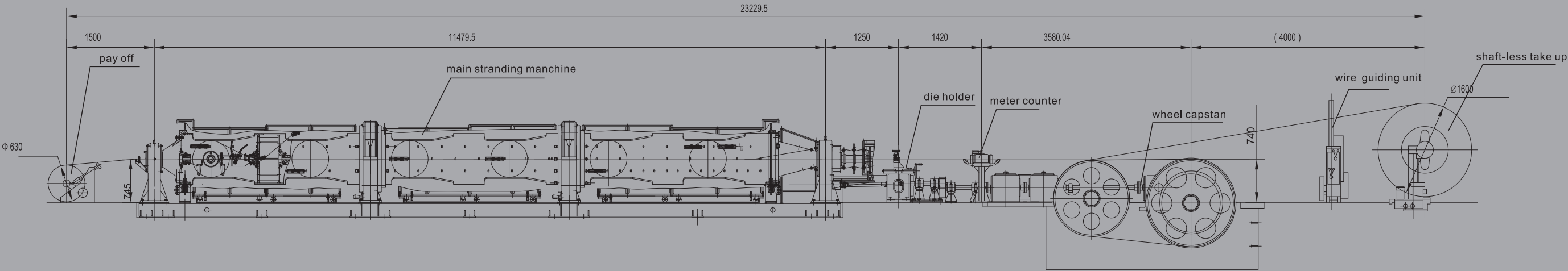
Main technical parameter

Bobbin size (mm)	Max rotated speed(rpm)				Single wire diameter(mm)		
	6B	12B	18B	24B	Aluminum	Copper	Steel
200	1500	1200	—	—	—	Φ0.2~0.8	Φ0.2~1.5
315	1200	1000	—	—	—	Φ0.3~1.0	Φ0.5~1.8
400	1000	800	550		Φ1.0~2.5	Φ0.6~3.0	Φ1.4~4.0
500	800	600	450	350	Φ1.3~5.0	Φ1.3~3.5	Φ1.8~5.0
560	700	500	400	300	Φ1.3~5.0	Φ1.3~3.5	Φ1.8~5.0
630	600	450	330	260	Φ1.3~5.0	Φ1.3~3.5	Φ2.0~6.0
710	400	300	—	—	Φ1.3~5.0	Φ1.3~3.5	Φ2.0~6.0
760	350	—	—	—	Φ1.3~5.0	Φ1.3~3.5	Φ2.0~6.0



The preparation list before installation and commissioning

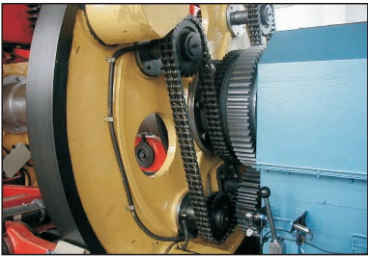
Items to be prepared	Description
Foundation building	Accordingly to our foundation drawing and layout drawing
Cooling water	The volume is 1.8m³ with water cooling system
Lubrication oil	For all gearbox: 30# mechanical oil (At least 10 barrel, 180KG/barrel)
Gear oil	For the open-type gear pair: Grease Omega 73#
Pay off bobbins	With full wire (More than 122pcs)
Take up bobbins	Empty bobbin for take up (At least one or two pieces)
Power supply	(Depends on the machine total power and the factory whole power)
Air supply	Prepare air compressor (0.8-1m3, 0.6Mpa)
According to our Interlink drawing--issued with the instruction sheet to finish all kinds of pipe: compress air pipe, lubrication pipe, and cooler water pipe is well prepared and assembled.	
Well lay all the power wire and cable used in equipment	
Traveling crane	(Loading more than 10T to assemble the equipment, to move the finished take up bobbins). It is ok to prepare the left fork to move the take up bobbins with full wire.
Hand tools	Hammer, crowbar, spanner, etc...



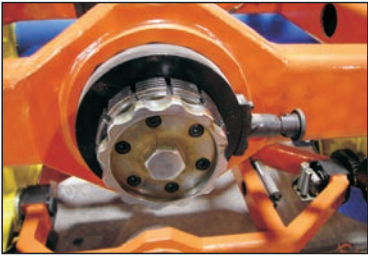
Planetary stranding machine with armoring



Individual motor control



Back twist device



Pintle

General description

- This equipment is suitable for the cable making of control cables, signal cables and special cables in various sizes, but also available to strand all kinds of flexible conductors.

The necessary information to fix the machine model

- It is shaft driven or individual motor driven?
- What is the single wire/conductor/cable diameter?
- If do the steel wire armoring, what is the cable size before armoring?
- The non-metal tapping, copper tape device, steel tape device.
- Filing rope device is the option.
- Portal type/column type pay off and take up is the option.
- Loading device is the option.
- What the machine operation direction?
- What is the machine color?
- Ac or dc control system is the option.
- Any special requirement for the parts, motor, bearing or electrical parts?

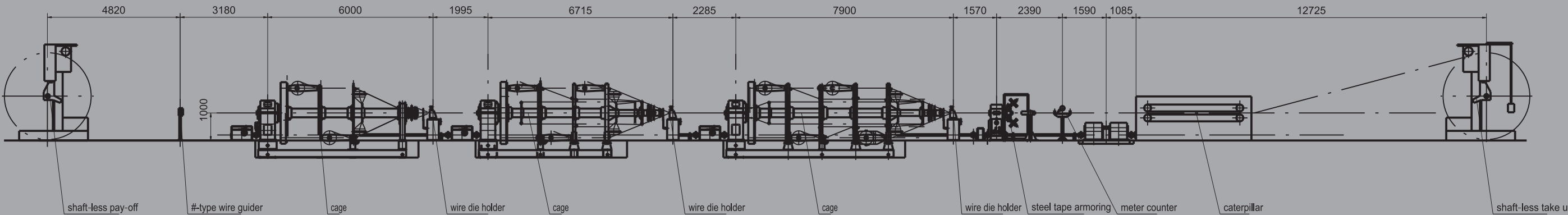
Main technical parameter for individual motor control type

Model		500	600
Dia of single wire (mm)	Copper	Φ1.5~5.0	Φ1.5~5.0
	Aluminum	Φ1.8~5.0	Φ1.8~5.0
	Insulated cores	Φ2.0~8.0	Φ2.0~10.0
Stranded conductor OD (mm)		Φ45	Φ50
Stranding pitch(mm)	6B	Step-less, adjustable	Step-less, adjustable
	12B	Step-less, adjustable	Step-less, adjustable
	18B	Step-less, adjustable	Step-less, adjustable
	24B	Step-less, adjustable	Step-less, adjustable
Rotating speed(mm)	6B	Max100	Max70
	12B	Max100	Max70
	18B	Max70	Max62
	24B	Max62	Max50
Stranding cage motor power (KW)	6B	45	75
	12B	55	90
	18B	75	110
	24B	90	132
Taping head	Rotating speed(r/min)	500	500
	Taping pitch (mm)	Step-less, adjustable	Step-less, adjustable
	Motor (KW)	11	11
	Haul speed (m/min)	Max51	Max42
Capstan	Haul speed (m/min)	Max51	Max42
	Motor (KW)	55	55



Main technical parameter for the shaft control type

Model		400mm	500mm	630mm
Dia of sigle wire (mm)	Copper	Φ1.5~5.0	Φ1.5~5.0	Φ1.5~5.0
	Aluminum	Φ1.8~5.0	Φ1.8~5.0	Φ1.8~5.0
	Insulated cores	Φ2.0~6.0	Φ2.0~8.0	Φ2.0~10.0
Stranded conductor OD (mm)		Φ35	Φ45	Φ50
Stranding pitch (mm)	6B	44~750	60~1020	75~1273
	12B	44~750	60~1020	75~1273
	18B	57~980	68~1159	85~1448
	24B	65~1108	78~1308	97.5~1647
Rotating speed (mm)	6B	68~162	50~118	33~78
	12B	68~162	50~118	33~78
	18B	52~124	44~104	29~69
	24B	46~109	33~91	2.5~6
Taping head	Rotating speed(r/min)	500	500	500
	Taping pitch (mm)	14~612	12~612	12~504
	Tape reel (mm)	Φ400xΦ40	Φ400xΦ40	Φ400xΦ40
	Tape width (mm)	15~60	15~60	15~60
Capstan	Haul speed (m/min)	Max51	Max51	Max42
Pay off reel in cage		PN400/PND400	PN500/PND500	PN630/PND630
Take up reel		PN1250~2500	PN1250~2500	PN1250~2500



Double twist bunching line



1100mm passive coiler take up



Guide wire wheel



Strander main body



Take up / capstan / transverse device

General description

- This machine is used for bare copper, alu wire stranding and PVC insulation cable and rubber insulation cable laying up.

The necessary information to fix the machine model

- What is the take up bobbin size?
- What is the inlet wire/conductor /cable diameter?
- What is the finished conductor /cable diameter?
- Active bobbin pay off, passive bobbin pay off, coiler pay off is the option.
- Shaft pay off or shiftless pay off is the option.
- The close dies are the option.
- The tapping device is the option.
- What the machine operation direction?
- What is the machine color?
- Ac or dc control system is the option.
- Any special requirement for the parts, motor, bearing or electrical parts?

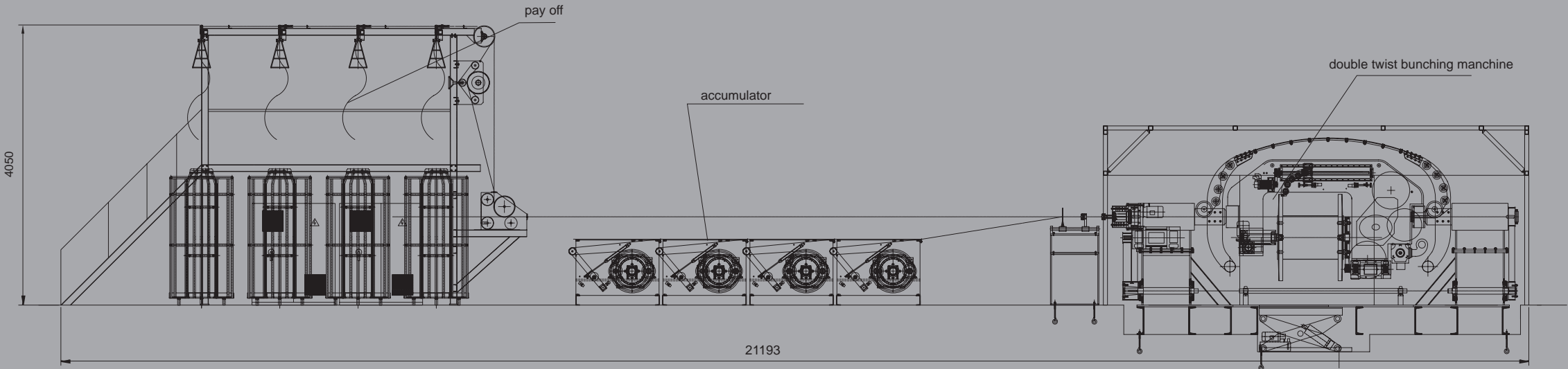
Main technical parameter for the pay off

Description	1100mm	630mm active	1250mm active
Pay off type	Passive, coiler	Active bobbin	Active bobbin
Pay off coiler/bobbin size (mm)	Φ1100×1860	630	1250
Suitable material	Naked copper wire, alu wire and tinned wire, silver plated wire	Copper, Tinning coating wire, silver coating wire, BV, BVR, LY	Copper, alu wire , PVC and rubber insulation, Tinning coating wire, silver coating wire, BV, BVR, LY
Pay off speed (m/min)	0-300	0-260	0-400
Tension range (N)	Constant pay off tension control system. Pneumatic adjust the tension	30-160	30-260
Loading/unloading the pay off	By crane	By crane	By crane
Loading capability (kg)	/	1000	4000



Main technical parameter for the strander

Description (mm)	630	800	1000	1250	1600
Inlet Alu wire Dia (mm)	0.18-1.05	0.3-1.2	0.52-2.12	1.0-2.50	1.0-3.1
Inlet Cooper wire Dia.(mm)				0.8-3.10	0.8-3.1
Inlet PVC insulation cable Dia.(mm)				1.5-5.2	2.5-8.0
Inlet Rubber insulation cable Dia.(mm)				2-6.8	4.9-50
Finished Alu conductor Dia. range	0.3-6mm ²	4-16mm ²	6-25mm ²	≤7mm	≤9.5
Finished Cooper conductor Dia. range				≤9mm	≤16
Finished PVC insulation cable Dia. range				≤16m	≤22mm
Finished Rubber insulation cable Dia. range				≤18mm	380mm ²
Max production speed	4000 twists	3000 twisting	2400 twists	2400 twists	300rpm
Transverse range	Online adjustment by the inner electrical parts	External cntrol, internal electrical line conditioning	Outer control, inner : online adjustment	Outer control, inner electrical adjustment on line	External control, internal electrical line conditioning.
Pitch adjustment	Adjusted in the program	Electronic adjustment	Electronic adjustment	Electronic adjustment	Electronic adjustment
Bobbin loading /unloading	Motor driven	Electric pallet handling movements	Electro-hydraulic	Lift by electro-hydraulic	Hydraulic or electrical
Motor power	Main motor: 15kW, Take up motor: 3kW Fan motor: 0.75kW	Main motor: 18.5KW DC motor Capstan motor: 15kW Take up motor: 11Kw Recover of wire electric motor: 5.5KW Fan motor: 0.075KW	Main motor: 45kW DC motor Capstan motor: 15kW Take up motor: 11Kw Transverse motor : 2.4kw Fan motor: 2*0.075kW	Main motor: 22kW Take up motor: 11KW Fan motor: 2*0.075KW	Main motor: 55KW DC motor Recover of wire electric motor: 37KW Row of line electric motor: 4.2KW Fan motor: 2*0.075KW
Take up bobbin size(mm)	630	800	1000	1250	1600



Drum twister with caterpillar & steel wire armoring



Sector conductor laying up



Steel wire armoring stand



Roller dies

General description

- This machine is used for cabling power cable of medium and low voltage and Milliken conductor or high voltage or extra high voltage: as well as for armoring with steel wire and steel tape or screening with copper wire.

The necessary information to fix the machine model

- How many cores laying up?
- What is the single core Dia. range?
- What is the final cable Dia. range?
- What is the final cable length limited?
- The steel wires armoring stand is the option.
- The steel wire detail is necessary.
- How many pcs steel wire armoring is the option?
- Filling rope pay-off is the option.
- The dies/roller to do the sector/round conductor/cable is the option.
- Non-metal tape, copper tape taping, steel tape tapping Is the option.
- What the machine operation direction?
- What is the machine color?
- AC or DC control system is the option.
- Any special requirement for the parts, motor, bearing or electrical parts?

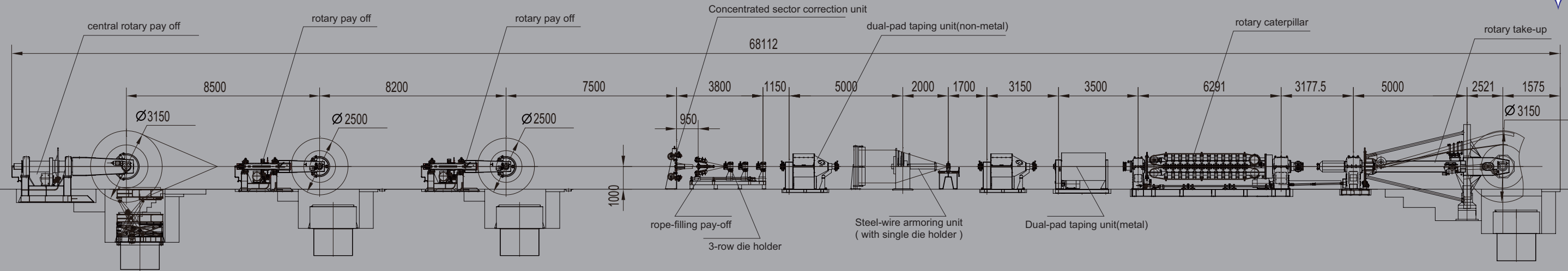


Rotated caterpillar



The Buyer's responsibilities during the commissioning period:

- Before the Seller's engineers arrive, the Buyer must install the Equipment and electric cabinets. No electrical power should be switched on.
- Do the foundation according to the foundation drawing and make all foundation hole clean and smooth.
- Put the parts into the foundation and measure each parts are in the center line and use steel plate to adjust the angle to make sure each part in center line.
- Prepare the installation and commissioning tools and materials:
 - Steel plate: based on 100mm*100mm and the thickness could be 10mm, 5mm, 2mm, 1mm.
 - Lifer or crane based on at least 10 tons capability.
 - Leveling instrument.
 - Vertical hanging.
 - Steel rope.



Drum twister with caterpillar & steel wire armoring

Main technical parameter

Take up bobbin size(mm)		2200	2500	3150	3500
Max. laying up OD(mm)		Φ25-Φ120	Φ25-Φ120	Φ25-Φ130	Φ25-Φ130
Max. rotating speed of drum twister and pay off stand (r/min)		33	33	21	18
Max. line speed of hauling-off(m/min)		50	50	33	28
Laying up pitch (mm)		200~5000Step-less,adjustable	200~5000Step-less,adjustable	200~8000Step-less,adjustable	200~8000Step-less,adjustable
Max. Haul-off force (kg)		6000	6000	6000	6000
Non-metallic taping device	Max. speed(r/min)	500	500	500	500
	Taping pitch (mm)	20~208	20~208	20~208	20~208
	Tape reel(mm)	Φ600~Φ80	Φ600~Φ80	Φ600~Φ80	Φ600~Φ80
	Tape width(m)	15-80	15-80	15-80	15-80
Metallic taping device	Max. speed(r/min)	300	300	300	300
	Taping pitch(mm)	20~305	20~305	20~305	20~305
	Tape reel(mm)	Φ200-Φ120	Φ200-Φ120	Φ200-Φ120	Φ200-Φ120
	Steel tape width (mm)	15-60	15-60	15-60	15-60
Central pay off stand		PN2200	PN2500	PN3150	PN3150
Pay off stand		PN1600	PN1600	PN2000	PN2500
Take up drum head size		PN2200	PN2500	PN3150	PN3500
Steel wire armoring specification (Optional)		PND500 PND630	PND500 PND630	PND500 PND630	PND500 PND630
Main motor power(KW)		45 AC inverter motor	45 AC inverter motor	45 AC inverter motor	45 AC inverter motor
Central pay off stand motor power		22 AC inverter motor	22 AC inverter motor	45 AC inverter motor	45 AC inverter motor
Pay off stand motor power		15 AC inverter motor	15 AC inverter motor	18.5 AC inverter motor	22 AC inverter motor
Traversing stand motor power		1.5KW AC	1.5KW AC	1.5KW AC	2.2KW AC
Take up stand motor power		5.5KW X2 DC/ 5.5KW X2 AC	5.5KW X2 DC/ 5.5KW X2 AC	6.7KW X2 DC/ 7.5KW X2 AC	6.7KW X2 DC/ 7.5KW X2 AC
Central height		1000	1000	1000	1000



The seller’s responsibilities during the commissioning period

- 1.The Seller should send skilled technicians to the Buyer’s factory to perform the commissioning.
- 2.The Seller will arrange the related engineers to commission as soon as receiving the notice from the Buyer, of which the Equipment should be installed completely.
- 3.When the engineers arrive at the Buyer’s factory, the following work must be done by the Seller:
Explain the technical documentation, drawings, and operation manual and equipment performance in detail.
- Check the line if mechanically in order.

● Check to ensure the electrical connections are in correct connection.

● Test the machine parts and electric components.

● Run the machine parts separately or together without load. And run-in the load until producing right cable



Cradle type laying up machine



Filling rope supporter



1+6 bobbins cage



Cradle type pay off stand

General description

- The machine is used for cabling medium low voltage cables, telephone cables, control cables or mining cables.
- This system is suitable for laying up the cables less than 7 cores with round or sector insulated cores.

The necessary information to fix the machine model

- The inlet single cable section or Dia.
- The final cable Dia. range.
- The finished cable length limited
- The rotated pay off and the column/portal pay off is the option.
- The non-metal tapping, copper tape tapping, steel tape tapping is the option.
- The loading device is the option.
- The column/portal type take up is the option.
- The filling rope supporter is the option.
- What the machine operation direction.
- What is the machine color?
- AC or DC control system is the option.
- Any special requirement for the parts, motor, bearing or electrical parts?

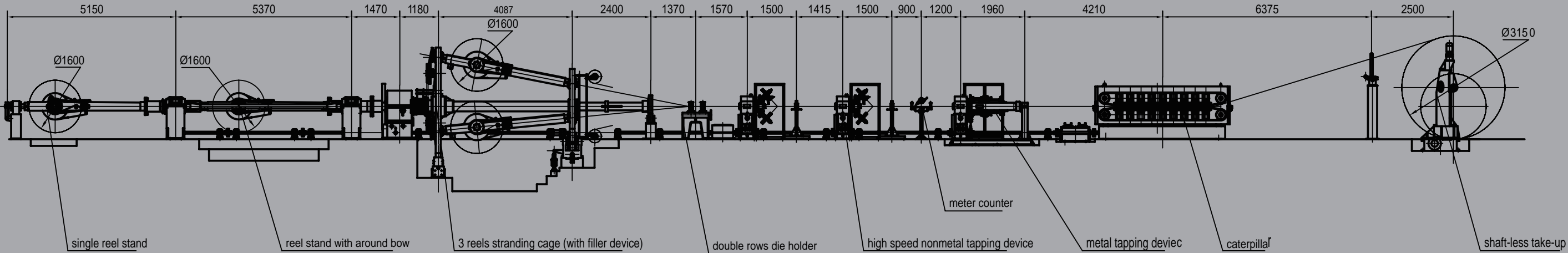


Finished cable
(Round/Sector conductor laying up)



Main technical parameter

Description(mm)	1000	1250	1600	2000
Wire cross-section (mm ²)	6-120	30-185	50-240	70-300
Stranding Dia. (mm)	≤Φ60	≤Φ80	≤Φ100	≤Φ120
Cage rotation (rpm)	14-33	9-12	6-14.6	4.3-10.2
Stranding pitch (mm)	180-3166	27-4898	324-5711	390-6800
Taping rotation (rpm)	174-387	171-380	175-390	170-380
Taping pitch (mm)	16-255	15-256	12-198	11-172
Armoring rotation (rpm)	148-340	151-338	148-330	143-320
Armoring pitch (mm)	18-288	17-289	14-234	12-203
Capstan wheel (mm)	Φ1600	Φ2000	Φ2350	Φ2500
Capstan line speed (m/min)	6-44	6-43	4.74-34.79	4-29
Bobbin in the cage	PN1000	PN1250	PN1600	PN2000
Central payoff bobbin	PN1000- PN1600			
Take up bobbin	PN1250- PN2000	PN1600- PN2500	PN2000-PN3150	
Main motor (KW)	30		45	55



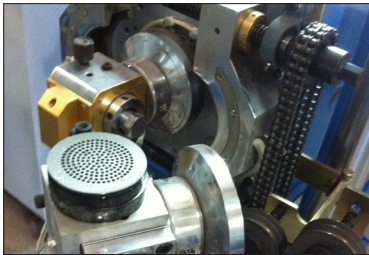
Extruder line



Screws



Heaters



Extruder heads

General description

- This machine is used for insulating or sheathing the wires and the cables. The material could be PVC, PE. And as the customer requires, this machine is ok to use material of LDPE, HDPE, XLPE, PP based on using the other screw.
- The machine is suitable for FPE, FPA, ETFE high temperature thermoplastic extrusion coating. Wire and cable production have temperature resistance, corrosion-resistant, wear-resistant properties.
- The machine suitable for extrusion Silicone rubber insulated, high temperature resistance properties, excellent dielectric properties, excellent resistance the weather, ozone and UV resistant performance is necessary for the cable production.

The necessary information to fix the machine model

- To do what kind of cable insulation or sheathing?
- What is the insulation or sheathing material needed?
- What is the inlet wire diameter range?
- What is the output cable size range?
- What is the expected line speed?
- Capstan haul off or caterpillar haul off is the option.
- Button control or touch panel control for the electrical system is the option.
- The pre-heated device is the option.
- Portal/column type pay off/take up is the option.
- Oil ink printer and inject printer is the option.
- Spark tester is the option.
- Diameter gauge is the option.
- Hydraulic shear is the option.
- Tips and dies is the option.
- What the machine operation direction?
- What is the machine color?
- To use AC or DC control system is the option.
- Any special requirement for the parts, motor, bearing or electrical parts?

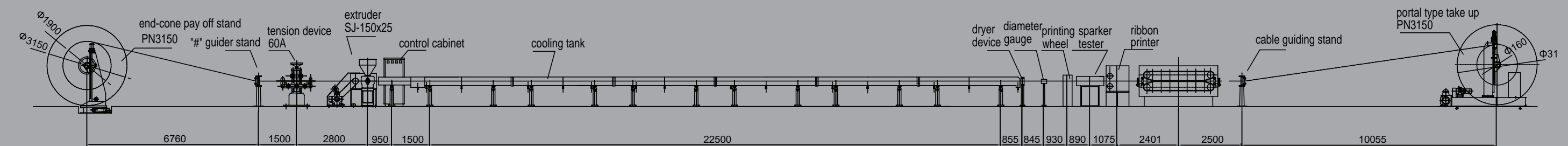


Main technical parameter for Fluoroplastic (High temperature) extruder line

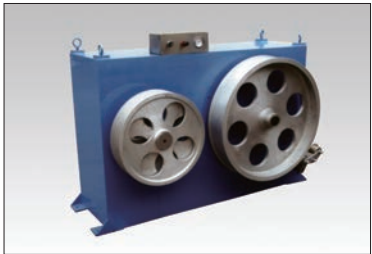
Description	30*25	45*25	65*25
Dia. Of screw(mm)	30	45	65
Length-Dia. ratio	25:1	25:1	25:1
Main motor power(KW)	7.5(AC/DC)	15(AC/DC)	30(AC/DC)
Heating type	Cast copper heating	Cast copper heating	Cast copper heating
Heating power(KW)	14	20	25
Max. Extruding Quantity(kg/h)	15	30	80

Main technical parameter for Silicone rubber extruder line

Technical parameter	65*12	90*12	120*12
Dia. Of screw (mm)	65	90	120
Length-Dia. Ratio (L/D)	25:1	25:1	25:1
Screw speed (m/min)	10-60	10-60	10-60
Driver power (KW)	15	30	45
Max. Extruding quantity (kg/h)	80	150	250
Inlet cable dia. (mm)	15	50	80
Insulation thickness (mm)	0.3~3	0.5~5	0.5~5
Produce speed (m/min)	10~100	10~60	6~40
Center height (mm)	1000	1000	1000



Extruder line



Wheel type take up



Pre-heater



Extruder head

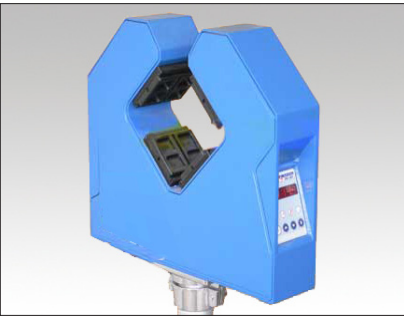


Main technical parameter for PVC/PE extruder line

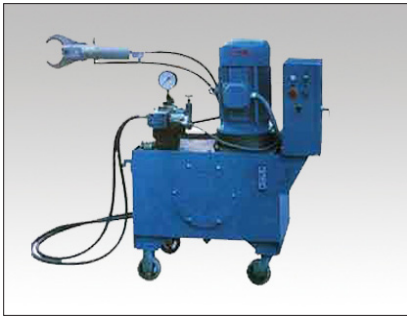
Description	45*25	65*25	90*25	120*25	150*25	200*25
Dia. Screw(mm)	45	65	90	120	150	200
Length-Dia. ratio	25:1	25:1	25:1	25:1	25:1	25:1
Screw speed(r/min)	10-110	10-105	10-90	10-80	10-70	10-60
Driver power(KW)	11(AC/D)	30(AC/D)	55(AC/DC)	132(AC/DC)	185(AC/DC)	315(AC/DC)
Temperature control segments (machine body/head)	3/2	4/3	5/3	6/3	6/3	9/4
Max. extrudingquantity (PVC) (kg/h)	50	130	280	420	820	950
Max. extrudingquantity (PE) (kg/h)	35	90	220	320	560	650
Max. extrudingquantity (XLPE) (kg/h)	35	90	220	320	560	650
Hall off type	Single wheel	Caterpillar pneumatic	Caterpillar pneumatic	Caterpillar pneumatic	Caterpillar pneumatic	Caterpillar pneumatic
Hall off force(kg)	300	500	800	1600	2500	2500 front capstan 3200 back capstan
Hall off speed(m/min)	6-150	6-90	6-80	6-80	6-50	6-50 front capstan 6-40 back capstan
Hall off motor power(KW)	4	5.5(AC/DC)	7.5(AC/DC)	7.5(AC/DC)	15(AC/DC)	15(AC/DC)
Hall off belt width(mm)	Capstan wheel Dia.500/700/ 800	80	100	120	160	160 front capstanand back capstan
Max OD of final cable(mm)	7.0	60	80	120	160	160 front capstan180mm back capstan
Take up stand type	Dual reel	Column	Column or portal	Column or portal	Column or portal	Column or portal
Take up bobbin size	PN400-630	PN1000- PN1600	PN1600-PN2500	PN1600-PN2500	PN1600-PN3150	PN2000-PN3500
Take up traverse type	Polish rod	Screw rod or polish rod	Screw rod	Screw rod	Screw rod	Screw rod
Dia. Of traverse shaft(mm)	30	50	60 or use portal type up	60 or use portal type up	75 or use portal type up	Use portal type take up
Take up motor power	2.5kg.m	4kg.m	6kg.m/7.5KW(AC/DC)	6kg.m/7.5KW(AC/DC)	8kg.m/7.5KW(AC/DC)	11KW(AC/DC)
Max. take up speed(r/min)	0-300	90	60	60	50	40
Max. loading weight(T)	0.5	6	10/12	10/12	12/15	25/30

The preparation list before installation and commissioning

Items to be prepared	Description
Foundation building	Accordingly to our foundation drawing and layout drawing
Concrete	For foundation building
Cooling water supply, electric supply and air supply	The cooling water should be recycle and to cool the cable. The electric supply should make sure all machines running in buyer customer, the power must be enough. The air supply: 0.3-1.0Mpa
Tools for clean the extruder	Knife, copper brush to clean the extruder device
Handle tools	Screwdriver, spanner, gradienter, hammers and so on.
Level material	LikeΦ1mm steel wire for make the machines in same centre h eight
Travelling crane or forklift	Loading weight more than 10T, to install machines
Lubrication oil	32# machine oil, for die and gears (At least 2-3 barrel,180KG/barrel)
Lubrication butter	For screw rod and bearings, butter should be anti high temperature.
Take up bobbins	Bobbins for take up machine, at least 10 pcs for each size
Pay off bobbins	Bobbins for pay off stand
Die	Depends on the cable size the clients needed. (At least one set to do the commissioning test)
Wires and cables	For installation and do wiring work according to the electrical drawing.
Pipes arrangement	According to the pipe layout drawing
Extruder materials	PVC compound
Extruder conductor as core	Copper or aluminum wires, copper or aluminum stranded conductor
Please contact the sales for the further information for maintenance and dies matching.	



Diameter gauge



Hydraulic shear



Spark tester

3-layer Co-extrusion CCV-line



Sag device

General description

- The production line is suitable for copper or aluminum wire core, making 6-35 KV voltage XLPE insulated cables. Arranging piping adopt the semi-hanging chain type, using crosslinking heating method, nitrogen cross-linked, water-cooled three-way cross-linking method were extruded production line, cross-linked structure of cable products meet the relevant standards GB/T12706-2002 or IEC Standard.

The necessary information to fix the machine model

- The total length of the workshop, the height and the width of the concrete main building for the extruder main body.
- The voltage and the section of the final cable.
- What is kind of cable will be produced; the CCV line is only used for power cable.
- The conductor material is Copper or Alu?
- The insulation material is XLPE.
- The X-ray thickness measurer from ZUMBACH or SIKORA is the option parts. The diameter gauge is the option parts.
- Monitor device is the option.
- High voltage testing system is the option parts.
- The machine color is necessary.
- Any special requirement for the parts, motor, bearing or electrical parts?



X-ray thickness measurer



The screws machining



Monitor device

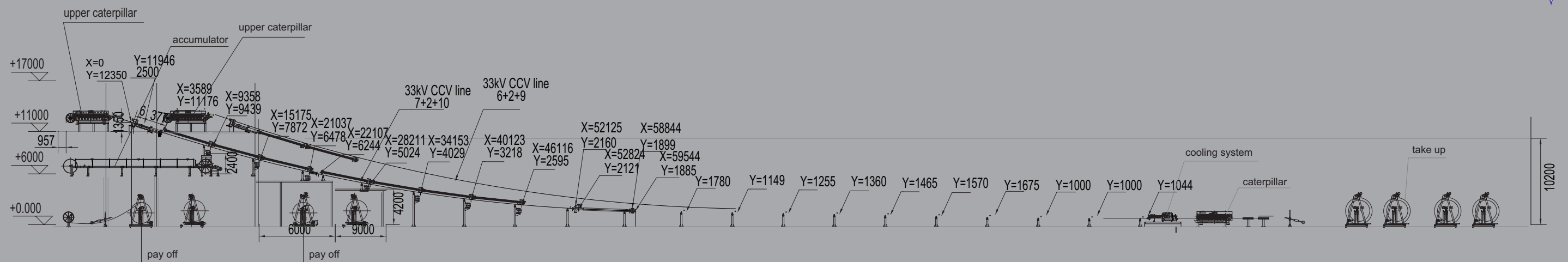


Accumulator



The preparation list before installation and commissioning

- Prepare the installation tools and material for electrical parts accordingly to our list.
- Prepare the installation tools for mechanical parts accordingly to our list.
- Prepare the assistant equipment accordingly to our list.
- Finish the foundation and main building built accordingly to our drawings.
- Prepare the recycle cooling water system, power supplier system, air supply system accordingly to the specification requirement.
- Prepare the material used for the production for bobbin, dies, materials etc... accordingly to our list.
- Please contact the sales for the further information for the preparation list based on different model no..



3-layer Co-extrusion CCV-line



Main technical parameter

Voltage class(KV)	XLPE 6-33	XLPE 35-132
Conductor cross section(mm ²)	Cu: 35-630 Al: 50-800	Cu: 50-1600 , Al: 70-1600 ,
Max. Weight of cable(kg/m)	10	25
Outer diameter of cable(mm)	≤Φ75	≤Φ90
Wall thickness(mm)	Φ65 extruder 0.5-2.0 for inner layer Φ150 extruder 2.5-10.5 for insulation layer Φ90 extruder 0.5-2.0 for outer layer	Φ80 extruder 0.5-3.0 for inner layer Φ175 extruder 10.5-20 for insulation layer Φ100 extruder 0.5-3.0 for outer layer
Length of vulcanizing tube(m)	≥102	≥114
Heating section length(m)	42 , 6 *6 sections	42 , 6 *6 sections
Pre-cooling section length(m)	12 , 6 *2 sections	12 , 6 *2 sections
Water cooling length(m)	54 , 6 *9 sections	66 , 6 *11 sections
Needed area of main platform (L*W)	≥24 m*18 m for one line ≥30m*24m for two lines	≥24 m*18 m for one line ≥30m*24m for two lines
Height of 3-platform(m)	≥10	≥16.5
Needed length of workshop (premises)	≥135 m	≥148m
Nitrogen gas (Mpa)/(m ³ /h)/(m ³)	Pressure:2.0-2.5 Mpa Purity: 99.5% Consumption:0.4-1.8 Volume of N2 tank: 5	Pressure:2.0-2.5 Purity: 99.5% Consumption:4-8 Volume of N2 tank: 8
Cooling water (Mpa)/(m ³ /h)	Pressure:0. 2-2 MPa Consumption: 12.5	Pressure:0.4-0.6 Consumption:15
Compressed air (Mpa)/(m ³ /h)	Pressure: 0.6-0.8 Consumption:0.8	Pressure: 0.6-0.8 Consumption:0.8
Installed capacity(KVA)	750 (Power voltage: 380V, 50HZ)	900 (Power voltage: 380V, 50HZ)
Two power incoming lines(mm ²)	3*185, 3*240	3*240, 3*240



Pay off stand



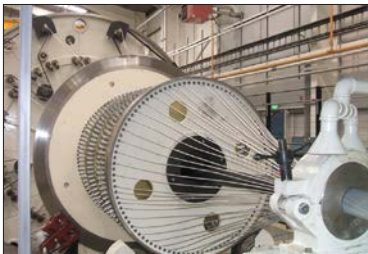
Accumulator



Cradle type steel wire armoring line



Tapping device



Steel wire armoring



Grease given device

General description

- The machine is used for armoring power cables with steel wire, stranding copper, alu wire and laying up cable with small size.

The necessary information to fix the machine model

- The max cable Dia. before steel wire armoring.
- The steel wire Dia.
How many steel wires armoring?
- What is the pay off bobbin size?
- The column/portal pay off/take up is the option.
- The non-metal tapping, copper tape tapping, steel tape tapping is the option.
- The loading device is the option.
- What the machine operation direction?
- What is the machine color?
- To use AC or DC control system is the option.
- Any special requirement for the parts, motor, bearing or electrical parts?

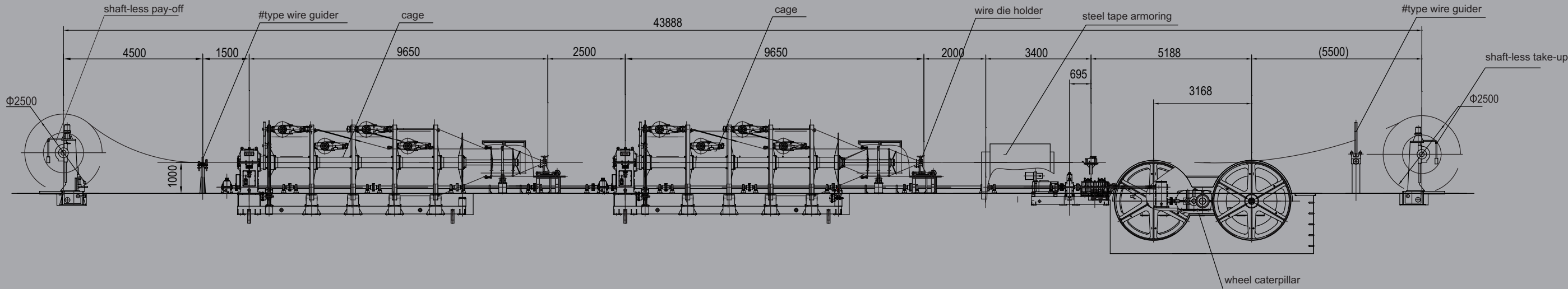


Close die stand



Main technical parameter

Description(mm)	315	400/12+18+24	400/36+36	500/48+48
Single wire Dia. (mm)	Φ0.8-Φ1.2	Φ0.8-Φ2.0		Φ0.8-Φ3.5
Stranding Dia. (mm)	≤Φ10	≤Φ55	≤Φ100	≤Φ130
Cage rotation (rpm)	199.4	118	44	38
Stranding pitch (mm)	100-300	63-1067	88-1499	116-2019
Capstan wheel (mm)	Φ1000	Φ2000	Φ2500	Φ2500
Capstan linear speed (m/mim)	3-30	4.85-35.6	3.8-28.2	4.4-32.3
Main motor (KW)	22	45	55	75
Bobbin in the cage	PN315	PN400/PND400	PN400/PND400	PN500/PND500
Central pay off bobbin	PN630/PN1250	PN1250/PN2000	PN1600/PN2500	PN2500/PN4200
Take up bobbin	PN1000/PN1600	PN1600/PN2500	PN2000/PN3150	PN2500/PN4200



Steel taping armoring and copper tape screening line



Copper tape device



Non-metal tape device



Steel/Copper tape rewinder

General description

- It is used for steel tape armoring and copper tape screening for middle and low voltage cable.

The necessary information to fix the machine model

- The cable size before armoring and before tapping,
- The I.D./O.D. for the steel tape.
- The I.D./O.D. for the copper tape.
- The pay off /take up bobbin size
- Portal type/column type pay off /take up is the option.
- The rewinding machine for the steel tape /copper tape is the option.
- What the machine operation direction?
- What is the machine color?
- To use AC or DC control system is the option.
- Any special requirement for the parts, motor, bearing or electrical parts?

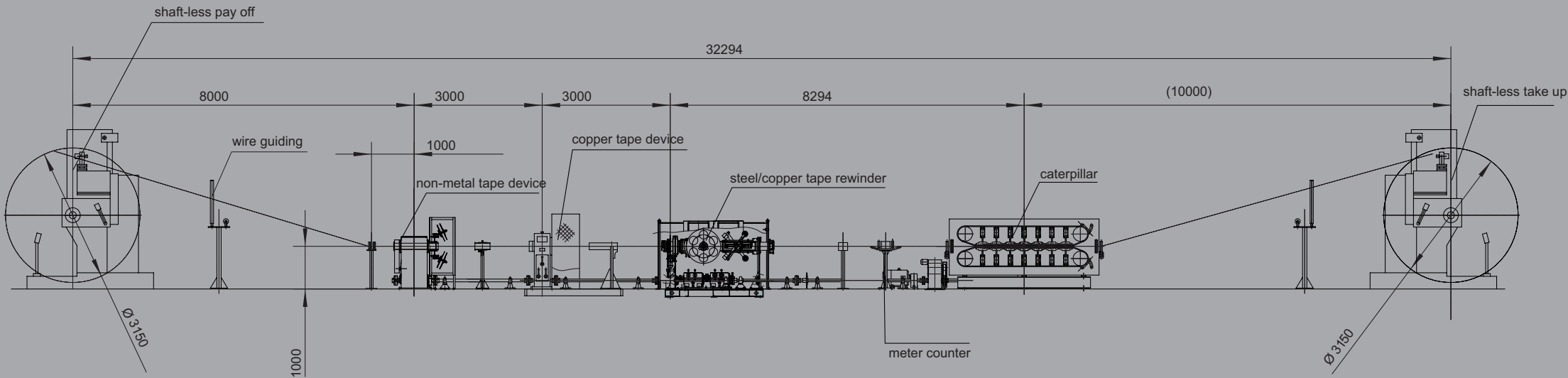


Whole production line



Main technical parameter

Suitable cable dia.(mm)	Φ20—Φ130
Non-metal tape size(mm)	Φ400/600×Φ75×(15-80)
Copper tape size (mm)	Φ600×Φ150×(20-60)
Steel tape size (mm)	Φ800×Φ120×(15-60)
Haul off speed	V≤25m/min (36 step speed adjusted)
Haul off	2500daN
Pay off size (mm)	PN1600-3150
Take up size (mm)	PN1600-3150
Motor power	11KW for tapping device
	18.5 KW for steel tape device
	15KW for caterpillar
	11KW for take up



Coiling, wrapping, shrinking machine



Semi-automatic high speed coiling machine



Automatic coiling and wrapping machine



Automatic cutting-sealing-shrinking machine

General description

- The whole line coiling machine is suitable for the following cable coiling:0.3-6mm², 1.0-25mm², 10-70mm², 50-240mm².
- Computer automatic coiling device could connect with the extruder directly for automatic coiling, and the suitable cable size is: Φ0.5-25mm.
- The wrapping machine is using the PVC, PE glue film and PP com knitting or knitting paper wrapping the cable coiler and it is also ok to use shrinking line to do the Plastic package.
- The Automatic shrinking machine (stainless steel) monomer or collective packaging for cable coiler.

The necessary information to fix the machine model

- For whole line coiling:
 - The whole line coiling or only the coiling machine connected with the extruder?
 - What is the cable Dia. range?
- For wrapping machine:
 - What is the wrapping material?
 - What is the finished coiling size? For example, I.D. O.D. Height.
- For shrinking machine:
 - What is the max weight for the shrink material?
 - The transmission belt or stock plate is the option after the shrinking tank.



Wrapping cable coiler

Main technical parameter for Semi-automatic high speed coiling whole line

	Small cross section		Middle cross section	Big cross section
Machine type	630	800	1250	2500
Pay off type	Shaft or shaftless self-tension pay-off		Shaft or shaftless self-tension pay-off	
Payoff bobbin size(mm)	Φ630	Φ800	Φ1000~1400(shaftless) ~Φ1250~1600(shaft)	Φ1000~1400(shaftless) Φ1250~2500(shaft)
Transverse type	Automatic traverse			
Coiler height (mm)	30~100	30~100	60~150	100~250
Rotated speed (r/min)	0~500	0~360	0~200	0~150
Coiler O.D.(mm)	MaxΦ310	MaxΦ400	MaxΦ650	MaxΦ800
Motor power (KW)	2.2	3.5	3.5 (Frequency control)	5.5
Coiler I.D. (mm)	Φ120	Φ120	Φ200 (According to drawing)	Φ20~350
Production capability	700 bundles of each class	400 bundles of each class	---	---
Suitable coiler range	BV / BVV / RV:0.3~6mm ² Extrusion type: BvvB Coaxial cable Extrusion type: BvvB Extrusion type: RVV / RVVP Extrusion type: extrusion outer diameters≤8mm	BV / BVV / RV: 1.0~25mm ² Extrusion type: BvvB Coaxial cable Extrusion type: BvvB Extrusion type: RVV / RVVP Extrusion type: extrusion outer diameters≤12mm	BV / BVV / RV: 10~70mm ² Extrusiontype :extrusion outer diameters≤20mm	BV / BVV / RV: 50~240mm ² Extrusiontype :extrusion outer diameter30mm



Main technical parameter for Computer automatic coiling device

	Micro-computer automatic coiling machine			
Model	*C0836	*C1246	C1860	C2480
Height outer (mm)	40~80	40~120	60~180	80~240
Diameter inner (mm)	Φ180~360	Φ200~460	Φ220~600	Φ300~800
Diameter total (mm)	Φ120~200	Φ140~220	Φ160~250	Φ200~300
Diameter winding (mm)	Φ0.5~8	Φ0.8~12	Φ2.0~20	Φ3.0~25
Speed(m/min)	500	500	350	300

Main technical parameter for Automatic wrapping machine

Model	HD70	HD100	HD120	HD140	HD180	D210
Height (mm)	30~70	50~100	70~120	70~140	90~180	100~210
Outer diameter (mm)	Φ200~360	Φ220~460	Φ220~460	Φ300~600	Φ320~600	Φ400~800
Single side (mm)	30~120	40~160	40~160	60~200	80~200	80~200
Inner diameter (mm)	Min140	Min150	Min160	Min180	Min200	Min250
Weight of packing Materials (kg)	Max25	Max35	Max40	Max100	Max150	Max200
Package material	PVC PE PP Pliofilm			PVC PE PP Pliofilm PP woven belt		
Material thickness (mm)	0.03~0.07	0.03~0.07	0.03~0.07	0.03~0.07 0.9~1.2	0.03~0.07 0.9~1.2	0.03~0.07 0.9~1.2
Material width	40~60	40~60	40~60	80~100	80~120	80~120

Main technical parameter for the Automatic sealing, cutting, shrinking line

Closure of All Forms of	L-shaped fully enclosed	Max film	530mm (W) x 280mm (OD)
Power supply	380V/50-60Hz/3phase	The total power	1.5kw
Maximum speed	35 packs / min	Platform height	780-850mm
Package Height	≤ 125mm	Atmospheric pressure	≤ 0,5MPa (5 Bar)
Package Width	≤ 350mm	PLC	Siemens S7
Use of film	POF on the folded membrane	The whole weight	350
Package Size	Width + height ≤ 400mm Length + height ≤ 480mm	The main material	Stainless steel
Sealing system	Temperature heating system, easy to replace the cutter, sealing and cutting do not smoke no odor		
Furnace size	1200mm (L), furnace port 450 (W) x 220 (H) mm	Power supply	380v, 50HZ
Conveyor	Chain conveyor, roller sets of silicone tube	Conveyor speed	Adjustable, 40 m / min
The total power	7KW	Platform height	780-850mm
The main material	Stainless steel	The whole weight	200kg

Testing machine for Low-voltage wire and cable

General description

- You could get the suitable proposal for kinds of testing machine for High-Middle-Low voltage cable.

The necessary information to fix the machine model

- Which standard you are following to test the machine?
- What is the cable voltage?
- What the machine operation direction?
- What is the machine color?



Cable fault testing machine



Physical property test machine



Digital measuring projector



High precision electronic densimeter



Aging Oven



Constant temperature water bath



Cable vertical flame tester



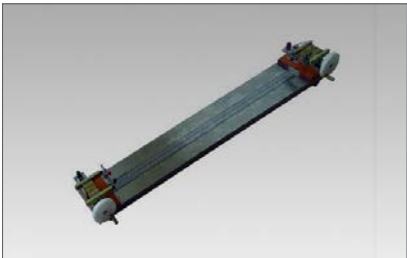
Conductor elongation tester



Cutter press



Sample buffing machine



General Conductor Resistance Clamp

Main technical parameter (IEC60502-1:2004 Testing instruments)

No.		Items	Name of instruments	Remarks
1	Type testing	15.2	YH-2230 conductors resistance tester	Digital, 1μω~2kω
	Type testing	15.2	qj57 double-arm bridge	Pointer, 0.01μω~1.11110kω
	Type testing	15.2	YH-8853x common conductors clmap jig	common:≤240mm2,clamping device: 200.00 a type:≤500mm2,clamping device: 200.00 0 b type:≤700mm2,clamping device: 200.00 c type:≤1000mm2,clamping device: 200.00
2	Type testing	15.3	YH-7155ax series high voltage tester 【2.5u0+2kv】	AC5kv/2a, rated voltage below 1kv AC15kv/2a, rated voltage below 5kv AC25kv/2a, rated voltage below 10kv AC35kv/2a, rated voltage below 15kv AC50kv/2a, rated voltage below 25kv
3	Sampling test	16.4	Conductors resistance tester	See items 15.2
	Sampling test	16.4	YH-8812wei universal material tester	Tensile,bend,compress and so on,≤ 5000n
	Sampling test	16.4	293-831 digital micromete	0.001~25mm
4	Sampling test	16.5	YH-3007 digital projectors	YH-3000 data processing system (optional)
5	Sampling test	16.6	293-831 digital micrometer 【narrow methods】	See items 16.4
	Sampling test	16.6	395-251sphere micrometer 【circle methods】	0.001~25mm
6	Sampling test	16.7	293-831 digital micrometer 【measure metal wire】	See items 16.4
7	Sampling test	16.8	YH-3007 digital projectors	See items 16.5
	Sampling test	16.8	500-196 digital caliper	0.01~150mm
	Sampling test	16.8	Measuring ruler	/
8	Sampling test	16.9	YH -8850 hot set device	/
9	Electrical testing	17.1~17.2	YH -8200 insulation resistance TESTER	Insulation resistance measuranc in ambient temperature and high temperature
	Electrical testing		YH-8727PB constant water tank	
10	Electrical testing	17.3	YH-7155GC high voltage tester	4h, 4U0 Voltage teseing(120KV-100mA)
11	Electrical testing	17.4	YH-7201XA impulse voltage tester	±100KV
12	Physical testing	18.1-18.2	YH-3007 digital projectors	See items 16.5
	Physical testing		YH-8812WEI universal material tester (10t)	See items 16.4
	Physical testing		YH-8812WEI universal material tester (2t)	
13	Physical testing	18.3-18.5	YH-8812WEI universal material tester (1000n)	/
	Physical testing		YH-8821 sample cutter	/
	Physical testing		DUMBBELL	I,II type each one piece
13	Physical testing	18.3-18.5	YH-8812WEI universal material tester (1000n)	/
	Physical testing		YH-8821 sample cutter	/
	Physical testing		DUMBBELL	I,II type each one piece
	Physical testing		YH-8821MG samples grinder	/
	Physical testing		YH-8821XP buffering tester	/
	Physical testing		YH-8821BP shaving tester	/
	Physical testing		YH-8736 nature air aging oven	200℃
14	Physical testing	18.6	YH-MARK-214 scale blance	200g/0.1mg
	Physical testing		DRYER	
15	Physical testing	18.7	YH-8849XGM high temperature pressure device	D≤50mm
	Physical testing		YH-8740 low temperature chamber	RT~-40℃ 210L
	Physical testing		YH-8825 low temperature impact tester	/
17	Physical testing	18.9	YH-8851 heat shock device	/
18	Physical testing	18.10	YH-8733Z ozone resistance aging chamber	150L
19	Physical testing	18.11	YH-8850 hot set device	See items 16.9
20	Physical testing	18.12	YH-8728 constant oil tank	/

Remarks: once a instrument appears, it will not appear in the following items.

Testing machine for Middle/High-voltage cable

- Used to the tests for cables and power apparatus
- Apply to lab. And field

Item	Details
35-350KV AC series resonant/partial discharge test system with shielded room	HV AC/PD Test System
	On-line diagram of the AC/PD test system for cables
	External form of the main equipments
Partial discharge detector/PD site locator	PD detector
	Digital PD detector
Impule voltage test system	Stage voltage 100KV series
	Stage voltage 200KV series
High performance EM shielded room series	/
Cable test termination	Deionized water termination
	Oil terminal
Heavy current generator/cable heating cycle test device	Heavy current generator
	Cable heating cycle test device
Tgδ measuring instrument/SF6 standard capacitor	Tgδ measuring instrument
	SF6 standard capacitor

Item	Details
AC test equipment series	/
Frequency modulated HV resonant test device	Heavy system
	Movable device
Partial discharge detector/PD site locator	PD detector
	Digital PD detector
Tri-frequency test device/DC test device	Stage voltage 100KV series
	Stage voltage 200KV series
Tgδ auto-measuring instrument/ digit KV meter	Deionized water termination
	Oil terminal
Characteristic parameter test devices	Heavy current generator
	Cable heating cycle test device
	Tgδ measuring instrument
	SF6 standard capacitor

You are free to contract the sales for further proposal based on your own situation.

Tgδ measuring instrument/SF6 standard capacitor



Dissipation Test Instrument



SF6 Standard Capacitor

AC test equipment series

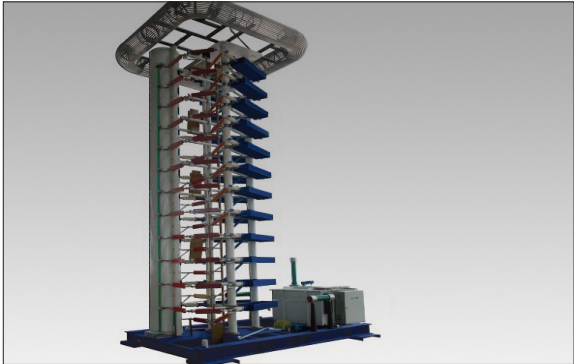


JTCX-1200kV/3600kVA Resonance test system (epoxy type reactor)



JDF-5 and control system

Impulse voltage test system



CJDV-2400kV/360kJ Impulse voltage generator



CJDV-2400kV/360kJ Impulse voltage generator

Partial discharge detrctor-PDsite locator



JDF2010(5) PD detrctor



JDF-5 and control system

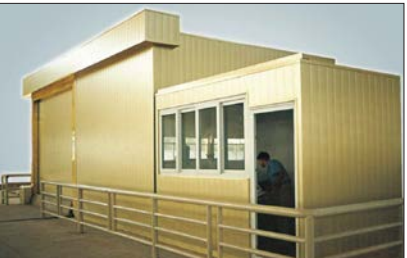
High performance EM shielded room series



Shielded room for 110kV cables(High Volt equipments)



Shielded room for 220kV cables(High Volt equipments)

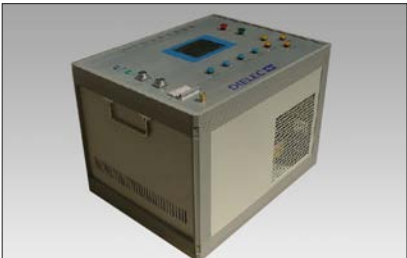


Shielded room for 35kV cables(High Volt equipments)

Frequency modulated HV resonant test equipment



Movable device



Movable device

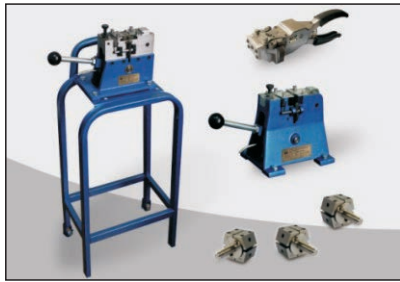


Heavy system

The accessories used in the cable factory



Butter welder



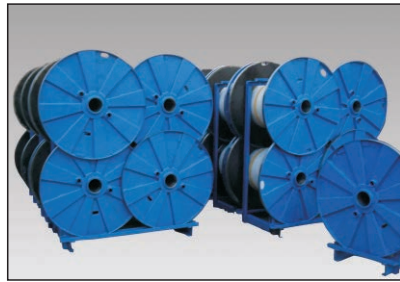
Cold welder



Cooling tower



Fork lift



Bobbin



Cable sample



Copper powder filter device



Coiler take up



Coiler basket



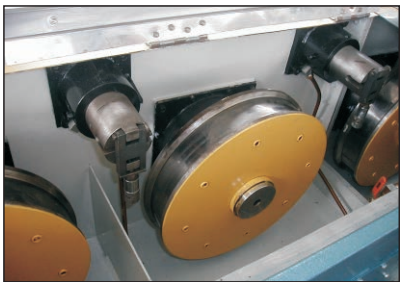
Air compressor



Crane



Steel tube cutter



Drawing capstan



Drawing dies



Roller dies



Kinds of cables



Ceiling fans



Workshop fans



Tips and dies



Inject printer



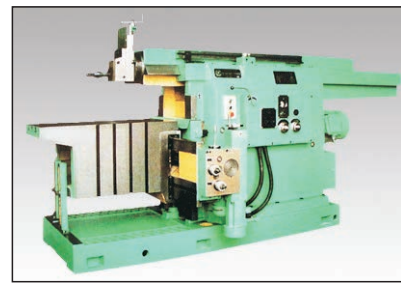
Oil ink printer



Lathe for maintenance



Milling machine for maintenance



Planning machine for maintenance



Touch panel



Timing belt



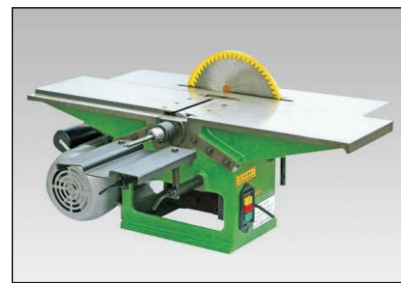
Power generator



Drilling machine for miantainace



Wooden working machine for wooden bobbins/plate



Wooden working machine for wooden bobbins/plate

The series material used for wire and cable producing

General description

- We offer the tape series material, filling series material and cable materials used in the wire and cable producing.

The necessary information to fix the machine model

- What is the Thickness?
- What is Weight?
- What is the Tensile strength?
- What is Elongation at break?
- What is the width?



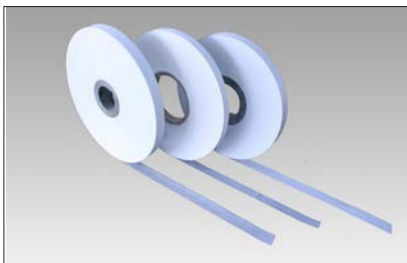
Mica tape



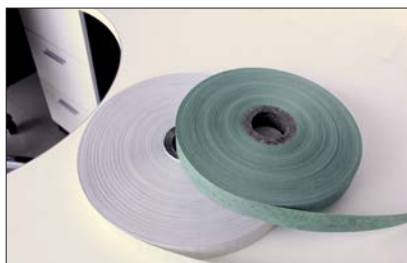
Synthetic mica tape



Gold mica



Plain non-woven



Embossing ideas non-woven



Flame-retardant non-woven



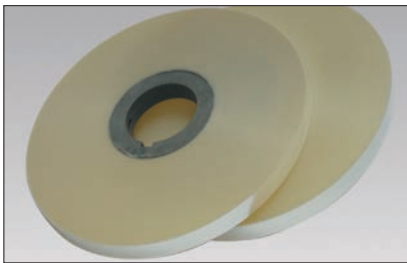
Electrical isolation paper/tissue



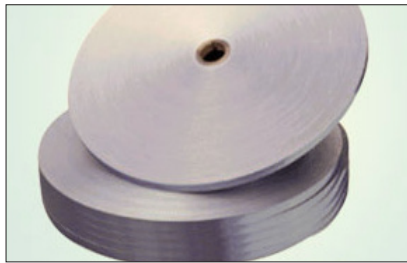
Glass fiber tape



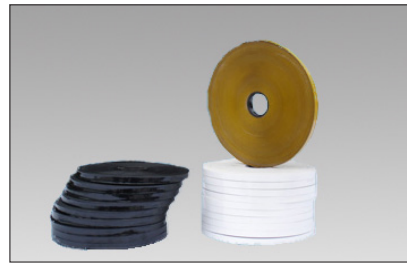
Halogen tape



Polyester tape



Single-sided aluminum composite tape



Cable printing tape



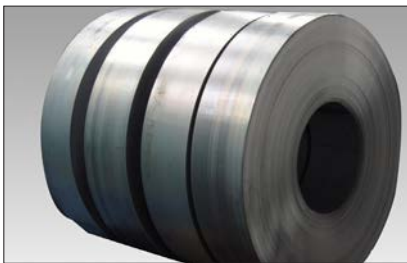
Copper plastic composite tape



Copper tape



Glass fiber filled rope



Steel tape



(PP) mesh fill rope



(PP) fill the hemp rope



Water blocking yarn



Yarn



Cable Chromatography tie



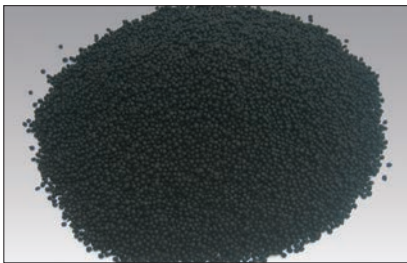
High temperature sub-ribbon



Steel rope



Galvanized steel wire



Semi-conducting shield material



XLPE compound



PVC compound

The series material used for wire and cable producing

Main technical parameter for tape series

Description	Application	Technical parameter	The necessary information
Single-sided aluminum composite tape	For screen, used on Communication cables date cables Coaxial cable network cable and so on	Width: Meet more than 5mm all specifications Color: silver blue green red golden I.D. (mm):52\58\76\102 or 152 O.D.(mm):200~500	Thickness (μm) Weight (g/m²) Tensile strength (N/mm²) Elongation at break(10%)
Double-sided aluminum composite tape	For tape and insulation used on Communication cables power cables Coaxial cable and special cable	Width: Meet more than 5mm all specifications Color: silver I.D. mm :52\58\76\102 or 152 O.D.(mm):200~600	Thickness (μm) Weight (g/m²) Tensile strength (N/mm²) Elongation at break(10%)
Polyester tape	For screen, used on Communication cables date cables Coaxial cable network cable and so on	Width: Meet more than 5mm all specifications Color: transparent white blue green red yellow and so on I.D.(mm):52\58\76\102 or 152 O.D.(mm):200~500	Thickness (μm) Weight (g/m²) Tensile strength (N/mm²) Elongation at break(%) Heat shrinkage (%) Melting point (°C) haze(%)
Plain non-woven	Used on rubber cable Communication cables power cables Coaxial cable and special cable and Fiber optic cable	Width: Meet more than 5mm all specifications Color: white I.D.(mm):52\58\76\102 or 152 O.D.(mm):200~600	Thickness (μm) Weight (g/m²) Tensile strength (N/mm²) Elongation at break(10%) Heat shrinkage (%) Water absorption rate
Embossing ideas non-woven	For high speed tape of laying up; used on Plastic power cable Communication cables	Width: Meet more than 10mm all specifications Color: white green I.D. (mm):52\58\76\102 or 152 O.D.(mm):200~500	Thickness (μm) Weight (g/m²) Tensile strength (N/mm²) Elongation at break(10%) Water absorption rate
Flame-retardant non-woven	Used on Flame-retardant power cable Flame-retardant rubber cable Flame-retardant marine cable Flame-retardant high temperature silicone rubber cable	Width: Meet more than 10mm all specifications I.D.(mm):52\58\76\102 or 152 O.D.(mm):200~600	Thickness (μm) Weight (g/m²) Tensile strength (N/mm²) Elongation at break(10%) Oxygen index(%)
Electrical isolation paper(tissue)	For Conductor isolation Conductor black prevent the sheathing and the insulation layer	Width: Meet more than 5mm all specifications Color: white I.D.(mm):52\58\76\102 or 152 O.D.(mm):200~600	Thickness (μm) Weight (g/m²) Tensile strength (N/mm²) Elongation at break(10%) Wet strength(KN/m) Tightness (g/cm²) Tear(mn)
Kraft paper	Used on taping of motor electrical wire and magnet wire	Width: Meet more than 5mm all specifications Color: white yellow I.D.(mm):52\58\76\102 or 152 O.D.(mm):200~600	Thickness (mm) Weight (g/m²) Tensile strength (N/30mm) Elongation at break(10%)
High temperature sub-ribbon	Used on power cable and XLPE cable to alternative masterbatch	Reel model I.D.(mm):22 O.D.(mm):120 Height (mm): 115	Width (mm): Thickness (mm) Tensile strength Mpa Elongation at break(10%) Instantaneous temperature (°C)
Logo/mark tape	Use on put LOGO or text into the cable for security And distinguish	/	According to Customer needs
Cable Chromatography tie	Use on Communication cables and telephone cable for distinguish colors	/	Width (mm): Thickness (mm) Density (g/cm³) Instantaneous temperature (Tensile strength Mpa) Elongation at break(10%) Heat shrinkage (%) Commonly used colors Length of reel (m)
Cable printing tape	Used on PVC or PE wire and cable	/	Coating Width (μm): Thickness (mm) Density (g/cm²) Instantaneous temperature (Tensile strength Mpa) Elongation at break(10%) Heat shrinkage (%) Commonly used colors Length of reel (m)
Gold mica	Used on Refractory layer of Fire-resistant cable and Temperature enhanced layer of high temperature fire-resistant cable Applies to Class B fire-resistant cable grade standards	Width: Meet more than 10mm all specification Color golden I.D.(mm):52\76 O.D.(mm):200~500	Thickness (μm) Weight (g/m²) Tensile strength (N/mm²) Elongation at break(10%) Dielectric strength(KV/mm) Mica content (%) Insulation resistance (MΩ) Fire-resistant cable rating standards
Synthetic mica tape	Used on Refractory layer of Fire-resistant cable and Temperature enhanced layer of high temperature fire-resistant cable Applies to Class B fire-resistant cable grade standards	Width: Meet more than 10mm all specification Color golden I.D.(mm):52\76 O.D.(mm):200~500	Thickness (μm) Weight (g/m²) Tensile strength (N/mm²) Elongation at break(10%) Dielectric strength(KV/mm) Mica content (%) Insulation resistance (MΩ) Fire-resistant cable rating standards
Synthetic mica tape	Used on Refractory layer of Fire-resistant cable and Temperature enhanced layer of high temperature fire-resistant cable Applies to Class A fire-resistant cable grade standards	Width: Meet more than 10mm all specification Color golden I.D.(mm):52\~500	Thickness (μm) Weight (g/m²) Tensile strength (N/mm²) Elongation at break(10%) Dielectric strength(KV/mm) Mica content (%) Insulation resistance (MΩ) Fire-resistant cable rating standards

Glass fiber tape	Used on XLPE cable Marine cable Flame-retardant cable mine cable	Width: ≥20mm, every 5mm one specification Color white I.D.(mm):58\76 O.D.(mm):200~500	Thickness (μm) Weight (g/m²) Tensile strength (N/mm²) Oxygen index(%)
Halogen tape	Used on high quality flame retardant cable	Width: Meet more than 15mm all specification Color white I.D.(mm):58\76 O.D.(mm):200~400	Thickness (μm) Weight (g/m²) Tensile strength (N/30mm) Oxygen index(%) Smoke density (%) PH of Combustion of gas release Conductivity of Combustion of gas release (μs/mm)
Copper plastic composite tape	Used on high quality shield of cable	Width: Meet more than 15mm all specification Color Natural I.D.(mm):52\58\76\152 O.D.(mm):200~400	Thickness (μm) Tensile strength (N/30mm) Elongation at break(10%)
Steel tape	Used on Taping and armoring	/	I.D.(mm) O.D.(mm)\ Thickness (mm) Width (mm)
Copper tape	Used on Taping and armoring	/	I.D.(mm) O.D.(mm)\ Thickness (mm) Width (mm)
Steel wire	Used on Taping and armoring	Quality:GB/T3028/ASTMA411 and other standards Diameter (mm):0.8~3.5 tensile strength (Mpa):340~550	Diameter (mm):0.8~3.5 tensile strength(Mpa) Zinc coating(g/mm²)

Main technical parameter for filling series

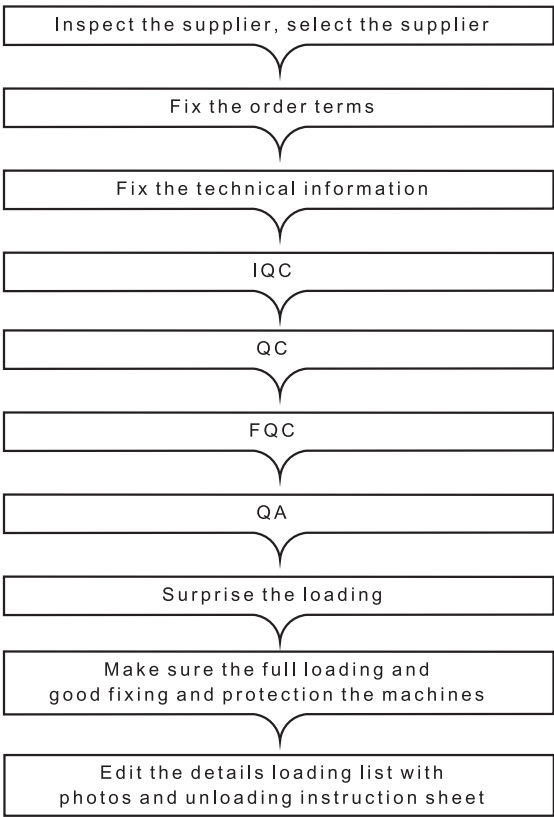
Description	Application	Technical parameter	The necessary information
(PP) mesh fill rope	Used on power cable\control cable\and XLPE cable	I.D.(mm):38 Height (mm): 230	Diameter of twisted (mm) Mold width (mm) Mold thickness (mm) Tensile strength (N) Elongation at break(%) Linear density (g/m) Fiber (D)
(PP) fill the hemp rope	Used on filling of special power cable and steel wire rope	I.D.(mm):38 Height (mm): 230	Tensile strength (N) Elongation at break(%) Linear density (g/m) Heat shrinkage (%) Fiber (D)
(PP) flame retardant filling rope	Used on filling of high quality flame retardant cable	I.D.(mm):38 Height (mm): 230	Tensile strength (N) Elongation at break(%) Linear density (g/m) Heat shrinkage (%) Fiber (D) Oxygen index(%)
Water blocking yarn	For screen, used on Communication cables\power optical cables\Submarine cable	I.D.(mm):92.5 Height (mm): 220 or I.D.(mm):95 Height (mm): 170 Color:white	Tensile strength (N) Elongation at break(%) Linear density (g/m) Heat shrinkage (%) Fiber (D) Oxygen index(%) Expansion rate (ml/g/1st min) Long-term temperature expansion(150°C24h Moisture content(%))
Glass fiber filled rope	Used on Fire-resistant cable and Flame retardant cable	/	Diameter (mm) Weight (g/m) Tensile strength (N/mm²) Oxygen index (%)

Main technical parameter for cable materials

PVC cable compound	10KV Thermoplastic semi-conductive shield compound (inner shield)
PE cable compound	10KV Crosslinkable semi-conductive shield compound (inner shield)
Rubber cable compound	35KV Thermoplastic semi-conductive shield compound (inner shield)
Cable compound for high voltage	10KV Crosslinkable semi-conductive shield compound (outer shield)
Power cable	Peroxide XLPE insulating compound for MV wires and cables up to 10kV (Natural)
Special cable compound, special POE compound	Peroxide XLPE insulating compound for MV wires and cables up to 35kV (Natural)
Tailored cable compound	Peroxide XLPE insulating compound for aerial wires and cables up to 35kV (Black)
10KV Crosslinkable semi-conductive shield compound (outer shield)	Peroxide XLPE insulating compound for aerial wires and cables up to 10kV (Black)
10KV Crosslinkable semi-conductive shield compound (inner shield)	Silane-XLPE Compound of Sioplas Method for wires and cables up to 3kV (Natural)
Silane-XLPE Compound of Sioplas Method for aerial wires and cables up to 10kV(Black)	/

Follow the production and strictly QC control

Do the strict QC control in the whole processing.



Commissioning and aftersales service

We have professional technical support team and after sales team to

