Operating Instructions Cosmic 60R



MCM COSMIC K.K.

1. Dear Customers

Thank you for purchasing **Cosmic 60R Rotary Jacket Stripper**.

This machine is developed for stripping various types of cables. Cutting diameter ranges from 3.0 to 11.0mm, and quality processing is as easy as turning the adjusting knob, with no hustle of changing blades!

Please read through and refer to this **OPERATING INSTRUCTIONS** as needed, and get completely familiar with the machine and its functions for proper and safe use.

- □ On receiving the machine, please check the followings.
- 1) The machine is the one you ordered.
- 2) Any exterior damage done during transportation.
- 3) The following accessories.
 - a) Power cord with 2 phase socket
 - b) Tool kit box
 - c) Foot Pedal Switch

2. Safety Notes

2.1 Symbols



marked with this symbol. Failure to do so may lead to minor injuries and to damage the machine.

2.2 Safety Requirements



3. Technical Specifications

Description	Specifications	
1) Cross section range	3 ~11mm outer diameter	
2) Strip length	20 ~ 90 mm	
3) Blade pull-back length	Max. 50mm	
4) Diameter setting	Conductor Knob (Digital Display)	
5) Cycle time	Max. 5 sec.	
6) Blade material	Tool Steel (Carbide /Optional)	
7) Controller	Micro Processor	
8) Power supply	AC110V or AC230V, 0 / 60 Hz	
9) Capacity	125VA	
10) Machine dimensions	628 L X 241 W X 230 H	
11) Machine weight	20Kg	

4. Machine Overview

- 1. Main switch
- 2. Digital display
- 3. Conductor (for diameter)
- 4. Adjusting knob (for Blade movement)
- 5. Safety cover
- 6. Wire guide (Leveler)
- 7. Fixing screw (for Leveler)
- 8. Foot switch connector
- 9. Bladearm
- 10. Blade
- 11. Scale (for semi-strip)
- 12. Power socket
- 13. Power cord
- 14. Centering guide
- 15. Length adjuster
- 16. Rear cover
- 17. Select switch





5. Setting-up

5.1 Setting Cutting Diameter

Rotate Conductor³ to set cutting diameter. The size in mm appears on Digital display². CW for larger and CCW for smaller.



5.2 Setting Strip Length

Slide Length adjuster15 to the stripping length on the scale of Centering guide14 and tighten it. To process cables, insert the cable end into Centering guide14 to touch Length adjuster15 and it starts stripping cycle.



5.3 Setting Semi-strip Length

Rotate Adjusting knob4 to set semi-strip length.

The length in mm is read on Scale11.

Always operate this machine for semi-stripping,

otherwise the stripped-off materials will be left in Centering guide14.

Therefore, Scale11 must read shorter than Length adjuster15 at all times.

The Position to set Leveler

5.4 Setting Wire Guide (Leveler)

Slide Wire guide (leveler)⁶ so that the processing cable is in line with the center in between Grippers.



5.5 Connecting Power Supply

Connect Power cord13 to Power socket12. Main switch1 **ON** and make sure Digital display2 is on.

5.6 Adjusting Gripping Strength

Gripping strength can be adjusted softer for thin and flexible insulation and firmer for thick and tough insulation.

5.6.1 How to adjust gripping strength



CAUTION Power cord must be pulled off before this procedure.

Insert a hexagon wrench (4mm) through the opening on Rear cover16 into the shaft inside. Turn it CCW for weaker gripping strength and CW For stronger (See the right picture).



5.6.2 Inside Structure

The adjusting bolt is pushing the joint bar, which in turn compresses a spring inside that makes gripping strength (See the right figure).

NOTE : If the adjusting bolt came off when loosened too much, put it back in place and screw it in.



5.7 Foot Switch

Connect Foot switch to Connector8 and choose "Foot Pedal" on Select switch17. With "Foot Pedal" selected, the start sensor is disabled.

5.8 Changing Blades



NOTE : Read through this instruction first and be sure to understand it well.

5.8.1 Mechanism inside Bladearm



See figure (A). Blade and Centralizer are installed on Bladearm with a spacer in between. Blade and the spacer are fixed-on while Centralizer can slide up and down, being pressed downward by the lever, which is pushed upward on the other end by a spring. Figure (B) shows when Blade is cutting into a piece of cable. Centralizer has simultaneously slid upward, pushing the cable downward to keep it in the center of the rotor blades. Thus Blades cut in evenly, making precision strip possible.

5.8.2 The shapes and names of each part

(1) Centralizer



(2)	Spacer



(3) Blade



(4) Fixing screw

Nanadalala

(5) Fixing washer



5.7.3 Changing Blades

1) Removal

As shown in the figure below, loosen the fixing screw with a screwdriver and remove the 5 pieces illustrated on the previous page (5.8.2).



2) Reassembly



Reassemble carefully though the following procedure.

Blades are the main wear parts in this section. Other parts seldom need replacing.

Procedure and points to care

- (1) Each Blade has two sides. Put them back in place in accordance with the figure above.
- Mount Centralizer to compose a "V" shape with Blade. (See figure B on previous page, 5.8.1)
- (3) Loosely tighten the screw, and make sure that Blade, Spacer and Centralizer are properly held inside the width of Bladearm.
- (4) Then push Blade alone with a fingertip all the way up to the end and tighten the screw.
- (5) Make sure Centralizer slides smoothly with the screw tightened.

6. Interlock

6.1 Safety Cover

With Safety cover5 removed, the circuit interlock is in effect and the machine will **not** operate.

<Installation and removal of Safety Cover>

Slide Wire guide (leveler)⁶ all the way down when installing and removing Safety cover⁵.

6.2 Overload

If cables out of the specifications were processed the circuit interlock may come at work.

How to release overload interlock



Remove Rear cover16, rotate the pulley CCW to open bladearms so that the processing cable can be taken out of Centering guide14. Connect Power cord13 and main switch1 ON.

Now interlock is released but operate 1 cycle without cable before start processing.

7. Lubrication

Lubricate the following points periodically.



Lubrication points	Oil	Period
1. Spline Shaft	Grease	Every 6 months
2. Ball Screw Shaft	Grease	Every 6 months
3. Guide Shaft	Grease	Every 6 months
4. Slide Shaft	Lubrication oil	Every 3 months

Grease : Lithium soap type grease / viscosity 30 – 140 cst Lubrication Oil : 32 – 100 / ISO grade

NOTE :

1) <u>NEVER</u> lubricate the Brake Plates.

2) If the interval between use is longer than 4 months, lubricate before operation.

8. After-Sales Service

8.1 In case of trouble please contact us or the distributor. The repair work for customers can be difficult to do and, in many cases result in more damage to the machine. Such cases cannot be covered by the maker warranty.

8.2 Warranty

The warranty period is 1(one) year after purchase. The followings are the circumstances in which the warranty is invalid.

- 1) Troubles caused by customers' negligence. (accidental fall, etc.)
- 2) Troubles caused by natural disaster or fire.
- 3) Troubles caused by usage out of its specifications and/or intended use.
- 4) Troubles caused by unauthorized repair works and/or modifications.
- 5) Ware parts and replacement cost.

Manufactured by

MCM COSMIC K.K.

Tamadaira 6-16-10 Hino-shi, Tokyo191-0062 Japan Tel: +81 42-582- 7911, Fax: +81 42-582-7922