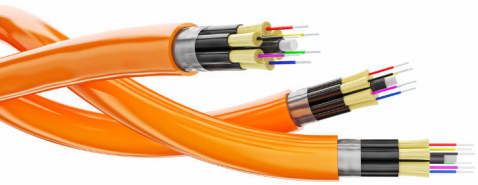
FIBER OPTIC CABLE BLOWING MACHINES



MINISKY MACHINES

USER MANUAL & MAINTENANCE INSTRUCTION

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allbme®

SKYFIBERTECH®

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Contents

2300+
Project Completed

100%
Satisfied Customers!

About Us

Our company ever since its in corporation in the telecommunication sector has been operating the fiber blowing machine. Our company since its establishment until the superior service quality and customer satisfaction continues to be one of the leading companies.

Since 2002 we started to manufacture about the spare parts and their components in Kocaeli. We mainly; Automotive, Telecomunication and Industrial Equipments & spare parts manufacturing.

After six years we started to manufacture fiber blowing machines and spare parts in our Kocaeli factory.

Allame Makina was given the opportunity to assist a new customer in equipping a new plant with newly built equipments for Telecom sector. The request was for us to design and build equipment very similar in operation to their existing production equipment.

Now; we are specialized only fiber optic cable blowing machines and spare parts manufacturing. All parts & Design & RD in our factory and we developing 100% handmade qualified machines with our engineers

Our Quality Standard is Always Highest

Since its establishment, Allame Makina has always made important studies on developing its own products and production technology, taking into account the changing market and competitive conditions.

In this direction, investments were made in human resources with increased engineering power and collaborations were established.

Our Vision

- Profitable and sustainable growth to ensure long-term customer and employee satisfaction, and satisfaction as well as aims.
- We export machines to over 70 Countries & 4500+ satisfied customers within 15 years.

Our Mission

- High standards, quality service in the time of our customers to maximize customer satisfaction and respect the rights. Our products, solutions, after sales service we provide our customers with reliability and high business ethics as the first choice to be a company that creates value for our employees and our customers.

There are two factors that we pay most attention to in the production process, the first is to reach the quality standard in production and the second is to make the product ready for delivery to the customers without any delay in the delivery time.

We produce with our rich and high technology machine park and experienced technical staff. Our production is carried out with computer-aided technical drawings prepared in a 3D environment, So all products are produced at the specified standards.

Why Allame?

Allame Makina has always prioritized quality and customer satisfaction in its works.

Allame

Easy use for jetting operation on site

Cable jetting machines has own motor power to blow up to 6000 meters one shot.

Generated big power with strong engines

There is pneumatic and hydraulic versions that can blow fiber cables.

CE approved certificates machines

CE and ISO certificates available and approved from certified company.

Large fiber optic cable range

Fiber optic cable diameters start from 0,8mm up to 30mm.

Best price for cable blowing machines

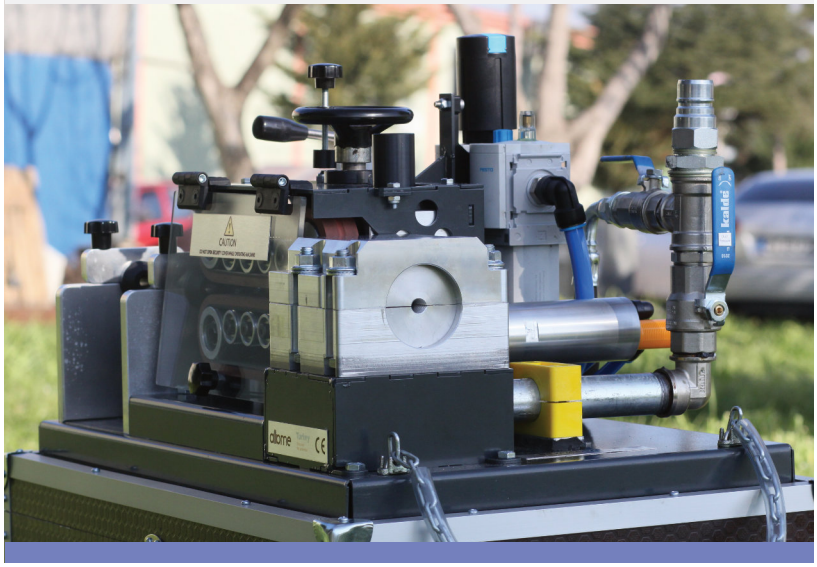
Quality & Performance and best price guaranty from ourside.

Spare parts available for everytime

Cable blowing machines manufactured our design and available stocks.

MiniSKY is a machine used to blow fiber optic cables into HDPE pipes.
MiniSKY cable blowing machine performs blowing of fiber cables between
2.5 mm and 16 mm. MiniSKY fiber blowing machine contains a single powerfull air motor.

MiniSKY | General Details



General Details

Recommended amount of compressed air for MiniSKY :
12 bar / 1-2 MeterCube / Minute

Fiber Optic Cable Diameter :
Range: 2.5 mm-16 mm

HDPE Pipe Diameter Ranges:
Can be adjusted optionally

MiniSKY is a machine used to blow fiber optic cables into HDPE pipes. MiniSKY cable blowing machine performs blowing of fiber cables between 2.5 mm and 16 mm.

MiniSKY fiber blowing machine contains a single air motor.

It works by releasing the compressed air from the compressor into the air motor and pipe. The incoming compressed air drives the engine and the belt system directly, causing the belts to rotate.

Please contact us for further information or placing order.

4 Different Belt System

Fiber Optic Cable Blowing Machine for your Integrated Projects Standard cable and pipe sizes used for MiniSKY cable blowing machine.

Cable Sizes: 2.5mm-3mm-4mm-5mm-6mm-7mm-8mm-9mm-10mm-11mm-12mm-13mm-14mm-15mm-16mm (With each cable diameter, cable beds seals are also provided.)

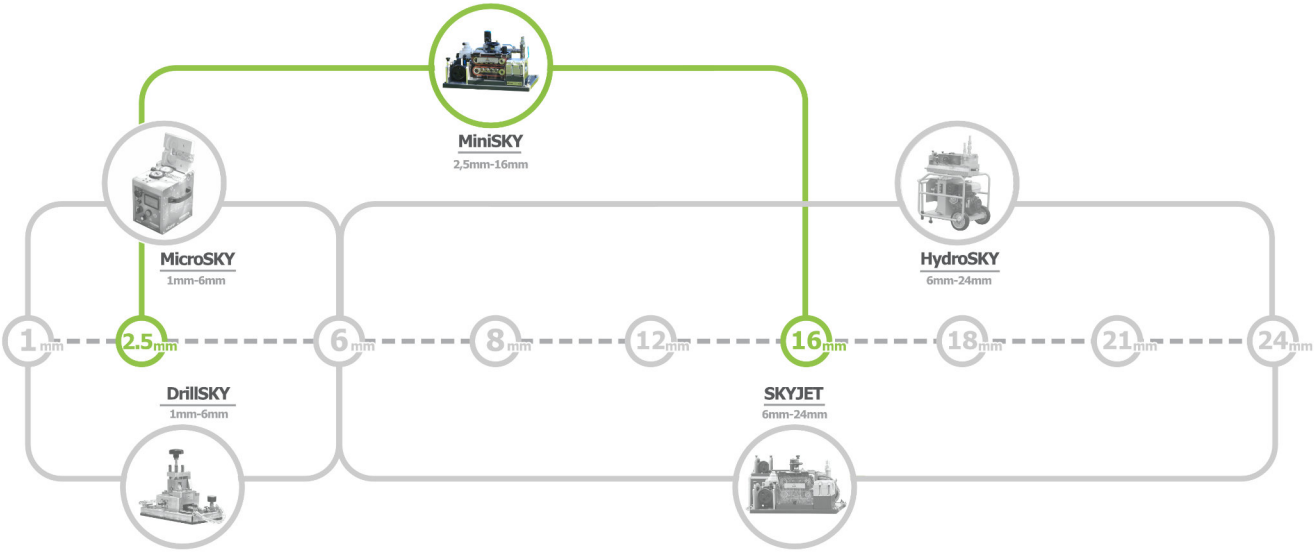
There are four sets of belts for Cable Diameters.

Drive belt sets,
2.5mm-4mm / 5mm-8mm / 9mm-12mm / 13mm-16mm

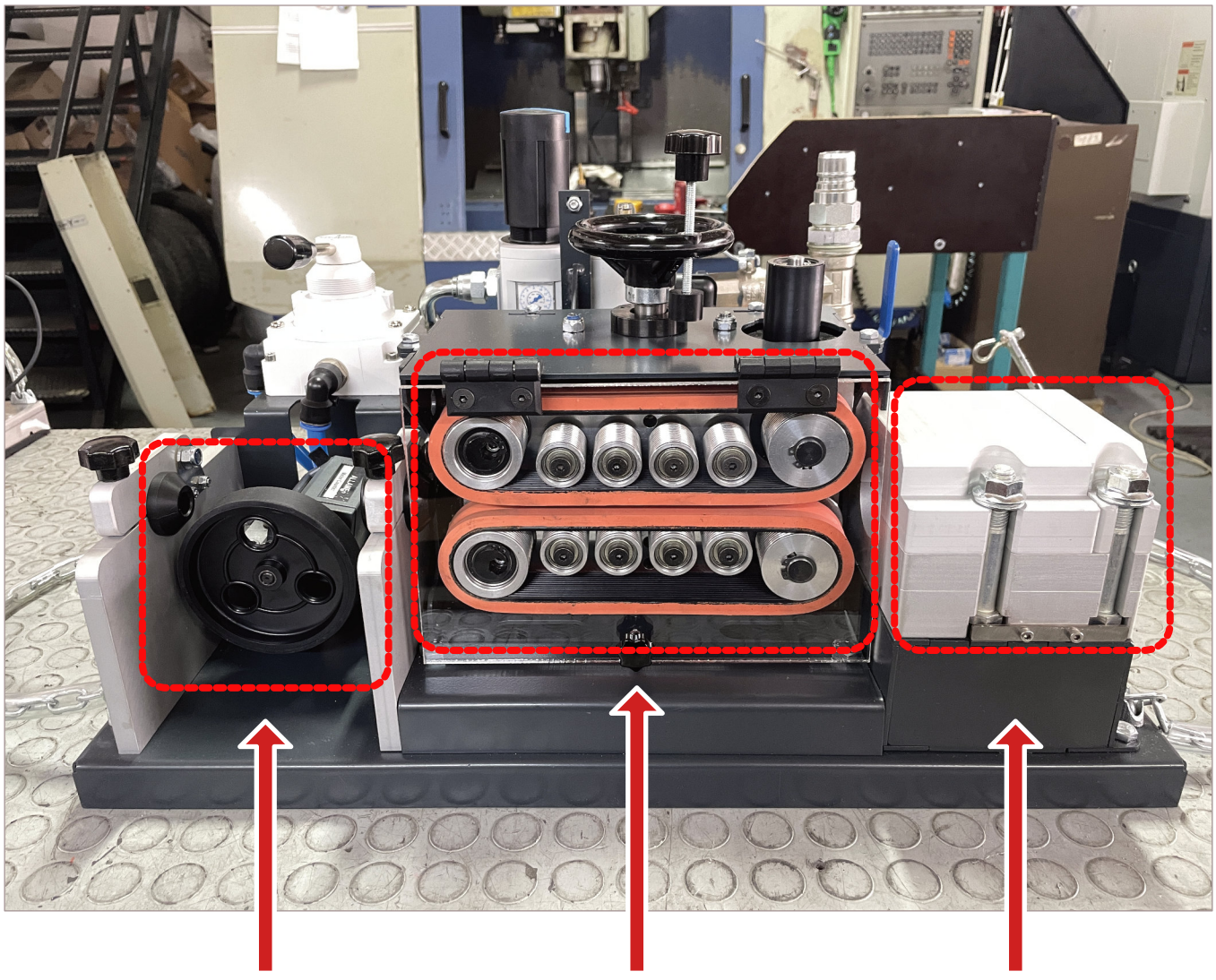
MiniSKY Technical Specifications

Pushing Force:	0 – 300 N
Pushing Speed:	0 – 150 m/min
Cable Size :	2,5 – 16 mm
Best Performance :	4 – 10 mm
Duct Size :	8 – 63 mm
Drive Motor :	Air
Air consumption per recommended minimum pipe diameter (at 12Bar):	
0 – 8mm :	1m³/min 40-50 CFM
From 8 to 12mm:	2m³/min 100-120 CFM
From 12mm to 16mm :	3m³/min 150 CFM
From 16mm to 20mm :	4m³/min 200 CFM
From 20mm to 32mm :	5-6m³/min 300 CFM

MiniSKY Fiber Optic Cable Diameter Ranges

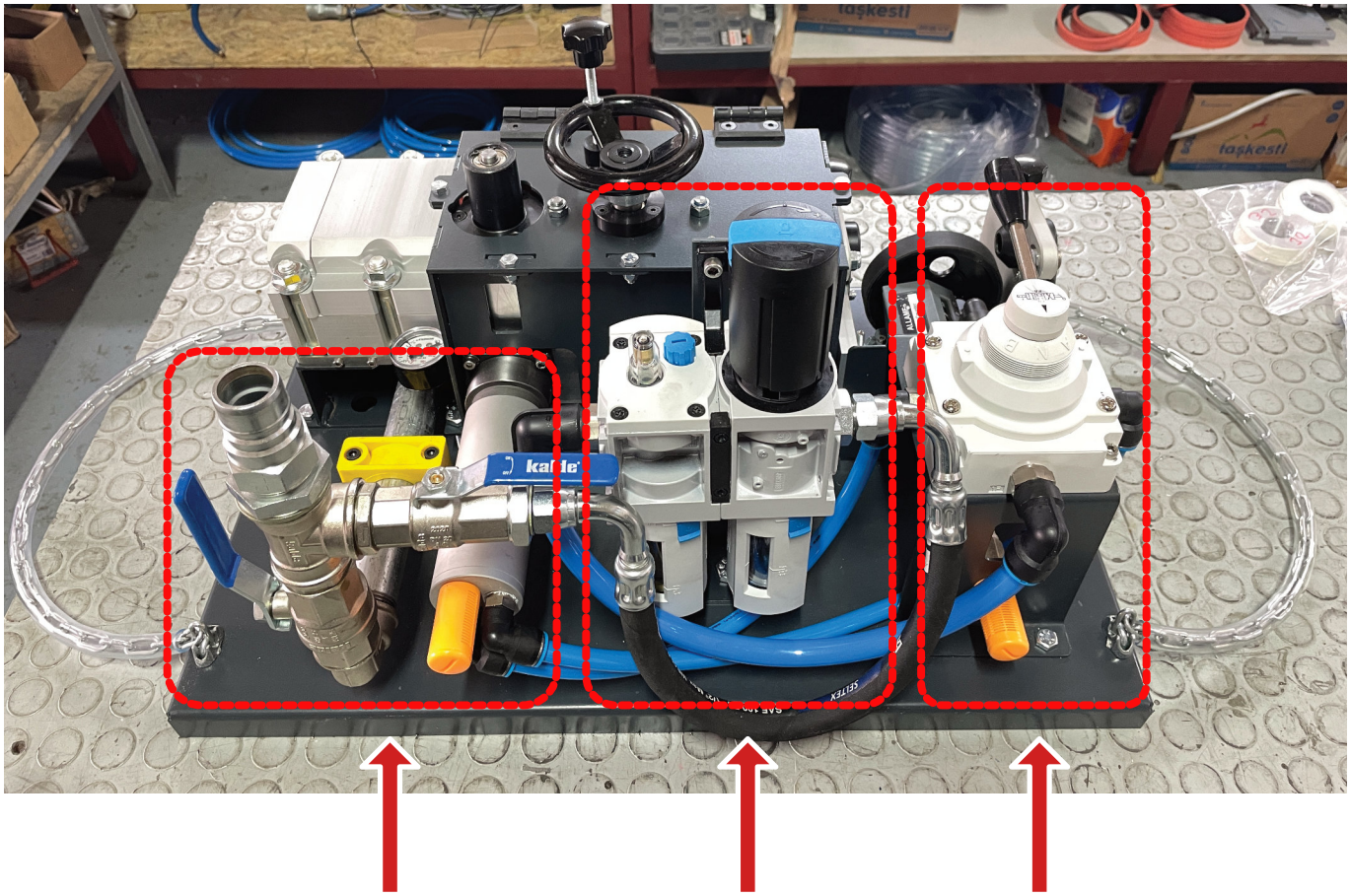


MiniSKY | General Introduction of the Machine



Belt Cable Sliding Unit

fiber optik kablonun, özel kaydırmaz kauçuk kaplı kayışlardan oluşan mekanizması arasında itilerek hdpe borunun içine sürülmesini sağlar.

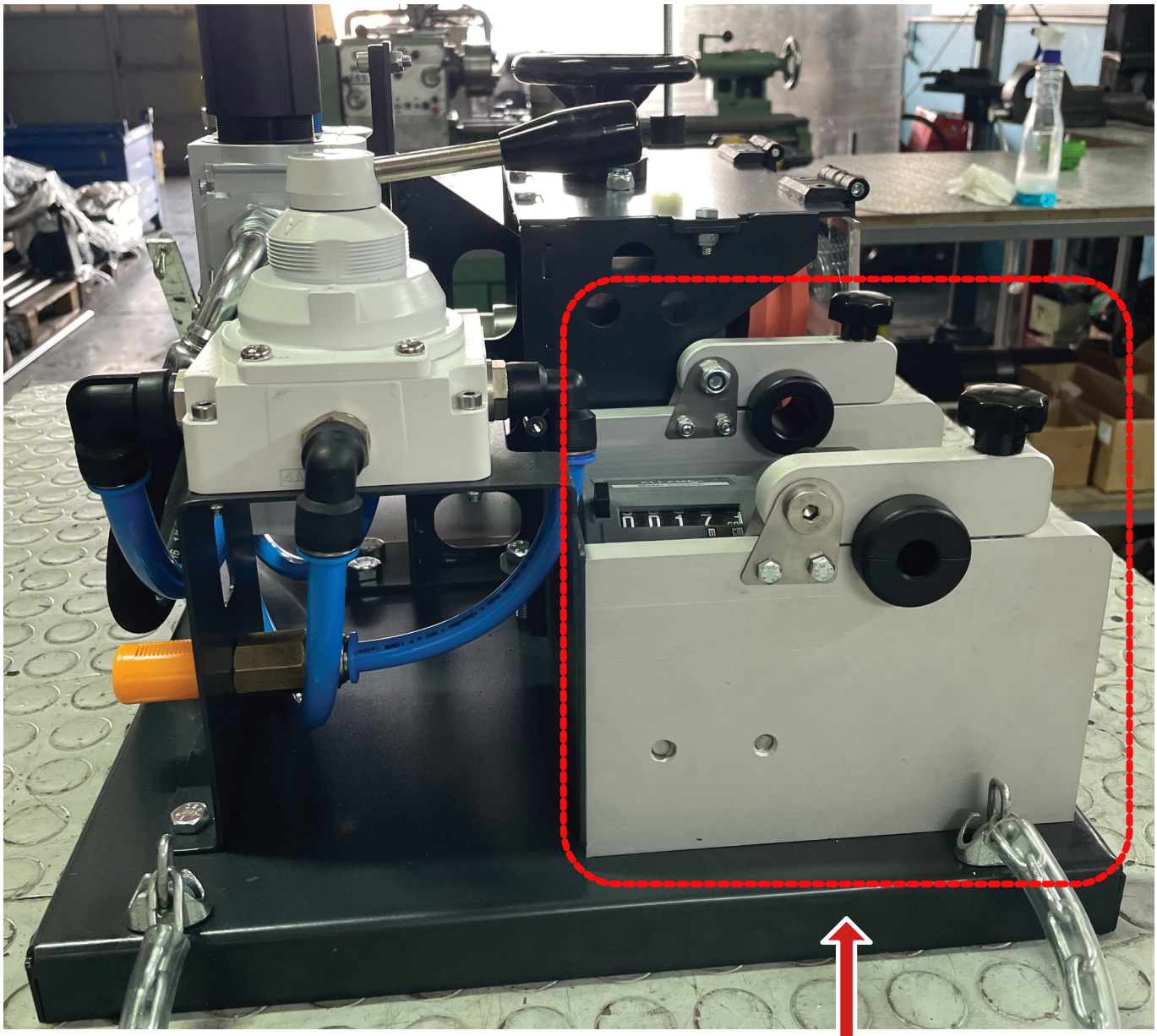


Conditioner

Adjusts and stabilizes air filter and lubricator air pressure

4 Lever Valve

Controls Air Motor

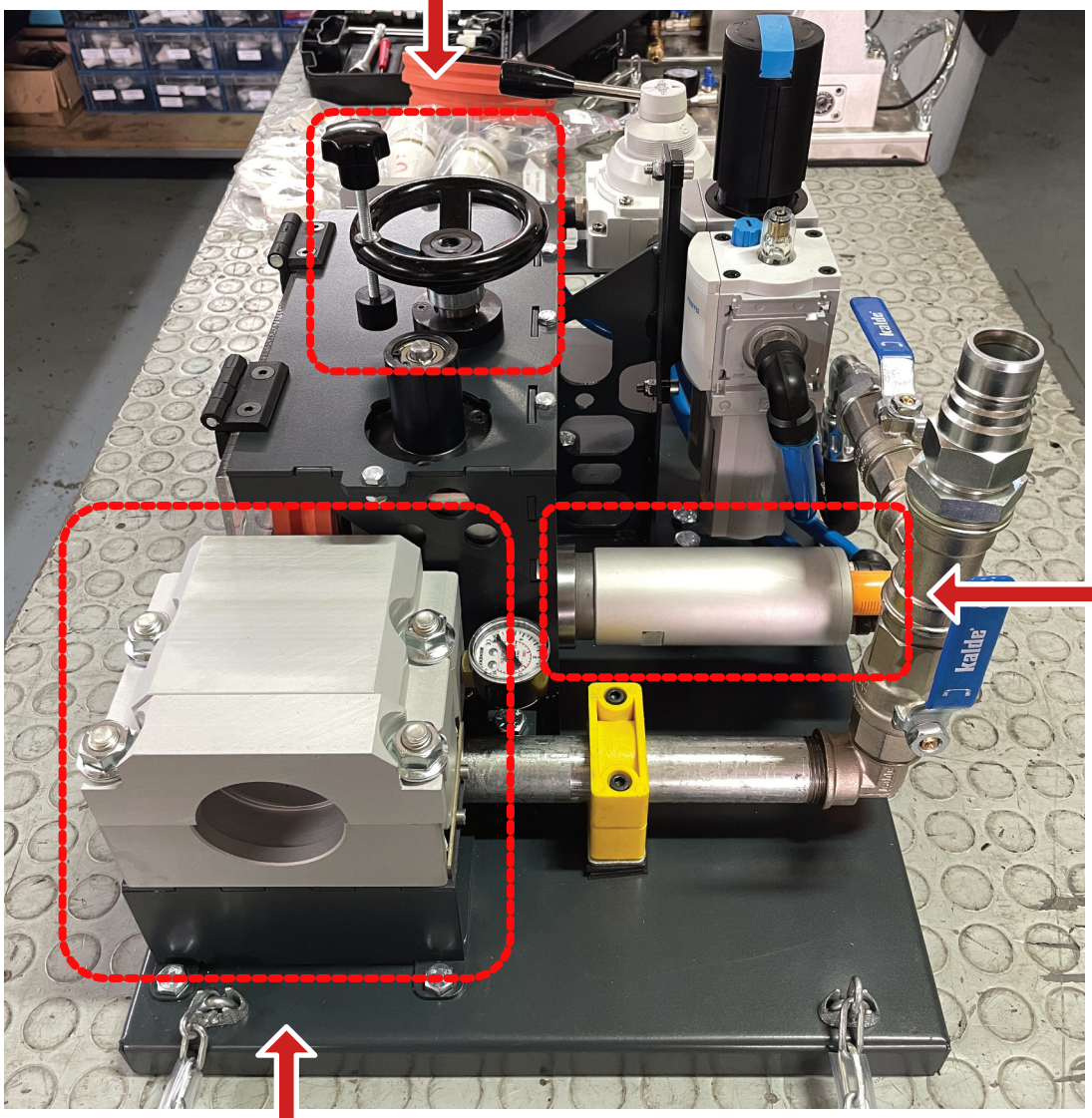


CABLE ENTRANCE UNIT

Cable Entrance Unit

Cable feeding side with mechanical counter.

BELT PRESSURE ADJUSTMENT WHEEL



DOUBLE DIRECTION AIR MOTOR

CABLE & DUCT OUTPUT UNIT

Cable & Duct Output Unit

The HDPE Pipe is mounted and compressed air is given. Then the fiber optic cable together with the air is blown into the hdpe pipe.

Belt Pressure Adjustment Wheel

It is used for the fiber optic cable to provide proper compression between the belts.

MiniSKY | Machine Installation

1

Step 1

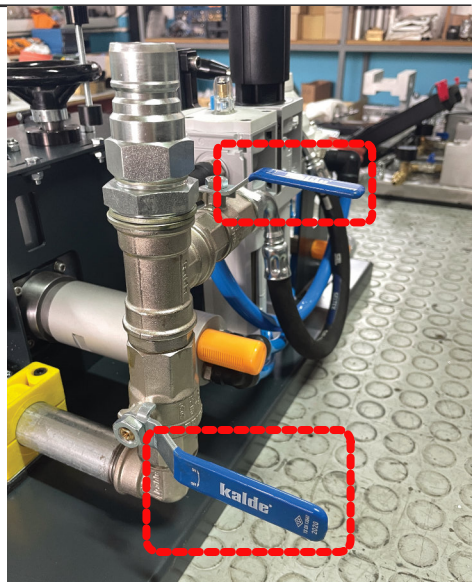
Fiber optic cable blowing machine does not need to be installed by the customer, it is ready for operation by simply attaching the air coupling, which has a quick connection feature, as seen in the picture on the right.

The machine needs at least 7 bar and maximum 8 bar compressed air to operate.

2

Step 2

Before the machine is started, the air valves must be in the closed position. (as seen in the picture side)

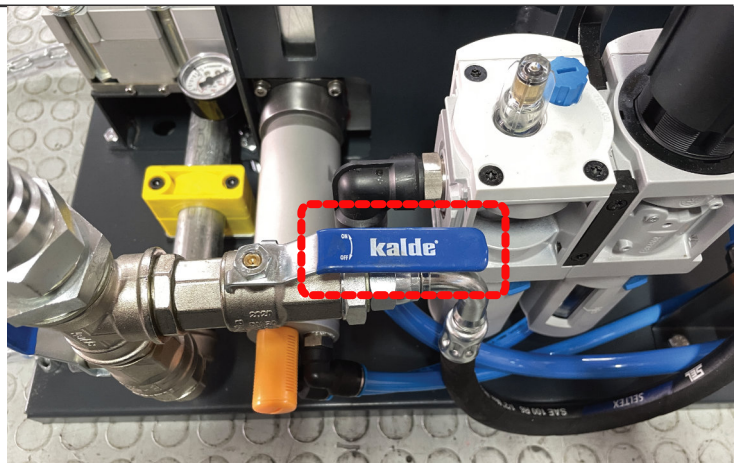


MiniSKY | Starting the Machine

3

Step 3

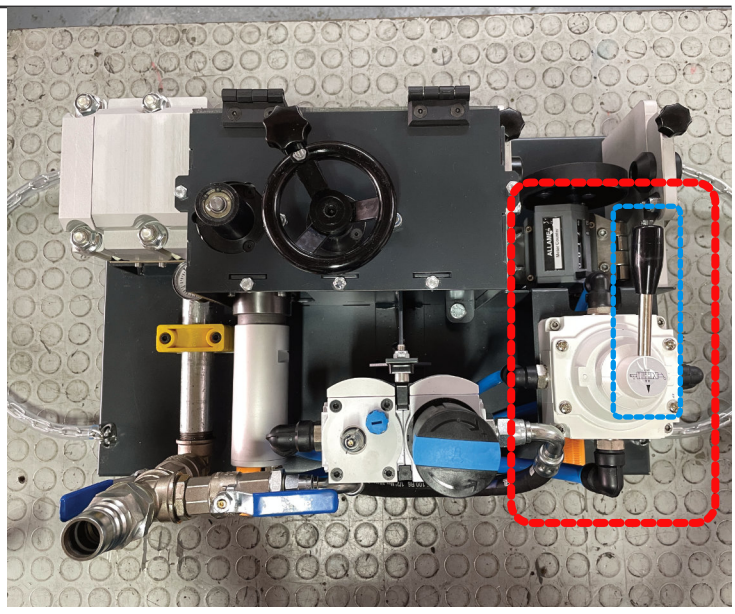
For the machine to work, first of all, the air valve feeding the air engine should be turned on.



4

Step 4

In order to prevent the air motor from starting suddenly, the lever valve must be at the zero level, otherwise the air motor may operate out of your control and cause damage to your fiber optic cable.

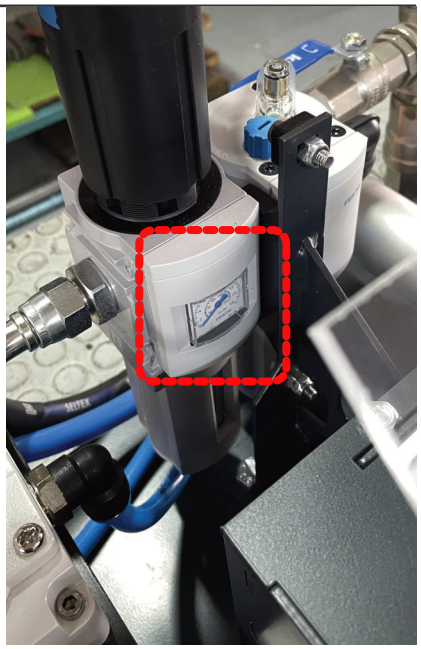


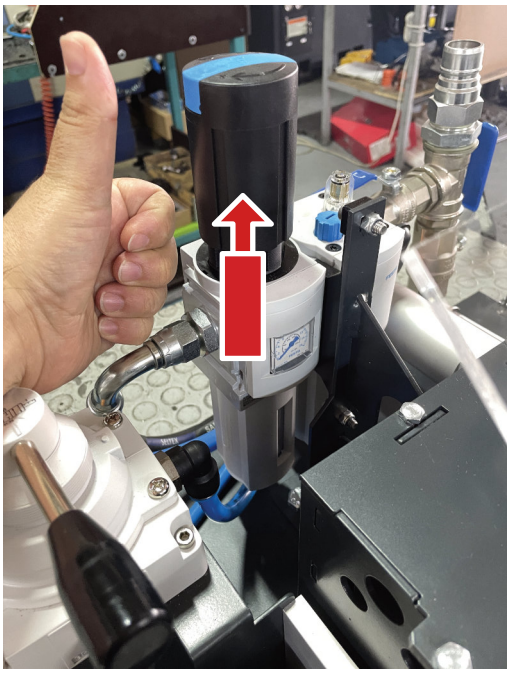
MiniSKY | Starting the Machine

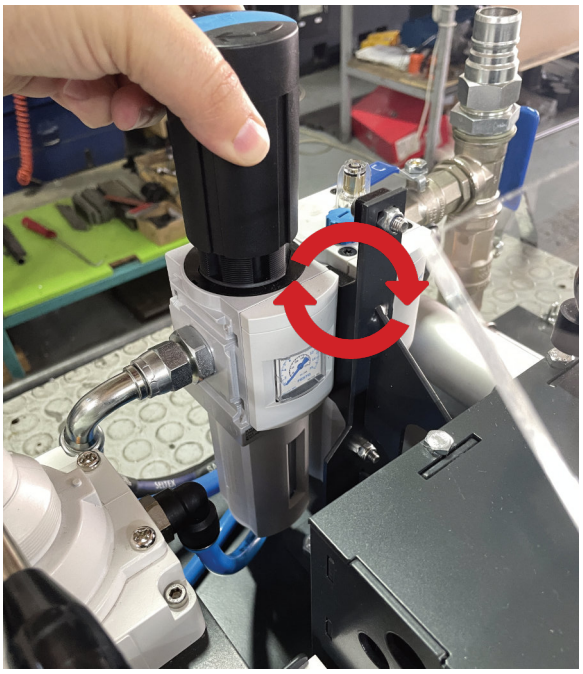
5

Step 5

Conditioner bar clock is brought to a pressure between 7-8 bar and fixed for the controlled delivery of compressed air to the air motor. The maximum pressure of the air should be 8 bar. (When the air motor is not running), When the air motor is running, the bar clock should be at least 2-3 bar, less air pressure will cause performance degradation. The BLACK adjustment lever of the conditioner is pulled upwards and released from the lock mechanism and the pressure is adjusted by turning it clockwise.







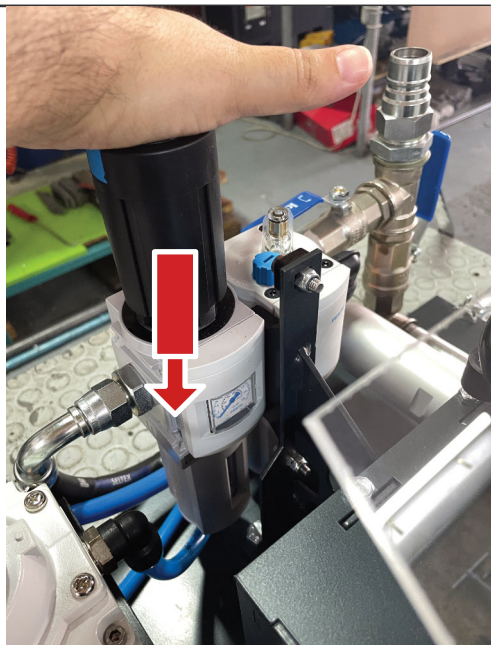
MiniSKY | Starting the Machine

6

Step 6

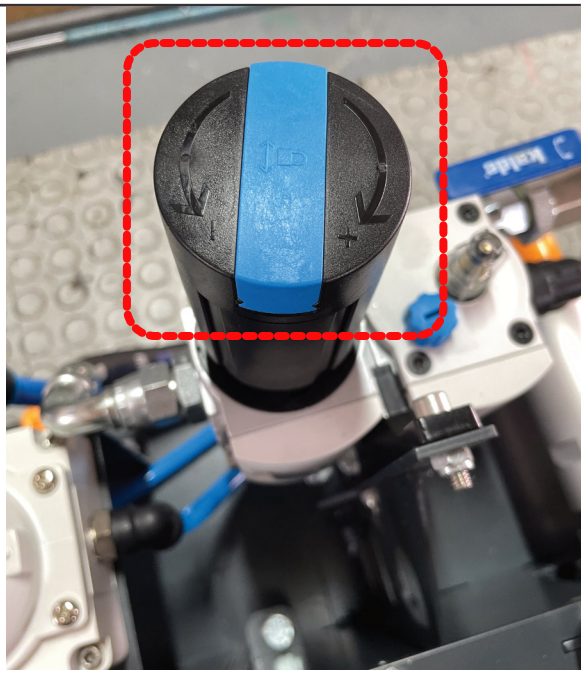
After the air pressure is adjusted with the conditioner, the adjustment lever is locked by pushing it downwards.

Follow the signs on the adjusting lever to decrease or increase the air pressure.



Note:

Air pressure is very important. Air conditioner should be at **2-3 bar**. When you open the air motor and duct vane same time check the motor pressure. If it's not at 2-3 bar -> **Your blowing perfanmance will be lower**. You should give more air pressure or you should use **bigger compressor** to solve problem.



MiniSKY | Starting the Machine

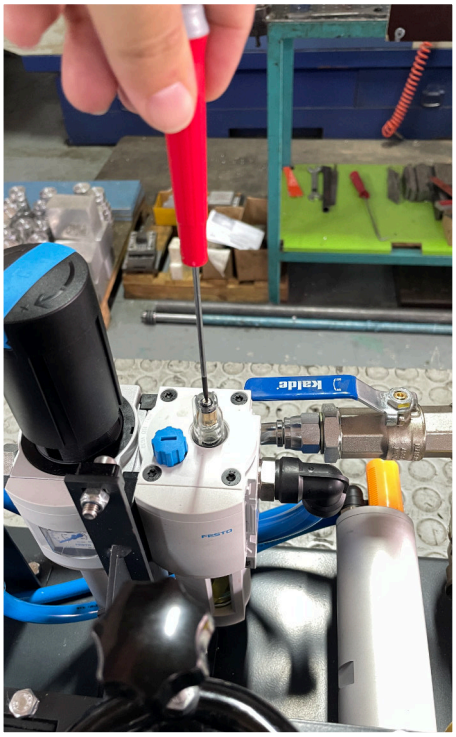
7

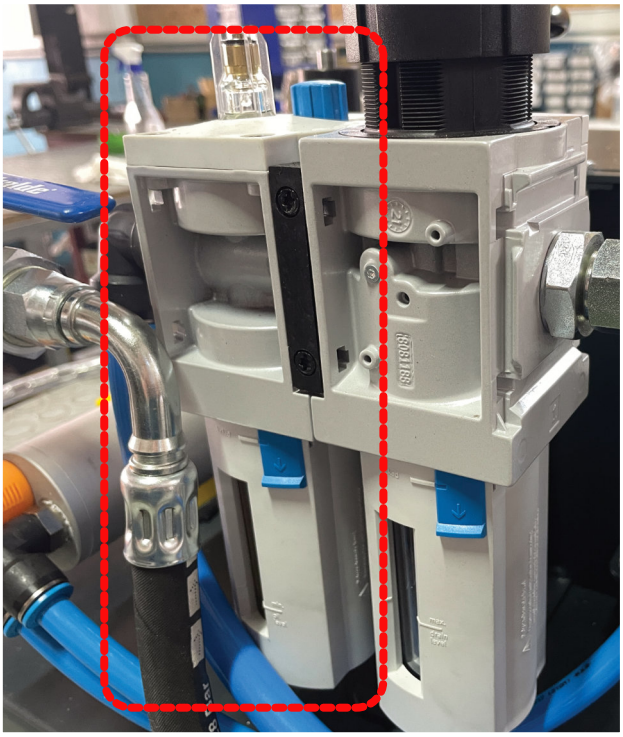
Step 7

The dripping mean amount of the lubricant unit in the conditioner should be 1-2 drops per minute.

As seen in the picture below, drip adjustment can be made with a small flat screwdriver. By observing the drip, you can adjust the oil flow rate. You have to do this while the machine is running, it should be done while the cable is blowing.

Note: Lubrication is very important to the air motor. The performance of the air motor, which is not sufficiently lubricated, decreases and causes it to malfunction. Excessive lubrication will cause the air filter to become clogged.



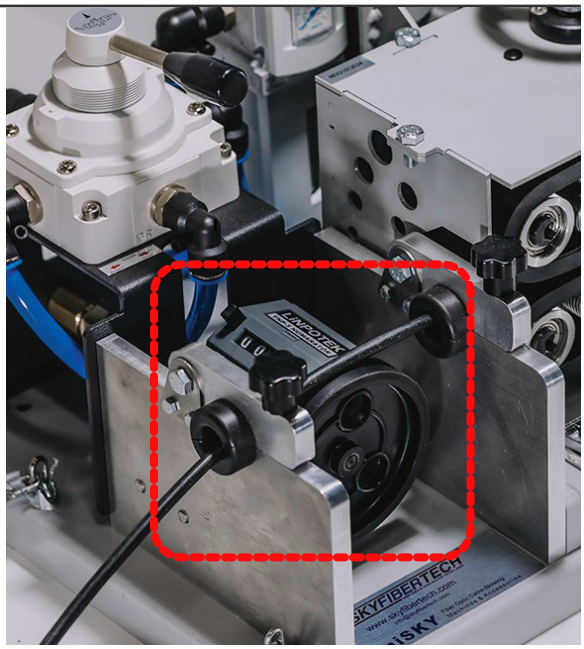


MiniSKY | Placing the Fiber Optic Cable in the Machine

8

Step 8

Fiber optic cable is placed in the entry unit as seen in the picture on the side and the cable end is aligned to the end of the output unit by passing it through the pallets.



9

Step 9

The meter counter must be adjusted after centering the cable. The wheel of the cable counter should touch the taut cable and apply slight pressure to the cable as seen in the picture above.

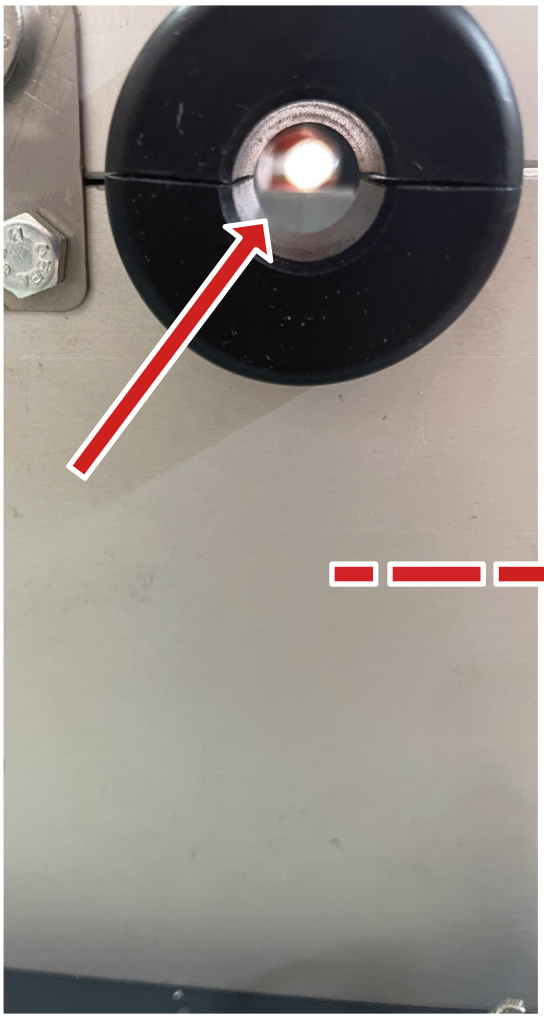
Height adjustment of meter counter is done with wing nuts.

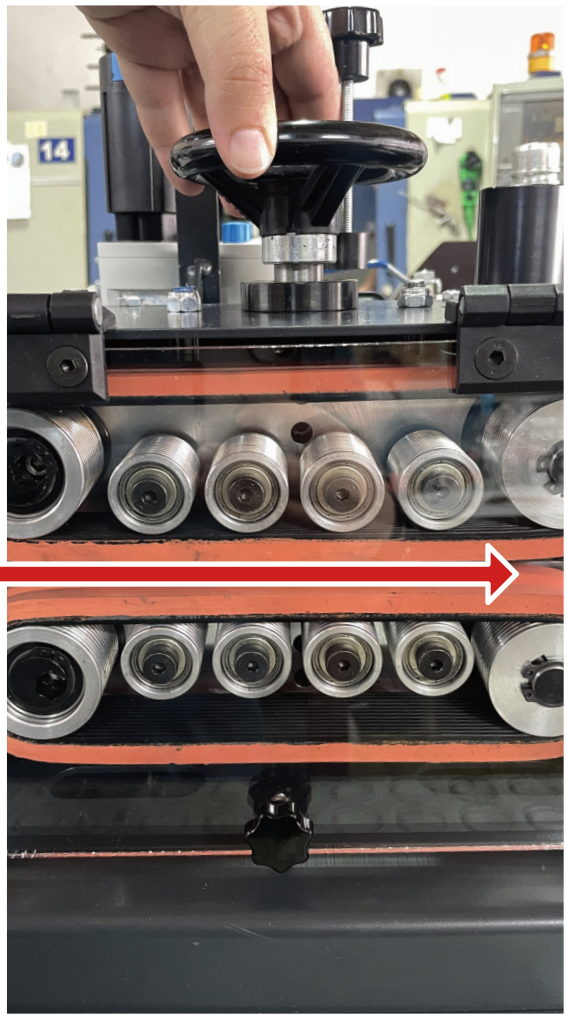
MiniSKY | Placing the Fiber Optic Cable in the Machine

10

Step 10

Check the axis line between fiber optic cable and belts. If its not straight you should fix it.





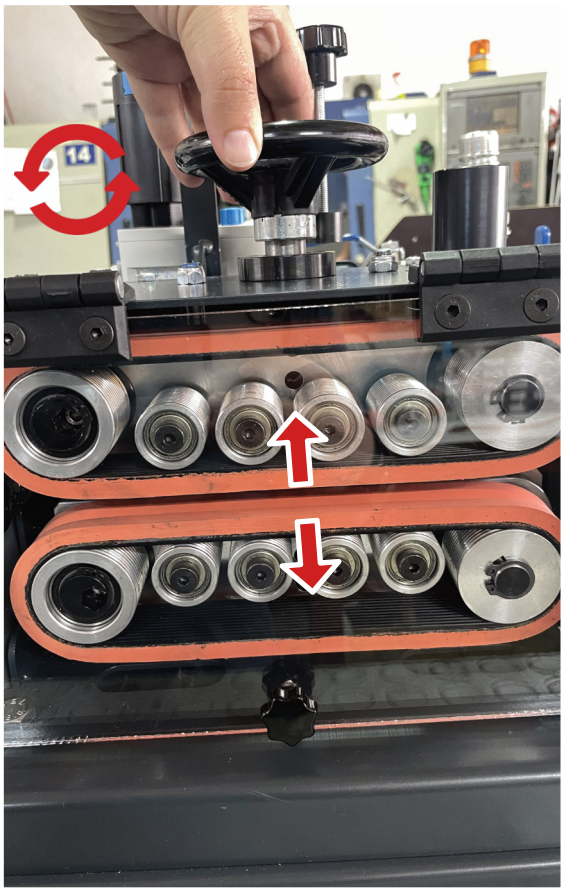
MiniSKY | Placing the Fiber Optic Cable in the Machine

11

Step 11

The centered cable is tightened between the straps, but it should be checked that the straps do not tighten the cable too much or that it is not loose.

As seen in the pictures, when the wheel is turned clockwise, the straps compress the cable, and when the wheel is turned counterclockwise, the straps release the cable.

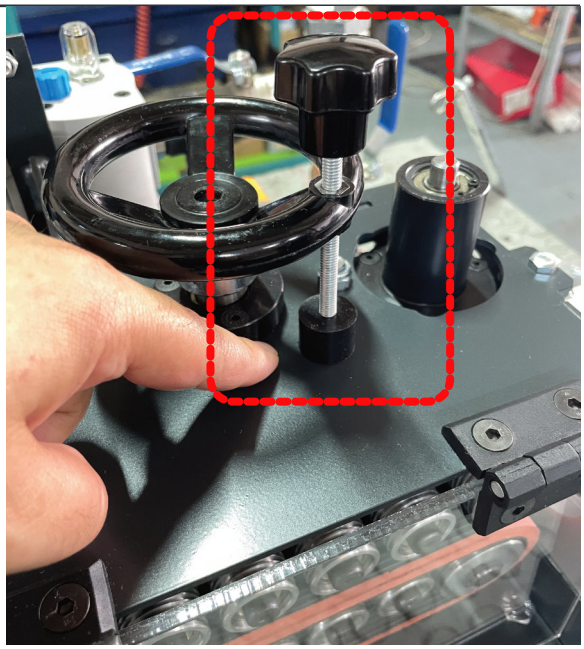


MiniSKY | Placing the Fiber Optic Cable in the Machine

12

Step 12

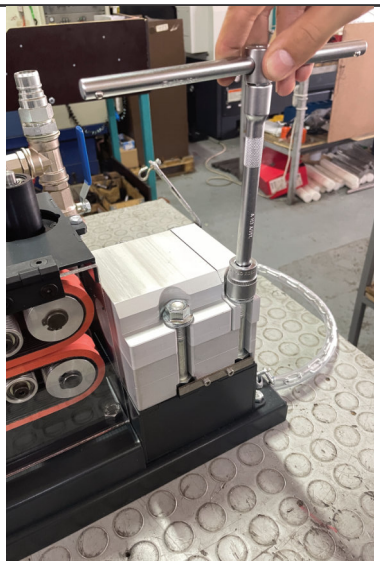
In order to prevent the loosening of the wheel due to vibration, the small handle on the wheel is rotated clockwise to fix the wheel.

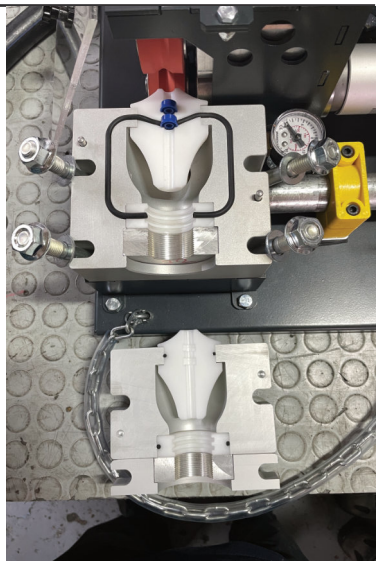


13

Step 13

Covers of the cable outlet unit are removed and the inside is checked, if it is dirty, it is cleaned with a clean cloth or compressed air.





MiniSKY | Placing the Fiber Optic Cable in the Machine

14

Step 14

Sealing elements are mounted inside the cable exit unit. Sealing elements should be mounted in sequence as seen in the picture. Care should be taken during the assembly of strip and o-ring gaskets.

The diameter of the o-ring seal must be suitable according to the size of the o-ring seal slots. The sealing on the sealing elements sent with the machine must be the same in all operations.

1

2

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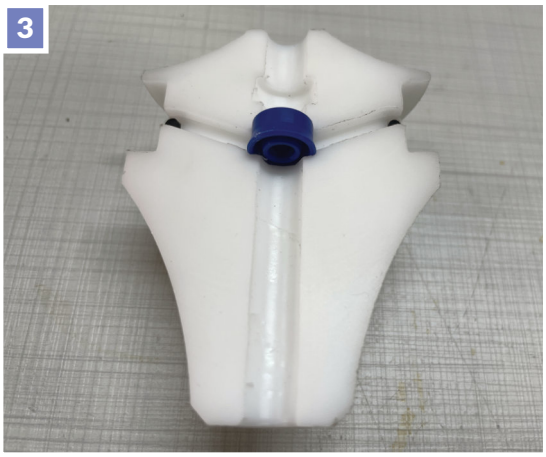

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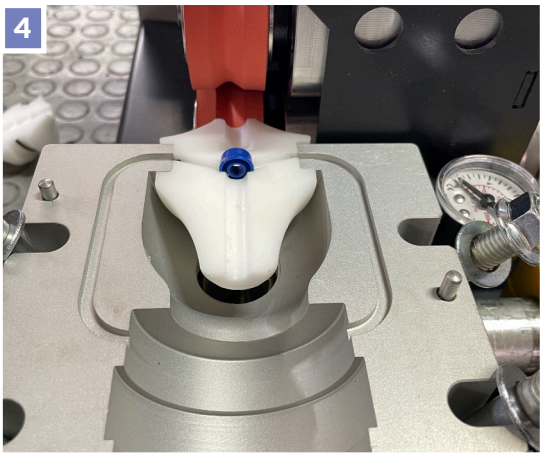

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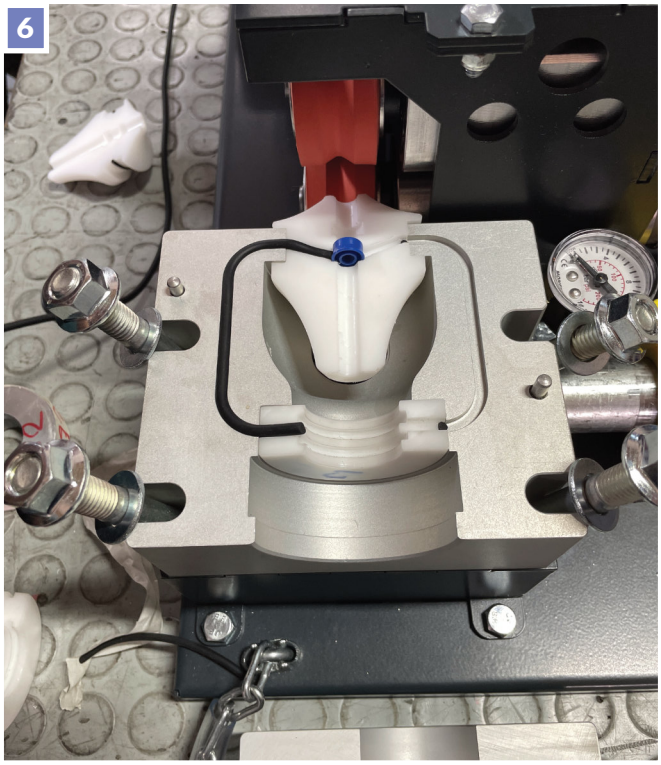

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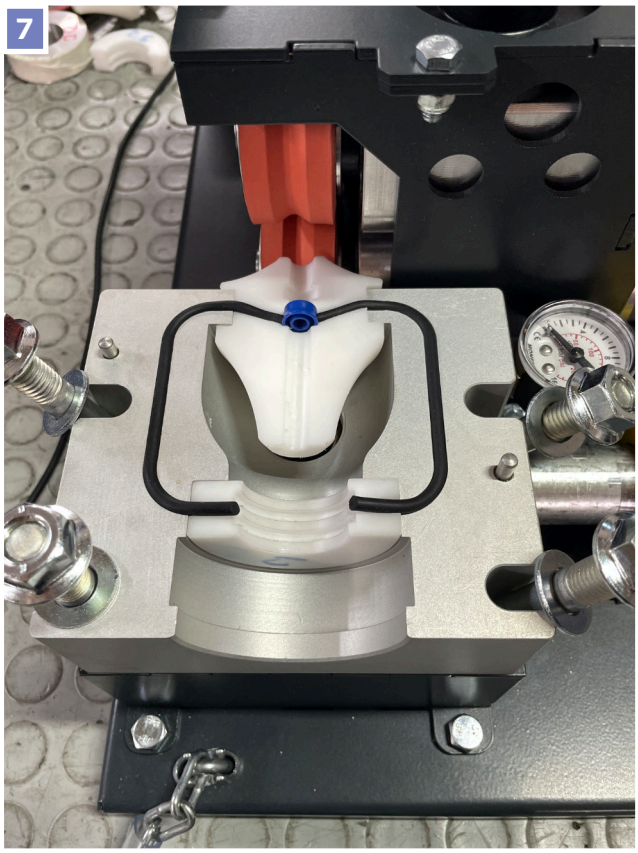

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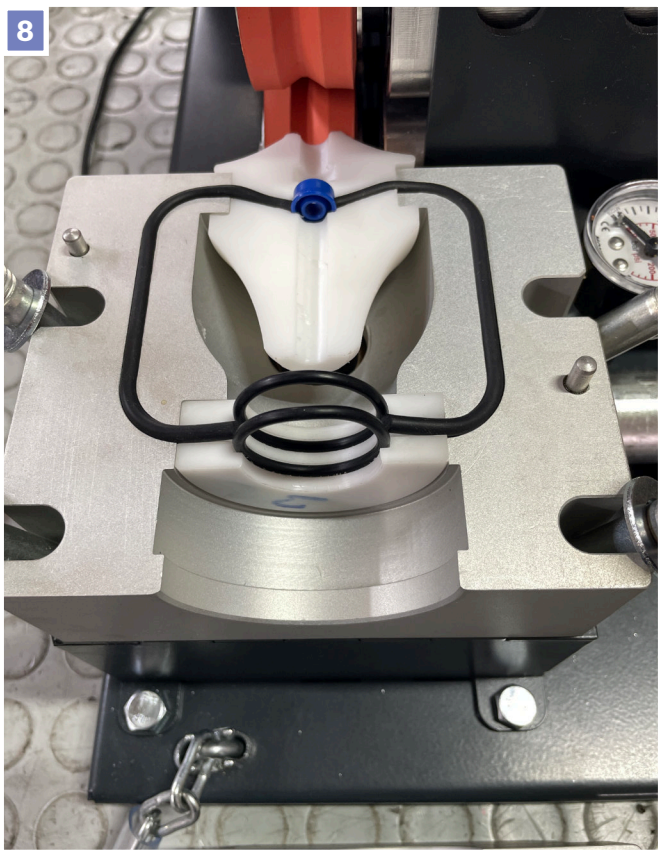

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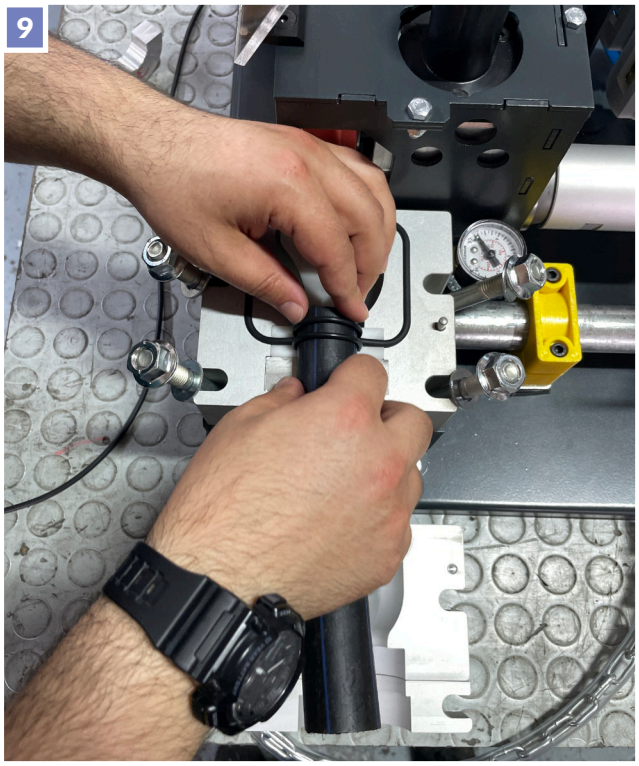

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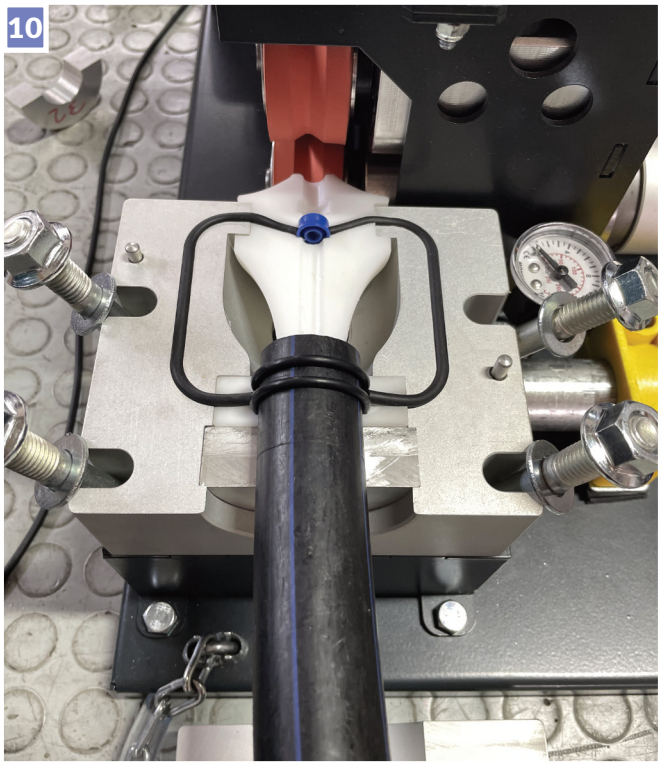

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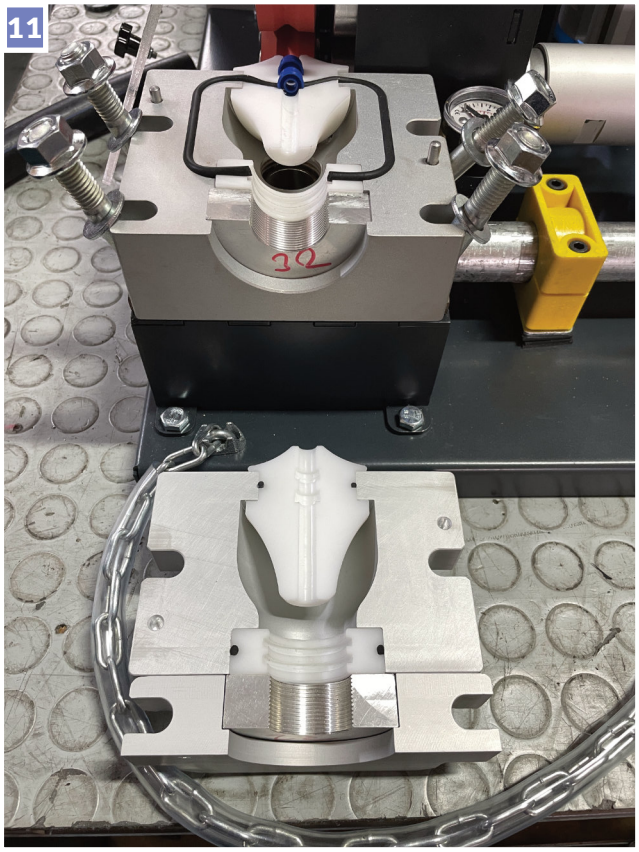

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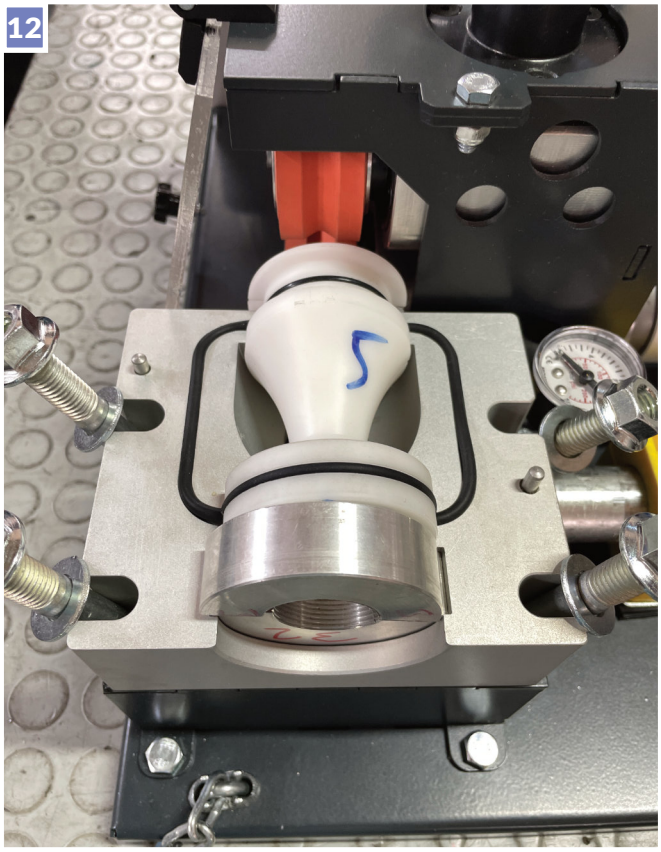

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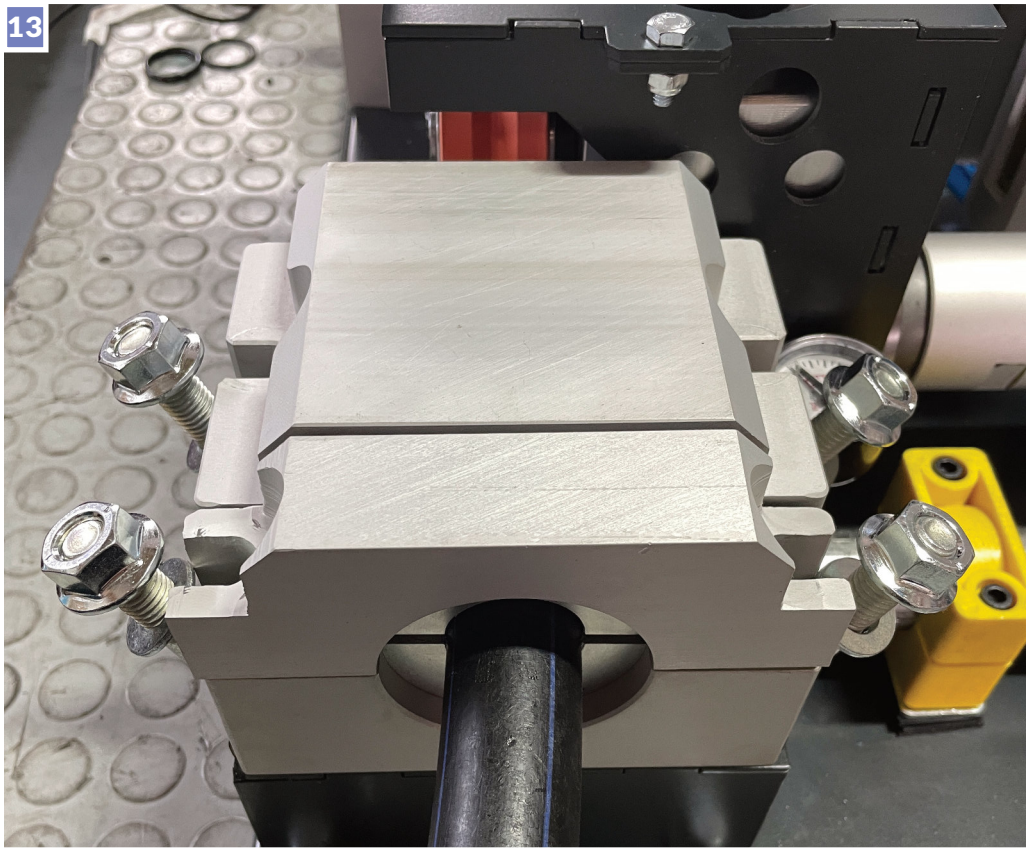

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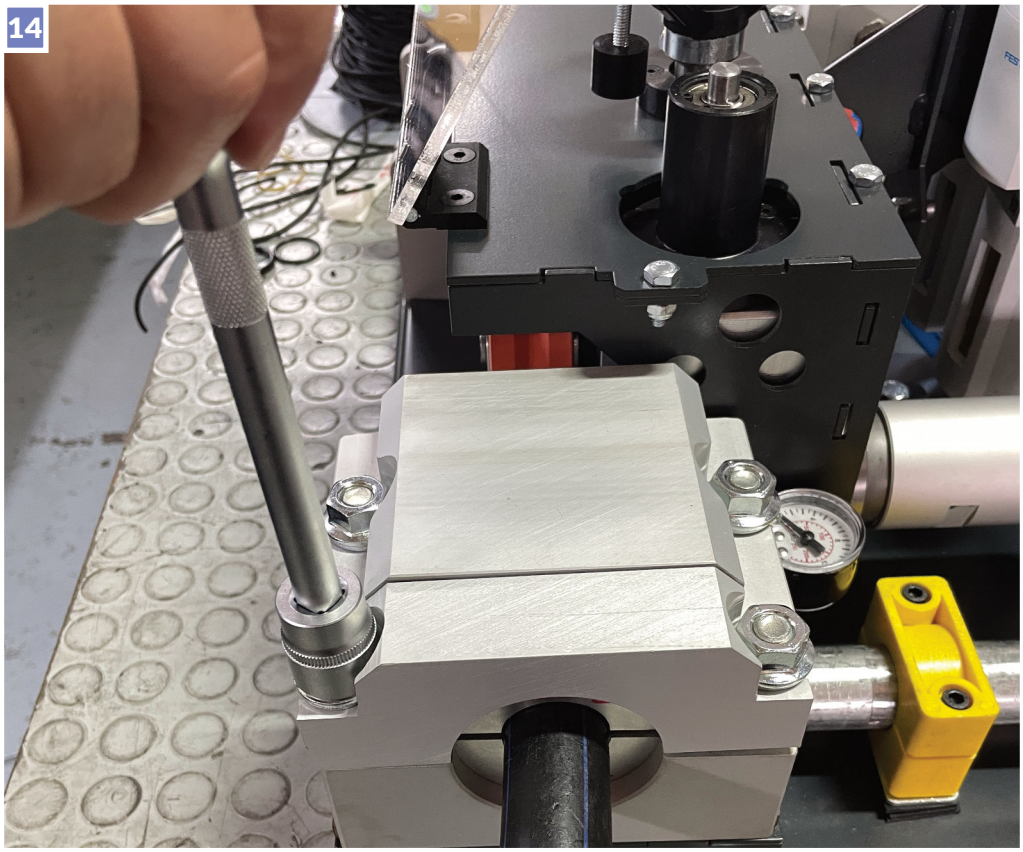


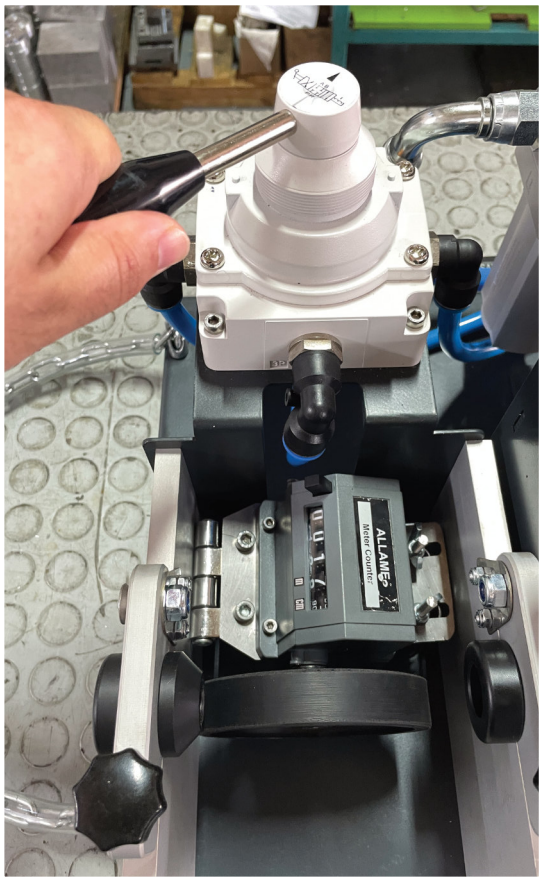
MiniSKY | Placing the Fiber Optic Cable in the Machine

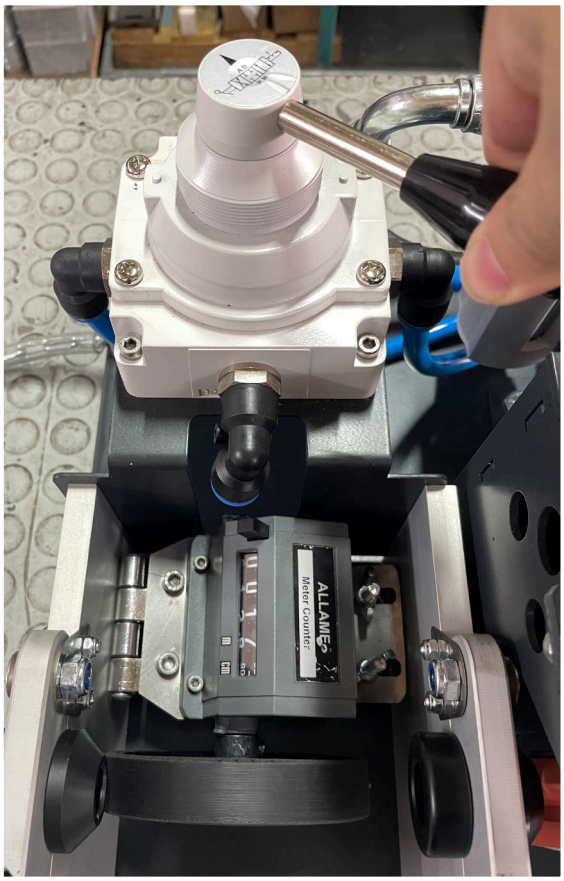
15

Step 15

After the cable outlet unit and hdpe pipe assembly is completed, the air motor is started for 2-3 seconds, this operation is for control purposes. It is observed that the fiber optic cable is pushed into the pipe without being pinched or twisted.

The air motor is controlled with the help of a lever valve as seen in the picture.





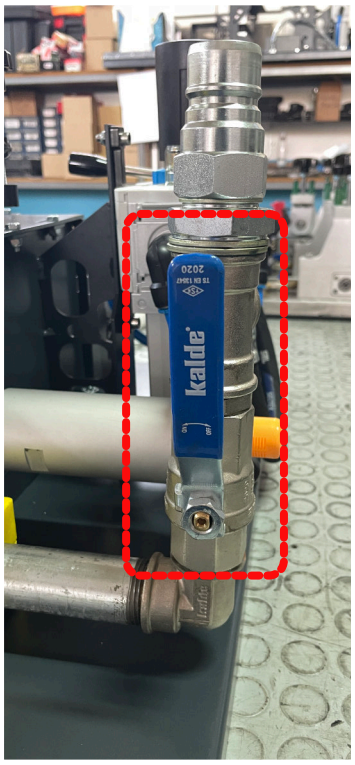
MiniSKY | Placing the Fiber Optic Cable in the Machine

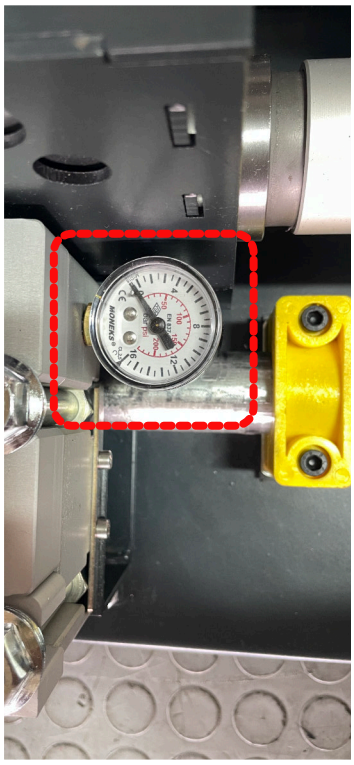
16

Step 16

A quick connection coupling is mounted at the end of the air hose coming from the air compressor and a quick coupling is attached to the inlet of the Air System and the 1" valve on the air system is brought to the open position in order to supply compressed air to the cable exit unit and the hdpe pipe.

The bar clock on the output unit must be at least 3-4 bar. Less air pressure causes the cable to bend or break inside the hdpe pipe.





MiniSKY | Replacing Belts

Replacing Belts

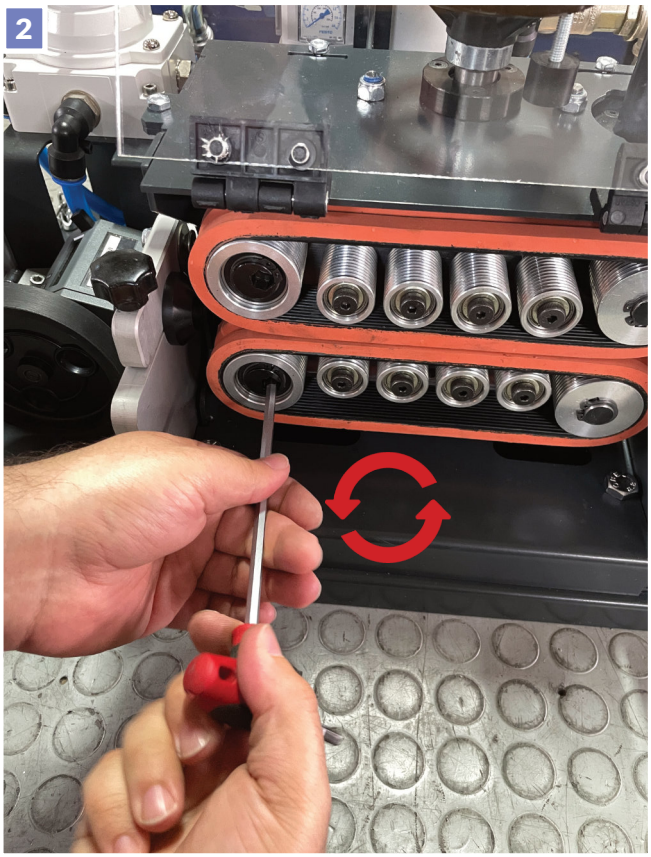
Belts in different sizes are sent with the machine according to the cable diameter used.

Belt No : 1 (Cable Diameters : 2,5 -3 – 3,5 – 4 mm.)
Belt No : 2 (Cable Diameters : 5 – 6 – 7 -3 – 8 mm.)
Belt No : 3 (Cable Diameters : 9 – 10 – 11 – 12 mm.)
Belt No : 4 (Cable Diameters : 13 – 14 – 15 – 16 mm.)

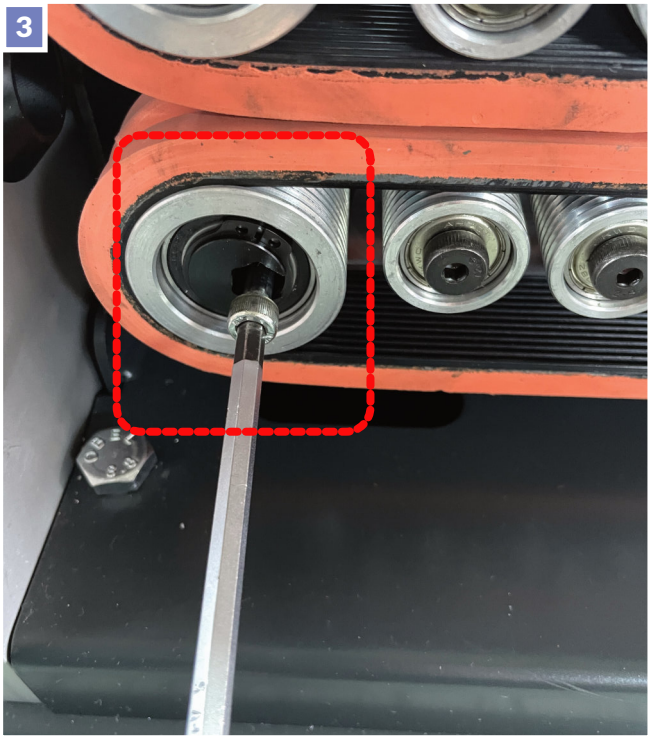
The change of belts on the machine is shown in the pictures.
Follow the pictures in order.

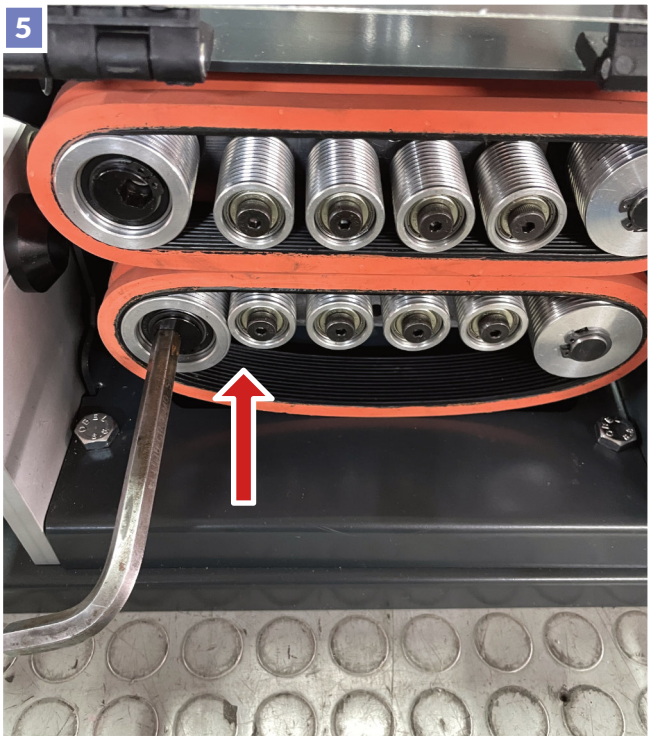
1

2



MiniSKY | Replacing Belts





MiniSKY | Replacing Belts

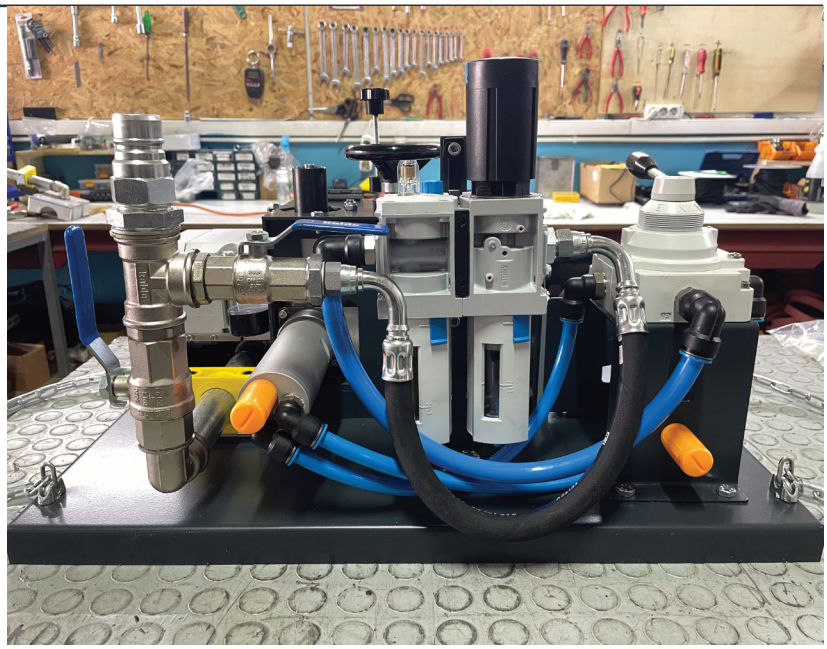
Replacing Belts

In the 8th and last step, the belt is removed and a new belt is fastened instead. These steps are repeated in the opposite direction after the replaced belt is properly placed. With the appropriate tension, the belt is tightened and is ready for use.

MiniSKY | Air Filter, Lubricant Maintenance And Cleaning of Pneumatic Exhaust

When the pneumatic oil in the lubricator runs out, the blue latch on the oil tank is pulled and turned counterclockwise half a turn, the oil tank is removed and the oil is supplemented.

The filter in the conditioner catches the moisture in the air and collects the water collected in its reservoir. The reservoir should be opened at regular intervals and the water in it should be emptied.



Pneumatic exhaust in the air motor and the lever valve should be cleaned at regular intervals, and if too much oil waste is formed, it should be replaced.

THANK YOU

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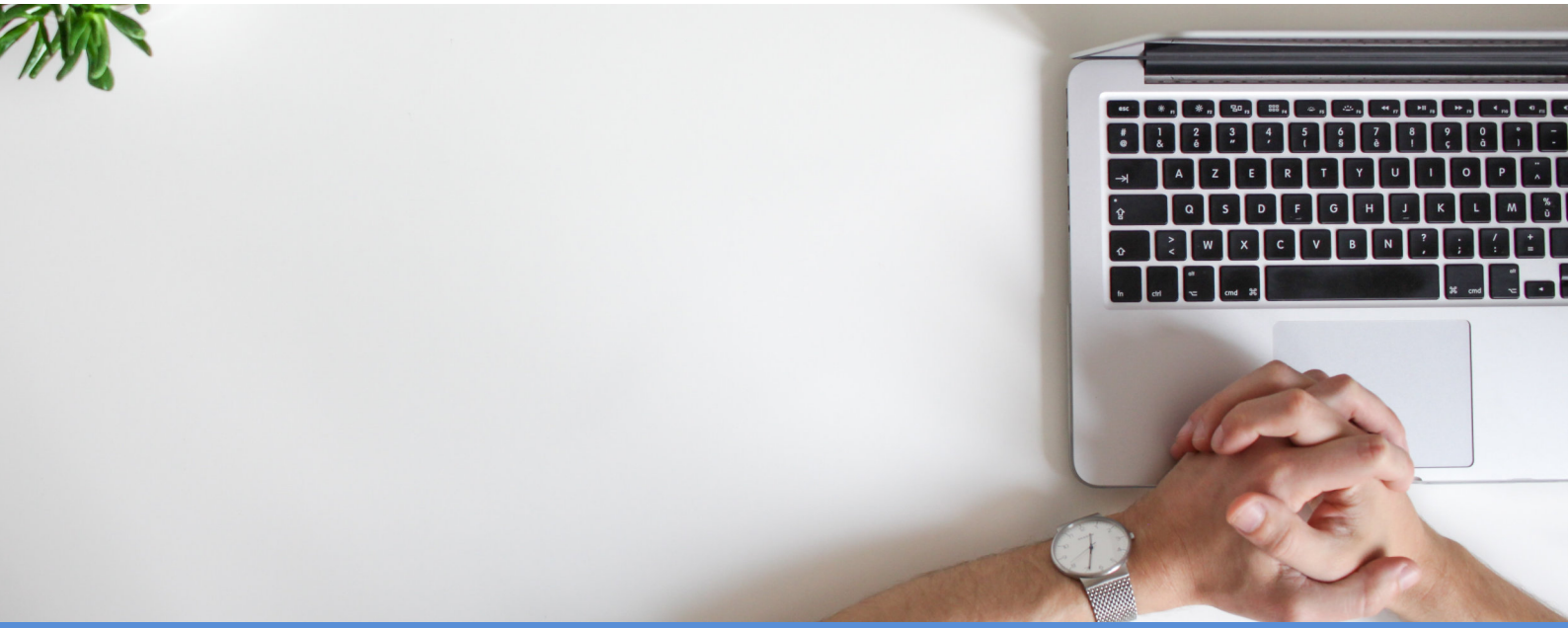

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