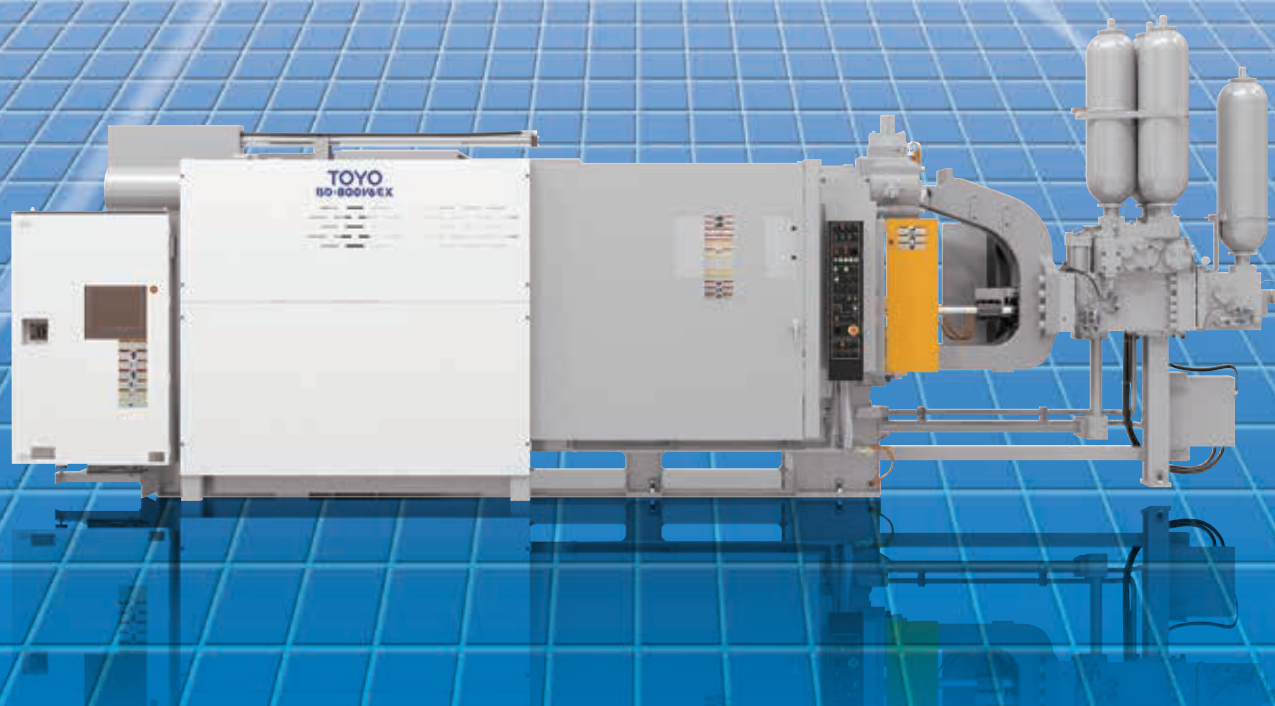


Die Casting Machine

BD-V6 *EX*series



Customer's Value Up

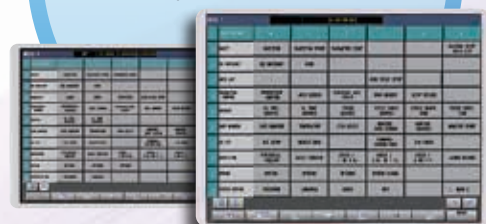
Further Development of Inherited Technology

The new BD-V6 EX series has been developed based on the previous model of proven BD-V5 EX series. Toyo's technical expertise, skills, and knowhow for over half-a-century have culminated in the BD-V6 EX series.

Evolution

Highly legible large screen

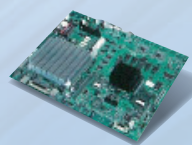
For higher legibility and operability, the screen is 1.25 times larger than that of the previous model.



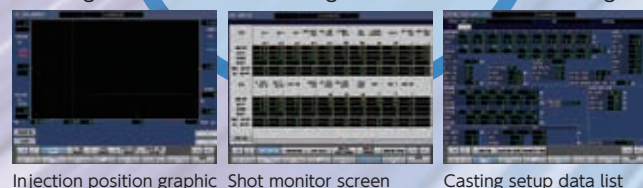
Evolution

New Control "SYSTEM 600"

High accuracy motion control



Integrated control of casting conditions and monitoring



Injection position graphic Shot monitor screen

Casting setup data list

Evolution

Application for tablet PC (option)

Advantages

- ① Wi-Fi connection is made between machine and tablet PC.
- ② Monitored data can be accessed and casting parameters can be changed with a tablet PC.
- ③ Casting conditions can be established referring to those of other machines.
- ④ One tablet PC can be connected to max. 32 machines.



Evolution

High speed tie-bar pulling out device (option*)

A split nut is adopted to the tie-bar pulling out device on the stationary die-plate side, so that the tie-bar pulling out time can be considerably reduced compared with conventional nut-rotating system, contributing to smooth die changes

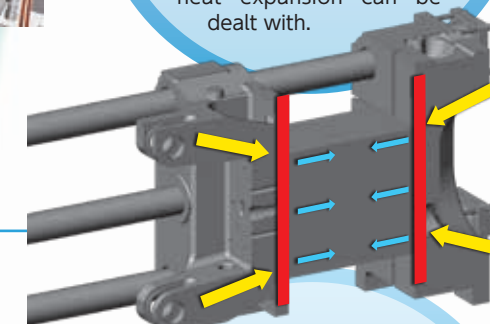


*not available in 125 and 200 ton models
standard in 800-ton model

Evolution

Die clamping device with increased rigidity

To increase the rigidity of the die clamping device, guide bars are provided between the movable die plate and the link housing, so that die parallelism changes due to heat expansion can be dealt with.



Evolution

Center press clamping structure

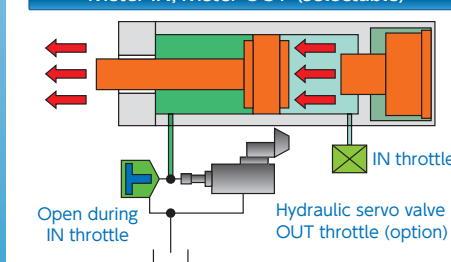
The shape of the die plate is optimized by using CAE analysis, so that deflection of the die plate can be minimized. The die clamping force is evenly distributed over the die surface, resulting in decreased defect rate of products.

- Low injection speed
0.03-1.0 m/s (maximum 9-point setting)
- High injection speed
1.0-9.0 m/s
- Sharp acceleration capability
7 m/s/0.01s (70G)

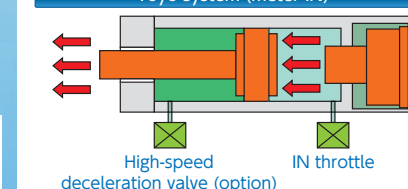
1. The dedicated EH valve for low speed use has improved stability of injection in the super-low speed range.
2. The compact EH valve has improved speed response.
3. A hydraulic servo valve (option) can be equipped.

- ① Improved deceleration stability in the high-speed deceleration function
 - ② Speed control selection possible in the high-speed range (meter-in, meter-out selection possible)
 - ③ Multi-stage (maximum 5 points) injection possible in the high-speed
- New injection system

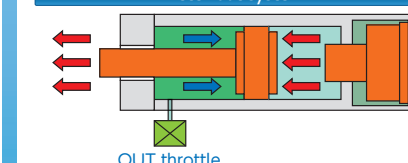
Meter-IN, Meter-OUT (selectable)



Toyo system (meter IN)



Meter out system



Multi Injection System

**Accurate injection at will,
from super-low speed to super-high speed**

This Multi Injection System, unique to Toyo, can inject molten metal into the die at adequate speeds ranging from super low speed to super high speed. This system has been developed based on Toyo's extensive technical expertise and new ideas in the die-casting field, and applicable to any kinds of castings.



■ **Low speed EH valve**
Demonstrates its speed stability in super-low speed casting range.



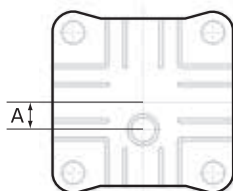
■ **Hydraulic servo valve (option)**
Demonstrates its ability in the high-speed injection range.
Demonstrates improved deceleration stability.
Realizes three speed control modes, from which one can be selected.



■ **Electric injection flow control valve**
Remotely controls the injection speed.
Automatically corrects speed and pressure rise time.

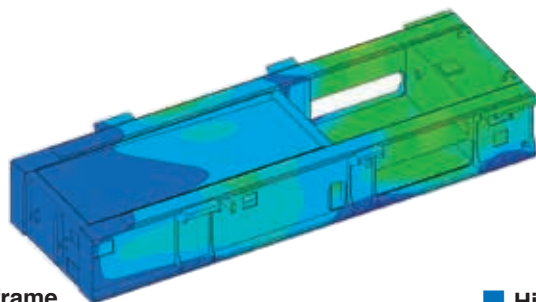
C Clamping System

The high-precision, high-rigidity die clamping unit can handle one size larger die mold



The center press structure minimizes deflection of die-mounting part of the movable die plate, and the guide bar system strengthens rigidity of the die clamping unit. Combined, high accuracy and firm die clamping can be made. In addition, one size larger die can be mounted owing to the lowered below-center injection position.

	BD-350	BD-500	BD-650	BD-800
A	125→150	150→175	175→225	250→275



■ **High rigidity machine frame**

- Highly rigid machine frame optimally designed with CAE analysis.
- High rigidity machine frame sustains rigorous die opening and closing motions and assures stable operation.
- Tough die-casting machine withstanding rough use in harsh operating environment.



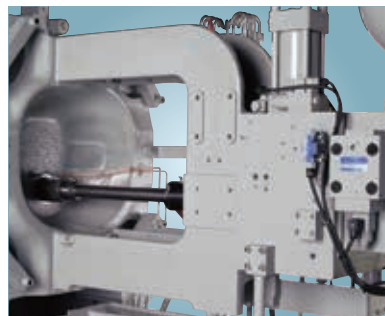
■ **High rigidity die-plates**

- Highly rigid die-plates optimally designed with CAE analysis to minimize deflection reduces burr generation.
- Die-clamping force is evenly distributed over the parting surface of the die, realizing ideal casting.



■ Automatic toggle lubrication unit

The high-precision, high-rigidity clamping system has adopted a "quantitative distribution automatic oil lubrication system". This feature further improves the reliability and durability of the system.

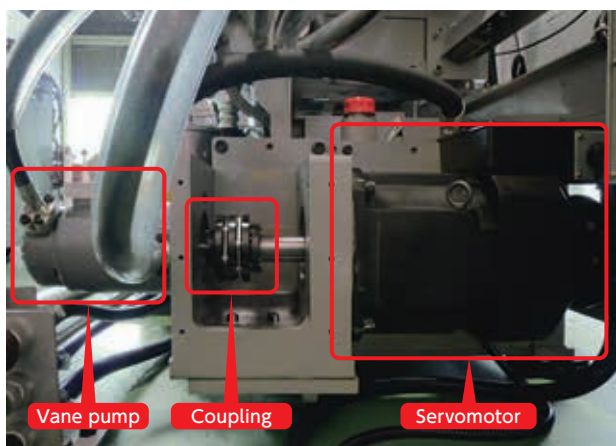


■ Injection C frame

A high-strength C frame has been adopted at the injection unit. Center of the injection cylinder and the sleeve hole have been machined together to improve the reliability of the injection unit.

Optional parts

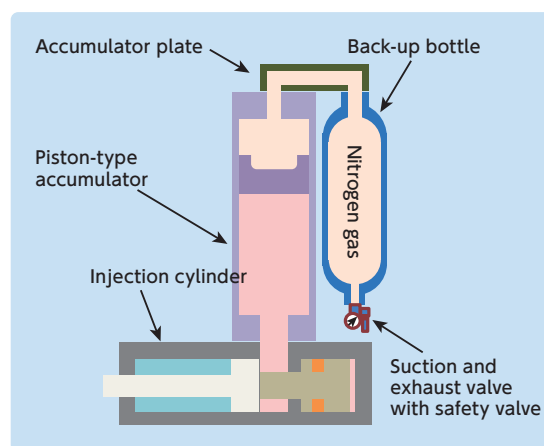
Optional items for energy saving and easy-to-use



■ Pump revolution control

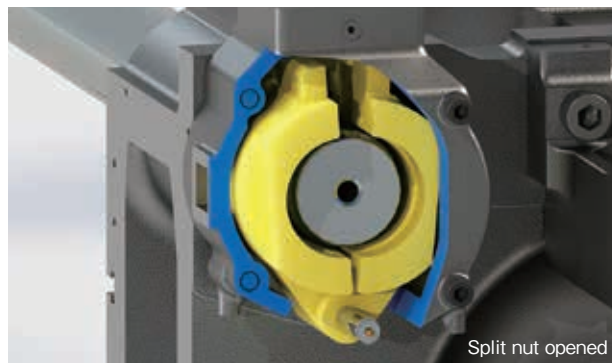
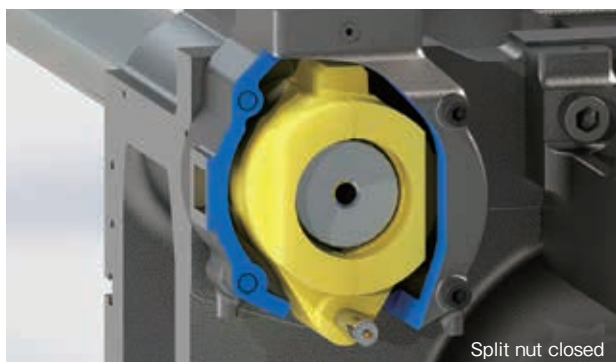
- The pump is driven by a servomotor.
- The pump runs at speeds corresponding to the flow rate that is required.
- Eliminating wasteful electricity, 30% or more power consumption can be reduced.

* Amount of energy saving varies depending on casting conditions.



■ Piston-type accumulator

- The high speed injection accumulator is changed from the bladder-type to the piston-type.
- This accumulator can be mounted on the machine in the field.



■ High speed tie-bar pulling-out device

- The tie-bar pulling-out device on the stationary die plate side is changed from the conventional nut-rotating system to the nut splitting system.
- Compared with the conventional type, the tie-bar pulling-out time can be reduced by 50% or more.

Control System

The latest electronic control system brings machine performance into full play

Easy operation

Next-Generation Human-Machine Interface: SYSTEM 600

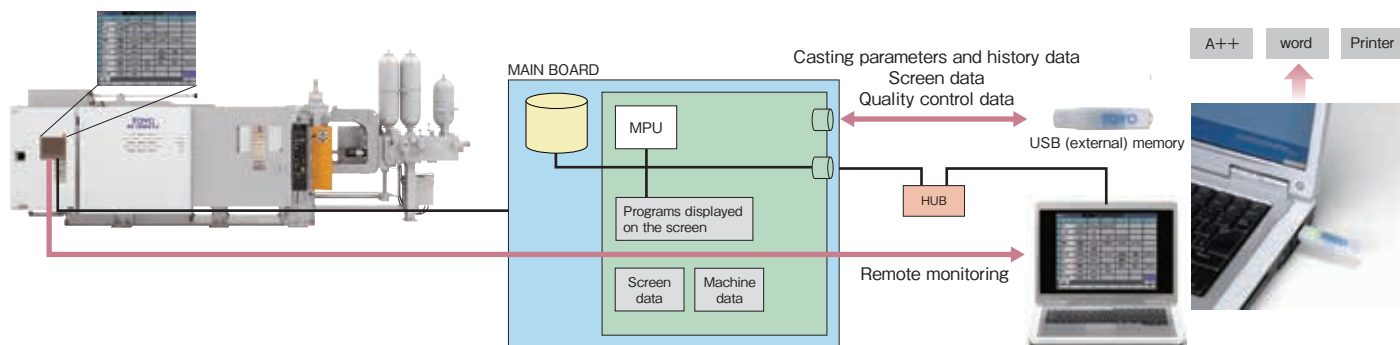


T-Station lite network control system brings your production control to new stage (Option)

The T-station lite is Toyo's own network control system where one server can monitor maximum 32 sets of die-casting machines. The BD-V6 EX series is equipped with an interface as standard for the T-station lite that can monitor operating conditions of machines real

time, anytime and anywhere, using wireless LAN. Make the best use of the T-station lite for the production control at your factory.

■ T-Station lite system configuration



Sequencer-control of die-casting machine (option)

■ Complex control system of SYSTEM 600 and sequencer

- The sequencer mainly controls the die-casting machine.
- Monitoring can be easily made with a sequencer software available in the marketplace.
- The SYSTEM 600 controls the screens.
- Conventional sharp setting screens and graphic display are available.



SYSTEM 600



Sequencer

This new sequencer control system utilizes the microprocessor control of the V6 EX series that has high operating and displaying functions and is further developed for broader versatility and flexibility.

All-in-one menu screen from which any screen can be accessed



Operator-friendly controller

The BD-V6 EX series is equipped with the latest controller SYSTEM 600 developed based on previous STSTEM 500, having a larger screen of 15 inch for better visibility.

Frustration-free, instant access to any screen

Any desired screen can be accessed directly from the MENU 1 screen. In addition, one screen can be shifted to another much quicker than previous controller.

Screen-storing function

Maximum five screens can be stored in the internal memory. Stored screens can be called up by just touching FORWARD or BACK buttons. This function is just one of the unique features you can find only in SYSTEM 600 control.

SYSTEM 600 supports the overseas operations of the customers.

- Language selection function (4 languages included in standard specifications)
Japanese, English, Chinese (traditional & simplified), and Korean

PARAMETER COUNT screen



T-Remote (Option)

Remote operation and viewing of the machine screen can be made with a tablet PC available in the marketplace.

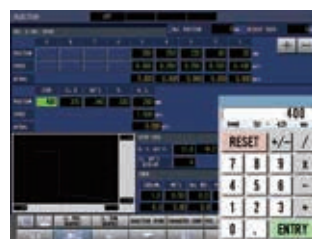
- You can see the same screens of the die-casting machine on your tablet PC.
- By connecting the SYSTEM 600 and a tablet PC via a wireless LAN router, you can see or operate the machine screens on the tablet PC anywhere around the machine.
- The machine screen can be seen from a multiple number of tablet PCs.

The T-Remote is a highly useful user-support system to markedly improve machine control and operation.



※Maximum 32 sets of machines can be connected.

PC-touch easy entry operation



Entry with 10-key screen

The popped up screen can be dragged to a convenient place for easy entry operation.



Software Keyboard

The keyboard appears as a pop-up, allowing key inputs similar to a personal computer keyboard.

Security features



Password function

The SYSTEM 600 controller is provided with a 4-step security protection using respective passwords for each authority level. If an upper level screen is left unattended for a certain time, it is automatically shifted to a default level screen.

Job title	Job title example	Operation authority
Manager	Plant general manager, manager	User management and addition, password assignment
Maintenance	Maintenance staff	Model changes, board replacement semi-fixed values, environment screen
Processor	Technical staff	Casting condition changes
Operator	Operation staff	Start/stop operation, screen display only

Easy-to-see screen design



I/O monitor screen

The input and output conditions can be checked at one glance.



Ladle screen

Selected contents are popped up.

Graphic function

Easily visible, diverse graphic functions help improve operation efficiency

The 15-inch color touch panel screen guides you easily and smoothly to all operations, including the various setup, adjustment, checking, and inspection functions.

Condition Settings

Injection screen



Setup of injection motion changeover positions, speeds, and accumulator pressures

Ladle screen



Setup of ladle arm and ladle motions changeover positions, speeds, and timers

High cycle setup screen



Setup of high cycle-related functions

Die movement and ejection screen



Setup of die and ejector movements changeover positions, speeds and pressures

Extractor screen



Setup of extractor mode

Reject shot screen



Setup of reject shot-related parameters during start-up period

Core setup screen



Setup of core movement sequence, speeds, and pressures

Spray screen



Setup of spray timers and spray mode

Injection spare screen



Setup of injection-related modes

Monitoring Conditions

Management

Shot monitor screen



Display of measured values in each shot

Injection position graphic



Display of injection graph (Horizontal axis: injection stroke)

Production control screen



Simplified production control function

Monitor data screen



Display of data for 200 shots

Injection time graphic



Display of injection graph (Horizontal axis: time)

Data memory screen



Storing of casting conditions for 400 dies and graphic data for 40 dies

Monitor graphics screen



Display of data for 200 shots in monitor graph

Alarm record screen



Storing of 400 alarm messages issued

Communication port screen



Casting conditions can be printed, and stored on USB memory.

Condition Support

Parameter count screen



Injection conditions are calculated and visually displayed for easy checking.

Setup record screen



Stores 300 items of setup records in memory

Casting setup data list screen



Main setting conditions are displayed for your glance. You can change the setting on this screen.

Line-up

Toyo's die-casting machines
meet all possible needs

BD-125V6 EX

An array of technological features are condensed into a compact body!
It's a very popular compact machine.



BD-200V6 EX

High cycle die-casting machine!



BD-250V6 EX

Available with a wide range of options,
it improves productivity!



BD-350V6 EX

Significant advances in ease of use,
multi-functionality, and productivity!



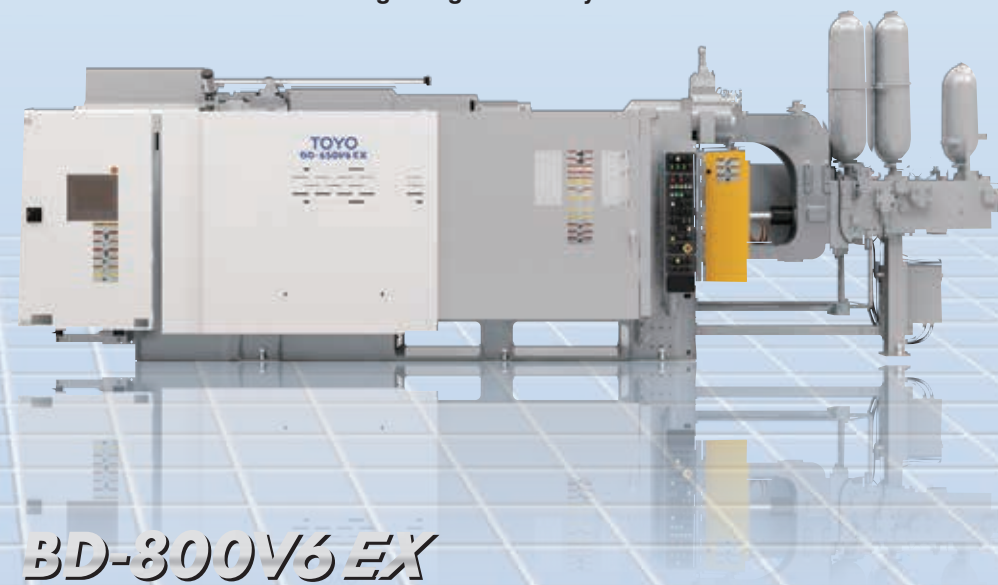
BD-500V6 EX

Productivity-conscious high-performance medium-sized machine.



BD-650V6 EX

Medium-sized machine boasting of high versatility.



BD-800V6 EX

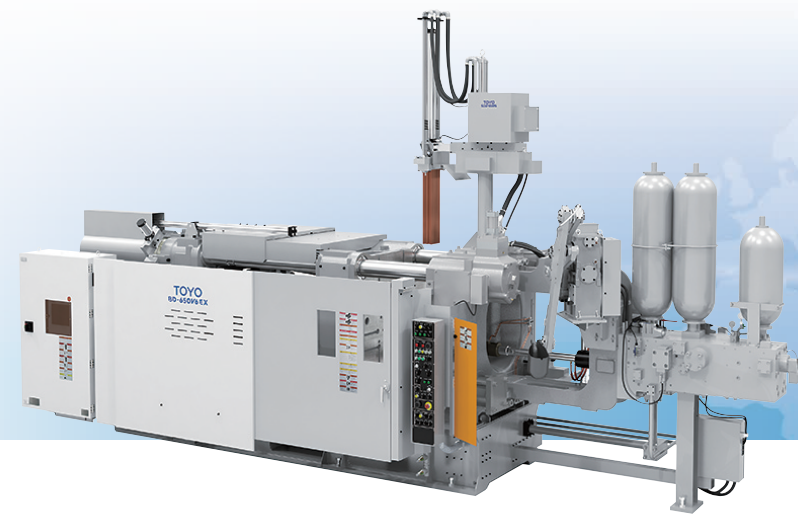
Provides superior cost performance to every diecaster.



※Photographs in the catalog include some optional devices.

Die-Casting Machine Main Specs

Performance to lead the
die-casting machines of the future



Model name			BD-125V6 EX	BD-200V6 EX(-H)	BD-250 V6 EX	BD-350V6 EX	BD-500V6 EX	BD-650V6 EX	BD-800V6 EX
Control system			SYSTEM 600						
Injection system			Multi Injection						
Clamping	Clamping force [kN]		1250	2000	2500	3500	5000	6500	8000
	Die plate	(fixed side: H×W) [mm]	700×700	820×820	850× 850	935×1008	1175.5×1200	1320×1335	1440.5×1475
		(movable side: H×W) [mm]	700×700	820×820	850× 904	935×1008	1070×1172	1200×1302	1400×1442
	Tie-bar distance (H×W) [mm]		460×460	508×530	584× 584	652×652	751×751	850×850	931×931
	Die stroke (Max. Min.) [mm]		350~200	350~200	380~ 250	420~300	560	660	760
	Die thickness (Max. Min.) [mm]		500~250	600~250	600~ 250	700~300	850~350	900~350	950~400
Tie-bar diameter [mm]			85	100	110	125	140	160	180
Injection	Injection force [kN]		143~177	176~219	226~ 281	270~335	395~491	423~525	485~603
	Intensity ratio		1 : 2.04	1 : 2.04	1 : 2.16	1 : 2.16	1 : 2.33	1 : 2.5	1 : 2.49
	Plunger stroke [mm]		305	370	370	425	580	670	750
	Tip jog-out stroke [mm] (from fixed die plate surface)		125	150	150	165	250	300	350
	Injection position [mm]		-100	-125	-125	-150	-175	-225*2	-275*2
	Tip diameter [mm] (○:Standard)		45・ <u>50</u> ・55・60	<u>50</u> ・55・60・65	50・55・ <u>60</u> ・65・70	60・65・ <u>70</u> ・75・80	70・75・ <u>80</u> ・85・90	70・75・ <u>80</u> ・85・90	80・85・ <u>90</u> ・95・100
	Injection pressure [MPa]		90.6	111.8	99.5	87.0	97.7	104.9	94.9
	Low injection speed [m/s]		0.03~1.0	0.03~1.0	0.03~ 1.0	0.03~1.0	0.03~1.0	0.03~1.0	0.03~1.0
	High injection speed [m/s]		1.0~9.0	1.0~9.0	1.0~ 9.0	1.0~9.0	1.0~9.0	1.0~9.0	1.0~9.0
Ejection	Ejection force [kN]		80.5	104.9	123.7	193.8	251.7	294.5	342
	Ejection stroke [mm]		0~75	0~80	0~ 80	0~100	0~110	0~125	0~125
Core	Core hydraulic outlet [Rc×sets]		1/2×1	1/2×1	3/4 ×3	3/4×3	3/4×3	3/4×3	3/4×3
	Number of hydraulic core [sets]		1	1	1	1	2	2	3
Coolant	Coolant inlet pipe diameter [Rc]		1	1	1	1	1・1/4	1・1/4	1・1/4
	Coolant drain pipe diameter [Rc]		2	2	2	2	2・1/2	2・1/2	2・1/2
	Die coolant adjustment valve	(fixed side) [Rc×quantity]	3/8×5	3/8×7	3/8 ×7	3/8×7	3/8×9	3/8×9	3/8×11
		(movable side) [Rc×quantity]	3/8×5	3/8×7	3/8 ×7	3/8×7	3/8×12	3/8×15	3/8×15
	Required coolant volume	(oil cooler) [L/min]	40	40 50*1	40	40	50	50	50
		(die cooling) [L/min]	25~50	25~50	30~ 70	30~70	50~90	50~90	50~90
Electrical	Motor	(hydraulic pump) [kW]	15	15 22*1	22	22	37	37	45
		(die height) [kW]	0.2	0.4	0.4	0.75	1.5	1.5	2.2
		(lubrication pump) [kW]	0.02	0.02	0.02	0.02	0.02	0.02	0.02
	Power supply capacity [kVA]		25	25 40*1	40	40	60	60	70
Power supply voltage [V] (50Hz/60Hz)			AC200/220 (±10%)	AC200/220 (±10%)	AC200 / 220(±10%)	AC200/220 (±10%)	AC200/220 (±10%)	AC200/220 (±10%)	AC200/220 (±10%)
Air	Air connection port [Rc]		1	1	1	1	1・1/4	1・1/4	1・1/4
Other	Machine dimensions (L×W×H) [mm]		4591×1549×2197	5574×1852×2545	5770×1942 ×2601	6395×2021×2786	7603×2416×2880	8047×2495×2907	8612×2753×3360
	Machine weight [t]		5	7	9	12	19	25	33
	Hydraulic fluid tank capacity [L]		280	365	382	465	844	874	1096

※1: Dimensions and capacity for BD-200V6 EX-H

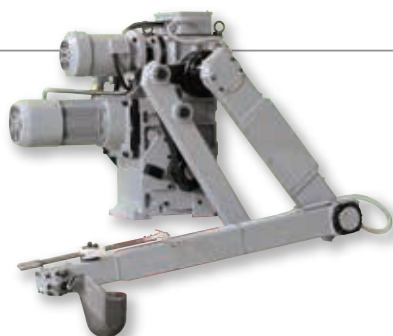
※2: There are also the special dimension.

These specifications are subject to change without notice.

P

eripheral Equipment

A robot system is controlled together with a die-casting machine



Automatic Ladle KD1-M5 series

With a linkage and full-bearing structure adopted to the driving unit, the automatic ladle can be operated smoothly with a minimum secular change. (※1)

Model		KD1-15M5	KD1-35M5	KD1-65M5	KD1-100M5	KD1-120M5
Installed die-casting machine		125, 200 ton class	200,250,350 ton class	500, 650 ton class	800, 900 ton class	1250 ton class
Pouring capacity	kg	1.6	3.5	6.0	10.0	20.0
Pouring accuracy	%	±1 (※2)		±2 (※2)		
Ladle	kg	0.4・0.8	200,250:0.8・1.6・2.5 350:1.6・2.5・3.5	2.5・4.0・6.0	4.0・6.0・8.0	10.0・15.0・20.0
Min-diameter of crucible	mm	450	550	750	750	800
Arm driving motor	kW	0.75			1.5	2.2
Ladle driving motor	kW	0.4				
Control unit		Integrated control by die-casting machine control panel				
Ladling adjustment system		Digital setting				

(※1) The chain mechanism is adopted in some area of the equipment.

(※2) Under conditions without molten metal runs or ladling residues

Automatic Spray SD2-M5 series

The spray control devices are integrated in a dedicated valve box to facilitate maintenance and adjustment.

Model		SD2-15M5	SD2-35M5	SD2-65M5	SD2-80M5	SDM-120M5
Installation die-casting machine		125, 200 ton class	200,250,350 ton class	500, 650 ton class	800, 900 ton class	1250 ton class
Up/down stroke	mm	600	750	950	1050	2255
Back & forth adjustment stroke (※3)	mm	150	200	250	250	300
Swivel angle (helper side)	°	90				—
Spray nozzle copper pipe quantity	pieces	36	32×2	37×2		35×2
Dedicated air blow nozzle copper pipe quantity	pieces	12	20			
Air consumption	NI/min	2500 (※4)				3500 (※4)
Primary air connection size/pressure		Rc1 0.5 MPa minimum		Rc1.1/4 0.5 MPa minimum		Rc2 0.5MPa minimum
Primary die release agent connection size/pressure		Rc1 / 2 0.3~0.5 MPa				Rc1 0.3~0.5MPa
Control unit		Integrated control by die-casting machine control panel				
Spray time adjustment system		Digital setting				

(※3) Adjusted by a manual lever (※4) Measured under Toyo's spray setting conditions

Automatic Extractor TD5L-M5 series

Smooth and high cycle operation by adoption of a dedicated inverter motor for driving arm.

Model		TD5L-15M5	TD5L-35M5	TD5L-65M5	TD5L-80M5
Installation die-casting machine		125, 200 ton class	200, 250, 350 ton class	500, 650 ton class	800, 900 ton class
Extraction stroke	mm	1020	1400	1800	2089
Pulling stroke	mm	150	250	250	350
Pull-out force	N	490			
Clamp diameter	mm	40~60	50~80	60~95	80~120
Finger turning angle	°	90			
Product detection		Limit switch detection, standard 2 pieces			
Arm actuation	kW	0.4		—	
Air consumption	ℓ/cycle	6.9	9.8	10	10
Primary air pressure	MPa	0.4~0.5 MPa			
Control unit		Integrated control by die-casting machine control panel			
Arm speed adjustment method		Digital setting			

Automatic diluter and pressure-feeding device AD-35

Original spray solution (water-soluble die releasing agent) is automatically diluted to the preset number of times, pressurized, and fed to the automatic spraying device.

Model		AD-35
Installation die-casting machine		125~1250 ton class
Dilution ratio	Times	40~150
Dilution capacity	ℓ/min	6
Discharge pressure	MPa	0.1~0.5
Primary side air piping connection size/pressure		Rc1/4 0.5 MPa minimum
Primary side water piping connection size/pressure		Rc1/2 0.07 MPa minimum
Primary side water flow rate	ℓ/min	6 minimum
Maximum discharge rate of pump	ℓ/min	32
Maximum discharge pressure of pump	MPa	0.5
Power source		AC100V 1A
Control system		Relay and timer control



Standard and Optional Specifications

●Standard ○Option

Machine name		125	200(H)	250	350	500	650	800
Injection	Standard Sleeve length	215	257	257	292	365	405	445
	Tip joint system	○	○	○	●	●	●	●
	Specified sleeve diameter	○	○	○	○	○	○	○
	Bladder type accumulator	●	●	●	●	●	●	●
	Piston-type accumulator	○	○	○	○	○	○	○
	Tip lubrication device	●	●	●	●	●	●	●
	Tip lubrication mixing system	○	○	○	○	○	○	○
	Injection area cover (helper side)	●	●	●	●	●	●	●
	Injection graphic screen display	●	●	●	●	●	●	●
	Injection monitor function	●	●	●	●	●	●	●
	Injection condition screen setup	●	●	●	●	●	●	●
	Injection electric flow control	●	●	●	●	●	●	●
	Injection condition feedback function	●	●	●	●	●	●	●
	Low-speed injection device	●	●	●	●	●	●	●
	Multi-injection (high-response EH ratio valve)	●	●	●	●	●	●	●
	Injection force adjustment	●	●	●	●	●	●	●
	Intensifying time adjustment	●	●	●	●	●	●	●
	Intensifying accumulator	—	○	○	○	○	○	○
	Intensifying relief installation (Intensifying force adjustment)	○	—	—	—	—	—	—
	Intensifying cylinder system	●	●	●	●	●	●	●
Clamping	FL injection system	—	●	●	●	●	●	●
	High-speed servo valve specification (maximum 5 point setting)	○	○	○	○	○	○	○
	Automatic lubrication device (toggle area)	●	●	●	●	●	●	●
	Movable die plate sliding plate system	●	●	●	●	●	●	●
	Die-height adjustment device	●	●	●	●	●	●	●
	Automatic clamp force setup	●	●	●	●	●	●	●
	Clamping force automatic adjustment	●	●	●	●	●	●	●
	Clamping force monitoring function	●	●	●	●	●	●	●
	Digital load meter (1 piece)	●	●	●	●	●	●	●
	Tie-bar pull out device, split-nut system (on operation side)	—	—	○	○	○	○	●
	Tie-bar pull out device, nut rotation system (on operation side)	○	○	—	—	—	—	—
	Chrome-plated tie-bar and guide bar	●	●	●	●	●	●	●
	Steel plate over die plates	○	○	○	○	○	○	○
	T-slot on die-plates	●	●	●	●	●	●	●
	Low pressure die protection system	●	●	●	●	●	●	●
	Operation side manual safety door	●	●	●	●	●	●	●
	Operation side automatic safety door	○	○	○	○	○	○	○
	Helper side safety fence	○	○	○	○	○	○	○
	Toggle side cover (operator side, helper side)	●	●	●	●	●	●	●
Casting	Squeeze pin specifications	○	○	○	○	○	○	○
	Vacuum casting VCS	○	○	○	○	○	○	○
Core	Core 1 installation	●	●	●	●	●	●	●
	Core 2 installation	○	○	○	○	●	●	●
	Core 3 installation (fixed die plate, helper side)	—	—	○	○	○	○	●
	Core motion selectable circuit	●	●	●	●	●	●	●
	Core speed adjustment function	●	●	●	●	●	●	●
	Core state display function	●	●	●	●	●	●	●
	Core unit pressure reducing valve	○	○	○	○	○	○	○
	Taiwa connector	●	●	●	●	○	○	○
	Nanahoshi metal connector	○	○	○	○	●	●	●
Hydraulic-Cooling	Mineral hydraulic fluid	●	●	●	●	●	●	●
	Water glycol spec	○	○	○	○	○	○	○
	Oil cleaner	●	●	●	●	●	●	●
	Hydraulic fluid temperature rise alarm	●	●	●	●	●	●	●
	Hydraulic fluid level lower alarm	●	●	●	●	●	●	●
	Oil cooler automatic water feed valve	○	○	○	○	○	○	○
	Temperature display function (Max. 9-point)	○	○	○	○	○	○	○
	Die cooling adjustment valve (standard)	10	14	14	14	21	24	26
	Die cooling ON-OFF valve fitting	○	○	○	○	○	○	○
	Drainage box for die cooling water fixed on counter operator side (side of moving die-plate).	○	○	○	○	○	○	○
	Nitrogen gas charging tool and hose	○	○	○	○	○	○	○
	Glycerin sealed pressure gauge	●	●	●	●	●	●	●
	Hydraulic fluid heat up function	●	●	●	●	●	●	●
	Pump rotation speed control	○	○	○	○	○	○	○
Control	Microprocessor control (SYSTEM 600)	●	●	●	●	●	●	●
	Sequencer control *1	○	○	○	○	○	○	○
	USB interface (1 connection)	●	●	●	●	●	●	●
	Touch key system	●	●	●	●	●	●	●
	Internal memory (400 type)	●	●	●	●	●	●	●
	External USB memory (400 type) *2	●	●	●	●	●	●	●
	Digital setting for Injection, clamping, ejection and ladling	●	●	●	●	●	●	●
	Timer digital setup	●	●	●	●	●	●	●
	Shot counter	●	●	●	●	●	●	●
	Production control function	●	●	●	●	●	●	●
	Monitor function (32 items) *3	●	●	●	●	●	●	●
	Automatic correction (6 items)	●	●	●	●	●	●	●
	Calculation of shot condition	●	●	●	●	●	●	●
	Spray time step control	●	●	●	●	●	●	●
	Spray time control based die temperature	○	○	○	○	○	○	○
	Alarm message	●	●	●	●	●	●	●
	Alarm history indication function	●	●	●	●	●	●	●
	Maintenance function (1 cycle graph, logic)	●	●	●	●	●	●	●
	Casting conditions list setting	●	●	●	●	●	●	●
	Regular inspection display function	●	●	●	●	●	●	●
Other	High-cycle specifications	●	●	●	●	●	●	●
	Interlock with other products automated devices	○	○	○	○	○	○	○
	Emergency stop push button	●	●	●	●	●	●	●
	Defect product signal output	○	○	○	○	○	○	○
	Reject shot function	●	●	●	●	●	●	●
	Color LCD 15 inch	●	●	●	●	●	●	●
	Indication light 3 levels (with mode selection function)	○	○	○	○	○	○	○
	Quality control system (A++)	○	○	○	○	○	○	○
	Production monitoring system (T-Station) (IoT support)	○	○	○	○	○	○	○
	Local language display (English, Chinese, Korean)	●	●	●	●	●	●	●
	Setting and operation via tablet PC *4	○	○	○	○	○	○	○
Other	Tool box set	○	○	○	○	○	○	○
	Tip lubrication pressure sensor	○	○	○	○	○	○	○

※The specifications are subject to change without notice.

*1 : Sequencer made by Mitsubishi Electric

*2 : In case only casting conditions are stored in Toyo-specified USB memory

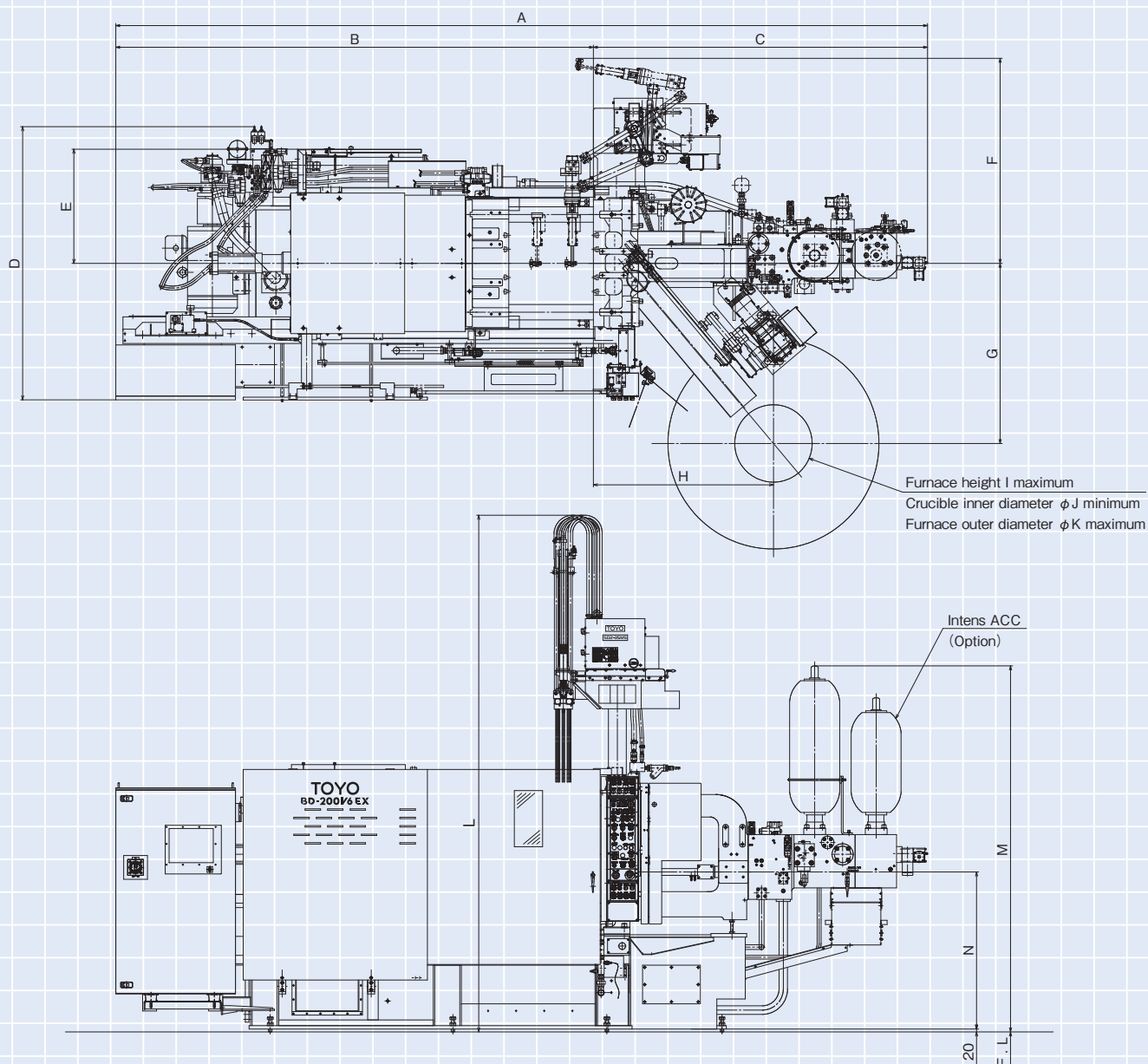
*3 : For screen display, maximum 32 items can be selected from 64 monitorable items

*4 : Corresponding OS Windows only

Dimensions

Equipped with the latest technology
unique to Toyo

BD-125 / 200 / 250 / 350V6 EX outside drawing

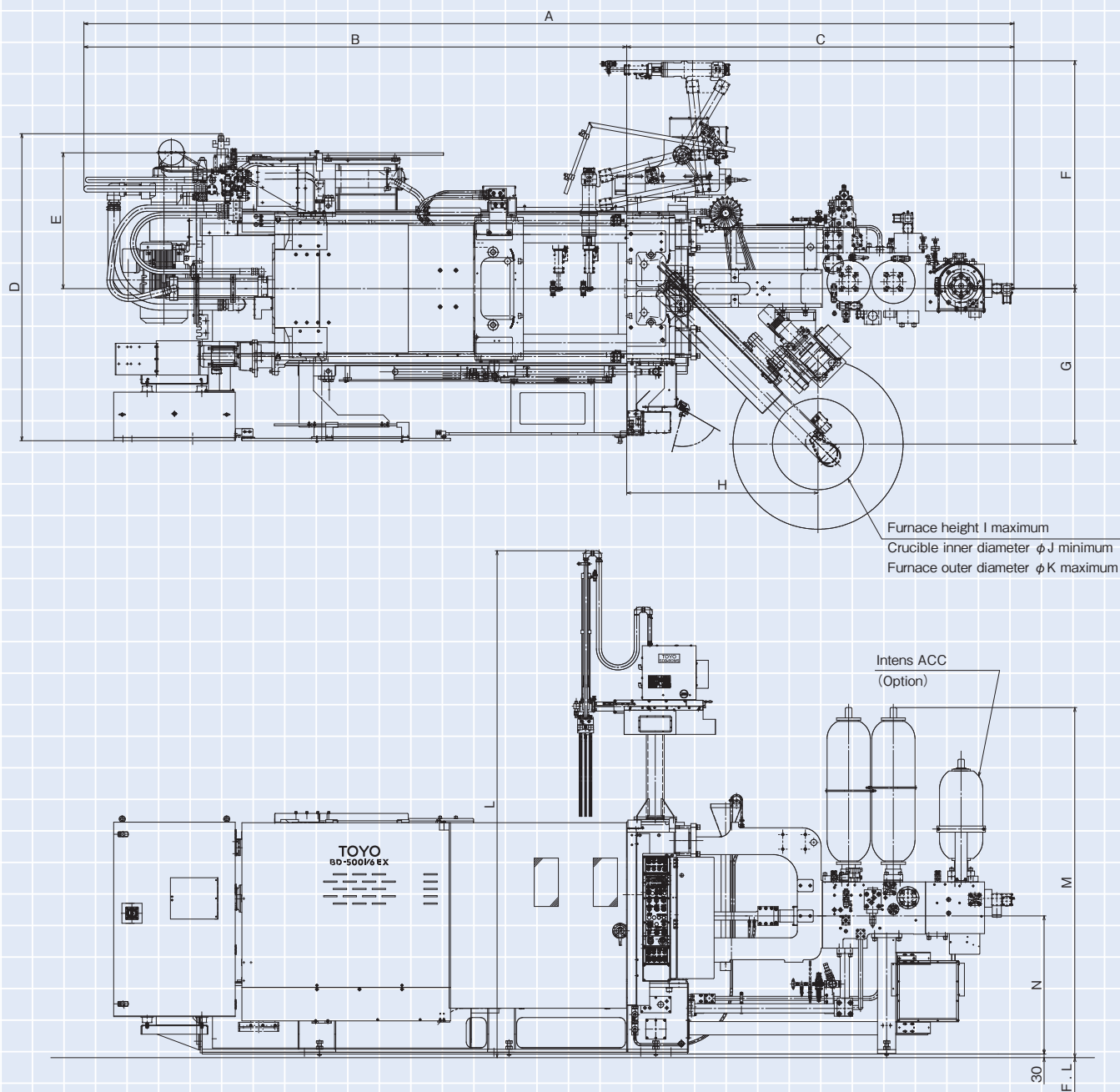


Machine name	A	B	C	D	E	F	G	H	I	J	K	L	M	N
BD-125V6 EX	4591	2840	1751	1570	725	1073	1185	975	1075	450	1200	3233	2197	1055
BD-200V6 EX	5574	3250	2324	1791	836	1457	1280	1274	1049	550	1500	3601	2545	1061
BD-250V6 EX	5770	3395	2375	1942	811			1280	1125			3672	2601	1117
BD-350V6 EX	6395	3775	2620	2021	892			1310	1150			3785	2786	1142

- The value unit is mm, unless indicated otherwise. ● The specification values are subject to change without notice.
- This diagram shows BD-200V6 EX with 35M series ancillary equipment.



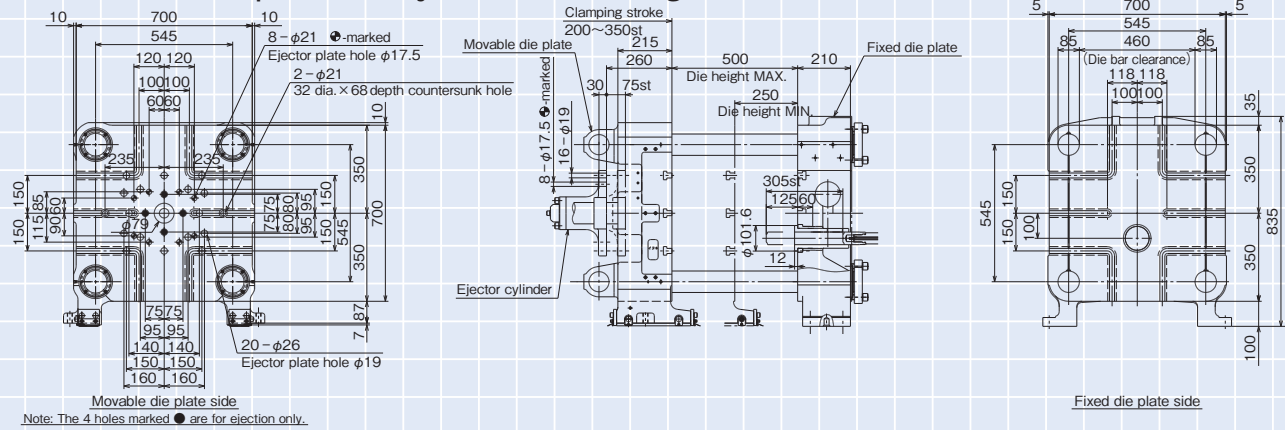
BD-500/650/800V6 EX outside drawing



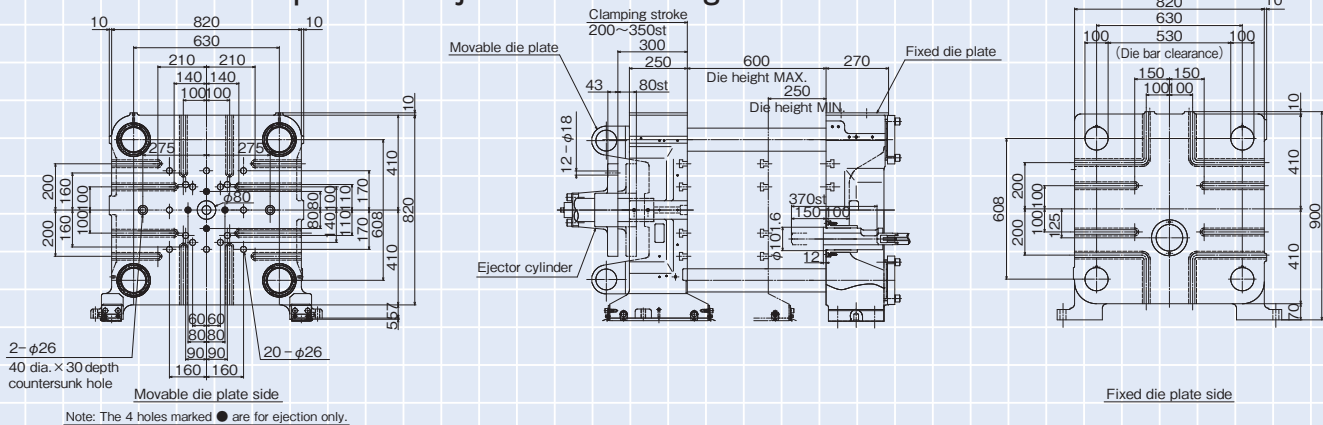
Machine name	A	B	C	D	E	F	G	H	I	J	K	L	M	N
BD-500V6 EX	7603	4415	3188	2416	1117	1873	1280	1575	1156	750	1400	4170	2880	1136
BD-650V6 EX	8047	4854	3193	2495	1165	1873	1433	1537	1183	750	1400	4312	2907	1163
BD-800V6 EX	8758	5191	3567	2753	1200	2160	1595	1605	1200	750	1500	4694	3360	1281

- The value unit is mm, unless indicated otherwise.
- The specification values are subject to change without notice.
- This diagram shows BD-500V6 EX.

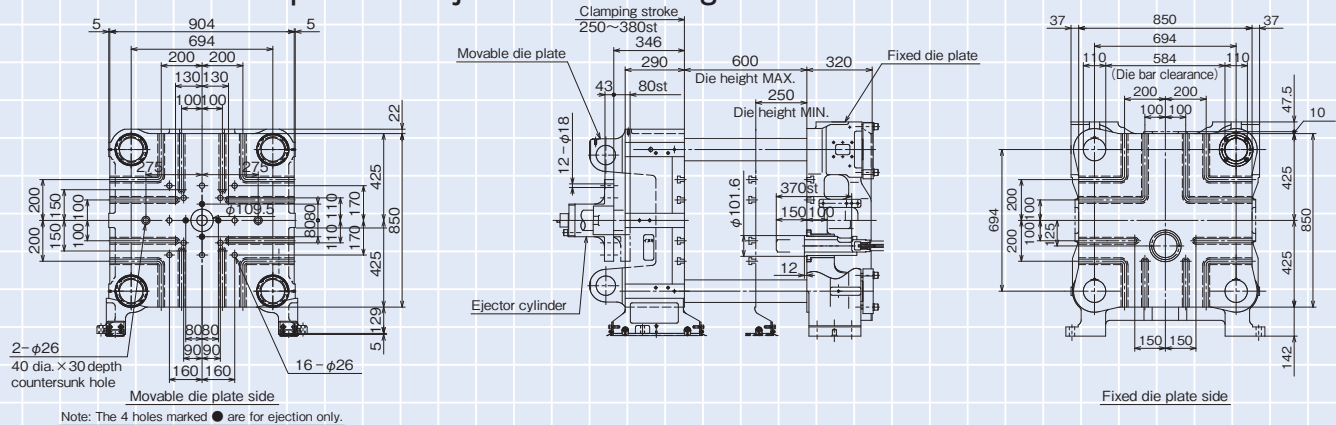
BD-125V6 EX die plate and ejector related diagram



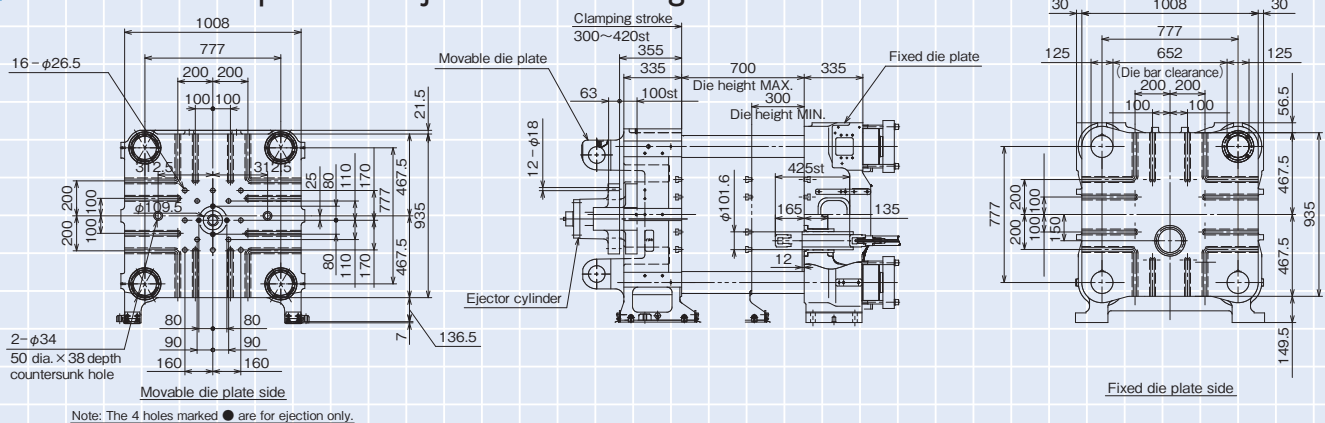
BD-200V6 EX die plate and ejector related diagram



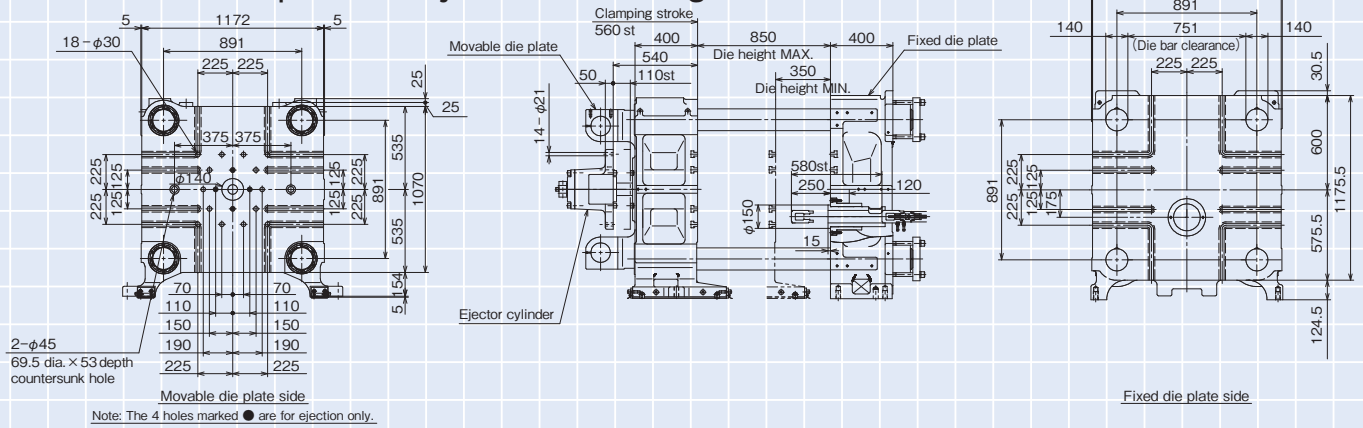
BD-250V6 EX die plate and ejector related diagram



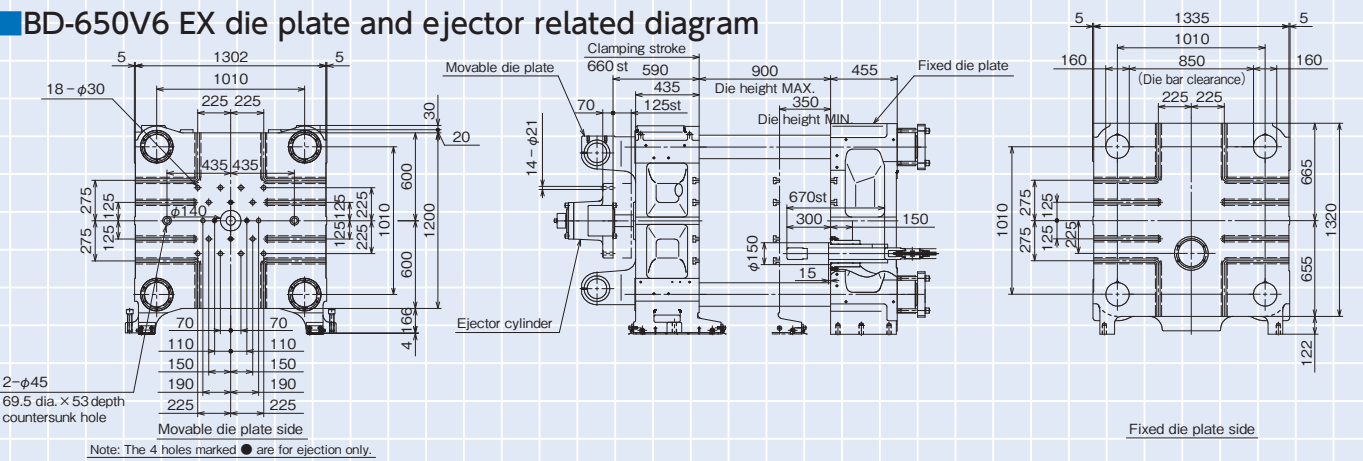
BD-350V6 EX die plate and ejector related diagram



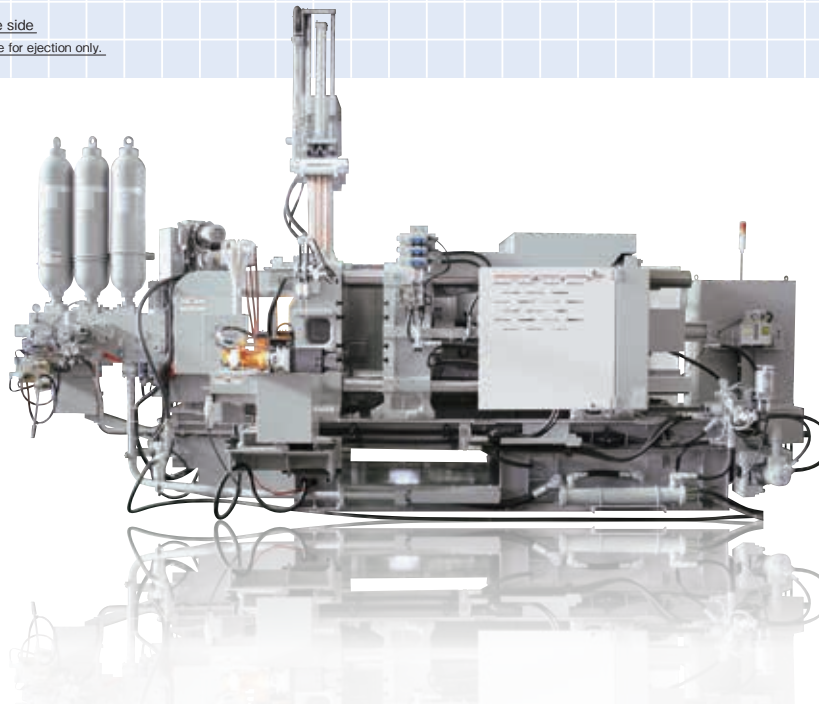
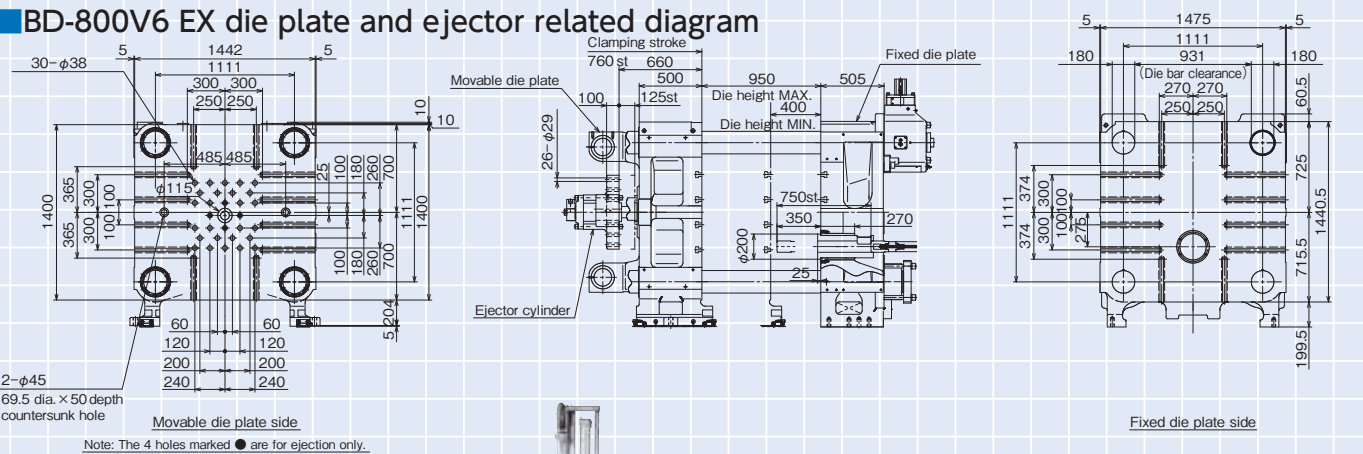
■BD-500V6 EX die plate and ejector related diagram



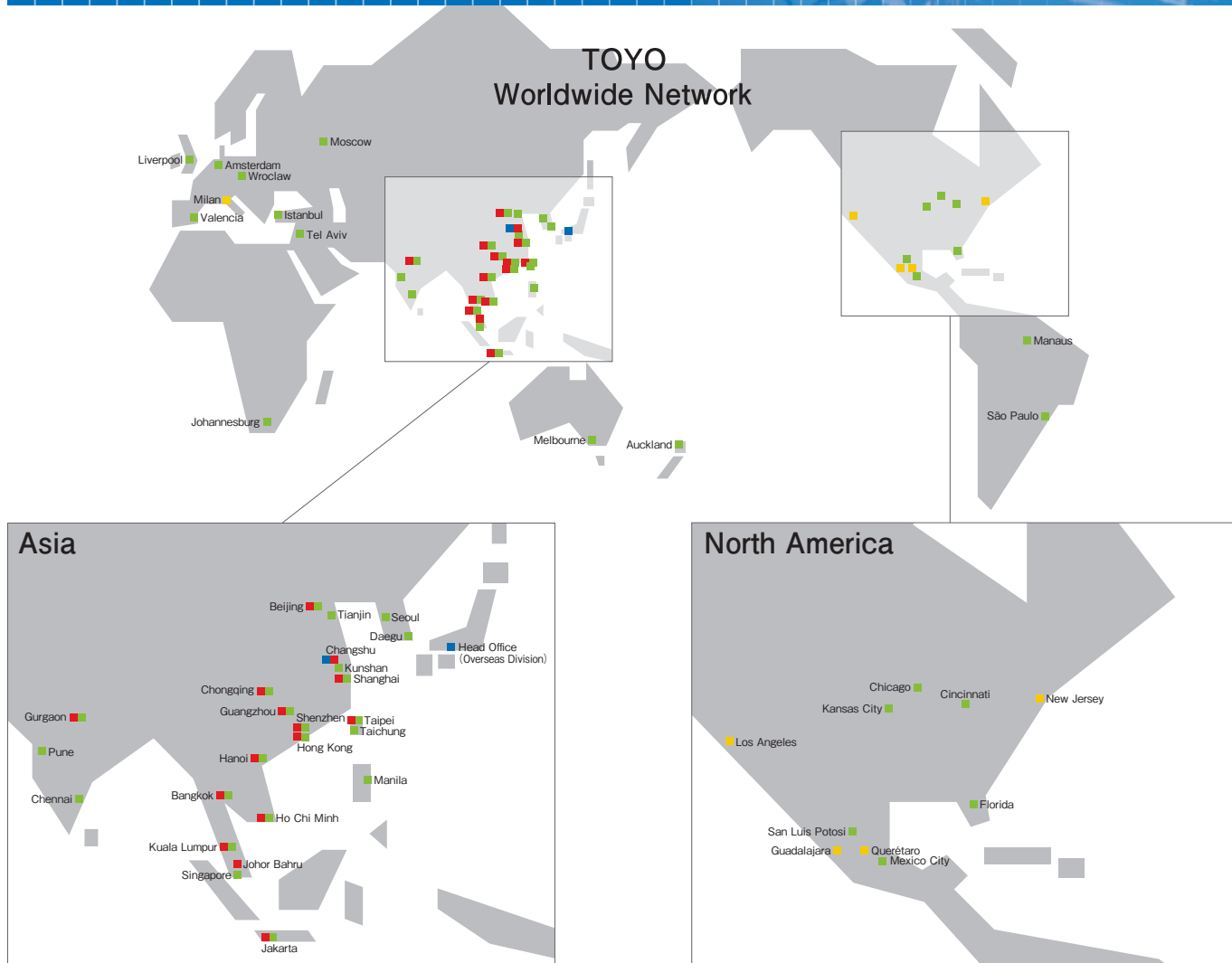
■ BD-650V6 EX die plate and ejector related diagram



■BD-800V6 EX die plate and ejector related diagram



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The products are produced at the factory certified with ISO-14001.



Precaution

For safe use of the machine, please read the respective manual carefully, especially sections for operation and maintenance, and follow all the safety precaution instructions specified in the manual.

- ① Photographs in the catalog include optional devices.
- ② For the improvement of the product, the appearance and specification are subject to change without notice.
- ③ If these products and technologies (including programs) are subject to the Japanese export control laws, including the Japanese Foreign Exchange and Foreign Trade Law, the products and technologies are required to obtain an export license of the Japanese government, when exported from Japan.
- ④ Some machine pictures and images on the controller screen are superimposed.