Realizing dreams with a new fusion. The future is here.

"We Deliver World Class Performance"

Announcing our NEW BRAND

UBE: UBE Industries, Ltd. → **"UM"** ← MHI: Mitsubishi Heavy Industries, Ltd.

Together leading the way to deliver customer trust and superior craftsmanship to the world.

"UM" is a new brand of plastic injection moulding machine born from the merger of UBE and U-MHI. (formerly Mitsubishi Heavy Industries, Ltd.)

UBE MACHINERY CORPORATION,LTD.
1980 Okinoyama, Kogushi, Ube, Yamaguchi 755-8633 Japan
Tel: +81-836-22-0072 Fax: +81-836-22-6457
http://www.ubemachinery.co.jp/english/

[Manufacturer]
U-MHI PLATECH CO., LTD.
1-Takamichi, Iwatsuka-cho, Nakamura-ku, Nagoya 453-0862 Japan
Tel: +81-52-412-1174 Fax: +81-52-412-1179
http://www.u-mhipt.co.jp/injec_e/

[Distributor]
U&M PLASTIC SOLUTIONS CO., LTD.
20F, Seavans North Bldg., 1-2-1 Shibaura, Minato-ku, Tokyo 105-6791 Japan
Tel: +81-3-5419-6216 Fax: +81-3-5419-6297
http://www.umps.co.jp/english/

Specifications are subject to change without prior notice.

Printed in Japan

ELECTRIC INJECTION MOULDING MACHINE

HH SERIES

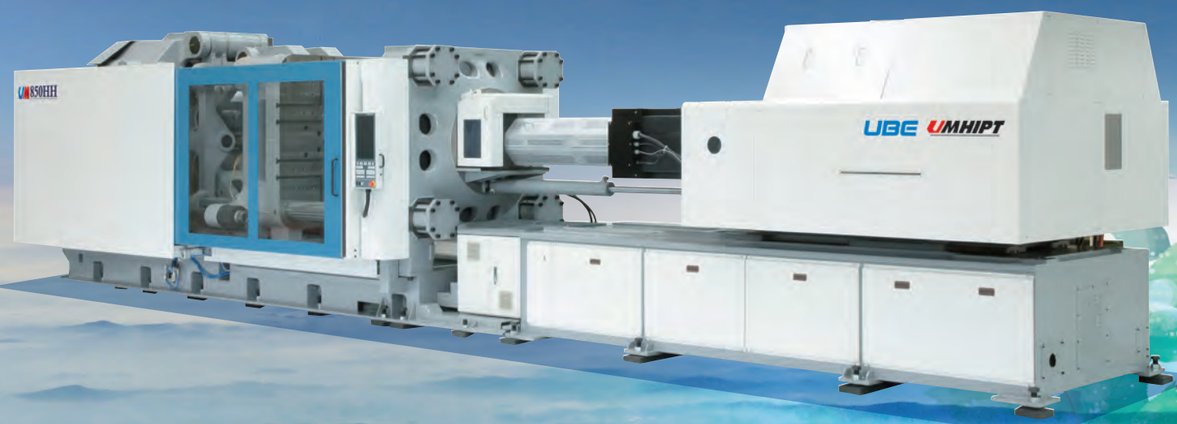
350/450/550/650/850/850W

As of August 1st, 2020, U-MHI Platech Co., Ltd. and U&M Plastic Solutions Co., Ltd. have merged as UBE Machinery Co., Ltd.

“Dreams and Future”!

Our unlimited technology offers expanded moulding possibilities with the new HH (Dual H) Series

The UM “HH Series” electric injection moulding machines reflect the qualities of “Dreams and Future” and provide moulding possibilities based on the reliable technologies developed by both Ube Machinery Corporation Ltd. and former Mitsubishi Heavy Industries Plastic Technology Co., Ltd.



850HH

※The pictures shown in this catalog include optional equipment.

- New MAC-IX Controller “connecting to the Internet”
- UM IoT solutions
- Varied selection of screw sizes
- DIEPREST for improved functionality and moulding capabilities
- Direct Drive (DD) injection servomotors for fast response, high-powered injection
- Highly rigid, wide platens to realize precise moulding
- Highly reliable, long-life ball screws
- Electric regeneration system for improved energy saving

Machine line-up of HH series

Clamp unit	Injection unit	Screw diameter	Injection speed
850HHW	i80	B ϕ115 mm	H (160 mm/sec)
		A ϕ105 mm	
		Y ϕ90 mm	
850HH	i50	A ϕ90 mm	H (160 mm/sec)
		Y ϕ80 mm	S (125 mm/sec)
650HH	i35	A ϕ80 mm	H (160 mm/sec)
		Y ϕ70 mm	S (125 mm/sec)
550HH	i25	A ϕ70 mm	U (250 mm/sec)
		Y ϕ62 mm	H (160 mm/sec)
450HH			S (125 mm/sec)
350HH	i17	A ϕ62 mm	U (300 mm/sec)
		Y ϕ57.15 mm	H (200 mm/sec)
			S (150 mm/sec)

HH SERIES
ELECTRIC INJECTION MOULDING MACHINE
350/450/550/650/850/850W

The new and improved MAC-IX Controller

- Exceptional operability with two separate screens implemented in large screens.
- An upgraded security funtion that uses ID card authentication is equipped as standard.
- Stable moulding by high-speed control that is six times that of a conventional system

Upgraded Operability

●Pivoting mechanism, two separate large LCD screens
Two screens are selectable as you choose, and allows for an unprecedented user-friendly operation environment.

●Injection waveform memory
Comparable to good item's waveform, and helpful for good producing.

●Vertically long screen
Long, vertical screens can display twice the trend data compared to a conventional system.

High Speed, Highly Accurate Control

●Shortened scan time
Scan time is shortened to a sixth of a conventional system by using EtherCAT® High-speed communication which provides for stable weight of the moulded product.

※EtherCAT® is a registered trademark of Beckhoff Automation GmbH.

Separated dual-screen control panel

30shot-trend data is displayed by long screen layout.

Injection conditions can be changed while reviewing process records

Upgraded Security Function

●Security ID card system
Login by ID card which can be assigned to an operator.
Automatic change of languages and units
Prevention of password loss

●Traceability management
Operator's information is added to the operational/setting records

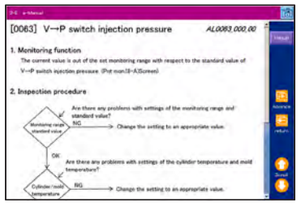
●Control of operator access
4 levels of access can be set for each operator.

User Support Function

●Alarm guidence
Actions for alarm resolution by using a flow chart which can be restored easily.
Easy identification of faults by improved alarm messages

●Fault record function
Input-output data both pre and post trouble is automatically stored to a large-capacity HDD, and helps to reduce the time for troubleshooting.

●e-manual
The machine manual is available for viewing on screen



Alarm guidence on screen

Global Reliability

●An uninterruptable power supply (UPS) is standard equipment
Prevents trouble caused by voltage drop or brownout, even in areas having an unstable electric power supply
Data can be safely backed-up in case of power outage

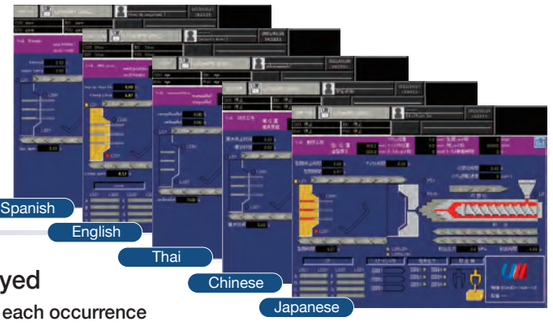
●A surge suppressor is standard equipment
Protects the control system from lightning strikes

●Multi-language selection
The standard languages available are Japanese, English, Chinese, Spanish, and Thai (new addition).
Eight other languages are available as an option.
A maximum of three languages is selectable from a total of 13 languages.

●Pictographic switches (ISO-compliant)
Easy to operate by pictographic switches

●Various International Standard compliance
Complies with JIMS, ANSI, EN, GB, and KCS standards.

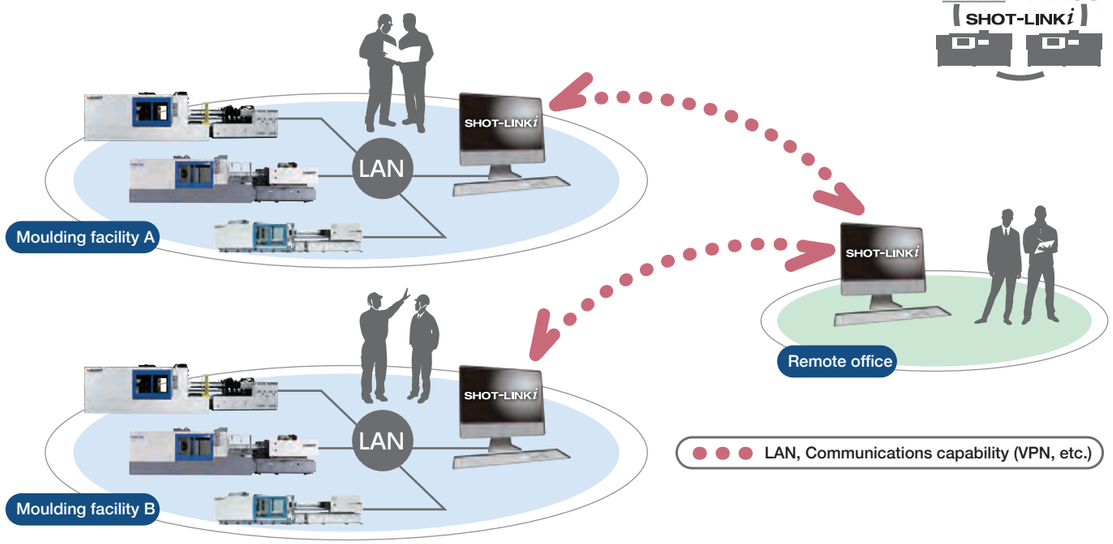
●IEC 61131-3-compliant ladder
The operation sequence is created by global standard ladder language



UM IoT solutions

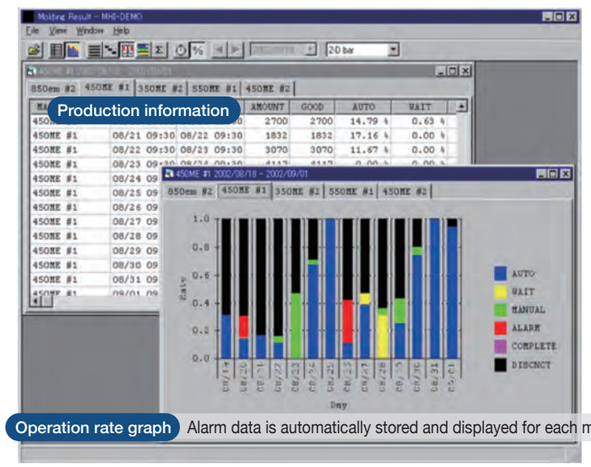
■UMHIPT – FANUC SHOT-LINKi

Product and Quality information management for globalization of moulding facilities (connectable up to a maximum of 128 machines)



■Production information for each machine is displayed

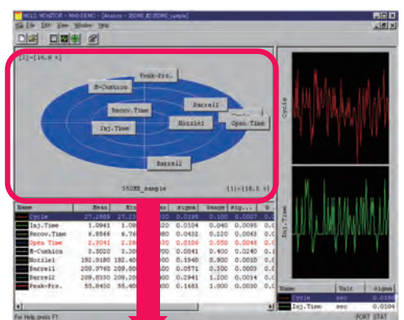
Able to classify and summarize alarm data from each machine for each occurrence



Alarm data is automatically stored and displayed for each machine.

Analysis

Quality radar
Displays the correlation of the data

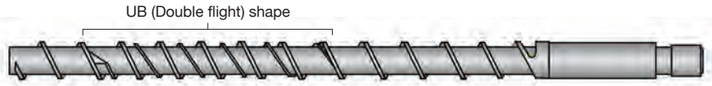


- Same place: Same correlation data
- Symmetrical to center point: Reversal correlation data
- Distance from center point: Variation impact is great.

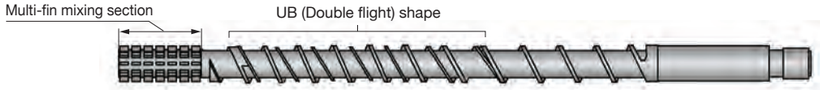
Variety of screw sizes available

The highly regarded UB screw with outstanding mixing and plasticizing capacity properties is standard equipment.
Various screw designs tailored to the wide-ranging needs of the industry are also available.

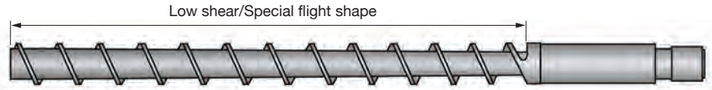
For high-cycle, general-purpose, "UB screw" (Standard equipment)



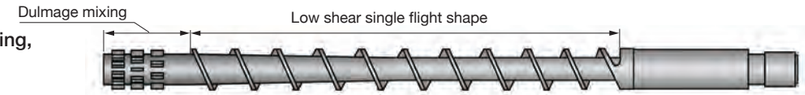
For super-high color mixing, "MF-UB screw" (Optional)



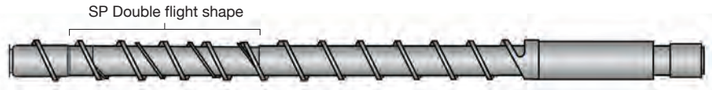
For Long Fiber Thermoplastics, "LFT screw" (Optional)



For low shear, low heat generating, "F screw" (Optional)



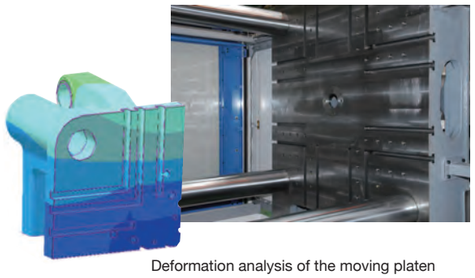
For high cycle, high mixing, "SP Ⅲ screw" (Optional)



High rigidity wide platen

Platen design is optimized for high rigidity

A new 850HHW model is added to the lineup, and a the 650HH is standarized with a wide platen.

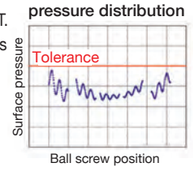


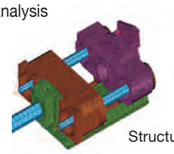
Deformation analysis of the moving platen

Highly reliable ball screw

The estimated ball screw service life is based on long-term endurance testing developed by U-MHIPT. The surface pressure testing system and U-MHIPT's unique overall structural analysis methods ensure long ball screw service life and lower maintenance cost.

Ball screw surface pressure distribution



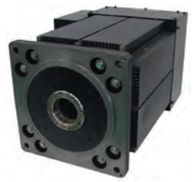


Structual analysis

High-response, high-powered injection, dedicated DD Motor

Featuring high-powered AC servo motors developed with Mitsubishi Heavy Industries' power electronic technology specifically for injection moulding applications

The DD (Direct Drive) mechanism directly connects the injection drive ball screw and the motor, making thin-wall moulding possible by low inertia, highly responsive, and high acceleration/deceleration performance. Maintenance costs are reduced by the beltless mechanism, and thick-wall moulding, which needs longer holding pressure times is also possible. The benefits of the DD System are useful for a broad range of process conditions.

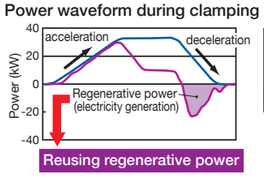


DD (Direct Drive) Motor

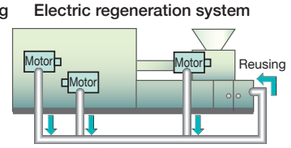
Electric regeneration system

During the braking phase of motion, the motors act as a generators, and the generated power is converted to electric power for reuse by the system.

Power waveform during clamping



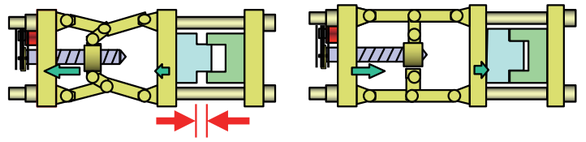
Electric regeneration system



Power regenerating

DIEPREST precise mould open/close control system (Optional)

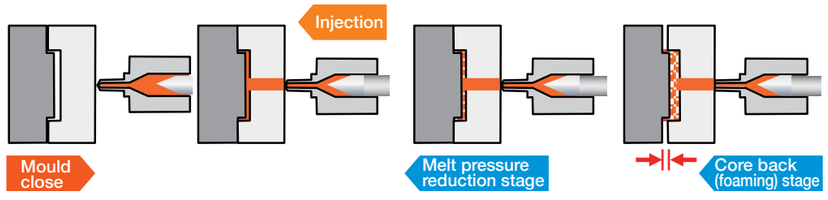
The combination of precise multi-step mould open/close operation of the electric toggle clamp and the electric direct drive injection unit allows for highly functional and diverse moulding.



DIEPREST Multi-step operation screen

DIEPREST

Core back foaming process — C-Mode / F-System — Gap cancellation organization

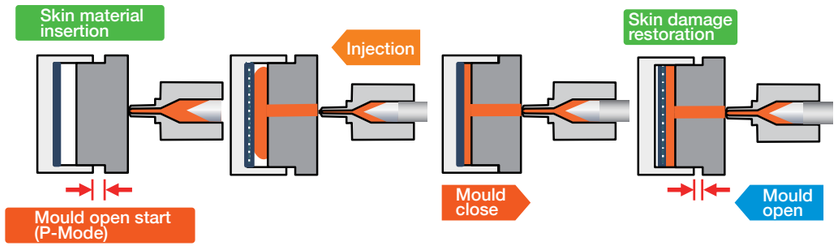


Results

- Weight reduction of the moulded product
- Uniform foamed cell size

Automotive interior parts

Skin material insert moulding — C-Mode: Mould close start / P-Mode: Mould open start



- High value-added products
- Reduced skin material losses
- Reduced manufacturing process

Automotive interior parts

Low pressure moulding — Injection compression mode / Injection press mode — Warpage and sink marks reduced, Thin wall moulding, Clamping force reduction, Gas release moulding

Film insert moulding — R-Mode — High value-added products

Sink mark reduced moulding — S-Mode — Sink mark reduction

DIEPREST is registered trademark in Japan.

MuCell® Moulding (Optional)

MuCell® is a registered trademark of TREXEL, INC.

The MuCell process produces microcellular structures inside the moulded product by introducing a supercritical fluid (SCF), typically nitrogen gas. This process greatly contributes to improved product quality and reduced cycle times.

Uniform internal stress in the product caused by the microcellular foam pressure.

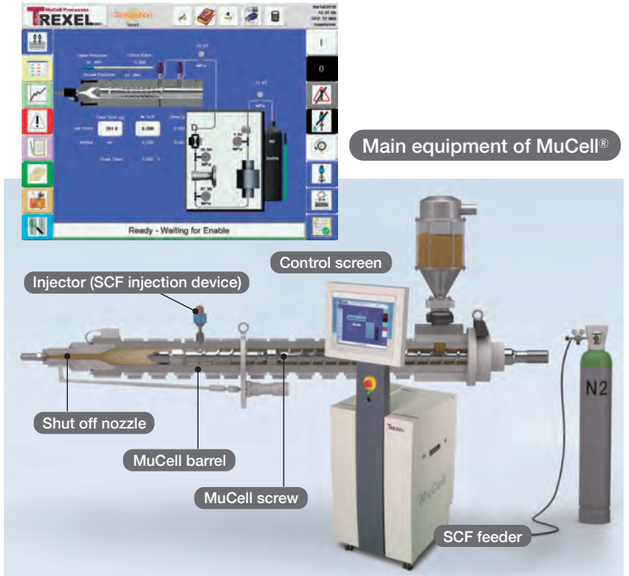
- Improved dimensional accuracy
- Reduction of warpage and sink marks
- Cycle time saving (elimination of hold pressure phase)

MuCell® & **DIEPREST**

Precise mould open/close control system

Greatly reduced product weight by the core back foaming process

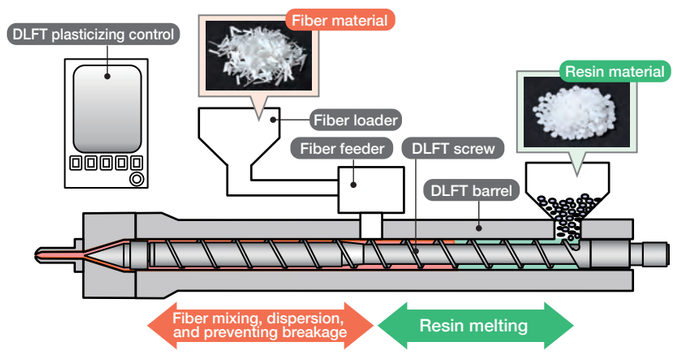
DIEPREST precise mould open/close control system realizes the high surface quality and the uniform fine structure of the foamed cells.



DLFT system – Direct Long Fiber reinforced Thermoplastics injection moulding system (Optional)

The DLFT system is an injection moulding system for Long Fiber reinforced Thermoplastics, which allows the direct mixing of the base resin material and the reinforcing fiber material in the barrel.
Allows LFT products, which have high strength, lighter weight, and are a suitable substitute for metal parts, to be produced at a lower cost!

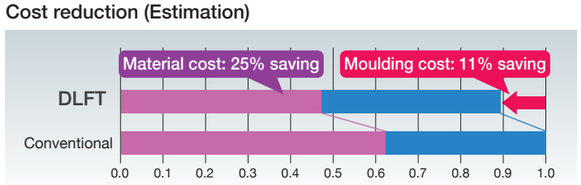
Patent registrations: 12
Trademark registrations: 4



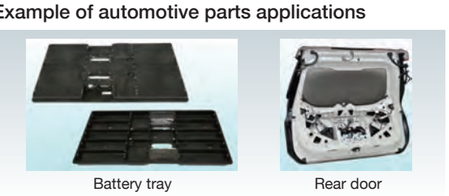
A fusion of the specially developed DLFT screw using an inline screw method together with our plasticizing control technology

- Maintaining fiber length (physical properties)
- Even fiber dispersion (quality)
- Sufficient plasticizing capacity (productivity)
- Easy moulding operation and maintenance with simple screw structure

Cost reduction (Estimation)



Example of automotive parts applications



Battery tray　　Rear door

DLFT SYSTEM is registered trademark in Japan.

Specification

Standard Specification

[Injection Unit]

1. Injection system
2. UB screw
3. Check ring
4. Barrel
5. Nozzle
6. Heater/Control
   - Band heater
   - SSR control
   - Temperature monitoring function
   - Rapid convergent temperature control
7. Injection control
   - Inj. speed and pressure programmed control (1-16 stages)
   - Holding pressure programmed control (1-4 stages)
   - Holding pressure switching control (position, time, or pressure)
   - Holding pressure slope control
8. Screw rotation speed programmed control (3stages)
9. Screw back pressure control (3stages)
10. Melt decompression circuit (after injection, after plasticizing)
11. Nozzle advance/retract control
    - Injection unit swivel device
    - Sprue break circuit (timer system)
12. Feed throat cooling water circuit
13. Trial moulding circuit (manual injection circuit)
14. Auto.color change circuit (Jet purge circuit)
15. Hot runner purge circuit (color change circuit for mould)
16. Screw cold start prevention circuit
17. Shot step circuit
18. Plasticizing mould opening and closing lap circuit
19. Screw indicator
20. Automatic lubrication device (Injection side)
21. Barrel cover
22. Purge cover

[Clamp Unit]

1. Clamp system
2. Ejector device
3. Automatic mould height adjusting device
4. Mould close-open control
   - Mould setting operation circuit
   - Mould close-open speed programmed control (4stage for opening, 4stage for closing)
   - Mould close-open automatic deceleration circuit
   - Mould protection circuit
   - Link motion of ejector and core pull with mould motion
5. Ejector control
   - Ejector programmed control (2stage, Max. 8times ejection)
   - Ejector block circuit (w/motor break)
   - Ejector on fly (at any mould opening position)
   - Ejector retract wait motion
6. Take-out Robot interface
7. Mounting holes for Take-out Robot (Based on EUROMAP)
8. Locating ring for mould centering
9. Automatic lubrication device (Clamp side)
10. Front safety door
    - Manual-operated door (-850HH)
    - Power-operated door (850HHW only)
11. Rear door
    - Manual-operated door
12. Safety device for mould area (850HH only)
    - Safety platform
    - Safety confirmation switch in mould area
    - Emergency stop botton in mould area
13. Mechanical safety device (for delivering to Japan only)

[Hydraulic Unit]

1. Hydraulic pump unit (Built-in)
   - 350, 450HH: 11 MPa/20 L/min(60Hz)
   - 550 - 850HH: 14 MPa/20 L/min(60Hz)
2. Oil temperature gauge
3. Hydraulic oil level alarm

[Electric Unit]

1. MAC-IX Control device
2. Automatic temperature storage for barrel
   - Heater burn-out detector
3. Automatic memory for mould condition
   - Internal memory (480 moulds)
   - External memory interface (1008 moulds)
4. Data security function
   - RFID card
   - Data protection by multilevel passward
   - Setting value change prevention circuit
   - Setting value change history display
5. Moulding condition data setting/display function
   - Injection speed/pressure waveform display
   - Screw roration waveform display
   - Injection speed/pressure waveform memory
   - Process support function (Easy setting condition)
   - Entire setting value display
   - Preset circuit for next moulding condition
   - Unit conversion
   - Foreign language (Displayed language switching, select 3 languages from Japanese, English, Chinese, Spanish, Thai)
6. Production management function
   - Production management data input
   - Production monitor
   - Process monitor function
   - Trend data display
   - External signal output circuitII
7. Alarm fuction
   - Operating condition OK monitor
   - Alarm indication
   - Input and output display
   - Alarm buzzer
8. Maintenance information
   - Grease supply alarm
   - Lubrication oil supply alarm
   - Battery exchange alarm
   - Alarm history display
   - Operation history display
   - Running hour meter
9. Screen shot (Screen image storage)
10. Safety/Energy saving function
    - Emergency stop buttons switch
    - Cycle start push botton
    - Power supply regeneration function
11. Heater subset temperature control
12. Automatic heat-up circuit
13. Automatic cycle stop circuit
14. Material feeding stop signal output
15. Production completion pre-notice circuit
16. Data maintenance (UPS, lighting surge suppressor)
17. Setting value direct input (Actuak value/percentage (%) input switching)
18. ECO monitor

[Control Unit]

1. Injection compression moulding circuit (coining circuit)
2. Early decompression circuit

[General]

1. Mounting/Leveling pad
2. Accessories
   - Specialized tools
   - Spare parts (fuses, grease cartridges)
   - Ejector rod
3. Instruction manuals, drawings (one Data CD each)

Option Equipment Specification

[Injection Unit]

1. Screw
   (1) Material
   Anti-abrasive & anti-corrosive screw
   (2) Screw type
   SPIII screw
   HC-UB screw (above 100DD)
   MF-UB screw
   F screw
   LFT screw
2. High-responsive check ring (for low viscosity resin)
3. Barrel
   - Anti-abrasive barrel
   - Anti-abrasive & anti-corrosive barrel
4. Extension nozzle
5. Shut off valve
   - Hydraulic shut off valve (Rotary type)
   - Hydraulic shut off valve (Needle type)
   - Pneumatic shut off valve (Needle type)
6. Barrel heater
   - Brass type heater
   - Ceramic type heater
7. Barrel cover
   - Insulated heater cover
   - ECO cylinder cover
   - Barrel cover with blower
8. Feed throat cooling water circuit
   - Flow meter
   - Temperature control device
   - Cooling water outage alarm
9. Melt decompression circuit (after plasticizing, after cooling, both)
10. Hopper stage
    - Ladder type
    - Large floor type
11. Hopper (Steel/Stainless)
12. Nozzle advance/retract control
    - Sprue break circuit (proximity switch)
    - Nozzle retract stop circuit
13. Material shortage detection circuit
14. Screw torque up

[Clamp Unit]

1. Hydraulic mould ejector (1line)
2. Mould ejector retraction confirmation circuit
3. Air blow (2 lines)
4. Hydraulic core (2, 4 lines)
   - Mould ejector circuit (Hydraulic core)
   - Hydraulic core decompression circuit
   - Hydraulic core cylinder block circuit
5. Air core (2 lines)
6. Hydraulic valve gate (2, 4 lines)
7. Air valve gate (2, 4 lines)
8. Ejector/Core link motion inhibition circuit
9. Piping for mould cooling water
   - Main piping type
   - Manifold type
10. Auto. powered opening device for front safety door (except 850HHW)
11. Power-operated front safety door (850HHW is std.)
12. Power-operated rear door
13. Safety platform (850HHW is std.)
14. Locating ring for easy alignment of mould
15. T-slotted mould platen
16. Automatic mould clamper interface
17. Magnet clamper interface
18. T-slotted platens
19. Daylight extension (+110 mm)
20. Heat insulation board for mould

[Hydraulic Unit]

1. High flow hydraulic pump unit (Built-in) (14 MPa/60 L/min (60Hz), except 350, 450HH)
2. Hydraulic oil temperature monitor

[Electric Unit]

1. Main breaker
2. Earth leakage breaker
3. Outlet circuit
   - 100V outlet circuit
   - 200V outlet circuit
   - Main power source outlet circuit
4. Hot runner control device
5. Signal light
   - Red color signal light
   - Three (3) color signal tower
6. Recording terminal (injection speed, pressure, position)
7. Acceptance check circuit
8. Memory data communication with take-out robot
9. Ancillary equipment alarm
10. Plug switch (located at operation side and anti-operation side)
11. Unmanned operation circuit
12. Product stocker change circuit
13. Air pressure drop alarm

[Control Unit]

1. Holding pressure switching control (mould cavity pressure, external signal)
2. Mould cavity pressure monitor
3. Mould temperature monitor
4. Gate cut circuit
5. Rotating core circuit
6. Product drop circuit interlock
7. Clamp force display circuit
8. Automatic clamp force correction circuit
9. packet MAC (LAN/USB)
10. Production control
    - LINKi

[For Special Moulding]

1. SCS moulding circuit
2. Gas assist moulding circuit
   - AGI circuit interface
   - Air mould circuit interface
   - Cinpres circuit interface
3. Active temperature control system
   - Interface for active temperature control unit
   - Active temperature control circuit
4. Core back circuit
5. MuCell moulding circuit
6. D-LFT system
7. Double mould circuit
8. DIEPREST moulding system
   - DP-C mode
   - DP-P mode
9. Foam moulding system (F-System)

[General]

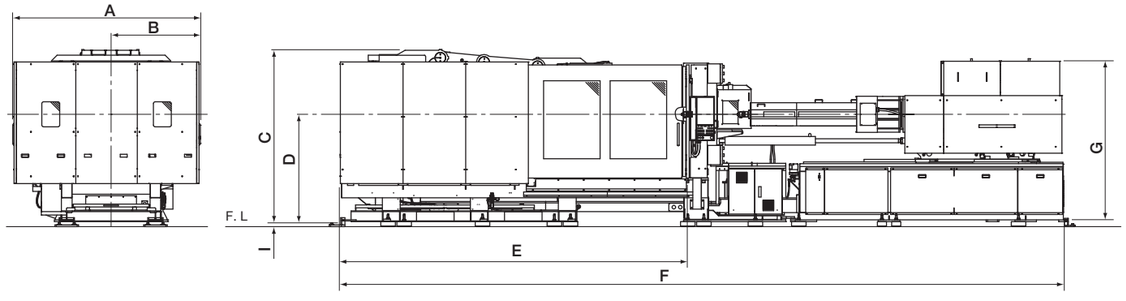
1. Special paint color
2. Spare parts for two (2) years
3. Spare parts for nozzle heater
4. Tools
5. Instruction manual, drawings (document file)
6. Name plate in foreign language
   - English name plate
   - Chinese name plate
7. Oil tank water filling test
8. Grease cartridge for spare
9. Mounting
   Foundation bolt
   Chemical anchor bolt

Machine Specifications

Model			350HH				450HH						550HH						650HH							850HH					850HHW				
Injection unit size			i17		i25		i17		i25		i35		i25		i35		i50		i35		i50		i80			i50		i80			i50		i80		
			Y	A	Y	A	Y	A	Y	A	Y	A	Y	A	Y	A	Y	A	Y	A	Y	A	Y	A	B	Y	A	Y	A	B	Y	A	Y	A	B
Injection Unit	Screw Diameter	mm	57.15	62	62	70	57.15	62	62	70	70	80	62	70	70	80	80	90	70	80	80	90	90	105	115	80	90	90	105	115	80	90	90	105	115
	Calculated Injection Volume	cm^3	795	935	1055	1345	795	935	1055	1345	1540	2010	1055	1345	1540	2010	2260	2860	1540	2010	2260	2860	3340	4540	5450	2260	2860	3340	4540	5450	2260	2860	3340	4540	5450
	Injection Weight PS	g	730	860	970	1240	730	860	970	1240	1410	1845	970	1240	1410	1845	2080	2630	1410	1845	2080	2630	3070	4180	5010	2080	2630	3070	4180	5010	2080	2630	3070	4180	5010
	Injection Weight PE	g	590	690	780	995	590	690	780	995	1140	1490	780	995	1140	1490	1670	2120	1140	1490	1670	2120	2470	3360	4030	1670	2120	2470	3360	4030	1670	2120	2470	3360	4030
	Max. injection Pressure	Mpa (kgf/cm^2)	206 (2100)	177 (1800)	206 (2100)	177 (1800)	206 (2100)	177 (1800)	206 (2100)	177 (1800)	206 (2100)	177 (1800)	206 (2100)	177 (1800)	206 (2100)	177 (1800)	206 (2100)	177 (1800)	206 (2100)	177 (1800)	206 (2100)	177 (1800)	206 (2100)	177 (1800)	147 (1500)	206 (2100)	177 (1800)	206 (2100)	177 (1800)	147 (1500)	206 (2100)	177 (1800)	206 (2100)	177 (1800)	147 (1500)
	Max. Holding Pressure	Mpa (kgf/cm^2)	177 (1800)	147 (1500)	177 (1800)	147 (1500)	177 (1800)	147 (1500)	177 (1800)	147 (1500)	177 (1800)	147 (1500)	177 (1800)	147 (1500)	177 (1800)	147 (1500)	177 (1800)	147 (1500)	177 (1800)	147 (1500)	177 (1800)	147 (1500)	177 (1800)	147 (1500)	123 (1250)	177 (1800)	147 (1500)	177 (1800)	147 (1500)	123 (1250)	177 (1800)	147 (1500)	177 (1800)	147 (1500)	123 (1250)
	Injection Rate Standard (S)	cm^3/s	385	455	375	480	385	455	375	480	480	630	375	480	480	630	630	795	480	630	630	795	-	-	-	630	795	-	-	-	630	795	-	-	-
	Injection Rate High Speed (H)	cm^3/s	515	605	485	615	515	605	485	615	615	805	485	615	615	805	805	1015	615	805	805	1015	1015	1385	1660	805	1015	1015	1385	1660	805	1015	1015	1385	1660
	Injection Rate Ultra High Speed (U)	cm^3/s	770	905	755	960	770	905	755	960	-	-	755	960	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Plasticizing Capacity PS	kg/hr	180	230	180	250	180	230	180	250	230	320	180	250	230	320	350	470	230	320	350	470	445	630	-	350	470	445	630	-	350	470	445	630	-
	Plasticizing Capacity PP	kg/hr	105	135	105	150	105	135	105	150	135	190	105	150	135	190	210	285	135	190	210	285	270	380	495	210	285	270	380	495	210	285	270	380	495
	Screw Speed	rpm	270		210		270		210		200		210		200		160		200		160		152		152	160		152		152	160		152		152
Clamp Unit	Max. Mould Clamping Force	kN (tf)	3430 (350)				4410 (450)						5390 (550)						6370 (650)							8335 (850)					8335 (850)				
	Platen Size (HxV)	mm	1150×1100				1280×1190						1330×1330						1530×1410							1590×1590					1900×1900				
	Distance Between Tie Bars (HxV)	mm	810×752				900×810						900×900						1070×970							1070×1070					1320×1320				
	Max. Mould Opening Stroke	mm	650				800						900						1000							1200					1200				
	Max. Daylight	mm	1320				1550						1700						2000							2300					2300				
	Mould Height	mm	300～670				350～750						400～800						400～1000							500～1100					500～1100				
	Ejector Ejector Force	kN (tf)	78 (8.0)				98 (10.0)						127 (13.0)						196 (20.0)							196 (20.0)					196 (20.0)				
	Ejector Ejector Stroke	mm	150				180						180						200							200					200				
General	Electric Heater Capacity	kW	13.4		17.1		13.4		17.1		22.3		15.5		19.7		25.1		19.7		25.1		35.3		38.6	25.1		35.3		38.6	25.1		35.3		38.6
	Overall Dimension (LxWxH)	m	7.1×1.9×2.2		7.5×1.9×2.2		7.7×2.1×2.2		8.1×2.1×2.2		8.4×2.1×2.2		8.5×2.3×2.2		8.8×2.3×2.2		9.6×2.3×2.3		9.4×2.6×2.4		10.2×2.6×2.4		10.7×2.6×2.4		10.9×2.6 ×2.4	10.9×2.6×2.6		11.4×2.6×2.6		11.6×2.6 ×2.6	10.9×2.9×2.6		11.4×2.9×2.6		11.6×2.9 ×2.6
	Shipping Weight	t	18		18		22		23		24		29		31		35		36		40		44		44	50		53		53	55		59		59

Note: 1. Above values are subject to change due to modification without prior notice.
2. The Value of plasticizing capacity are taken form the company's standard testing conditions.
3. Injection weight, Injection rate, and plasticizing capacity are depending on the used resin and moulding conditions.

External Dimensions of Machine



Unit: mm

Model	A	B	C	D	E	F	G	I
350HH-i17	1901	919	2235	1400	3689	7104	2012	70
350HH-i25	1901	919	2235	1400	3689	7484	2012	70
450HH-i17	2083	1030	2235	1400	4270	7685	2012	70
450HH-i25	2083	1030	2235	1400	4270	8065	2012	70
450HH-i35	2083	1030	2235	1400	4270	8405	2112	70
550HH-i25	2296	1123	2245	1400	4200	8460	2012	70
550HH-i35	2296	1123	2245	1400	4200	8799	2112	70
550HH-i50	2296	1123	2345	1500	4200	9569	2277	70
650HH-i35	2623	1248	2405	1500	4801	9401	2212	70
650HH-i50	2623	1248	2405	1500	4801	10171	2277	70
650HH-i80 (Y, A)	2623	1248	2405	1500	4801	10721	2332	70
650HH-i80 (B)	2623	1248	2405	1500	4801	10941	2332	70
850HH-i50	2623	1248	2610	1500	5495	10865	2277	70
850HH-i80 (Y, A)	2623	1248	2610	1500	5495	11415	2332	70
850HH-i80 (B)	2623	1248	2610	1500	5495	11635	2322	70
850HHW-i50	2933	1403	2610	1500	5495	10865	2277	70
850HHW-i80 (Y, A)	2933	1403	2610	1500	5495	11415	2322	70
850HHW-i80 (B)	2933	1403	2610	1500	5495	11635	2322	70