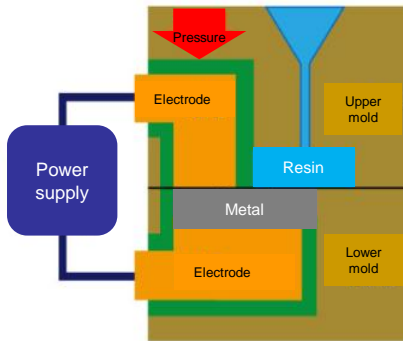


Different dimension, high adhesion insert molding technology

We have developed a technique to destroy the skin layer that has been a cause of adhesion failure and an eternal issue in insert molding, by energizing heating technology instantaneously and completely. Since it is possible to isolate only the insert part and heat it instantaneously, it became possible to perform high adhesion insert molding under the recommended conditions of resin manufacturer as the injection molding conditions.

Base machine : SANJO SEIKI Co. Ltd.
Rotary table type
Vertical type injection molding machine
『VHR series』

Energization heating type insert molding, Conceptual diagram



5 Big

Features of 『PM series』

1

Destroys skin layer completely

By pinpoint temperature control, it is possible to destroy the skin layer on the surface of resin instantaneously at the timing when the resin comes in contact with the insert part without impairing the resin performance.

2

High adhesion

We realized a high adhesion by destroying the skin layer that inhibits adhesion. Even the complex three-dimensional shape, it is possible to effectively raise up the temperature of the insert part from its surface by flowing electrical current to the surface of the insert part.

5

Bonding technology by special surface treatment has also been graded UP

This method is also effective for resin to metal bonding by conventional special surface treatment. Particularly in the special surface treatment of molecular bonding, reproducibility has been remarkably improved by pinpoint temperature control and occurrence of irregularity has been avoided.

3

Good repeatability

By directly measuring the metal surface temperature of the insert part and executing a temperature feedback control, we have a realized highly accurate temperature control.

4

Reduced cycle time

By enabling rapid increase/decrease of temperature, preheating time and cooling time have been reduced considerably, by which it became possible to finish completely the pre-heating and cooling process within the injection process.



Specifications of 『PM-15Sa / 35Sa』

PM-15Sa

Item	Specification
Screw diameter	18mm
Injection volume	18.3cm ³
Injection pressure	220Mpa
Injection pressure keeping	220Mpa
Injection speed	425mm/s
Mold clamp force	159kN
Mold clamp stroke	200mm
Daylight	300mm
Table size	580mm
Ejector force	15.7kN
Ejector stroke	40mm

PM-35Sa

Item	Specification
Screw diameter	26mm
Injection volume	49cm ³
Injection pressure	200Mpa
Injection pressure keeping	220Mpa
Injection speed	400mm/s
Mold clamp force	343kN
Mold clamp stroke	200mm
Daylight	400mm
Table size	880mm
Ejector force	15.7kN
Ejector stroke	40mm

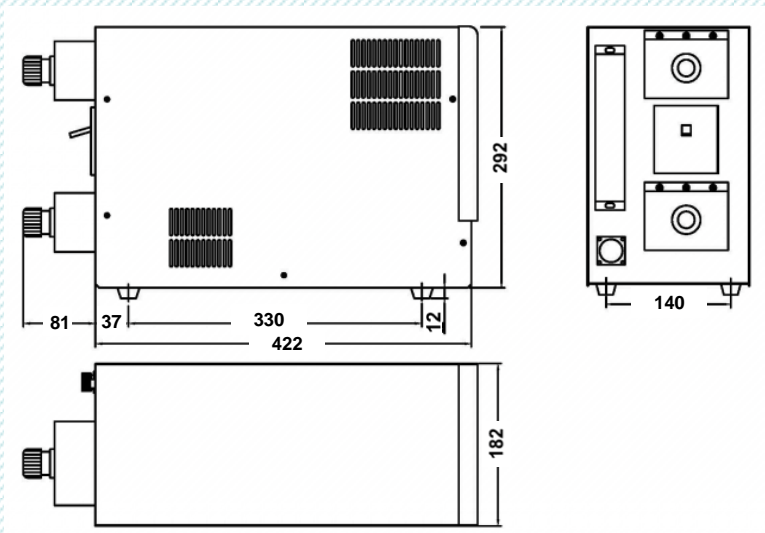


Specifications of Power supply unit 『R-01』

Specifications of R-01

Item	Specification
Input power supply	3 Phase, AC180~240V ±10% 50/60Hz
Max. Input current	55A
Max. Output current	300A (PEAK)
Rated capacity (50%)	90KVA
Heater setting	Current:1.0~15.0KA / Azimuth: 10~99.9%
Max. current setting for welding machine	1.0~12.0KA
Setting of transformer winding number	1.0~199.9
Number of current switching times	3
Counter	0~99999
Alarm output	Overcurrent / Overheat / No current
Status output	READY / NG / ALARM / END / DELAY
Communication performance	RS-232C / 485 (OPTION)
External dimensions (mm)	182 (W) × 503 (D) × 304 (H)
Weight (NET)	16kg

External view of R-01



When using this product, please read the operation manual carefully.

“ELEBON” is a trademark or registered trademark of products using the energization diffusion (heating) bonding technology.

Manufacturer

ECO-A Co. Ltd.

〒302-0127

Ibaraki-ken, Moriya-shi, Matsugaoka,1-18-3

TEL : 0297-44-9247 FAX : 0297-44-9248



Please look at the information on the Internet.

<http://www.eco-a2010.co.jp/>