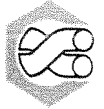


Schlemmer  
KABELSCHUTZSYSTEME



VDA 6.1  
QS 9000

# Operating Instructions

## semi-automatic corrugated pipe-cutting machine



## 1. General Information

Plastic corrugated pipes are preferably used in the mechanical engineering and automobile branches where electric wiring must be protected against dirt, mechanical damage and thermal influences.

These corrugated pipes if slotted or unslotted must be cut to a certain length. In order to do that different kinds of cutting tools were used up till now; mostly simple tools, such as a knife were used. The cut edges of the corrugated pipes although aren't straight but irregular.

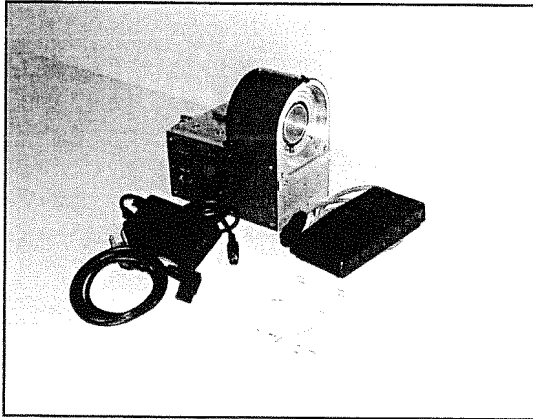
Most important thing of cutting corrugated pipes is not to cut in the grooves or in the area between groove and pitch, but if possible entirely at the highest point of the pitch. Only if *cut at the pitch summit* can it be guaranteed that the ends of the corrugated pipes do not damage the wires when the wires and corrugated pipes rub against each other (so-called abrasive edges) especially when the extending wire from the corrugated pipe is bent.

The *CPC-M* is a specially developed semi-automatic corrugated pipe-cutting machine, which fulfills exactly these requirements. „Semi-automatic“ because feed and transportation of the corrugated pipe is carried out manually.

With help of the quickly and easily insertable modular inserts the *CPC-M* can be equipped for the according pipes that are to be cut. Suppliable are NW <sup>\*)</sup> for the different Schlemmer pipe profile modular inserts: 4.5 to 50 mm (**turn to enclosure 1**).

<sup>\*)</sup> Inner diameter of the corrugated pipe

## 2. Supplied equipment

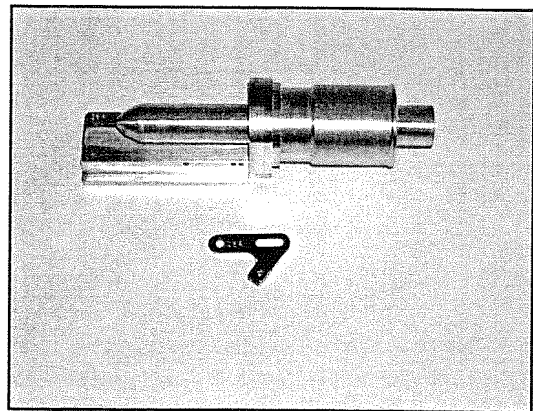


Picture 1. CPC-M

The semi-automatic machine (**Picture 1**) is supplied with an AC line adapter (incl. power cable), foot switch and two cut protection shields.

One modular set (**Picture 2**) for each inner diameter consists of a pipe lead and knife-holder.

Attention: Modular sets are not a regular part of the machine. They must be ordered separately.



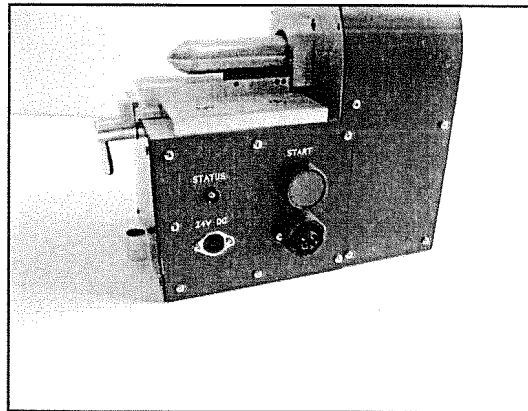
Picture 2. cutting modul

### 3. Construction and Function

**Picture 3** shows the simple and clearly visible control panel which is compactly arranged on one side of the machine.

Includes:

- LED status beam
- Starter switch
- 24V DC connection socket
- Connection socket for the supplied foot switch.



**Picture 3.** Control panel of the CPC-M

The power supply is connected to the 24 V DC through the supplied power line adapter

The LED beam shows the operating status:

- Red for *not ready* resp. not in starting position.
- Green for *ready* and in starting position.

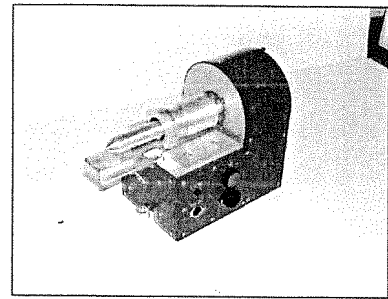
The cutting operation and the adjustment of the starting position is enabled through the start switch. The supplied foot switch or if necessary any other push button can be connected to the socket for external terminals.

The patented cutting principle of the *CPC-M* is based upon two movable rings with separate bearings and thereupon fastened knife holders. The rotatable knifeholder runs on the bearings of the inner ring and is simultaneously held through a steel pin in the lengthslot of the outer ring. The outer ring is driven through a belt from the electric motor. When cutting the steel pin moves in the longitudinal slot causing at first a movement of the knifeholder in direction of the corrugated pipe to be cut. The blade fastened on the knifeholder cuts into the pipe. The belt-driven outer ring pulls the knifeholder with the help of the steel pin once around the pipe until it is completely cut through. Now the direction of rotation is changed, causing the knifeholder to retrieve from the pipe.

While cutting the pipe the knifeholder, due to its special form is guided into the groove, therefore guaranteeing an absolute exact cut through the pitch summit.

## 4. Preparing module set

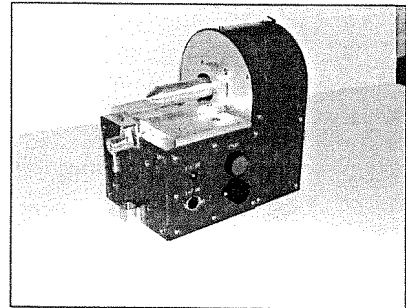
The pipe lead is pushed from the back of the *CPC-M* into a T-shaped slot until it is flush with the base plate. (**Picture 4**)



Picture 4.



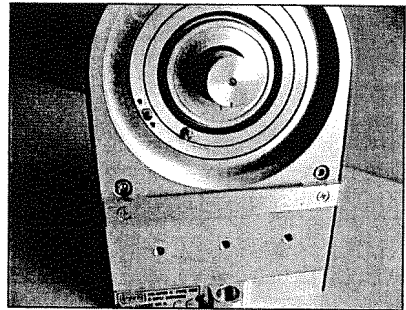
In order to not displace the pipe lead during the cutting procedure pull out and shift the securing toggle until it locks into the lead module. (**Picture 5**)



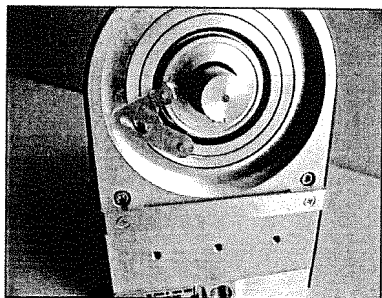
Picture 5.



Simultaneously attach the knifeholder in front upon the rotating bolt and the lead pin. (**Picture 7**) The inner ring should be turned into the right position for easier handling. (**Picture 6**) The knifeholder is correctly attached, when the label (NW ...) is visible with the named diameter size.



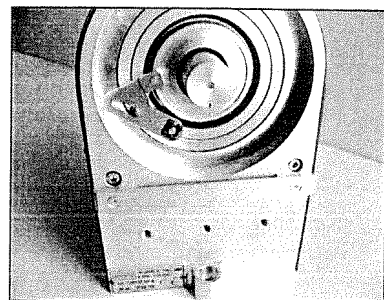
Picture 6.



Picture 7.



Attach the securing clamp into the slot of the rotating bolt. (**Picture 8**)



Picture 8.

## 5. Cutting procedure

To start operating the *CPC-M* the power supply unit must be connected with the 24V DC socket and the 230V mains supply. When using the external foot switch connect it with the designated plug (**Picture 3**) connection.

### Attention !!!

The applied cutting module (**Picture 2**), meaning the guide piston and the knifeholder must correspond with the inner

diameter and the profile of the pipe that is to be cut.

Use the fitting cut protection shield for safe working.

Should the LED status beam be red, press the start button and keep it pressed until the status beam turns green and the knifeholder automatically stops at its starting position. The *CPC-M* is now ready for operation.

Push the corrugated pipe over the guide rod until it appears in front (when cutting slotted pipes: slot must be at the bottom). Position the pitch summit so that there is a groove between the edge of the corrugated pipe on the guide rod and the pitch summit that is to be cut. Press the start switch and keep it pressed until the cutting procedure is automatically stopped. Should the corrugated pipe not be cut through, e.g. the pitch summit be missed, then the corrugated pipe should be pushed forward a little bit. Repeat the cutting procedure and remember the new position. Check the length of the cut corrugated pipe and if necessary correct during the next procedure.

Should the start switch be released during the cutting procedure, either deliberately or by mistake, then the cutting procedure will be stopped at once and the LED status beam shall light up red. In order for the *CPC-M* to be ready for operation again, the start switch must be pressed again and kept pressed until the cutting procedure is automatically stopped and the LED status beam lights up green.

## 6. Technical Data

Power supply .....	Primary 220-240V AC, 50Hz Secondary 24V DC, 2A max.
Control system.....	IWZ – Microprocessing system
Power drive .....	Direct current motor with iron-free rotator and 13 segmented stainless steel-commutation
Bearings.....	maintenance-free deep groove ball bearing
Dimensions.....	Length: 260 mm Width: 140 mm Height: 230 mm <i>without cutting module and accessories</i>
Weight.....	7,5 kg <i>without cutting module and accessories</i>
EG-Regulations.....	Machine Regulation (89/392/EWG) Low voltage Regulation (73/23/EWG) EMV-Regulation (89/336/EWG)
Harmonized Standards.....	DIN EN 292, Machine safety DIN EN 60 204-1, electr. equipment for industrial machines
Suppliable cutting modules.....	<i>for slotted corrugated pipes</i> Normal profile: NW 4,5 to NW 50 AHW-profile: NW 6 to NW 34 <i>for closed corrugated pipes upon request</i>
Accessory.....	- Handle for mobile servicing - Limiting track 1000mm - Cut protection shield NW 29 - 50 <i>Information upon request</i>

# Enclosure 1

*semi-automatic  
corrugated pipe-cutting machine  
CPC-M*

EDP-Art.-No.: 9002200

*cutting module  
(Picture 2)*

**slotted  
corrugated pipe**  
↓

**unslotted  
corrugated pipe**  
↓

normal profile	EDP-Art.-No.	EDP-Art.-No.
NW 4,5	9002204	9002254
NW 7,5	9002207	9002257
NW 8,5	9002208	9002258
NW 10	9002210	9002260
NW 12	9002212	
NW 13	9002213	9002263
NW 14	9002214	
NW 16	9002216	
NW 17	9002217	9002267
NW 19	9002219	9002269
NW 22	9002222	
NW 23	9002223	
NW 26	9002226	
NW 29	9002229	
NW 37	9002237	
NW 50	9002250	

AHW and S-profil	EDV-Art.-Nr.	EDV-Art.-Nr.
NW 6 AHW	9002306	
NW 8,5 AHW	9002308	
NW 11 AHW	9002311	
NW 13 S AHW	9002313	
NW 15 AHW	9002315	
NW 19 AHW	9002318	
NW 19 S AHW	9002319	
NW 23 S AHW	9002323	
NW 26 AHW	9002326	
NW 26 S AHW	9002327	
NW 29 S	9002329	
NW 34 AHW	9002334	