

A-KLP.COM

CUSTOM Machinery & Molds

A-KLP.COM

USCTE.COM



CONTACT

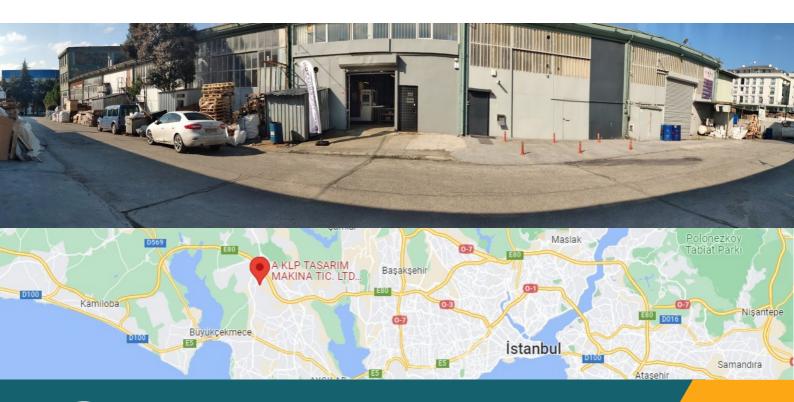
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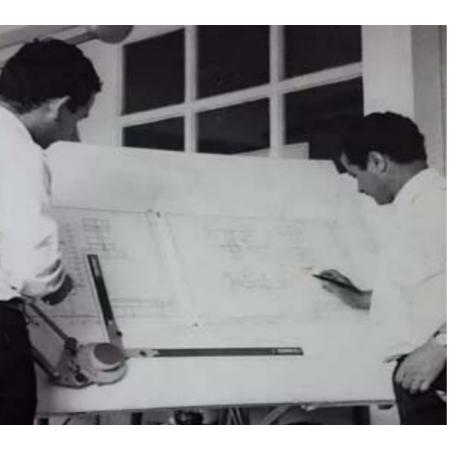
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ABOUT US

Custom machinery and mold design for specialists since 1947



A-KLP is a boutique family company that developing products at the request of customers since 1947. Following the requests of our customers, we manufacture manual, semi-automatic, and fully automatic machines and molds

PRODUCTS

Connector & Terminal Molds

New Design Manual Molds

Semi-Automatic Cable Lug Molds

Fully-Automatic Cable Lug Molds

Orbital Pipe Cutting Machines

Double Sided Countersinking Machines

Fully Automatic Pipe Feeding Magazines

Exclusive Hydraulic Press Machines

PLC Controlled Vibrating Feeders

DO YOU WANT TO PRODUCE MORE THAN 30,000 CABLE LUGS IN A DAY WITH LESS STAFF, LESS RAW MATERIAL WASTAGE, AND LESS ENERGY CONSUMPTION?



WE OFFER YOU HIGH CAPACITY AND HIGH-QUALITY PRODUCTION OPPORTUNITIES IN SMALL AREAS. MORE PRODUCTIVITY WITH LESS STAFF, LESS RAW MATERIAL WASTAGE, AND LESS ENERGY CONSUMPTION.



ARE YOU STILL CUTTING THE PIPES BY HAND?

A FULLY AUTOMATIC ORBITAL PIPE CUTTING MACHINE CUTS PIPES WITHOUT WASTE AND WITHOUT THE NEED FOR LABOR



THE MACHINE PAYS FOR ITSELF AFTER CUTTING 40 TONS OF PIPE





NO LABOR

NO WASTAGE

AUTOMATIC ORBITAL PIPE CUTTING MACHINES CUTS 1
PIPE PIECE IN 2 SECONDS. FROM EACH PIPE, 2 CABLE
LUGS ARE MADE.



A-KLP MOLDS New DesignManual Mold 2 staff 2 press machines 16% wastage ~ 6% Quetivity in 10 5,000 cable lugs **Semi-Automatic Mold** 1 staff single press machine wastage ~ 5% cable lugs 7,500 **Fully-Automatic Mold** no staff single press 100% machine wastage ~ 2% ductivity in 10 30,000

Ordinary Manual Mold min. 2 staff 2 press machines wastage > 8% max. 3,000 cable lugs per day

SPEED UP YOUR PRODUCTIONS

With the new design FULLY AUTOMATIC CABLE LUG MOLDS, -FACLM-10 times faster production capacity compare to the traditional methods. You also do not require a press machine operator.

Fully Automatic Cable Lug Machine

FACLM

FULLY AUTOMATIC CABLE LUG MACHINE IS PLC CONTROLLED, AUTO-LOADED CABLE LUG MOLD

PLC UNIT CONTROLLED VIBRO FEEDER, FEEDS ALUMINUM OR ANNEALED COPPER PIPES (WHICH ARE CUT UP THE DOUBLE-SIZE, AND COUNTERSINK) INTO THE FULLY AUTOMATIC CABLE LUG MACHINE. THE HYDRAULIC OR ECCENTRIC PRESS MACHINE AUTOMATICALLY MOVES, WHEN PIPES ARE DETECTED BY A SENSOR AND PRODUCES 2 CABLE LUGS WITH EACH MOVE.

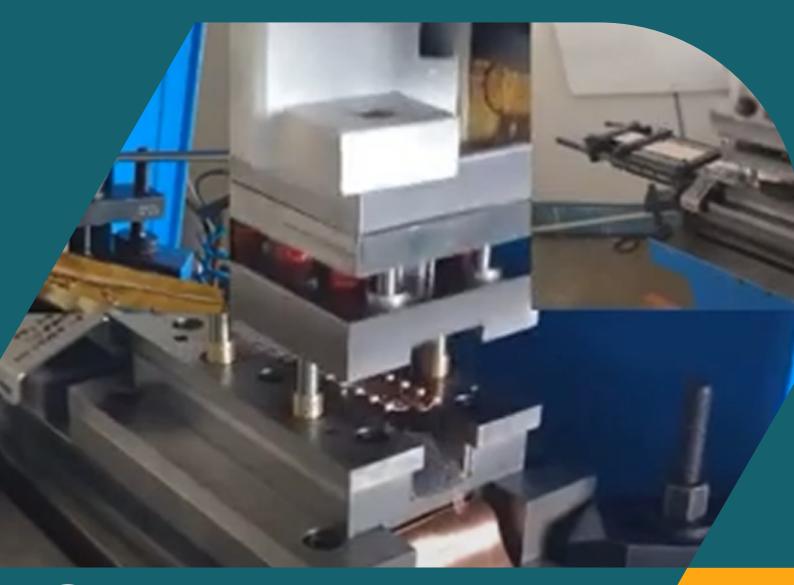


Fully Automatic Connector & Terminal Molds

FACTM

PURCHASE BRAND-NEW FULLY AUTOMATIC PROGRESSIVE METAL MOLDS

SO THAT TERMINALS, CONNECTORS, AND A VARIETY OF OTHER COMPONENTS CAN BE PRODUCED IN LARGE QUANTITIES IMMEDIATELY.





New Design Manual Molds

MCLM

YOU MAY PRODUCE 2 CABLE LUGS IN A SINGLE MOLD INSTEAD OF 2 MOLDS IN ECCENTRIC PRESS MACHINE WITH THE NEW DESIGN MANUAL CORE MOLDS.

RAW MATERIAL FEEDING AND PRODUCT UNLOADING IS DONE MANUALLY.

YOU MAY PRODUCE UP TO 10,000 CABLE LUGS PER DAY, DEPENDING ON THE DIMENSIONS OF PRODUCT.



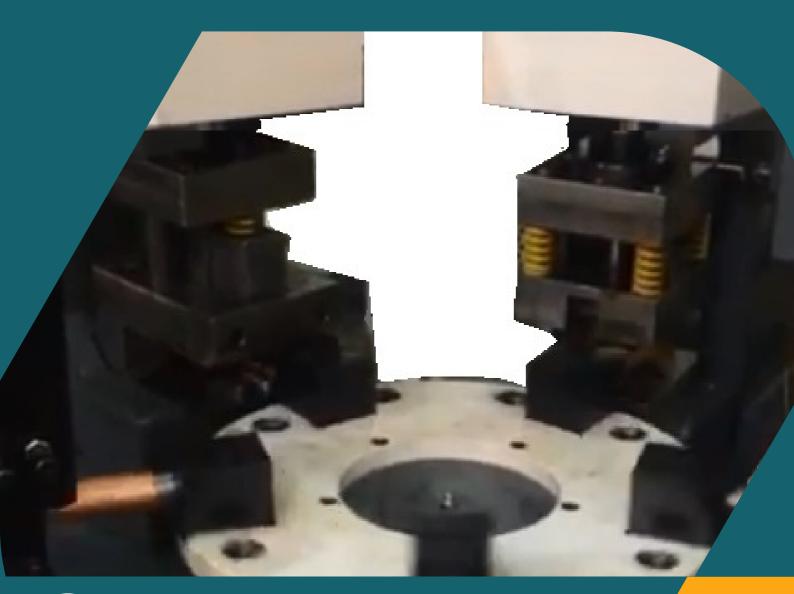


Semi-Automatic Cable Lug System

SACLS

THE TURNTABLE SYSTEM (THE ROTARY TABLE SYSTEM)
CONSISTS OF FOUR STATIONS AND A TWO-HEADED
HYDRAULIC PRESS MACHINE.

THE TURNTABLE SYSTEM HAS A ROTATING DISC (TURNTABLE) WITH FOUR PRODUCT SLOTS AND FOUR TOOLS IN FIXED POSITIONS AROUND THE TURNTABLE; THE TOOLS OPERATE ON THE PRODUCTS.





Automatic Orbital OC0516 Pipe Cutting Machine with Reel Opener

FULLY AUTOMATED CUSTOM EQUIPMENT THAT CAN ORBITAL INLINE PIPE CUTTING IN ACCORDANCE TO YOUR REQUESTS.

NO WASTAGE, NO SWARF, NO STAFF.

THE REEL OPENER IS USED TO UNWIND 5-45 MM DIAMETER COPPER (OR ALUMINUM) COIL FORMED PIPE. THE STRAIGHTENED PIPE PUSHED TO ACHIEVE THE SPECIFIED CUTTING LENGTH, CUT BY ORBITAL BLADES.



Automatic Orbital \ OC1645 **Pipe Cutting Machine**

FULLY AUTOMATED CUSTOM EQUIPMENT THAT CAN ORBITAL INLINE PIPE CUTTING IN ACCORDANCE TO YOUR REQUESTS. NO WASTAGE, NO SWARF, NO STAFF.

COPPER/ALUMINUM PIPES WITH A DIAMETER OF 6-42 MM ARE MANUALLY OR AUTOMATICALLY (THROUGH PIPE FEEDING MAGAZINE) INSERTED INTO A LINEAR CHAMBER.

TO ACHIEVE THE SPECIFIED CUTTING LENGTH, THE COPPER PIPE PUSHES FORWARD. THE PIPE IS CUT BY ROTARY BLADES WITHOUT WASTAGE.



Double Sided Countersinking Machine

DSCSM

PLC CONTROLLED FULLY AUTOMATIC COUNTERSINKING
MACHINE COUNTERSINKS BOTH ENDS OF 1 PIPE IN 2 SECONDS

(2 CABLE LUGS IN 2 SECONDS)

5-45 MM DIAMETER COPPER PIPES ARE PUSHED INTO THE COUNTERSINKING MACHINE'S CHAMBER BY VIBRATION. THE OPEN ENDS OF THE COPPER TUBE OF DOUBLE CABLE LUG LENGTH ARE COUNTERSUNK ON BOTH SIDES.



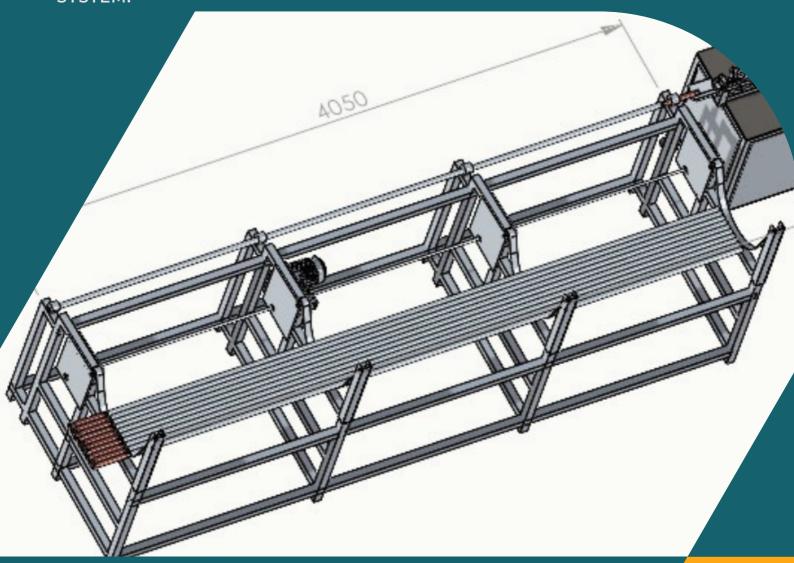
Fully Automatic Pipe Feeding Magazine

FAPFM

FULLY AUTOMATIC PIPE FEEDING MAGAZINE (FAPFM)

FEEDS 4 METERS LENGTH PIPES TO THE PIPE CUTTING MACHINE (OC1645) AUTOMATICALLY.

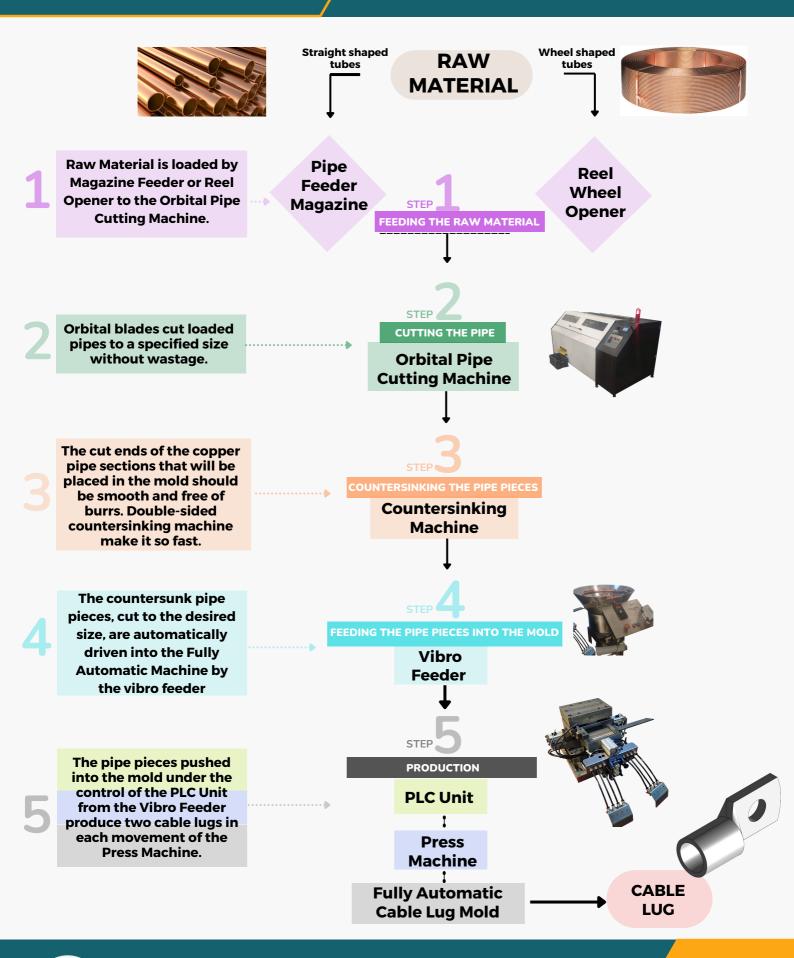
4 METERS LENGTH AND 16-42 MM DIAMETERS BUNDLE OF PIPE (APPROXIMATELY 1 TON) IS PLACED IN THE CONTAINER OF FAPFM. THE PIPES IN THE RESERVOIR ARE TRANSPORTED AUTOMATICALLY ONE BY ONE TO THE AUTOMATIC ORBITAL PIPE CUTTING MACHINE (OC1642) BY THE ELEVATOR SYSTEM.





FULLY AUTOMATIC CABLE LUG SYSTEM

PRODUCTION LINE





5 STAGES OF THE PURCHASING PROCESS

Stage 1

Send us the technical drawings and/or dimension charts for the items that will be manufactured using the mold or machine that you are ordering.

Stage 2

You will receive a pro forma invoice from us detailing our offer. Accept and sign the pro forma invoice that was emailed to you, then send us a copy of it via e_mail.

Stage 3

Send the prepayment to the account stated on the pro forma invoice, and e-mail us with the payment confirmation. The manufacture of your order will begin, following the transmission of your payment to our bank account.

Stage 4

Trial production of your machines and/or molds will be carried out in our workshop. In our workshop, you can see the trial manufacturing in action. You will receive the samples from the trial production for your review and approval.

Stage 5

Following your approval, the products are prepared for shipping and delivery. Delivery is made after balance payment.



TERMS OF SALE

- The ordered machinery and/or molds will be tested within 90 days of prepayment. Tested items will be delivered to the buyer (EXW Istanbul) following the approval and paying the balance amount.
- The buyer must provide A-KLP with free raw materials for test production samples within one month after placing the order. Otherwise, A-KLP reserves the right to cancel and change the agreed delivery date.
- Under regular operating conditions, A-KLP offers a one-year warranty on non-wear parts. (PLC Control and Driver, Vibro feeder, Mold Set and Electrical Parts)
- Installation and Training Installation and training costs are not included in this quote. The installation and training charge per person per day is \$250. In addition to this charge, the buyer is responsible for lodging, round-trip flight tickets from Istanbul, and meals. Service days from departure to return are anticipated to be 5 days for two individuals. (\$2,500 plus expenses for five days)
- Installation and Training Installation and training costs are not included in this quote. The installation and training charge per person per day is \$250. In addition to this charge, the buyer is responsible for lodging, round-trip flight tickets from Istanbul, and meals. Service days from departure to return are anticipated to be 5 days for two individuals. (\$2,500 plus expenses for five days)
- Overtime on installation The costs of the overtime days during the installation except for the problems arising from the quality of the machine belong to the buyer.
- Approval Time The machines and/or the molds must be approved by the order description. Approval time must be in two weeks following the test production samples have been received.
- Modifications The extra cost of modifications caused by the buyer belongs to the buyer. If machines and/or molds fail to deliver to the buyer due to the buyer's problems, A-KLP accepts no responsibility in this regard and the buyer cannot request a refund of the payment.

PAYMENT TERMS:

50% of the total amount of this Appendix is paid in advance after the present Appendix is signed. The rest 50% of the total amount will be paid before delivery of the machines and/or the molds.



FREQUENTLY ASKED QUESTIONS

F.A.Q.

FOR START-UP

*What I Need for Cable Lug Production?

Basically; you need a mold and a press machine to produce the cable lug. You have the option of using manual, semi-automatic, or fully automatic cable lug molds. And the press machine might be a hydraulic or an eccentric-mechanical press machine. The raw material (annealed copper or aluminum pipe) has to be cut to the correct size and must be countersunk.

*What is Difference Between Mold. Machine and Production Line?

<u>A Mold</u> (Mould or Die) is a tool used to shape an object formed of malleable material. We manufacture newly designed manual and fully automatic molds.

<u>A Machine</u> is an apparatus using mechanical power and has several parts, each with a definite function and performing a particular task. We manufacture Orbital Pipe Cutting Machines, Countersinking Machines, Vibrating Feeders, Hydraulic Press Machines, and Pipe Feeder Magazines. We call our Fully Automatic Molds "Fully Automatic Machines" when we use them with PLC Controlled Vibrating Feeders and Press Machine.

<u>A Production Line</u> is an arrangement of machines in a factory, where the products pass from machine to machine until they are finished. We manufacture the entire production line from raw material loading to the finished product process. Pipe Feeding Magazine, Orbital Pipe Cutting Machine, Countersink Machine, PLC Controlled Vibrating Feeder, Fully Automatic Cable Lug Mold, and Hydraulic Power Press Machine are in this production line. This production line allows producing approximately one cable lug per second.

*Which Of The Listed Machinery And Molds Should We Purchase?

You'll need to order a different mold for each distinct element in your production plan. It is important for production optimization to select molds in fully automatic, semi-automatic, or manual systems based on your annual production target.





FOR START-UP

*What Are The Machines And Molds Required For Start-Up?

Fully Automatic Production Line

- 1 Pipe Feeding Magazine or Reel Wheel Opener
- 2 Orbital Pipe Cutting Machine
- 3 Countersinking Machine
- 4 Hydraulic Power Press Machine: (According to cable lug dimensions: 35 tons for 6/70 mm2;
- 50 tons for:70/240 mm2; 120 tons for: 240/1000 mm2).

You can use your existing Power Press Machines, but the table-hammer distance of the machine must be 300 mm minimum.

- 5 Vibrating Feeder with PLC Control System for molds.
- 6 Fully automatic mold (a mold for each different cable lug size) (Minimum order quantity for mold is 5)

Semi-Automatic Production Line

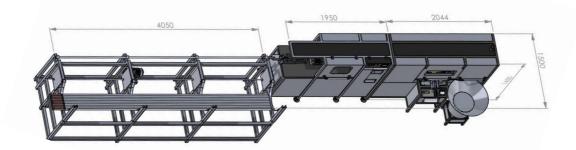
- 1 Pipe Feeding Magazine or Reel Wheel Opener
- 2 Orbital Pipe Cutting Machine
- 3 Countersinking Machine
- 4 Custom Multi-Head Rotary Table Hydraulic Type Press Machine:

(According to cable lug dimensions: 35 tons for 6/120 mm2; 50 tons for 6/400 mm2; 120 tons for 240/1000 mm2).

- 5 Mold Group, (a mold group for each different cable lug.)
- 6 Hydraulic Type Press Machine

Manuel Production Line (For Double Cable Lugs)

- 1 Pipe Feeding Magazine or Reel Wheel Opener
- 2 Orbital Pipe Cutting Machine
- 3 Countersinking Machine
- 4 Hydraulic or Eccentric Type Mechanical Press Machine: (According to cable lug dimensions: 35 tons for 6/70 mm2; 50 tons for 70/240 mm2; 120 tons for 240/1000 mm2). You can use your existing Power Press Machines, but the table-hammer distance of the machine must be 300 mm minimum.
- 5 Manual mold (a mold for each different cable lug size)



FREQUENTLY ASKED QUESTIONS

F.A.Q.

ABOUT CABLE LUG MOLDS

*How Many Cable Lugs are Produced With a Single Mold?

A MANUAL CABLE LUG MOLD is able to produce 3,000 / 5,000 cable lugs in 10 hours.

A SEMI-AUTOMATIC CABLE LUG MOLD is able to produce 6,000 / 10,000 lugs in 10 hours.

A FULLY AUTOMATIC CABLE LUG MOLD can produce one cable lug per second. Approximately 30,000 cable lugs can be produced in 10 hours.

*Is It Possible to Produce Different Cable Lugs in the Same Mold?

Yes, you can. But we do not recommend it.

The same metric section and same size but the various screw diameters cable lugs can be produced in the same mold.

However, for this process, some parts of the mold must be replaced, and these parts must be disassembled and reassembled with other parts by a professional.

It's important to remember that replacing mold parts frequently reduces the mold's lifespan.

These molds lose their warranty, if the disassemble/reassemble process, which has not been done by us and requires experience, is performed out of our control.

Only the upper part of the mold can be changed as a secondary method. This part has an additional charge.

*Can We Make Custom Production with Our Logo?

Yes, you can.

*What is the time required to switch from one mold to another?

It takes approximately 15 minutes.



F.A.Q.

ABOUT PREPARATION MACHINES

*Why I need Semi-Product Preparation Machines?

Copper or aluminum pipes are utilized as raw materials in the manufacture of cable lugs. The raw material has to be cut to the required size. Cut pipe pieces have to countersink from both ends. These operations can be done manually. But you need human power in manual operations. Also, a lot of time is wasted.

A-KLP manufactures fully-automatic machines for these operations. ORBITAL PIPE CUTTING MACHINE and COUNTERSINKING MACHINE. A-KLP manufactures PIPE FEEDING MAGAZINE and REEL WHEEL OPENER for loading the raw material.

*What is ORBITAL PIPE CUTTING MACHINE? Why do we need to buy it?

You need to cut the raw material to the required length of cable lug production. This can be done manually or with an automatic machine. A-KLP manufactures "ORBITAL PIPE CUTTING MACHINE". This machine cuts copper or aluminum pipes to the desired size automatically. A pipe piece is cut in 2 seconds with a pipe cutting machine. 2 cable lugs are produced from this cut piece.

*What is DOUBLE-SIDED COUNTERSINKING MACHINE? Why do we need to buy it?

Pipe pieces cut to the required size with a manual or automatic pipe cutting machine should be countersunk on both sides before inserting into the fully automatic mold. A-KLP manufactures DOUBLE-SIDED COUNTERSINKING MACHINES. These machines automatically countersink pipe pieces from both sides approximately in 1-2 seconds.

*What is the energy consumption of the semi-product preparing machines?

The Pipe cutting machine and the Countersinking machine each use 2 to 5 kw/h of energy.



F.A.Q.

FREQUENTLY ASKED QUESTIONS

ABOUT POWER PRESS MACHINES

*Why I Need Power Press Machine?

With the strong pressing force it generates, the Power Press Machine provides the appropriate pressure to the Cable Lug Mold. You may use Hydraulic Type Power Press Machines or Eccentric Type Mechanical Power Press Machines.

*Can we use our existing Power Press Machine with "Fully Automatic Cable Lug System"?

Yes, But the Table-Hammer distance of the Power Press Machine must minimum 300 mm.

*What is the pressure value of the press machine I should buy?

According to cable lug dimensions:

35 tons Power Press Machine for 6mm2 to 70 mm2 Cable Lugs

50 tons Power Press Machine for 70mm2 to 240 mm2 Cable Lugs;

120 tons Power Press Machine for 240mm2 to 1000 mm2 Cable Lugs

*May We Purchase Power Press Machines from You?

Yes. We manufacture "Exclusive Hydraulic Press Machines" for Cable Lug Production. Our special designed "Exclusive Hydraulic Press Machines" offers faster and more efficient production.

Exclusive Hydraulic Press Machines' inputs and outputs are designed especially for Cable Lug Molds. Easy to install and switch the Cable Lug Molds.

Ordinary Hydraulic Type Power Press Machines are slow and expensive. Ordinary Eccentric Type Mechanical Power Press Machines are heavy.

We combined the advantages of both types of power press machines.

Exclusive Hydraulic Press Machines are fast, lightweight and cheap.



F.A.Q.

FREQUENTLY ASKED QUESTIONS

ABOUT RAW MATERIAL LOADING SYSTEMS

*What is PIPE FEEDING MAGAZINE? Why I Need it?

Cable lugs are produced using copper or aluminum pipes. Pipes with a diameter of 16-42 mm are usually supplied as straight pipes with a length of 4 meters. A bundle of straight pipes (approx. 1 ton) is put in the PIPE FEEDING MAGAZINE, automatically fed one by one to the ORBITAL PIPE CUTTING MACHINE.

*What is REEL WHEEL OPENER?

Cable lugs are produced using copper or aluminum pipes. Pipes with a diameter of 05-16 mm are usually supplied as reel wheels. Reel wheel pipes are fed into the orbital pipe cutting machine after being automatically straightened in the REEL WHEEL OPENER.

The answers to "Frequently Asked Questions" are theoretical. These are responses provided taking into account the practice of productions. Because the manufacture follows the requests of customers, the sizes and production quantities are variable.