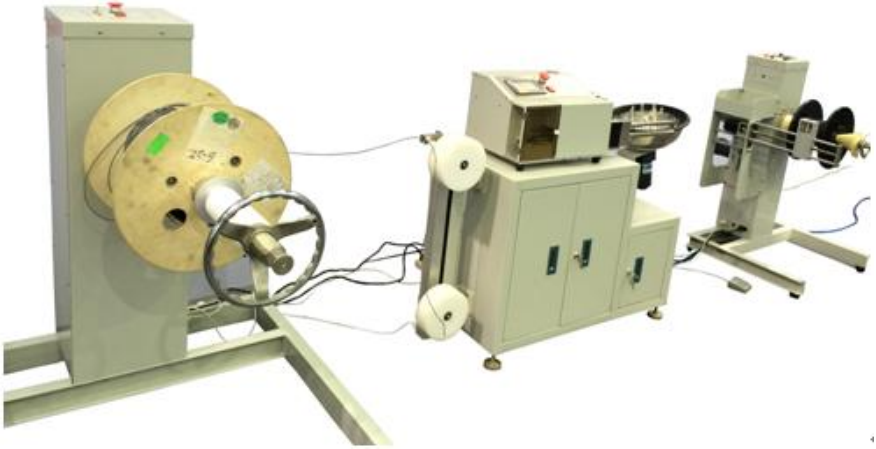
Table: SUN-UM-PCPL-CCM001-E Version: A/0

SUN-CCM-X20D Cable Cutter Machine

Sun Telecom's SUN-CCM-X20D automatic cutting machine is professional equipment, which is used in optical fiber jumper cable (or cable) production to measure length, cut, count, wind and spray words marking (optional). It can cut cables of different sizes and wind them into the desired length and annular, with advantages of measuring accurately, a series of cutting, winding, easily automatic operation. It can set different length, speed, and numbers and so on, greatly improving the production efficiency.



Features

- Max 500m cable length cutting
- Cable arrange function optional
- Touch Screen

Application

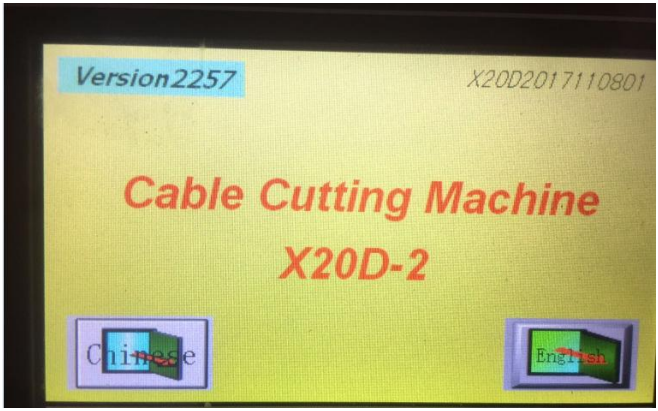
- Patch Cord Production Line

Specifications

Parameters	Specification	
Model	SUN-CCM-X20D	SUN-CCM-X20D-2
Operation Interface	Touch screen	Touch screen
Cutting Speed (m/s)	≤1.5	≤1.5
Cable Length After Cutting (m)	3~500	3~500
Cutting Accuracy (mm)	≤±（2+L*0.003）	≤±（2+L*0.003）
Bearing Weight (kg)	≤150	≤150
Cutting Cable Specifications (mm)	¢ 0.9-7	¢ 0.9-7
Spraying Function	Support	Support
Cable Receiving Machine	Without Cable Arrange function	With Cable Arrange function
Power Supply (kw/v)	1.8/220	1.8/220
Gas Source (MPa)	≥0.5	≥0.5
L*W*H (m)	3*1*1.2	3*1*1.2

Instruction

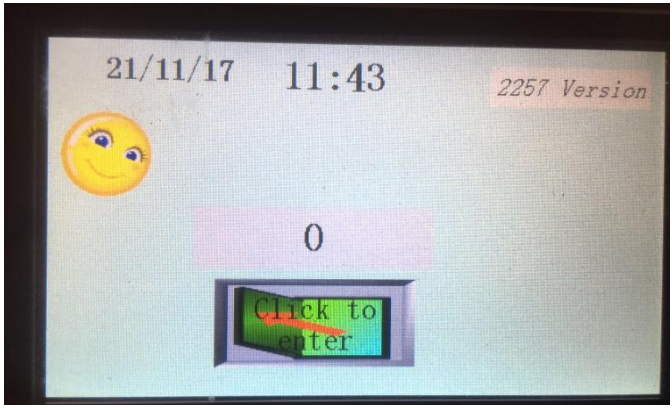
1. Language Change



Chinese: choose Chinese

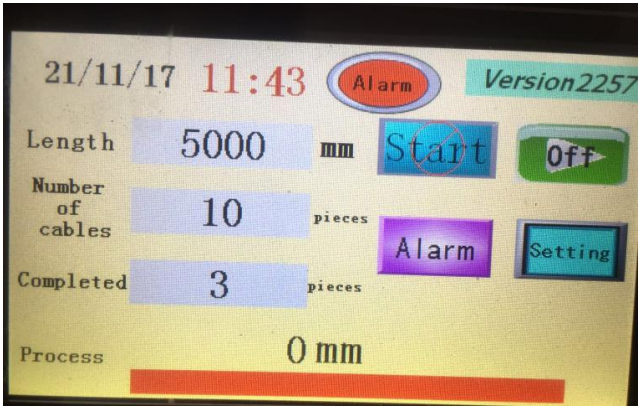
English: choose English

2. Opening Display



Click to enter: click the button and enter next

3. Main Menu



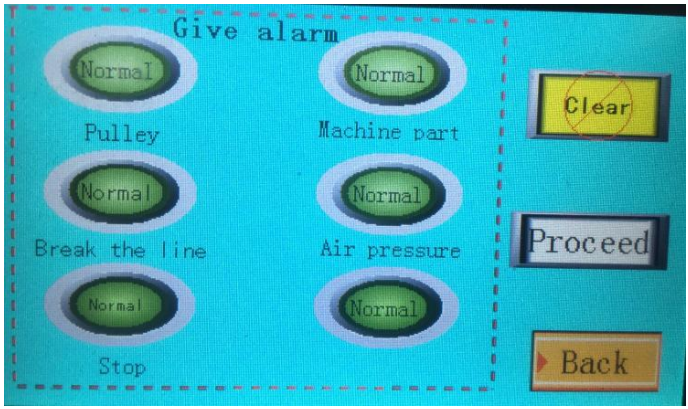
Start: Start cutting the cable

Off: Stop cutting the cable

Alarm: Enter the “alarm” information

Setting: Enter the “setting” menu

4. Alarm Information



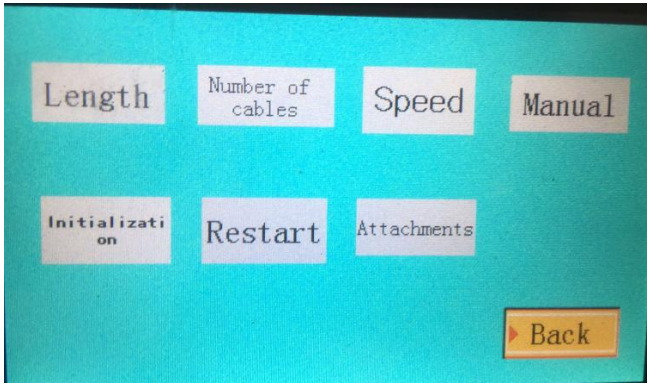
In this page, you can see the alarm information and judge where the problem is.

Clear: clear all the alarm information

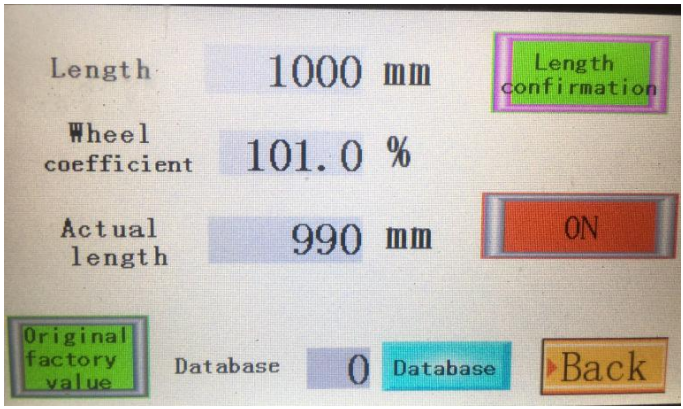
Proceed: continue the program, but the result maybe incorrect

Back: back to the main menu

5. Menu Setting



5.1 Length Setting



Length: input how long you want to cut the cable and press “length confirmation”

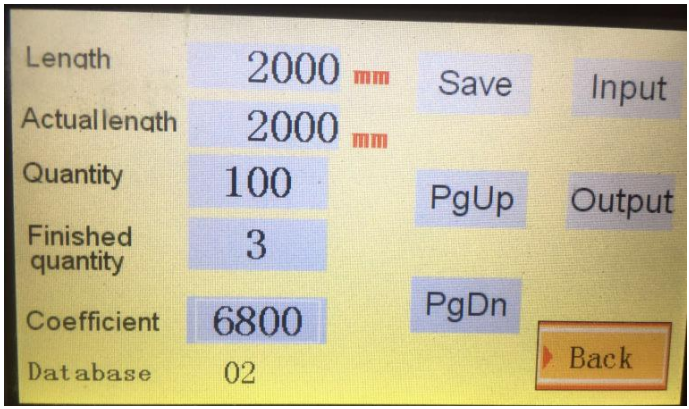
Wheel coefficient: default is 100%, it will change with actual length

Actual length: input the length which the machine actual cutting and press “actual length confirmation”

Original factory value: factory reset with wheel coefficient

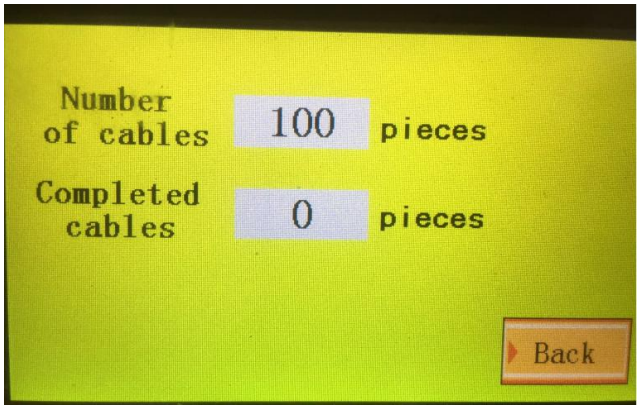
Database: enter database menu

Database Setting



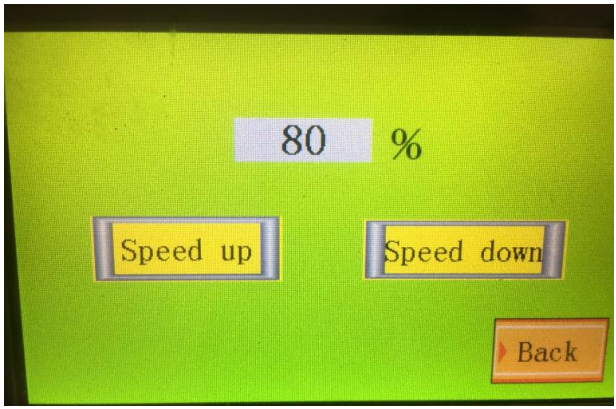
Save: save the length setting into database
Input: input the length setting to the machine
Pgup: page up/forward
Output: output the length setting to the machine
Pgdn: page down/downward

5.2 Number of cables setting



Number of cables: how many cables do you want to cut
Completed cables: how many cables have been completed

5.3 Speed Setting



It will control the cutting speed

Speed up: speed up the speed

Speed down: slow down the speed

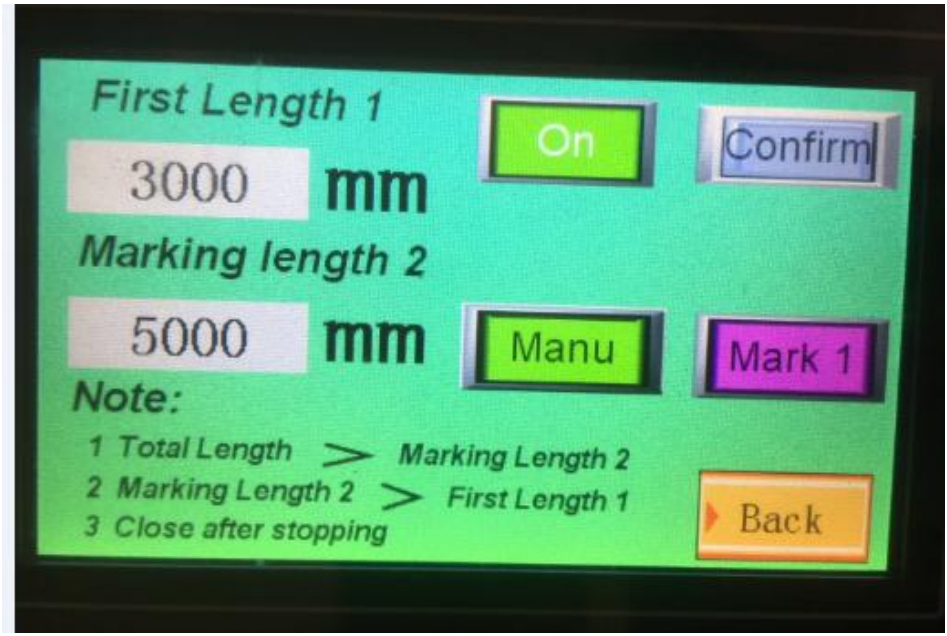
5.4 Manual Setting

Cutter: cut the cable manual

Pending coiling: pending the cable coiling

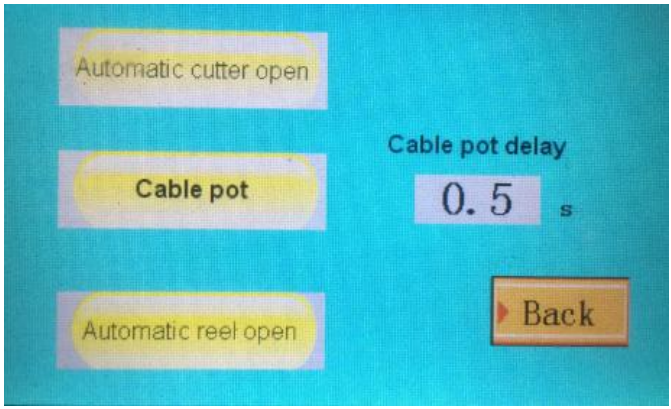
Tight wheel/rising the roller: rising the roller and let the cable in, then tight the wheel, then press cutter

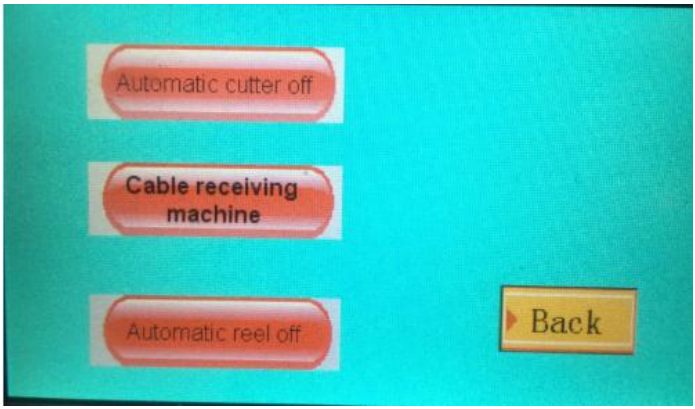
5.5 Restart Setting



First length 1: the length is first length that cable output
Marking length 2: this length is for marking the location

5.6 Attachments Setting





Automatic cutter open: automatic cutter open function open or close
Cable pot/cable receiving machine: cable pot or cable receiving machine
Automatic reel open: automatic reel open function open or close

Part I Cutter

Operating Controls

Control panel	The control panel is used to program
Adjustment knob for feed	This adjustment knob is used to select the pressure of the feed rollers onto the cable. To set the pressure, pull

roller pressure and gauge	out the knob until it engages, turn it to the left or right and then press it back into the start position. When in the start position the adjustment knob cannot be turned. The air gauge will show the pressure setting from 0-10 bar (0-140 psi).
Air filter pressure regulator for input pressure	The air filter/pressure ensures that clean air is fed to the pneumatic system. The pressure regulator is used to select the input pressure. To set this pressure, pull out the knob until it engages, turn it to the left or right and then press it back into the start position. When in the start position, the adjustment knob cannot be turned
Cable guides	The cable guides keep the cable straight. They can be set to the cable diameter using the two knurled screws
Emergency-Off switch	The Emergency -Off switch immediately shuts off all the functions of. To do this, press the knob in firmly until it engages. To release it, turn the Emergency-Off switch clockwise until it springs out of the engaged position
Clear plastic slider cable output	The clear plastic slider is left in for most applications. For very short pieces, the slider can be removed to allow the material to slide down the exit
Master switch	The master switch is used to switch on and off (Figure 3). After being switched on, the following appears in the display: Software version 1.5 edition 4(04/05)
Out-of-material switch	The out-of-material switch stops or prevents processing if no cable has been inserted into the unit or if the cable has been used up. The rod is then positioned fully downwards as shown in Figure 1. When the rod is raised up, the monitoring is switched off (Figure 8)

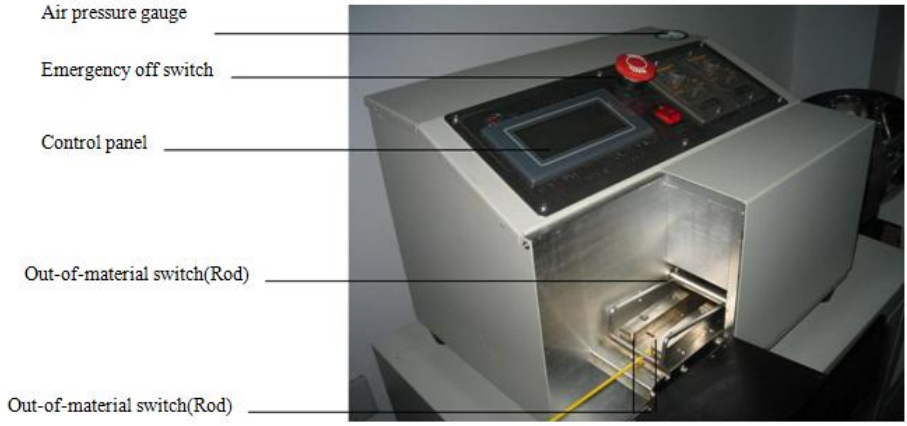


Figure 1 Front View

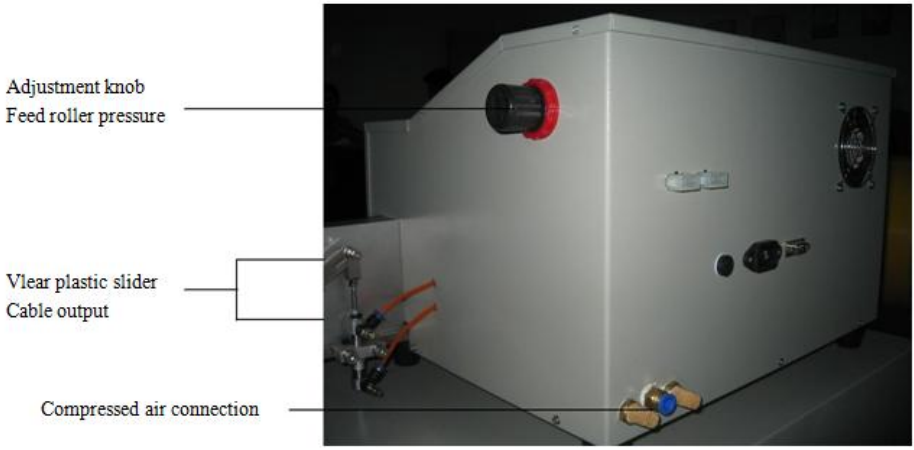


Figure 2 Rear View

Connections

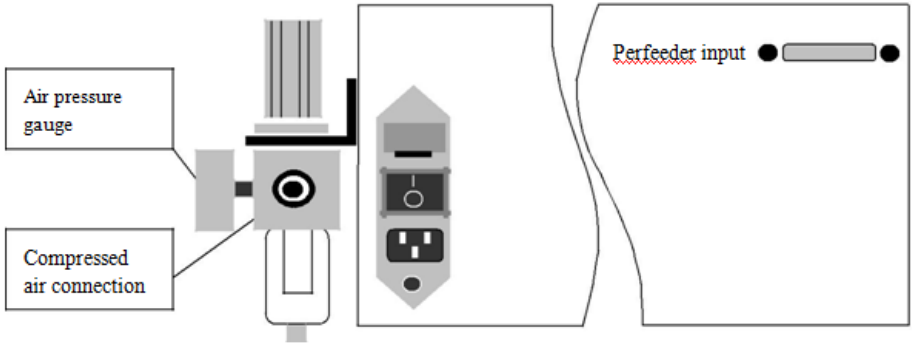


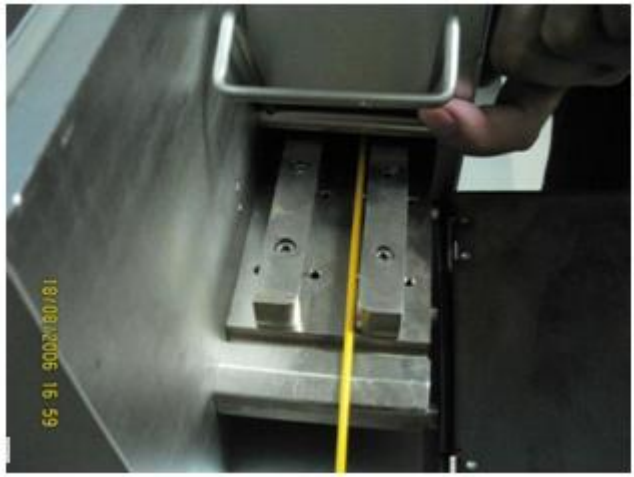
Figure 3 Rear Panel XZ Diagram

SETUP

It is imperative to check whether the mains voltage set on the unit is the same as the local mains voltage. If the voltages differ then you must adjust the mains voltage on the unit using the voltage selector.

- Place the X20-D on a equipment rack or a hard, even base.
- Switch the master switch off if it is on
- Connect the compressed air to the filter / regulator unit, max pressure 10 bar (Figure 3)
- Adjust the pressure to maximum of 7 bars. Connect the mains cable

Operation



Figure

- Turn the master switch on, the PLC will display as the figure
- Raise the out-of-material switch up. As be shown figure 11
- Insert a cable between the cable guides until the cable can't move along (approximately 100mm), it means the end of the cable reached the cable cutter blade
- One minute later after you turn the master switch on, the PLC will display as figure

MAINTENANCE

All ball bearings and bushings are dustproof and are permanently lubricated. Therefore no lubrication work is required.

Cleaning

Virtually no waste is created either when cutting or stripping cable and tube material. Nevertheless, it may be necessary from time to time to remove

dust etc. from

- Cleaning the housing with a damp cloth and an all-purpose cleaning agent
- The best way to remove dust and similar dirt is with a paint brush and vacuum cleaner attachment. Never use compressed air; otherwise you will blow the dirt right inside the machine housing

Replacing blades

- Switch the master switch off. Disconnect the power cord from the power supply. Disconnect from the compressed air supply
- Handle lift the cutter. To do this, undo the 4 screws around the edge of the cover
- Take out the cutter system from the cabinet, rub the blade with an oily cloth and fit it into the holder–screw tight
- Align the blades using the procedure

TROUBLESHOOTING, FAULT CLEARANCE, REPAIRS

All maintenance work should be carried out by specially trained personnel only agents, the user's own specially trained personnel

Electrical faults

In the event of any faults you should always check whether the power and compressed air supply is on and correctly connected. The procedure for replacing mains fuses is described on page? If any faults occur that you are unable to correct, please notify Customer Service. State the program version number as it appears in the display when the unit is switched on.

Replacing the Electronics Modules

The electronics controls are housed in two "control panel" and "real panel"

modules. The rear panel electronics module provides the power supply and servo motor controls. It is located on the rear panel of. The control panel electronics module regulates and controls all processes as well as length measurement. Should any repair work be required, the whole control panel must be removed and sent to the Customer Service Department. Do not attempt to repair or replace individual components.

Mechanical and Other Faults

Cable lengths incorrectly cut

Possible Cause	Action
Although the length measurements have been correctly programmed the cut length is incorrect. A correction factor may have been programmed	Set the correction factor to 100% (**correct** keys section “Key Function” Page?)
The cable is not being fed in loosely and evenly	Ensure that the cable reel can unwind smoothly
There is insufficient play between the cable guides.	Adjust the cable guides in such a way that there is approx 1 mm play between cable and guides (“Operation” section, Page?)
The feed roller are dirty and / or worn (nominal diameter 31.85 mm)	Clean or replace the feed rollers
The feed roller pressure on the cutting material is insufficient	Increase the feed roller pressure (“Operating Control” Section, Page?)
The processing feed is too high	Reduce the processing speed (speed keys, “Key Functions” Section, Page?)

Cutter blocked, not cutting or cutting unevenly

Possible Cause	Action
The blades are blunt or defective	Remove the cover on the rear panel as described on Page? If the blades are blunt or defective refer to the information in the same chapter on how to replace the blades
The blades are poorly adjusted	Readjust the blades (Page?)
Insufficient pressure of the compressed air supply.	At least 2 bar (30psi) input pressure. However, 2 bars will only allow you to process thin materials which can easily be cut. A higher pressure is required depending upon the composition of the material. See also the section entitled “compressed air connection” Page?

CCM-X20D will not start

Possible Cause	Action
The automatic unit is not connected to the mains	Insert the power cord into the power supply
The automatic unit has not been switched on	Switch the master switch on
The Emergency-Off switch has not been reset	Reset the Emergency-Off switch
The mains fuses have blown	Replace the fuses (Page?)
The fuses on the rear panel electronics unit have blown	These fuses can be found on Page? in the section entitled “Checking Supply Voltages”.

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