

LABO PRESS

SD type forming press machine

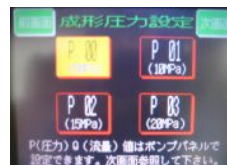
Heating / Cooling 42ton automatic forming press machine

NEW MODEL SDOP-1042IV-2HC-AT [Standard JIS K6299]



[Feature] Equipped with inverter type pump

- ① Forming pressure can be shifted automatically.
(Standard: 4-step, option: Max. 16-step)
- ② Low sound and energy-saving design



Main Specifications	
4-pole support type	
Hydraulic drive	42ton (MAX) Inverter type
Hydraulic cylinder ram diameter	φ 160 × 180(ST)mm
Heating system	Electric heating (max. temperature: 200°C)
Cooling system	Water-cooling system (with air blow)
Dimensions of pressurized plate	400 × 400mm
Temperature control	2-system (top-bottom heating plate)
Temperature control system	Digital type PID proportional control system
Power source	AC200V 3-phase 50/60Hz 12KVA
Size	Approx. (W)1350 × (D)1000 × (H)1900mm
Weight	Approx. 1500kg

Vertical transfer forming machine (2-head type automatic injection forming machine)

NEW MODEL SDOP-1004PT-SD [Standard EIMS etc.]



Main Specifications	
Forming die clamping pressure	7.8ton (MAX)
Injection pressure	1.6ton (MAX)
Hydraulic cylinder ram diameter	(Clamping die) φ 100 × 100(ST)mm (Injection) φ 50 × 200(ST)mm
Heating System	Electric heating (max. temperature: 250°C)
Dimensions of pressurized plate	250 × 250mm
Temperature control	4-system independent control
Temperature control system	Digital type PID proportional control system
Equipped with automatic forming program mechanism.	
Power source	AC100V 3-phase 50/60Hz 8KVA
Size	Approx. (W)1480 × (D)800 × (H)1950mm
Weight	Approx. 950kg

Example of Spiral flow mold



Patent Pending (Cutter is already patented in USA,CA,KR,JP)



DUMBBELL CO., LTD.

Full Automatic 4-stage 42ton forming press machine

NEW MODEL SDOP-1042IV-8H-FAT [Standard JIS K6299]



Main Specifications	
4-pole support type	
Hydraulic drive	42ton (MAX) Inverter type
Hydraulic cylinder ram diameter	φ 160 × 260(ST)mm
Heating system	Electric heating (max. temperature 200°C)
Dimensions of pressurized plate	300 × 300mm
Temperature control	8-system (top-bottom heating plate)
Temperature control system	Digital type PID proportional control system
Mold stock area	Rotary type: stock nos.: Max. 16 sets
Power source	AC200V 3-phase 50/60Hz 18KVA
Size	Approx. (W)3000 × (D)1150 × (H)1850mm
Weight	Approx. 2000kg

- [Feature]**
- ① Maximum 16 sets of molds before forming can be stocked. (4-row x 4-stage)
 - ② One row of all 4-stage can be formed at one time.
 - ③ By the adoption of rotary type mold stock system, continuous forming is possible.
Taking out the forming ended molds, and adding new forming molds are possible during automatic operation.
 - ④ The data input of individual forming condition for each row is possible.
 - ⑤ By using the inverter type pump, low sound and energy-saving design have become possible.

Heating / Cooling 2-stage 42ton automatic vulcanization forming press machine

MODEL SDOP-1042-2HC-AT [Standard JIS K6299]



Main Specifications	
4-pole support type	
Hydraulic drive	42ton (MAX)
Hydraulic cylinder ram diameter	φ 160 × 250(ST)mm
Heating system	Electric heating (max. temperature 200°C)
Cooling system	Water-cooling system (with air blow)
Dimensions of pressurized plate	400 × 400mm
Temperature control	2-system (top-bottom heating plate)
Temperature control system	Digital type PID proportional control system
Power source	AC200V 3-phase 50/60Hz 10KVA
Size	Approx. (W)1200 × (D)1150 × (H)1600mm
Weight	Approx. 1100kg

4-stage 42ton automatic vulcanization forming press machine

MODEL SDOP-1042-8H-AT [Standard JIS K6299]



Main Specifications	
4-pole support type	
Hydraulic drive	42ton (MAX)
Hydraulic cylinder ram diameter	φ 160 × 330(ST)mm
Heating system	Electric heating (max. temperature: 200°C)
Dimensions of pressurized plate	350 × 350mm
Temperature control	8-system (top-bottom heating plate)
Temperature control system	Digital type PID proportional control system
Power source	AC200V 3-phase 50/60Hz 23KVA
Size	Approx. (W)1350 × (D)1200 × (H)1700mm
Weight	Approx. 1600kg

Easy operation by liquid crystal programmable terminal (5.7-inch)



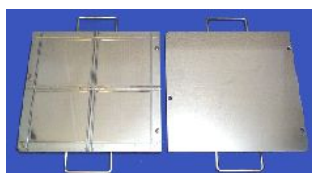
Conforms to New JIS **Lightweight Sheet forming mold** [Hard aluminum]

The most evident merit of the mold that is manufactured with hardened aluminum is its lightweight. The specific gravity of hardened aluminum is **so light that is one third** of carbon steel (S55C) that is conventionally used for the mold. That is why our products are efficient to reduce the work of carrying heavy burden for many workers at the actual job site. Until recently we have manufactured Teflon-lined molds with hardened aluminum. This method is good to separate a molded piece but the surface is easily damaged because of its insufficient hardness.

Now we have developed new technology to plate hard chromium plating on the surface of hardened aluminum mold that is hard enough just like conventional carbon steel made mold.

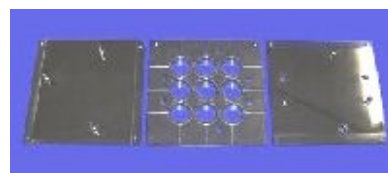
- ◆ **Lightweight** Weight is approx. 1/3 than that of carbon steel.
- ◆ **Excellent heat conductivity** Approx. 2 times than that of steel.
Substantially shortened a shot cycle at the time of forming.
- ◆ **High hardness** Nearly equal to S55C, High strength and high separation characteristic of molded piece.

Lightweight sheet forming mold
MODEL MP-124NJAKC



Sheet size 150 × 150 × 2(t)mm Cavity: 4

Lightweight Mold for compressed strain test
MODEL MPL-309LAKC



JIS K6262 Large test piece φ 29mm cavity: 9

42ton Automatic vulcanization forming press machine

MODEL SDOP-1042-2H-AT [Standard JIS K6299]



Main Specifications	
4-pole support type	
Hydraulic drive	42ton (MAX)
Hydraulic cylinder ram diameter	φ 160 × 150(ST)mm
Heating system	Electric heating (max. temperature 200°C)
Dimensions of pressurized plate	400 × 400mm
Temperature control	2-system (top-bottom heating plate)
Temperature control system	Digital type PID proportional control system
Power source	AC200V 3-phase 50/60Hz 10KVA
Size	Approx. (W)1200 × (D)1150 × (H)1500mm
Weight	Approx. 1000kg

Heating / Cooling 2-stage 20ton automatic forming press machine

MODEL SDOP-1020-2HC-AT



Control board



Pressurized-Cooling plate

Main Specifications	
4-pole support type	
Hydraulic drive	20ton (MAX)
Hydraulic cylinder ram diameter	φ 140 × 250(ST)mm
Heating/cooling simultaneous pressurized drive system	
Heating system	Electric heating (max. temperature 250°C)
Cooling system	Water-cooling system (with air blow)
Dimensions of pressurized plate	400 × 400mm
Temperature control	2-system (top-bottom heating plate)
Temperature control system	Digital type PID proportional control system
Power source	AC200V 3-phase 50/60Hz 10KVA
Size	Approx. (W)1040 × (D)1000 × (H)1400mm
Weight	Approx. 900kg

[Feature]

- ① Cooling time, deflation shot number & time, forming time are completely operated automatically.
- ② Easy operation by liquid crystal programmable terminal (5.7-inch).

HANDLING ITEMS

Manufacturing of various kinds of Physical Testing Machines
 Specimen Forming Molds for testing and Related Equipments
 SD type Sample Cutting Cutter and Related Equipments



DUMBELL CO., LTD.

2243-1 Kasahata Kawagoe-shi, Saitama 350-1175 JAPAN
 TEL.049-232-1550 (Operator) FAX.049-233-5242
<http://www1.odn.ne.jp/dumbbell.co.jp>
 e-mail: cutter@dumbbell.co.jp



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