ELECTROMAGNETIC CHUCKS

CHUCK CONTROLLERS

PERMANENT PERMANENT ELECTROMAGNETIC CHUCKS MAGNETIC CHUCKS

BLOCKS FOR MC

VACUUM CHUCKS

Trouble?

If your electromagnetic chuck failed, refer to this page. Symptoms, possible causes and corrective actions of two typical Chuck Masters are presented here. Please follow these instructions prior to asking for repair or purchasing parts.



Residual holding power is large.

Holding power is weak.

Symptom Electromagnetic Chuck Master Demagnet-Alarm Check and chuck does not does not ization is not indicator lamp Fuse blows Corrective Action Cause nold workpiece. output voltage performed. lights up. Power is not being supplied. . Check the power source. Remove the fuse from the fuse use has blown holder and replace it with a new one. Power source is exceeding Check the nower source voltage and use • • the rated voltage the power source at the rated voltage. Output voltage adjust variable Adjust the output voltage again • esistor has been turned CCW fully If measurement of resistance of Wiring to electromagnetic chuck has been broken electromagnetic chuck is ∞ Ω or shorted. wiring broken. If 0 Q, wiring shorted Disconnect the cord from the output terminal of Chuck Master and measure insulation resistance of electromagnetic Insulation of electromagnetic chuck chuck. OK when it is above 5 MO. It and its wiring is poor less than 5 MΩ, check wiring. I (ground) insulation of electromagnetic chuck is poor, please request for repair. ES-M

If the Chuck Master does not function properly, check it referring to the following table.

EH-V/305A

Symptom Electromagnetic Demagnetchuck does not Fuse blows zation is no Check and Corrective Action Cause old workpiece performed. Power is not being supplied Check the power source Remove the fuse from the fuse holder and replace it with use has blown. a new one Check the power source voltage and use the power Power source is exceeding source at the rated voltage. the rated voltage Wiring between Chuck Disconnect the cord from the output terminal of Chuck Master and electromagnetic Master and measure insulation resistance of electromagnetic chuck. OK when it is above 5 M Ω . If less than 5 M Ω , check wiring. If insulation of electromagnetic chuck is defective or electromagnetic chuck is chuck is poor, please request for repair. faulty.

XNote: ·Prior to checking/investigating causes, be sure to turn off the power and disconnect the power cable from the Chuck Master.

·Measure the insulation resistance of the electromagnetic chuck with an insulation resistance tester. Be sure it is above 5 M at a test voltage of 500 VDC.

·If the electromagnetic chuck failed, place an appropriate warning (such as attaching a tag of "Out of Order. Use Prohibited."). If the cause cannot be identified, please contact the manufacturer.

or holding direction of workpieces. *Note: Since ES-M Series outputs a constant excitation voltage, it does not have the excitation voltage adjust variable resistor.

Turn the demagnetization adjust variable resistor to a

Set the excitation voltage adjust variable resistor

If the holding power is still weak, the magnet being

used may not be adequate for the shape, material

point where the maximum demagnetization effect can

Model TB **TERMINAL BOX**

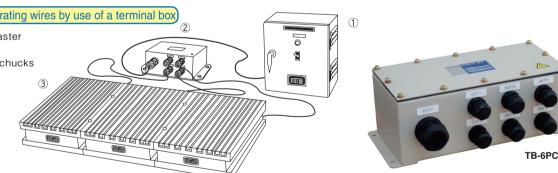
An example of integrating wires by use of a terminal box

- 1 Electro Chuck Master
- 2 Terminal box

be obtained.

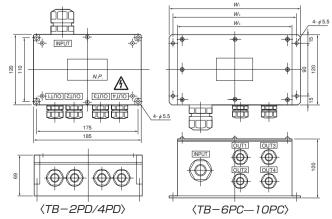
at the maximum.

③ Electromagnetic chucks connected



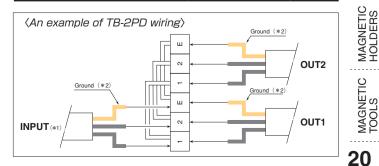
[Application]

When several electromagnetic chucks are connected and are to be controlled together by one unit of the Chuck Master, a terminal box is required that integrates wires from the chucks. Terminal boxes for 2 circuits up to 10 circuits are available.



*The number of "OUT" in the above figures varies according to the number of branches.

| | | | | | [mm (in)] |
|---------|----------------|-------------------|------------------------|-----------|----------------|
| Model | Input Capacity | No. of Outputs | Dimensions | | |
| | | | W1 | W2 | W ₃ |
| TB- 2PD | 30A | 2 | (See left-side figure) | | |
| TB- 4PD | | 4 | | | |
| TB- 6PC | | 6 | 280(11.0) | 266(10.4) | 250(9.84) |
| TB- 8PC | | 8 | 330(12.9) | 316(12.4) | 300(11.8) |
| TB-10PC | | 10 | 380(14.9) | 366(14.4) | 350(13.7) |



PROMELTA* SYSTEM