

# NISSEI®

CATALOG 1919

# NEX-IV

## ELJECT

*ELECTRIC TYPE HIGH-PERFORMANCE INJECTION MOLDING MACHINES*



## **NEX-IV Series**

**NEX30IV**

**NEX50IV**

**NEX80IV**

**NEX110IV**

**NEX140IV**

**NEX180IV**

**NEX220IV**

**NEX280IV**

**NEX360IV**

# Electric Type High-Performance Injection Molding Machines

# NEX-IV Series

It is capable of running large molds in smaller machines...A faster, more precise, easy-to-use, and mold-friendly molding system has arrived.

Variation		Screw diameter(mm)			Injection velocity(mm/s)		
Clamping unit	Injection unit	Max. injection pressure(MPa)			STD	Hi-V(OP)	Hi-L(OP)
		NEX30IV	2EG	16	19	500	500
		265	196				
NEX50IV	3EG	19	22	500	500	-	
		265	210				
NEX80IV	5EG	22	26	28	500	500	350
		280	196	169			
NEX110IV	9EG	26	28	32	300	500	300
		280	243	186			
NEX140IV	12EG	28	32	36	270	400	240
		280	223	177			
NEX180IV	18E	32	36	40	200	300	200
		276	218	177			
NEX180IV	25E	36	40	45	180	270	180
		261	211	167			
NEX220IV	36E	40	45	50	180	270	180
		260	206	167			
NEX220IV	50E	45	50	56	180	270	180
		250	202	161			
NEX280IV	71E	50	56	63	160	200	160
		249	199	157			
NEX360IV	100LE	50	56	63	160	200	160
		249	199	157			



**Controller**

**TACT IV Controller**  
New features added: taking its user-friendliness to the next level.

**New Clamping Unit**

**Linear Pressure Toggle Mechanism**  
Running large mold in small machine. Faster and more precise.

**Injection Unit**

**NEX Type Injection Unit**

- New plasticization device
- EG type injection unit

Eliminating plasticization problems. Expanding moldable range.

# Maximizing the Advantages of All-Electric Type Injection Molding Machine

Since its debut in 2002, the NEX Series, which consists of high-performance all-electric type injection molding machines, has become one of the best-selling series in NISSEI's lineup. The clamping unit generates uniform contact pressure, and the injection unit materializes superior plasticization. The controller provides excellent operability, and its rigid bed structure supports stable high-cycle operation. NEX-IV Series was developed to take these electric type's advantages to the next level.

In addition, NISSEI has been advocating the downsizing of molding equipments. As a pioneer, NISSEI suggests optimum equipments for their clients and reinforces their total support in injection molding processes with the release of the all-new NEX-IV Series.

## < Development Concept >

Improving mold open/  
close precision and repeatability

Reducing wear of the toggle bush

Reducing clamping force

**Mold-Friendly**

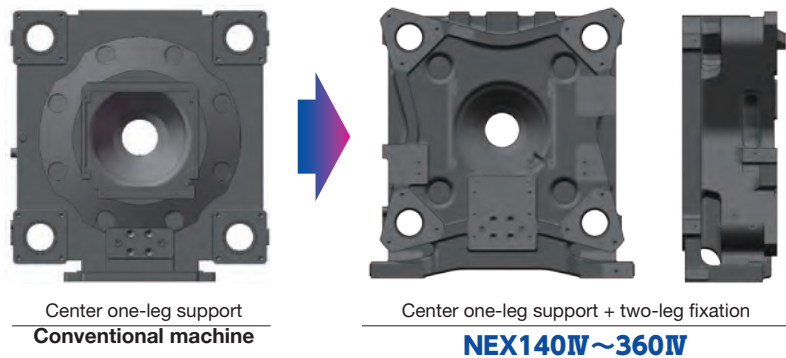


# Faster Mold Open/Close Motion and Higher-Precision Metering Materialized. Faster and More Precise.

The newly-designed toggle mechanism can cut the mold open/close cycle time, and the ejector speed is faster, offering far better productivity. The time-tested “Flat Clamp Mechanism” has been further developed. “The New Flat Clamp Mechanism” improves the evenness of its contact pressure. To improve clamping precision, linear guides come standard for the movable platen slides, improving the rectilinearity of the clamp. These features contribute to prevent flash and other molding defects as well as prolonging the life of mold and clamping unit. Combining it with the “Precision Metering” function, which maintains the consistency of metering density and injection volume, it materializes highly-stable precision molding with high repeatability.

## New Flat Clamp

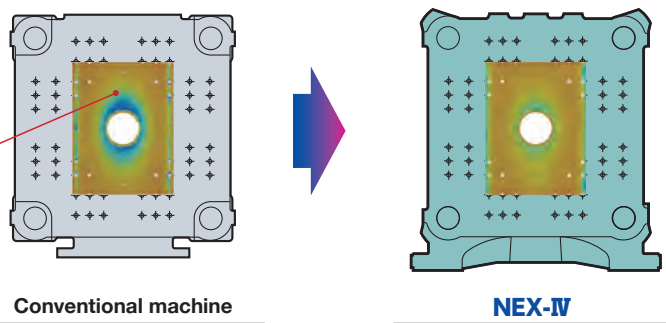
The strength of the area around the locating ring and the contact pressure of the mold pressure receiving area have been improved. Stationary platen side and tie bars fixation side are structurally separated in NEX140IV and above. It is a twist-resistant two-leg type with the advantages of one-leg type. NEX110IV and below use redesigned one-leg type, improving the contact pressure of the mold pressure receiving area.



## Comparison of Contact Pressures by a Test Mold

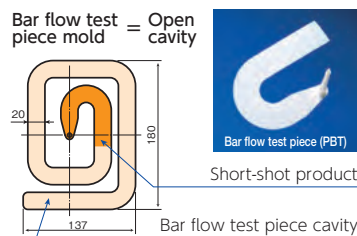
It offers uniform contact pressure and twist-resistant structure. It hardly causes flash, making reduction and optimization of clamping force easy.

**Contact pressure around the locating ring has been improved significantly.**



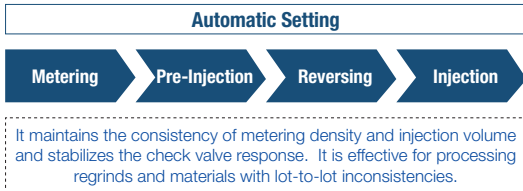
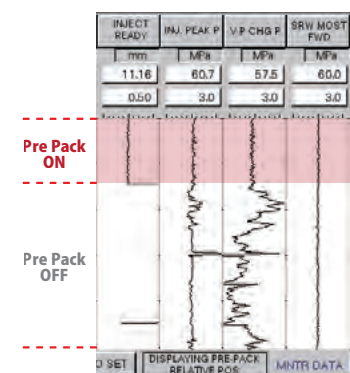
## High-Precision Metering Control “Pre Pack”

Pre-Pack can improve yield even when regrind materials or materials with poor lot-to-lot consistency are processed. It is achieved by maintaining the consistency of metering density and injection volume. Pre-Pack’s supreme filling stability has been proven by testing it with an open-cavity-structured bar flow test piece mold. Various new settings, including automatic setting, have been added to Pre-Pack.



Proving the effect of Pre Pack (products are juxtaposed to compare the lengths)

[Example] Improved fill pressure stability in processing PBT

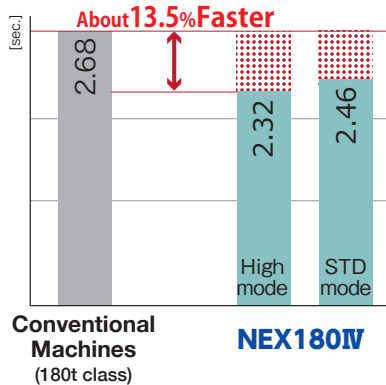




## High-Cycle Materialized

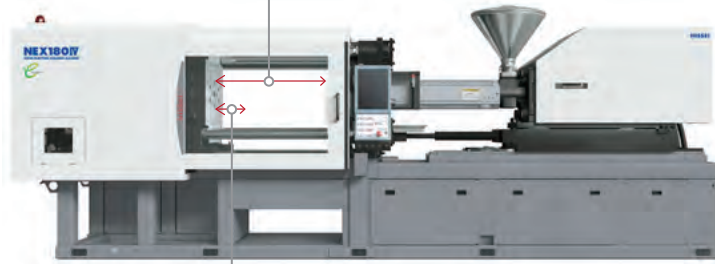
Cycle Time  
**5~20% Faster**  
[Compared to the Conventional Machines]

### Comparison of dry cycles



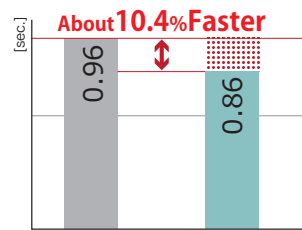
Faster maximum mold open/close speed

Up to  
**169% Faster**  
[360t class OP]



NEX180IV-36E

### Comparison of ejector operation time



Ejector Operation Time  
About Up to  
**19% Faster**  
[Compared to the Conventional Machines]

Conventional Machines (180t class) NEX180IV

## Linear Guides for Movable Platen Clamping Slides

Energy efficiency and mold open/close repeatability have been improved by reducing the sliding friction.

## Less Greasing Required

Less grease is used around the movable platen since it has no tie bar guide bushes, and linear guides are greased manually: it keeps molded products and operator's clothes clean and free from grease. Rear clamp inspection windows (NEX110IV and above) and a drawer type drain pan are equipped, making removal of discharged grease easy.



▲ Drawer type drain pan & inspection window



▲ Grease adhesion free tie bar

## Excellent Clean Operation

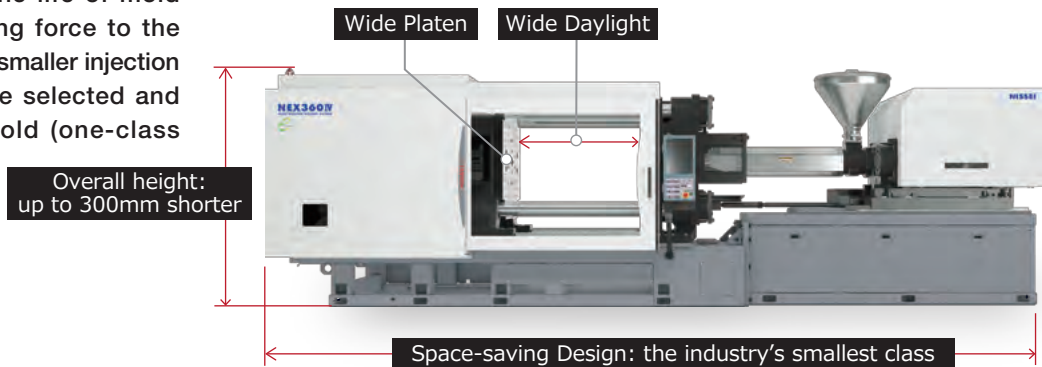
Particle emission during continuous operation in enclosed clean room is extremely small. Scattering of grease and generation of oil mists, which are common for all-electric injection molding machines, are also minimal. NEX Series machines have abundant track record of operation in the clean rooms below class 10,000. It possesses superior capability in meeting needs for clean room applications for container and medical industries.

Food-grade grease available (optional / consultation)



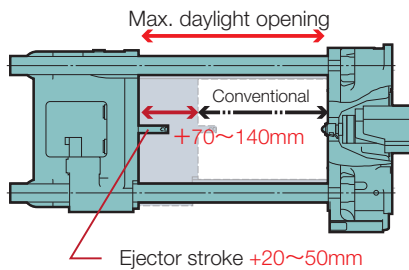
# Space-Saving Design and Expanded Mountable Mold Range Larger Mold, Smaller Machine

NEX-IV Series offers one of the widest daylight in the industry while keeping its footprints to industry's smallest size. Extending the daylight have greatly increased the mold thickness ranges. It flexibly accommodates hot runner molds, molds for long-length products, and modern molds which grow in accordance with integral molding or intricate shapes of the products. In conjunction with the low-pressure molding system, which eliminates molding defects and prolongs the life of mold by lowering the clamping force to the optimum level, one class smaller injection molding machine can be selected and used for an existing mold (one-class downsizing).

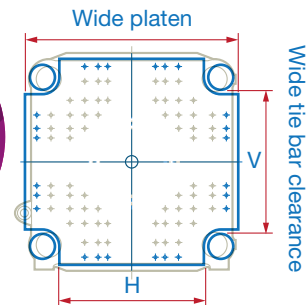


## Wide Daylight + Wide Platen

Daylight  
Max **140mm**  
Extended  
[Compared to the Conventional Machines]



Platen  
About **16%**  
Wider  
[360t class]

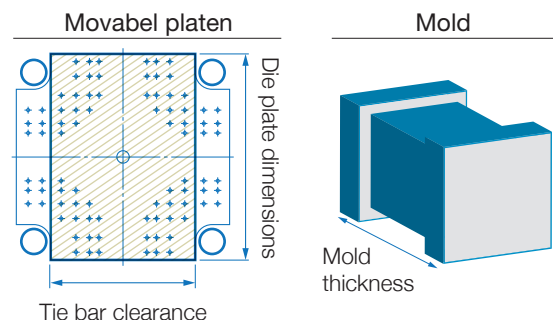


Daylight dimensions (mm)	30t	50t	80t	110t	140t	180t	220t	280t	360t
NEX-IV series	605	710	785	860	950	1035	1230	1350	1440
Conventional	535	610	685	760	850	960	1090	1210	1340

Tie bar clearance (mm)	140t		180t		220t		280t		360t	
	H	V	H	V	H	V	H	V	H	V
NEX-IV series	510	510	560	560	660	610	760	660	810	760
Conventional	510	460	560	560	590	590	660	660	735	735

## Maximum Mountable Mold Volume

Type	NEX-IV (mm)			Ⅲ : Ⅳ
	Tie bar clearance	Die plate dimensions	Mold thickness	
30t	310	450	375	123%
50t	360	505	460	128%
80t	420	580	485	126%
110t	460	647	510	124%
140t	510	720	550	136%
180t	560	800	585	115%
220t	660	870	680	139%
280t	760	955	750	142%
360t	810	1080	790	129%



## K-SAPLI™ : Low-Pressure Molding System for Electric Type Injection Molding Machine

OPTION

K-SAPLI™ is a low-pressure molding software application by NISSEI, which optimizes injection molding processes. It helps to increase yield, reduce mold maintenance work and lower running costs.

### Advantages of Low-Pressure Molding System K-SAPLI™

- ① **Reduce molding defects** ... Reduce flash, warpage, sink mark, burn, and short shot as well as facilitating gas release
- ② **Shorten cycle** ... Shorten injection (holding pressure) time and cooling time
- ③ **Expand moldable range (range of condition to mold quality products)** ... Simplify molding condition
- ④ **Prolong the life of mold** ... Reduce mold maintenance cost



K-SAPLI™

### Workload reduction by zero clamping force molding

#### Molding comparison using a mold deposit evaluation mold (without gas vent)

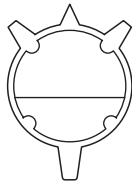


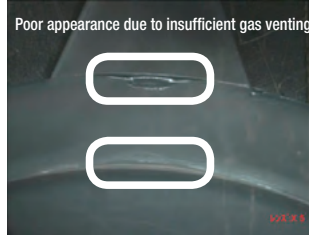
Image of molded product

#### Mold maintenance (cleaning)

Once in 40,000 shots ⇒ Once in 27,000 shots

#### Eliminating molding defect

Clamping force : 15 t



Residual gas at the flow end

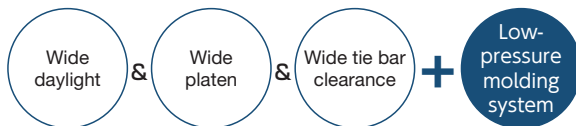
Clamping force : 0 t



★ Eliminating molding defect caused by insufficient gas venting

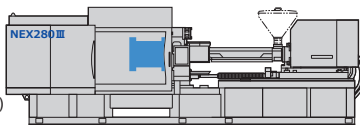
## One-Class Downsizing

The mountable mold sizes became larger in NEX-IV Series due to its extended tie bar clearances. In conjunction with the optimization of clamping force by the low-pressure molding system, selecting one-class smaller machine for an existing mold may be possible. Saving space, reducing costs, and many other benefits can be expected.



### NEX280III

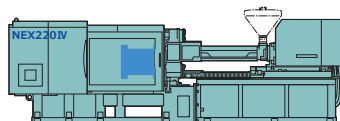
(Clamping force: 2740kN)



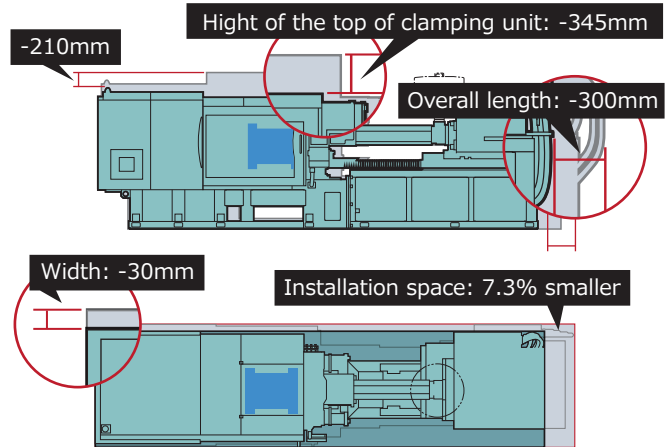
Downsizing to One-Class Below  
<The same mold can be mounted>

### NEX220IV

(Clamping force: 2160kN)



#### Comparison of installation spaces



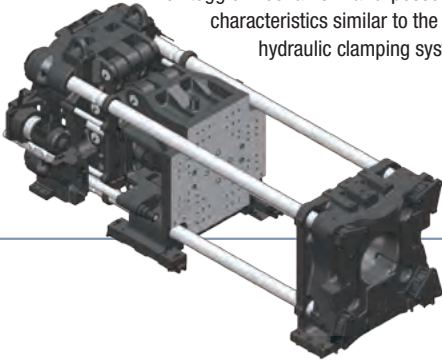
NEX280III(L×W×H):6600×1640×2200 [mm]  
 NEX220IV(L×W×H):6300×1610×1990 [mm]  
 (Japanese specifications)

# Linear Pressure Toggle: a Mechanism that Utilizes the Advantages of the Toggle Mechanism and Possesses the Characteristics Similar to the Straight-Hydraulic Clamping System

- New **New Flat Clamp**
- Automatic clamping force adjustment**
- Direct clamping force setting**
- High-sensitivity mold protection**
- Magnet clamp, valve gate, and deep cavity mold can be used**
- New **High-cycle performance**  
(simultaneous motions, shorter mold open/close cycle, faster ejector)

## Linear Pressure Toggle

It is a toggle mechanism that utilizes the advantages of toggle mechanism and possesses the characteristics similar to the straight-hydraulic clamping system.



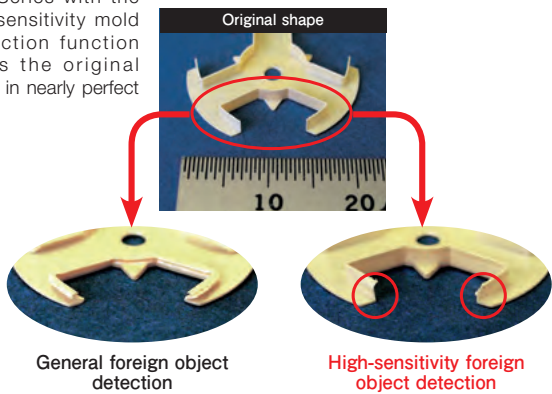
## High-Sensitivity Mold Protection

It opens mold instantaneously with “ultra high-speed reaction” when it detects a foreign object during mold close to protect valuable mold. Stopping performance upon the detection is 20% faster compared to the conventional machines (when slowdown speed is 10%).

### Example of foreign object detection

**[Product: insulator with a vertical rib (t = 0.25mm)]**

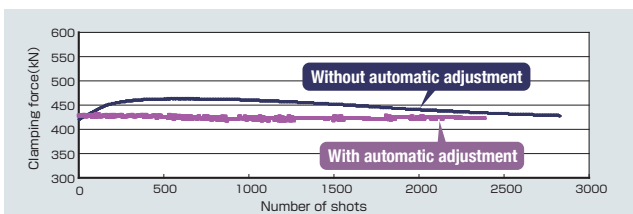
With a conventional machine's general foreign object detection, the vertical rib section is crushed completely while NEX Series with the high-sensitivity mold protection function keeps the original shape in nearly perfect form.



## Automatic Clamping Force Adjustment

This function automatically adjusts clamping force fluctuations caused by disturbances, such as changes in mold and machine temperatures during automatic run. A new tie bar strain sensor is added, improving the adjustment precision.

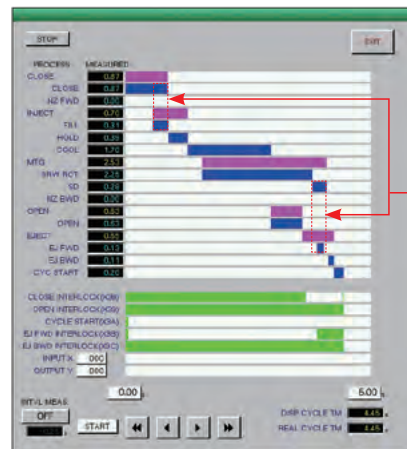
### Effect of automatic clamping force adjustment (clamping force: 500kN)



## Support for Higher Cycle Molding

A function that controls injection molding processes simultaneously (simultaneous motion of mold & nozzle movement and mold & ejector movement) and servomotor load monitoring function come standard. Cycle display function, which writes a graph for each process, is newly added. It assists the analysis of cycle time in order to shorten it.

### Cycle display in process monitoring screen

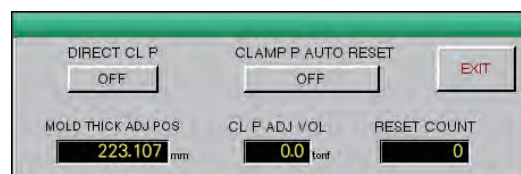


It displays the time of each process in a graph. The left edge of the graph is the starting of a cycle, and the right edge is the ending.

Simultaneous motion

## Direct Clamping Force Setting

Just like a straight-hydraulic machine, changing clamping force setting during continuous molding operation is possible.

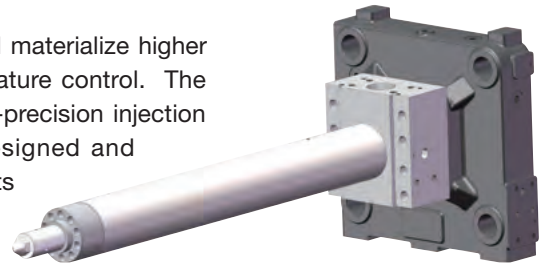


Simple setting



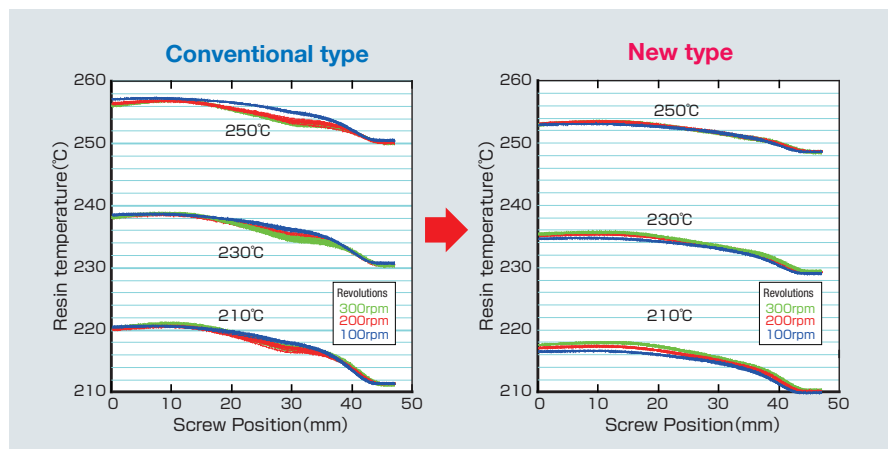
# NEX Type Injection Unit and New Plasticization Device that Materialize Further Improved Plasticization Stability

Low inertia servomotor, NISSEI's original injection unit, and its control materialize higher speed/response/pressure injection and optimization of barrel temperature control. The NEX type injection unit expands the moldable range and makes high-precision injection and metering possible. For 2EG~12EG injection units, newly-designed and improved plasticization devices are equipped to reduce molding defects by subdividing and optimizing the barrel temperature control zones.



▲Image of "the all-new plasticization device"

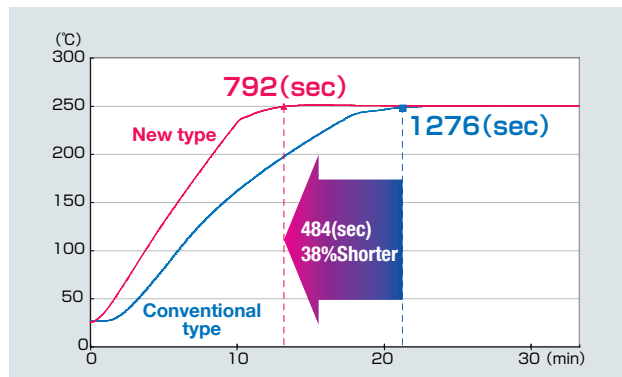
## Improved resin temperature stability by the all-new plasticization device (PP)



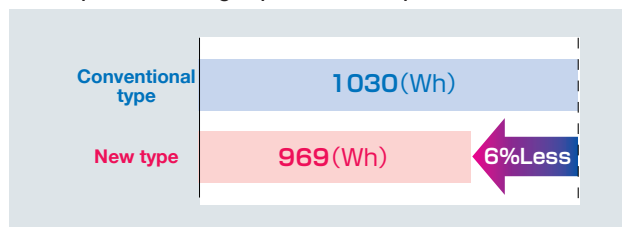
## Reduction of Heat-Up Time and Energy Consumption

Heat-up time and energy consumption have been reduced by improving the heat conduction of the newly designed nozzle and barrel.

### Comparison of heat-up time



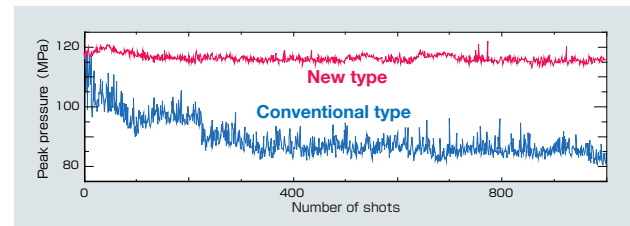
### Comparison of integral power consumption



## Improving Molding Stability

Drifting of resin temperature, which often happens during molding startup, can be eliminated. It also stabilizes the plasticization of PBT (non-reinforced), LCP, PA66, and PCTA as well as enhancing the plasticization performance for PP. It is highly effective in processing a variety of resins, reducing defective rate, improving yield, and increasing productivity.

### Improved LCP molding startup stability



## Shortening Plasticization Time

Shorter plasticization time is achieved by 2-zone control (subdivision) of the rear heater.

## High-Speed, High-Response, and High-Pressure Injection

In order to expand moldable range further, pressures for A and AA screw specifications have been increased about the average of 5%, and optional ultra high-velocity specifications (18E: 400mm/s and 25E~36E: 350mm/s) have been added.

# A Variety of Functions that Expand Moldable Range

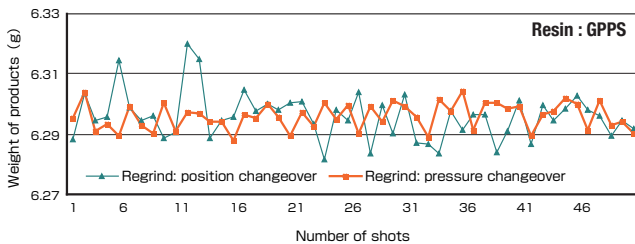
## An Optimum Holding Pressure Changeover Response from a Variety of Settings

V-P changeover response control offers a variety of controls for compression/decompression processes when it switches over to injection pressure holding. It offers a variety of sensitive compression/decompression controls and can freely control the final filling process, which heavily influences the quality of molded products. It is highly effective in eliminating many types of molding defects.

## A Variety of V-P Changeover Methods

A Variety of V-P changeover methods come standard, contributing to mass production of various products.

### Example of stable molding of regrind material using pressure changeover control



		Virgin material		Regrind material	
		Position	Pressure	Position	Pressure
Max	g	6.306	6.296	6.319	6.294
Min	g	6.293	6.291	6.281	6.285
Ave	g	6.2978	6.2941	6.2959	6.2930
R	g	0.0125	0.0054	0.038	0.0098
$\sigma$	g	0.0028	0.0012	0.0077	0.0021
6Cv	%	0.2694	0.1223	0.7347	0.2005

### Four changeover modes

"Position/pressure/VPV/external" V-P changeover controls come standard. Selections of ideal changeover methods according to the type of molded products can be selected.

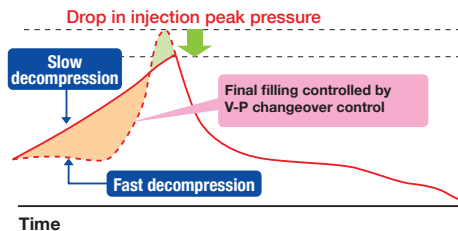
### Four pressure control modes

"Pressure/positioning/pressure⇒positioning/positioning⇒pressure" pressure controls come standard. Selections of ideal pressure controls according to the type of molded products can be selected.

## V-P Changeover Reaction Control

It permits versatile controls for final filling, which determines the quality of the molded products.

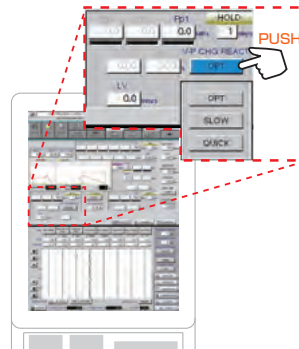
A variety of compression/decompression controls are available for the V-P changeover reaction control. Number of delicate compression/decompression and final filling that majorly affects the quality of the molded products can be controlled freely. It is highly effective in eliminating many types of molding defects.



- Improve defective appearance
- Control peak pressure
- Facilitate gas release

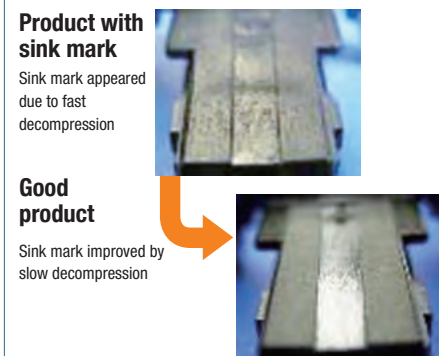
## Changeover response control by LV (holding pressure limit velocity) and RAMP (max. compression/decompression time) make it even easier to use.

One of the three modes can be selected according to the type of molded products.

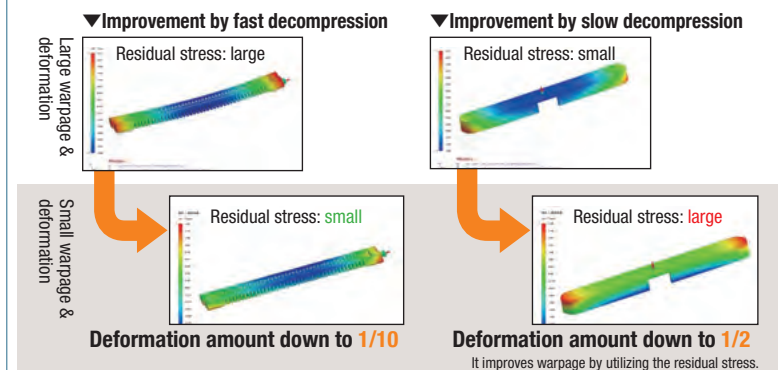


- "OPT" mode**  
Maximum of 20,000 settings possible
- "SLOW" mode**  
Hydraulic machine-like smooth compression/decompression that eliminates sink marks
- "QUICK" mode**  
Quick compression/decompression that eliminates flashes

### Example: effect on sink mark

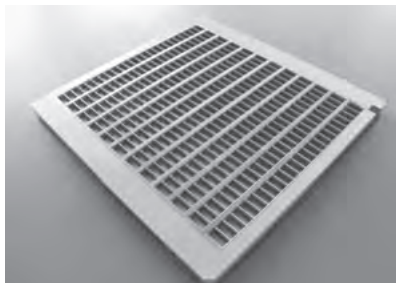


### Example: effect on warpage and twisting



## High Quality Molding by Clamping Compression Molding **CPN3**

Clamping compression is executed during filling, which is effective in reducing the stress on the molded products and facilitating gas release.



**Molding defect**

Filling pressure and residual stress result in warpage and deformation. This problem is not resolved by changing the injection velocity and holding pressure condition.

**CPN3**

**Reducing the stress on the molded products**

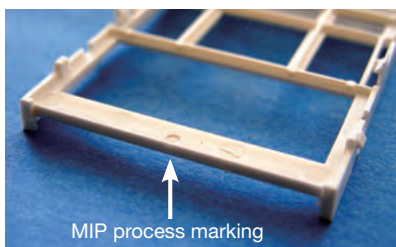
**Facilitating gas release**

**Improved**

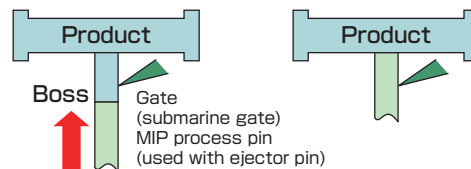
The residual stress was reduced by the CPN3's clamping compression effect. Warpage and deformation were significantly reduced, and molding of good parts were made possible.

## Simplifying Operation Process by Mold Inside Process **MIP**

Ejection during clamping materializes gate cut and partial compression of the products.



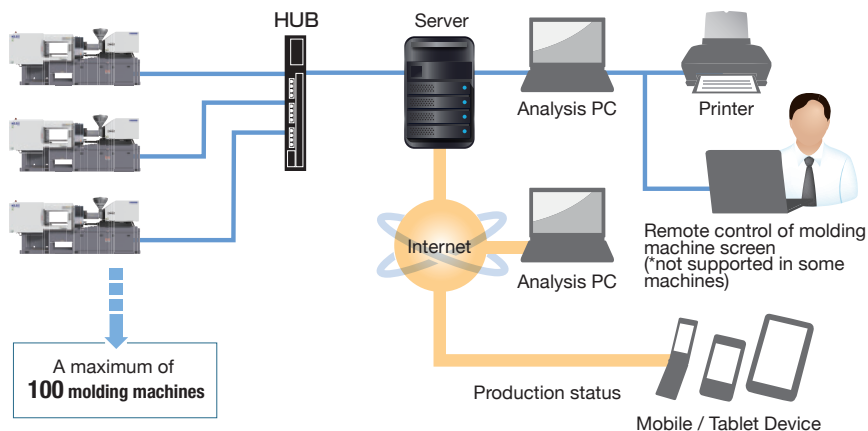
This is a gate cutting method that forwards MIP process pin by ejector forward motion before the boss cools and solidifies, and the resin filled inside the boss is pushed into the cavity. This eliminates the finishing process and has a partial compression effect since the resin inside the boss is pushed into the cavity.



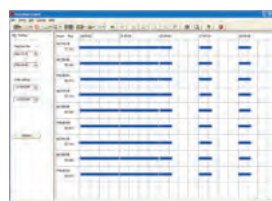
## Reinforcing Quality Control Function to Grasp Productions **PQ Manager**

**PQ Manager** (sold separately) is package software that collects and analyzes quality/production information for up to 100 molding machines. It handles versatile applications, ranging from the quality analysis of one machine to the cluster management of multiple machines, and it offers the quality management and product analysis system at a low price. In addition, injection waveform, event, molding condition, monitor data in numerical value within a specified range can be utilized as traceability data while monitoring the trend graph in real-time.

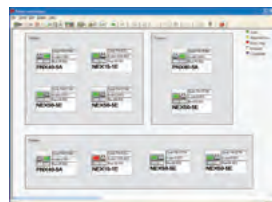
### Example of PQ Manager configuration



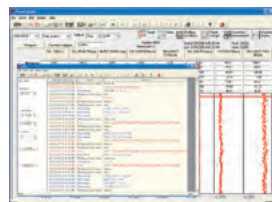
### PQ Manager's status monitoring screen



▲ Operation/stop



▲ Molding machine status monitoring



▲ Trend

# Materialize Molding You Desire

High-Performance & High-Functioning Controller

## “TACT IV”

**New controller that pursues better operability and workability**

Large screen, newly designed operation panel, and convenient & user-friendly premium software are equipped to improve workability and operability. Quality and production management functions also have been reinforced, taking its user-friendliness to the next level.

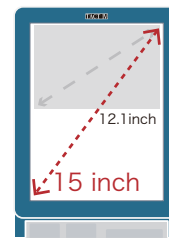
Freely-combinable upper and lower windows

Flat sheet type operation panel that materializes easy and reliable operation

External connections



Easier operation with a high-response high resolution touch & slide display



Bright and easy-to-see 15-inch LCD display



6-language display that comes as standard (English, Japanese, Chinese, Spanish, Korean, and Thai)

## New Features

### MAIN DATA Screen

It displays necessary molding information collectively in a large 15-inch screen, such as injection, clamping, temperatures, and monitor values, permitting easier molding condition management. User-defined information, such as material and machine number, can also be entered, and it can be printed as a condition chart.

### Stagnancy Monitor

Adding a purging interlock prevents mold damage from filling stagnant resin.

### Mold Protection

Stopping performance upon the detection is 20% faster (when slowdown speed is 10%).

### Cycle Display in Process Monitoring Screen

Each process is displayed graphically. Display of process time and operating time has been improved.

### Mold Close Acceleration

Mold close acceleration can be selected from one of the three modes: low-speed, normal, high-speed.

### Automatic Purging Circuit

It improves the efficiency of material/color change as well as preventing breakage and burn.

### Automatic Purging Circuit

#### Material Change Purging

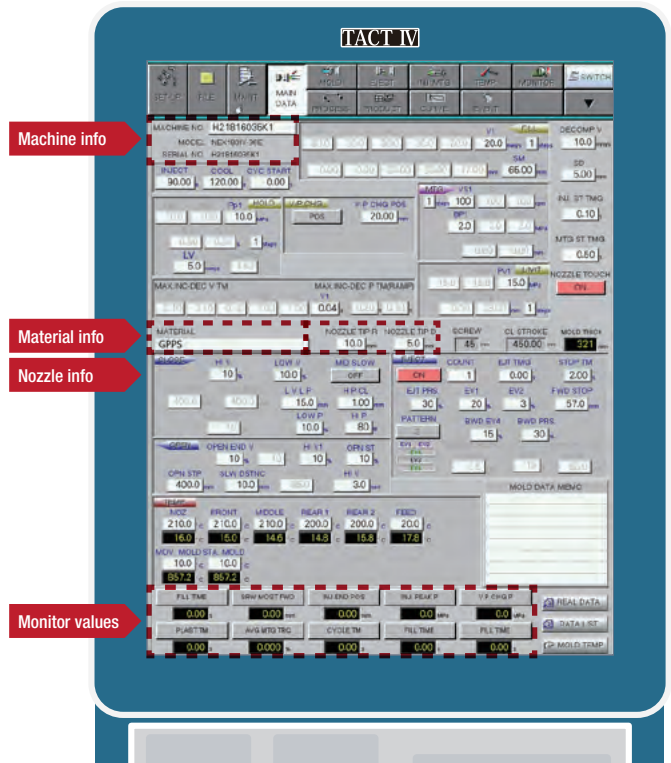
Ideal purging sequences can be selected according to the material types.

### Monitor Data Pass/Fail Judgment Function

A function to set base values, which are the averages of previous shots, is added.

### High Precision Metering Control “PRE-PACK”

It stabilizes metering, and automatic condition function is added.



### OPTION

#### Special Air Blow

More motion selections are added, permitting optimum air blow condition settings for the mold.

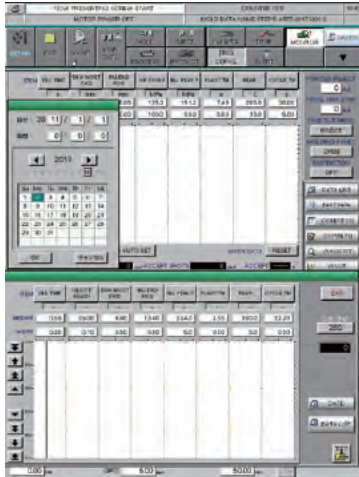
### OPTION

#### SET-UP Navigation

It guides you through the set-up procedures from removing the mold to preparing for mass production.



## Traceability Support



▲Calendar

Search for event and monitor data in specified date is possible.

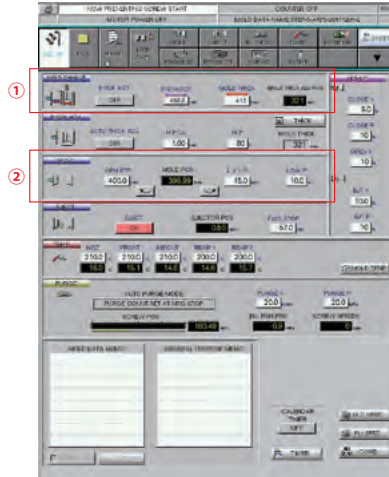
### ▶ Molding condition (max. 500 conditions)

Saving waveform data and displaying image data are possible. Molding condition and an image of its product can be managed together as a set.

### ▶ Event/monitor data (max. 100,000 events)

It is helpful for maintenance and quality control (operation mode change, condition change, error, etc.).

## SET-UP Mode/SET-UP Screen



▲SET-UP screen

Settings related to startup, such as mounting mold and purging, are consolidated on one page. When SET-UP mode is selected, it automatically switches the screen to the SET-UP mode to eliminate troublesome screen switching during setup.

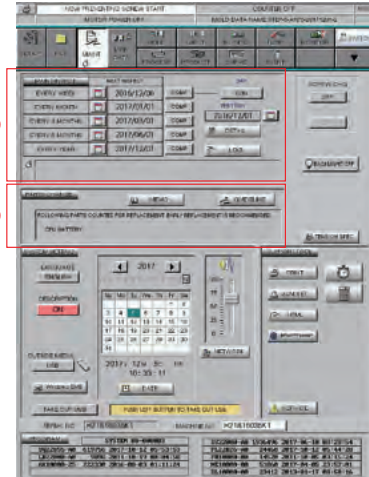
### ① Automatic mold thickness adjustment function

It automatically adjusts the position for the next mold during mold change.

### ② Mold Position Reading function

Mold open stop position and low-speed/low-pressure position can be set with a simple step.

## Enriched Maintenance Functions



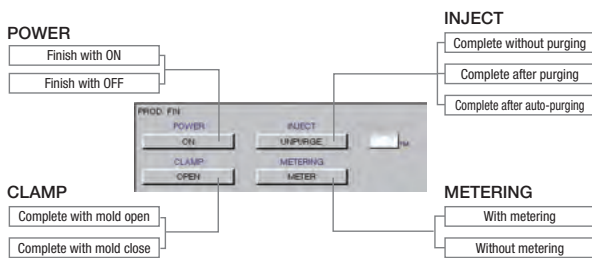
▲Newly added MAINT screen

TACT IV can notify when recommended scheduled maintenance(①) and consumable parts replacement time arrive(②), and its related notes can be entered.

It can display arbitrary notifications, such as for mold, screw, lubrication, maintenance period, etc. on specified dates or shots.

## Shutdown Sequence

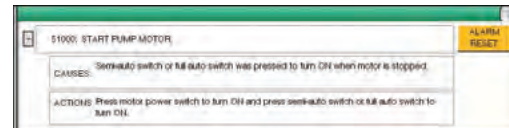
A variety of finishing states after completing production is available. Operating power state and shutdown sequence for each actuator can be freely selected.



▲Selection of shutdown sequence after completing production

## Descriptions of Errors

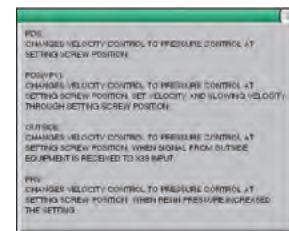
It displays error message and solution.



▲Error message and its solution (touch [Error message] to show details)

## Descriptions of Adjusters

It displays easy-to-understand definitions of the technical terms used for the adjusters.



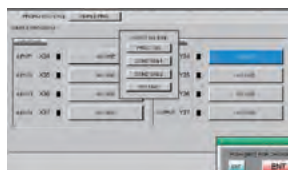
Description of V-P changeover ▶

## Enriched Programming Function

Simple interface programs with auxiliary devices can freely be created on the screen. The program can be saved together with the molding data (ladder programming function). Various error input and signal output functions can be assigned to the four of input/output terminals (simple programming function).



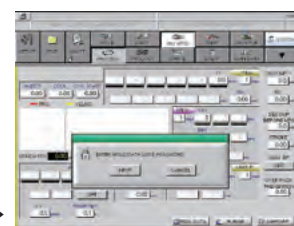
▲Ladder programming



▲Simple programming

## Screen Lock and Adjuster Masking Functions

Adjusters that need to be password protected can be arbitrarily selected.



Password and masking screen ▶

▼ **Clamping unit/mold**

- ★ 1 Clamping linear guide
- ★ 2 Mold protection (clamping time monitor) / High-sensitivity mold protection (torque monitor)
- 3 Mold protection error reconfirmation circuit (motion selection when an error occurs)
- 4 Mold clamping halfway slowdown
- 5 Mold opening velocity: 4-speed (initial/2-stage high-speed/final)
- 6 Mold opening pause
- 7 CPN3 (primary clamping → injection filling → specified injection position or specified injection pressure reached → secondary clamping)
- ★ 8 Mold close acceleration (low-speed/normal/high-speed)
- 9 Mold position reading function
- 10 Mold thickness device preparatory movement function
- 11 Automatic clamping force adjustment (automatically adjust clamping force fluctuations due to outside factors)
- 12 Direct clamping force setting (high-pressure clamping setting value change during operation possible)
- 13 Optimal clamping force molding: 10-100%
- 14 Automatic mold thickness adjustment
- 15 Multi-functional ejector (continuous operation, pause, ejector start timer, halfway change of velocity, 2-stage forward speed, and variable forward/backward stroke)
- ★ 16 Expended mountable mold range (wide platen/wide daylight/ejector stroke extension)
- ★ 17 High-speed ejector motion (NEX140IV~)
- 18 Ejector plate return confirmation (for circuit only)
- 19 Simultaneous operation of mold opening and ejection
- 20 Processing inside mold · MIP
- ★ 21 High-speed toggle mechanism
- ★ 22 New Flat Clamp
- ★ 23 High-speed clamp specification (NEX30IV~180IV)

▼ **Injection unit**

- 1 Injection process control: 6-speed, 3-pressure, and 3-limit pressure
- 2 V-P changeover: 4 modes (position/VPV/injection pressure/external input signal)
- 3 V-P changeover response: 3 modes (optional/slow/high response)
- 4 Holding pressure control: 4 modes (pressure/positioning/pressure → positioning/positioning → pressure)
- 5 Injection during mold clamping (IDMC) / Nozzle forward during mold clamping
- 6 Injection volume compensation control
- 7 Injection start timer / Metering start timer / Nozzle backward start timer
- ★ 8 IN-RUSH (high-response injection rise)
- 9 Over packing prevention circuit
- 10 Decompression / Decompression before metering
- 11 3 backpressures and 3 metering speeds
- 12 Simultaneous metering operation
- ★ 13 High-precision metering control: 3 modes (normal/precision metering/Pre-pack with automatic condition function)
- ★ 14 Automatic purging circuit (flexible purging mode/material change purging mode/dry run prevention function)
- 15 Purging guard (with interlock)
- 16 Screw cold start prevention (all-zone sequential type)
- 17 Nozzle/barrel temperature upper/lower limit alarm / Nozzle/barrel temperature PID control
- 18 Simultaneous heating of nozzle and barrel
- 19 Nozzle heater circuit SSR
- 20 Barrel heater circuit SSR (2EG ~ 36E)
- 21 High-wattage heater for rear 2 (2EG ~ 12EG)
- 22 Barrel heat retention circuit (forced heat retention and heat retention when an error occurs)
- 23 Barrel heat radiation/burn prevention cover
- 24 Nozzle/barrel heater simple disconnection alarm
- 25 Hopper throat temperature screen display
- 26 Hopper throat temperature control
- 27 Material retention timer

▼ **Molding system control/production management**

- 1 TACT IV (15-inch vertical display, dual window display, and flat operation panel)
- ★ 2 Main data screen (collective management in one screen)
- ★ 3 Process monitoring screen (graph display of each process cycle)
- 4 Shot counter / Free shot counter
- ★ 5 Production management counter / Production counter / Production lot management counter / Cause-classified defective counter
- 6 Monitor data display and output (max. 100,000 events)

- 7 Statistic processing function / Display of scatter diagram
- 8 Display of injection velocity and pressure waveform
- 9 Waveform analysis
- ★ 10 Monitor data pass/fail judgment function (batch condition entry and average monitor function)
- 11 Product take-out robot interface
- 12 Barrel heat-up (calendar timer)
- 13 Molding condition and image data set management ("jpeg" or "bmp" can be stored in the controller)
- 14 Molding condition internal memory (up to 500 conditions)
- 15 Built-in LAN connector (10/100 BASE-TX) / USB port (x1)
- 16 Connection to PC / Saving data to a USB flash drive
- 17 Operation history display (100,000 items)
- 18 Molding support message
- 19 Multilingual display capability (English, Japanese, Chinese, Spanish, Korean, and Thai)
- 20 Hour meter (molding machine total operation time display) / Clock function (stopwatch and kitchen timer) / Calculator function
- 21 Servomotor load monitor
- 22 Ladder programming function (4 I/O signals programmable)
- 23 Signal I/O allocation (error processing input and various output signals can be assigned to four of the I/O terminals)
- 24 Signal recorder (analysis of motor signal or I/O signal waveforms and data collection function)
- 25 Alarm function (display arbitrary message for specific shot or time)
- 26 Display of error and its clearing method
- 27 Emergency power shut off (shut off the heater and motor circuits when a critical error occurs) / Emergency power shut off delay timer
- 28 Shutdown sequence (selection of production complete state / selection of mold, injection, metering, and operation power states when production is completed)
- 29 Cycle alarm
- 30 Remote maintenance function (remote control of TACT screen from PC possible)
- 31 Setting unit change (injection pressure, injection velocity, injection position, metering speed, temperature, and clamping force)
- 32 Description of adjusters (when some of the adjusters are touched, descriptions and tips will be displayed)
- 33 Setup mode (mold open/close & ejection by setup speed and injection & metering by purging speed)
- 34 Setup simultaneous motion (simultaneous motion of injection metering during automatic mold thickness adjustment in setup mode)
- 35. SPC function (molding machine process management by statistical method)

▼ **Cooling**

- 1 Cooling water manifold: 4 circuits (hopper throat, injection unit, stationary side, and movable side)
- ★ 2 Flow checker (hopper throat/NEX30IV~110IV)

▼ **Operation safety**

- 1 Alarm lamp
- 2. Alarm bell
- 3 Emergency stop button (operator side)
- 4 Mold clamping safety device (mechanical/electrical)
- 5 Safety door lock
- 6 High-pressure clamping and nozzle touch release confirmation when turning off the operation power
- 7. Safety door with PC window
- ★ 8 Stationary upper clamp cover
- 9. Password protection function (screen lock and adjuster masking)

▼ **Power**

- 1. Main power breaker

▼ **Maintenance, installation, and others**

- 1 Automatic centralized greasing unit (specified grease type: NS-1; for toggle and sliding surface of the clamp & injection)
- 2 Periodical inspection support function (display of scheduled inspection date)
- 3 Parts replacement support function (display of recommended parts replacement period)
- 4. Tools

▼ **Clamping unit/mold**

1	Locating ring attachment (non-fixed type or fixed type)
2	Locating ring diameter change ※
③	Insulation plate (material and thickness to be specified depending on the heat resistance temperature)
4	Additional mold mounting bolt hole ※
5	Mold close pause
6	Thin foreign object detection
⑦	Mold temperature control (without thermocouple)
8	Mold temperature upper/lower limit alarm
9	Mold heater disconnection alarm (monitoring of electrical current)
10	T-slot plate / T-slot on die plate ※
11	Die plate cooling circuit ※
★ 12	High-speed clamp specification (NEX220V~360V)
13	Ejector plate return confirmation (metal interface box/connector output)
14	Mold installation support (SAT Clamp and Easy Clamp)
15	Mold automatic clamp (hydraulic/air/magnetic)
16	Mold positioning pin and block

▼ **Injection unit**

1	Nozzle/barrel heater disconnection alarm (monitoring of electrical current)
2	2-point nozzle temperature control
3	Barrel insulation cover
④	Special-purpose nozzle, screw, screw tip, barrel, and barrel head
5	High-velocity injection (9EG ~ 100LE) ※
6	Ultra high-velocity injection (18E, 25E, and 36E)
7	High-load injection (2EG ~ 100LE)
8	Hopper / Hopper spacer / Hopper slider / Hopper extension with band
9	Hopper magnet
10	K-SAPL™ (low-pressure molding system)
11	High-precision injection (2EG ~ 12EG) ※
★ 12	HAC heater (control of barrel temperature rise caused by shear heat)

▼ **Molding system control/production management**

1	Unscrewing circuit (contact us for details)
②	Air blow circuit
3	Hydraulic core pull circuit (for signal output only, hydraulic unit required)
4	Pneumatic core pull circuit
⑤	Fixed chute / Swing chute
6	Additional AC outlet and electrical current (calendar timer)
7	USB flash drive

8	Water alarm / Air alarm
9	Selector switch type operation panel ※
10	Material feeding device "Smart Feeder"
★ 11	TACT-controlled material feeding device "Smart Feeder"
12	Setup support software "SET-UP Navigation"

▼ **Cooling**

1	Cooling water filter
2	Additional cooling water circuit
3	Cooling water circuit (with a return stop valve)
4	Cooling water circuit (with a flow checker)
5	Water temperature gauge
6	Anti-condensation cooling hose

▼ **Operation safety**

1	Rotating beacon (Patlite)
2	Layered indicator lamp (signal tower)
3	Emergency stop button (non-operator side)
4	Alarm lamp with a stand
5	Clamping upper slide cover (NEX30V~140V) ※
6	Automatic safety door open/close (NEX220V~360V)
7	Primary power indicator lamp

▼ **Power**

①	Leakage breaker
②	AC outlet
3	Fire alarm
4	Electrical outlet circuit power shutdown
5	Different voltage (overseas: installation of a step-down transformer)
6	Additional outlet for different voltage
★ 7	Power regeneration unit (NEX180V~360V) ※

▼ **Maintenance, installation, and miscellaneous**

1	Automatic centralized greasing unit (for clamping linear guide)
2	Spare grease (grease type: NS1)
3	Manual greasing set
④	Mounting pad ※
5	Custom paint
★ 6	Food-safe grease (for clamping linear guide)



**NEX110V-12EG**  
(Equipped with options)



**NEX360V-100LE**  
(Japanese specifications)

**NEX-IV Series | Performance specifications**

Models			NEX30IV				
Specification item		Injection type	2EG		3EG		
		Unit					
Injection	Screw diameter	inch (mm)	A 0.63 (16)	B 0.75 (19)	A 0.75 (19)	B 0.87 (22)	
	Injection capacity	inch <sup>3</sup> (cm <sup>3</sup> ) (oz)	0.8 (13) (0.4)	1.1 (18) (0.6)	1.4 (23) (0.8)	2.1 (35) (1.2)	
	Plasticization capacity (PS)	lbs/h (kg/h)	17.6 (8)	28.7 (13)	24.3 (11)	35.3 (16)	
	Max. injection pressure	psi (MPa) (kgf/cm <sup>2</sup> )	38450 (265) (2704)	28440 (196) (2000)	38450 (265) (2704)	30470 (210) (2143)	
	Injection rate	Standard	inch <sup>3</sup> /s (cm <sup>3</sup> /s)	6.2 (101)	8.7 (142)	8.7 (142)	11.6 (190)
		High velocity (OP)	inch <sup>3</sup> /s (cm <sup>3</sup> /s)				
		High load (OP)	inch <sup>3</sup> /s (cm <sup>3</sup> /s)	4.3 (70)	6.0 (99)	—	—
	Injection velocity	Standard	inch/s (mm/s)	19.7 (500)		19.7 (500)	
		High velocity (OP)	inch/s (mm/s)	13.8 (350)		—	
		High load (OP)	inch/s (mm/s)	—		—	
	Screw speeds	rpm	0~400		0~350		
Nozzle touch force	US tons (kN) (tf)	1.1 (10) (1.0)		1.1 (10) (1.0)			
Hopper capacity (OP)	Gal (L)	4.0 (15)		4.0 (15)			
Clamping	<b>Clamping force</b>	<b>US tons (kN) (tf)</b>	<b>33 (294) (30)</b>		<b>33 (294) (30)</b>		
	Clamping stroke	inch (mm)	9.06 (230)		9.06 (230)		
	Mold thickness (min.-max.)	inch (mm)	5.91~14.8 (150~375)		5.91~14.8 (150~375)		
	Max. daylight opening	inch (mm)	23.8 (605)		23.8 (605)		
	Tie bar clearance (H×V)	inch (mm)	12.2×12.2 (310×310)		12.2×12.2 (310×310)		
	Die plate dimensions (H×V)	inch (mm)	17.7×17.7 (450×450)		17.7×17.7 (450×450)		
	Min. mold dimensions (H×V)	inch (mm)	8.46×8.46 (215×215)		8.46×8.46 (215×215)		
	Locating ring diameter	inch (mm)	4.0 (101.6)		4.0 (101.6)		
	Ejector force	US tons (kN) (tf)	1.1 (10) (1.0)		1.1 (10) (1.0)		
	Ejector stroke	inch (mm)	1.97 (50)		1.97 (50)		
	Electrical & others	Heater band capacity	kW	3.12	3.55	4.21	4.86
Machine dimensions (L×W×H)		inch (m)	122.0×39.8×60.6 (3.10×1.01×1.54)		124.8×40.2×60.6 (3.17×1.02×1.54)	126.8×40.2×60.6 (3.22×1.02×1.54)	
Floor dimensions (L×W)		inch (m)	105.5×23.6 (2.68×0.60)		105.5×23.6 (2.68×0.60)		
Machine weight		lbs (t)	4409 (2.0)		4630 (2.1)		

Models			NEX50IV				
Specification item		Injection type	3EG		5EG		
		Unit					
Injection	Screw diameter	inch (mm)	A 0.75 (19)	B 0.87 (22)	A 0.87 (22)	B 1.02 (26)	
	Injection capacity	inch <sup>3</sup> (cm <sup>3</sup> ) (oz)	1.4 (23) (0.8)	2.1 (35) (1.2)	2.1 (35) (1.2)	3.0 (49) (1.6)	
	Plasticization capacity (PS)	lbs/h (kg/h)	24.3 (11)	35.3 (16)	35.3 (16)	50.7 (23)	
	Max. injection pressure	psi (MPa) (kgf/cm <sup>2</sup> )	38450 (265) (2704)	30470 (210) (2143)	40630 (280) (2857)	28440 (196) (2000)	
	Injection rate	Standard	inch <sup>3</sup> /s (cm <sup>3</sup> /s)	8.7 (142)	11.6 (190)	11.6 (190)	16.2 (265)
		High velocity (OP)	inch <sup>3</sup> /s (cm <sup>3</sup> /s)				
		High load (OP)	inch <sup>3</sup> /s (cm <sup>3</sup> /s)	—	—	8.12 (133)	11.3 (186)
	Injection velocity	Standard	inch/s (mm/s)	19.7 (500)		19.7 (500)	
		High velocity (OP)	inch/s (mm/s)	—		13.8 (350)	
		High load (OP)	inch/s (mm/s)	—		—	
	Screw speeds	rpm	0~350		0~350		
Nozzle touch force	US tons (kN) (tf)	1.5 (13) (1.3)		1.5 (13) (1.3)			
Hopper capacity (OP)	Gal (L)	4.0 (15)		4.0 (15)			
Clamping	<b>Clamping force</b>	<b>US tons (kN) (tf)</b>	<b>55 (490) (50)</b>		<b>55 (490) (50)</b>		
	Clamping stroke	inch (mm)	9.84 (250)		9.84 (250)		
	Mold thickness (min.-max.)	inch (mm)	5.91~18.1 (150~460)		5.91~18.1 (150~460)		
	Max. daylight opening	inch (mm)	28.0 (710)		28.0 (710)		
	Tie bar clearance (H×V)	inch (mm)	14.2×14.2 (360×360)		14.2×14.2 (360×360)		
	Die plate dimensions (H×V)	inch (mm)	19.9×19.9 (505×505)		19.9×19.9 (505×505)		
	Min. mold dimensions (H×V)	inch (mm)	10.0×10.0 (255×255)		10.0×10.0 (255×255)		
	Locating ring diameter	inch (mm)	4.0 (101.6)		4.0 (101.6)		
	Ejector force	US tons (kN) (tf)	2.2 (20) (2.0)		2.2 (20) (2.0)		
	Ejector stroke	inch (mm)	2.95 (75)		2.95 (75)		
	Electrical & others	Heater band capacity	kW	4.21	4.86	4.91	5.75
Machine dimensions (L×W×H)		inch (m)	140.6×41.7×62.6 (3.57×1.06×1.59)		140.6×41.7×62.6 (3.57×1.06×1.59)		
Floor dimensions (L×W)		inch (m)	122.0×25.6 (3.10×0.65)		122.0×25.6 (3.10×0.65)		
Machine weight		lbs (t)	5732 (2.6)		5732 (2.6)		

- Actual plasticizing capacities may vary, depending on the molding conditions and materials.
- Maximum injection pressures indicate the maximum output of the injection units, not the resin pressures.
- Machine dimensions, floor dimensions, and machine weights are approximate values. The listed machine weights do not include the weights of optional equipments.
- Maximum injection pressures are the highest values that can be set on the machines. These values may be limited, depending on the molding conditions.



Models			NEX80IV									
Specification item		Injection type Unit	5EG			9EG			12EG			
Injection	Screw diameter	inch (mm)	A 0.87 (22)	B 1.02 (26)	BB 1.10 (28)	AA 1.02 (26)	A 1.10 (28)	B 1.26 (32)	AA 1.10 (28)	A 1.26 (32)	B 1.42 (36)	
	Injection capacity	inch <sup>3</sup> (cm <sup>3</sup> ) (oz)	2.1 (35) (1.2)	3.0 (49) (1.6)	3.5 (57) (1.9)	3.3 (54) (1.8)	4.2 (69) (2.3)	5.5 (90) (3.0)	4.2 (69) (2.3)	6.2 (101) (3.4)	7.7 (127) (4.3)	
	Plasticization capacity (PS)	lbs/h (kg/h)	35.3 (16)	50.7 (23)	70.5 (32)	41.9 (19)	61.7 (28)	88.2 (40)	61.7 (28)	88.2 (40)	119 (54)	
	Max. injection pressure	psi (MPa) (kgf/cm <sup>2</sup> )	40630 (280) (2857)	28440 (196) (2000)	24520 (169) (1725)	40630 (280) (2857)	35260 (243) (2480)	26990 (186) (1898)	40630 (280) (2857)	32360 (223) (2276)	25680 (177) (1806)	
	Injection rate	Standard	inch <sup>3</sup> /s (cm <sup>3</sup> /s)	11.6 (190)	16.2 (265)	18.8 (308)	9.7 (159)	11.3 (185)	14.7 (241)	10.1 (166)	13.2 (217)	16.8 (275)
		High velocity (OP)	inch <sup>3</sup> /s (cm <sup>3</sup> /s)				16.2 (265)	18.8 (308)	24.5 (402)	15.0 (246)	19.6 (322)	24.8 (407)
		High load (OP)	inch <sup>3</sup> /s (cm <sup>3</sup> /s)	8.1 (133)	11.3 (186)	13.2 (216)	9.7 (159)	11.3 (185)	14.7 (241)	9.0 (148)	11.8 (193)	14.9 (244)
	Injection velocity	Standard	inch/s (mm/s)	19.7 (500)			11.8 (300)			10.6 (270)		
		High velocity (OP)	inch/s (mm/s)	19.7 (500)			19.7 (500)			15.7 (400)		
		High load (OP)	inch/s (mm/s)	13.8 (350)			11.8 (300)			9.4 (240)		
	Screw speeds	rpm	0~350			0~300			0~300			
	Nozzle touch force	US tons (kN) (tf)	1.5 (13) (1.3)			1.5 (13) (1.3)			1.5 (13) (1.3)			
Hopper capacity (OP)	Gal (L)	4.0 (15)			6.6 (25)			6.6 (25)				
Clamping	<b>Clamping force</b>	<b>US tons (kN) (tf)</b>	<b>88 (784) (80)</b>			<b>88 (784) (80)</b>			<b>88 (784) (80)</b>			
	Clamping stroke	inch (mm)	11.8 (300)			11.8 (300)			11.8 (300)			
	Mold thickness (min.-max.)	inch (mm)	5.91~19.1 (150~485)			5.91~19.1 (150~485)			5.91~19.1 (150~485)			
	Max. daylight opening	inch (mm)	30.9 (785)			30.9 (785)			30.9 (785)			
	Tie bar clearance (HXV)	inch (mm)	16.5×16.5 (420×420)			16.5×16.5 (420×420)			16.5×16.5 (420×420)			
	Die plate dimensions (HXV)	inch (mm)	22.8×22.8 (580×580)			22.8×22.8 (580×580)			22.8×22.8 (580×580)			
	Min. mold dimensions (HXV)	inch (mm)	11.6×11.6 (295×295)			11.6×11.6 (295×295)			11.6×11.6 (295×295)			
	Locating ring diameter	inch (mm)	4.0 (101.6)			4.0 (101.6)			4.0 (101.6)			
	Ejector force	US tons (kN) (tf)	2.2 (20) (2.0)			2.2 (20) (2.0)			2.2 (20) (2.0)			
	Ejector stroke	inch (mm)	2.95 (75)			2.95 (75)			2.95 (75)			
	Electrical & others	Heater band capacity	kW	4.91	5.75	6.05	7.17	8.29	9.41	8.29	9.41	10.22
		Machine dimensions (L×W×H)	inch (m)	164.2×45.3×66.1 (4.17×1.15×1.68)			164.2×45.3×66.1 (4.17×1.15×1.68)			168.1×45.3×66.1 (4.27×1.15×1.68)		
Floor dimensions (L×W)		inch (m)	148.0×29.5 (3.76×0.75)			148.0×29.5 (3.76×0.75)			148.0×29.5 (3.76×0.75)			
Machine weight		lbs (t)	7936 (3.6)			8377 (3.8)			8377 (3.8)			

Models			NEX110IV									
Specification item		Injection type Unit	9EG			12EG			18E			
Injection	Screw diameter	inch (mm)	AA 1.02 (26)	A 1.10 (28)	B 1.26 (32)	AA 1.10 (28)	A 1.26 (32)	B 1.42 (36)	AA 1.26 (32)	A 1.42 (36)	B 1.57 (40)	
	Injection capacity	inch <sup>3</sup> (cm <sup>3</sup> ) (oz)	3.3 (54) (1.8)	4.2 (69) (2.3)	5.5 (90) (3.0)	4.2 (69) (2.3)	6.2 (101) (3.4)	7.8 (127) (4.3)	7.1 (117) (3.9)	9.0 (148) (5.0)	11.1 (182) (6.1)	
	Plasticization capacity (PS)	lbs/h (kg/h)	41.9 (19)	61.7 (28)	88.2 (40)	61.7 (28)	88.2 (40)	119 (54)	88.2 (40)	119 (54)	165 (75)	
	Max. injection pressure	psi (MPa) (kgf/cm <sup>2</sup> )	40630 (280) (2857)	35260 (243) (2480)	26990 (186) (1898)	40630 (280) (2857)	32360 (223) (2276)	25680 (177) (1806)	40050 (276) (2816)	31630 (218) (2225)	25680 (177) (1806)	
	Injection rate	Standard	inch <sup>3</sup> /s (cm <sup>3</sup> /s)	9.7 (159)	11.3 (185)	14.7 (241)	10.1 (166)	13.2 (217)	16.8 (275)	9.82 (161)	12.4 (204)	15.3 (251)
		High velocity (OP)	inch <sup>3</sup> /s (cm <sup>3</sup> /s)	16.2 (265)	18.8 (308)	24.5 (402)	15.0 (246)	19.6 (322)	24.8 (407)	14.7 (241)	18.6 (305)	23.0 (377)
		High load (OP)	inch <sup>3</sup> /s (cm <sup>3</sup> /s)	9.7 (159)	11.3 (185)	14.7 (241)	9.03 (148)	11.8 (193)	14.9 (244)	9.82 (161)	12.4 (204)	15.3 (251)
	Injection velocity	Standard	inch/s (mm/s)	11.8 (300)			10.6 (270)			7.87 (200)		
		High velocity (OP)	inch/s (mm/s)	19.7 (500)			15.7 (400)			11.8 (300)		
		High load (OP)	inch/s (mm/s)	11.8 (300)			9.45 (240)			7.87 (200)		
	Screw speeds	rpm	0~300			0~300			0~300			
	Nozzle touch force	US tons (kN) (tf)	1.9 (17) (1.7)			1.9 (17) (1.7)			1.9 (17) (1.7)			
Hopper capacity (OP)	Gal (L)	6.6 (25)			6.6 (25)			6.6 (25)				
Clamping	<b>Clamping force</b>	<b>US tons (kN) (tf)</b>	<b>121 (1080) (110)</b>			<b>121 (1080) (110)</b>			<b>121 (1080) (110)</b>			
	Clamping stroke	inch (mm)	13.8 (350)			13.8 (350)			13.8 (350)			
	Mold thickness (min.-max.)	inch (mm)	7.09~20.1 (180~510)			7.09~20.1 (180~510)			7.09~20.1 (180~510)			
	Max. daylight opening	inch (mm)	33.9 (860)			33.9 (860)			33.9 (860)			
	Tie bar clearance (HXV)	inch (mm)	18.1×18.1 (460×460)			18.1×18.1 (460×460)			18.1×18.1 (460×460)			
	Die plate dimensions (HXV)	inch (mm)	25.5×25.5 (647×647)			25.5×25.5 (647×647)			25.5×25.5 (647×647)			
	Min. mold dimensions (HXV)	inch (mm)	12.8×12.8 (325×325)			12.8×12.8 (325×325)			12.8×12.8 (325×325)			
	Locating ring diameter	inch (mm)	4.0 (101.6)			4.0 (101.6)			4.0 (101.6)			
	Ejector force	US tons (kN) (tf)	2.6 (24) (2.4)			2.6 (24) (2.4)			2.6 (24) (2.4)			
	Ejector stroke	inch (mm)	3.94 (100)			3.94 (100)			3.94 (100)			
	Electrical & others	Heater band capacity	kW	7.17	8.29	9.41	8.29	9.41	10.22	8.88	10.57	
		Machine dimensions (L×W×H)	inch (m)	181.9×47.2×70.9 (4.62×1.20×1.80)			181.9×47.2×70.9 (4.62×1.20×1.80)			183.9×47.2×70.9 (4.67×1.20×1.80)		
Floor dimensions (L×W)		inch (m)	167.3×30.7 (4.25×0.78)			167.3×30.7 (4.25×0.78)			167.3×30.7 (4.25×0.78)			
Machine weight		lbs (t)	10802 (4.9)			10802 (4.9)			11244 (5.1)			

- Maximum injection rates in the tables are the estimated values that were derived from a formula, and these are not guaranteed values when the maximum injection pressures are reached.
- Clamping forces may be lower than the values in the tables if molds smaller than indicated minimum mold sizes are used.
- Specifications are subject to change without notice due to continuous performance improvement.
- 1 MPa = 10.2 kgf/cm<sup>2</sup> ≈ 10 kgf/cm<sup>2</sup>, 1 kN = 0.102 tf ≈ 0.1 tf

Models		NEX140IV										
Specification item	Injection type	Unit	12EG			18E			25E			
			AA	A	B	AA	A	B	AA	A	B	
Injection	Screw diameter	inch (mm)	1.10 (28)	1.26 (32)	1.42 (36)	1.26 (32)	1.42 (36)	1.57 (40)	1.42 (36)	1.57 (40)	1.7 (45)	
	Injection capacity	inch <sup>3</sup> (cm <sup>3</sup> ) (oz)	4.2 (69) (2.3)	6.2 (101) (3.4)	7.7 (127) (4.3)	7.1 (117) (3.9)	9.0 (148) (5.0)	11.1 (182) (6.1)	9.9 (163) (5.5)	12.3 (201) (6.7)	15.5 (254) (8.5)	
	Plasticization capacity (PS)	lbs/h (kg/h)	61.7 (28)	88.2 (40)	119 (54)	88.2 (40)	119 (54)	165 (75)	119 (54)	165 (75)	225 (102)	
	Max. injection pressure	psi (MPa) (kgf/cm <sup>2</sup> )	40630 (280) (2857)	32360 (223) (2276)	25680 (177) (1806)	40050 (276) (2816)	31630 (218) (2225)	25680 (177) (1806)	37870 (261) (2663)	30620 (211) (2153)	24230 (167) (1704)	
	Injection rate	Standard	inch <sup>3</sup> /s (cm <sup>3</sup> /s)	10.1 (166)	13.2 (217)	16.8 (275)	9.82 (161)	12.4 (204)	15.3 (251)	11.2 (183)	13.8 (226)	17.5 (286)
		High velocity (OP)	inch <sup>3</sup> /s (cm <sup>3</sup> /s)	15.0 (246)	19.6 (322)	24.8 (407)	14.7 (241)	18.6 (305)	23.0 (377)	16.8 (275)	20.7 (339)	26.2 (429)
		High load (OP)	inch <sup>3</sup> /s (cm <sup>3</sup> /s)	9.0 (148)	11.8 (193)	14.9 (244)	9.8 (161)	12.4 (204)	15.3 (251)	11.2 (183)	13.8 (226)	17.5 (286)
	Injection velocity	Standard	inch/s (mm/s)	10.6 (270)			7.87 (200)			7.09 (180)		
		High velocity (OP)	inch/s (mm/s)	15.7 (400)			11.8 (300)			10.6 (270)		
		High load (OP)	inch/s (mm/s)	9.45 (240)			7.87 (200)			7.09 (180)		
	Screw speeds	rpm	0~300			0~300			0~300			
	Nozzle touch force	US tons (kN) (tf)	1.9 (17) (1.7)			1.9 (17) (1.7)			1.9 (17) (1.7)			
Hopper capacity (OP)	Gal (L)	6.6 (25)			6.6 (25)			11.9 (45)				
Clamping	<b>Clamping force</b>	<b>US tons (kN) (tf)</b>	<b>154 (1373) (140)</b>			<b>154 (1373) (140)</b>			<b>154 (1373) (140)</b>			
	Clamping stroke	inch (mm)	15.7 (400)			15.7 (400)			15.7 (400)			
	Mold thickness (min.-max.)	inch (mm)	7.09~21.7 (180~550)			7.09~21.7 (180~550)			7.09~21.7 (180~550)			
	Max. daylight opening	inch (mm)	37.4 (950)			37.4 (950)			37.4 (950)			
	Tie bar clearance (H×V)	inch (mm)	20.1×20.1 (510×510)			20.1×20.1 (510×510)			20.1×20.1 (510×510)			
	Die plate dimensions (H×V)	inch (mm)	28.3×28.3 (720×720)			28.3×28.3 (720×720)			28.3×28.3 (720×720)			
	Min. mold dimensions (H×V)	inch (mm)	12.8×12.8 (325×325)			12.8×12.8 (325×325)			12.8×12.8 (325×325)			
	Locating ring diameter	inch (mm)	4.0 (101.6)			4.0 (101.6)			4.0 (101.6)			
	Ejector force	US tons (kN) (tf)	4.0 (35) (3.6)			4.0 (35) (3.6)			4.0 (35) (3.6)			
	Ejector stroke	inch (mm)	4.72 (120)			4.72 (120)			4.72 (120)			
Electrical & others	Heater band capacity	kW	8.29	9.41	10.22	8.88	10.57	10.54	13.01			
	Machine dimensions (L×W×H)	inch (m)	198.0×52.0×73.2 (5.03×1.32×1.86)			198.0×52.0×73.2 (5.03×1.32×1.86)			198.0×52.0×73.2 (5.03×1.32×1.86)		202.4×52.0×73.2 (5.14×1.32×1.86)	
	Floor dimensions (L×W)	inch (m)	186.2×33.9 (4.73×0.86)			186.2×33.9 (4.73×0.86)			186.2×33.9 (4.73×0.86)			
	Machine weight	lbs (t)	12787 (5.8)			13228 (6.0)			14550 (6.6)			

Models		NEX180IV										
Specification item	Injection type	Unit	18E			25E			36E			
			AA	A	B	AA	A	B	AA	A	B	
Injection	Screw diameter	inch (mm)	1.26 (32)	1.42 (36)	1.57 (40)	1.42 (36)	1.57 (40)	1.77 (45)	1.57 (40)	1.77 (45)	1.97 (50)	
	Injection capacity	inch <sup>3</sup> (cm <sup>3</sup> ) (oz)	7.1 (117) (3.9)	9.0 (148) (5.0)	11.1 (182) (6.1)	9.95 (163) (5.5)	12.3 (201) (6.7)	15.5 (254) (8.5)	13.8 (226) (7.6)	17.5 (286) (9.6)	21.5 (353) (11.8)	
	Plasticization capacity (PS)	lbs/h (kg/h)	88.2 (40)	119 (54)	165 (75)	119 (54)	165 (75)	225 (102)	137 (62)	201 (91)	254 (115)	
	Max. injection pressure	psi (MPa) (kgf/cm <sup>2</sup> )	40050 (276) (2816)	31620 (218) (2224)	25680 (177) (1806)	37870 (261) (2663)	30620 (211) (2153)	24230 (167) (1704)	37730 (260) (2653)	29890 (206) (2102)	24230 (167) (1704)	
	Injection rate	Standard	inch <sup>3</sup> /s (cm <sup>3</sup> /s)	9.8 (161)	12.4 (204)	15.3 (251)	11.2 (183)	13.8 (226)	17.5 (286)	13.8 (226)	17.5 (286)	21.5 (353)
		High velocity (OP)	inch <sup>3</sup> /s (cm <sup>3</sup> /s)	14.7 (241)	18.6 (305)	23.0 (377)	16.8 (275)	20.7 (339)	26.2 (429)	20.7 (339)	26.2 (429)	32.3 (530)
		High load (OP)	inch <sup>3</sup> /s (cm <sup>3</sup> /s)	9.8 (161)	12.4 (204)	15.3 (251)	11.2 (183)	13.8 (226)	17.5 (286)	13.8 (226)	17.5 (286)	21.5 (353)
	Injection velocity	Standard	inch/s (mm/s)	7.9 (200)			7.1 (180)			7.1 (180)		
		High velocity (OP)	inch/s (mm/s)	11.8 (300)			10.6 (270)			10.6 (270)		
		High load (OP)	inch/s (mm/s)	7.9 (200)			7.1 (180)			7.1 (180)		
	Screw speeds	rpm	0~300			0~300			0~250			
	Nozzle touch force	US tons (kN) (tf)	2.5 (23) (2.3)			2.5 (23) (2.3)			2.5 (23) (2.3)			
Hopper capacity (OP)	Gal (L)	6.61 (25)			11.9 (45)			11.9 (45)				
Clamping	<b>Clamping force</b>	<b>US tons (kN) (tf)</b>	<b>198 (1765) (180)</b>			<b>198 (1765) (180)</b>			<b>198 (1765) (180)</b>			
	Clamping stroke	inch (mm)	17.7 (450)			17.7 (450)			17.7 (450)			
	Mold thickness (min.-max.)	inch (mm)	6.89~23.0 (175~585)			6.89~23.0 (175~585)			6.89~23.0 (175~585)			
	Max. daylight opening	inch (mm)	40.7 (1035)			40.7 (1035)			40.7 (1035)			
	Tie bar clearance (H×V)	inch (mm)	22.0×22.0 (560×560)			22.0×22.0 (560×560)			22.0×22.0 (560×560)			
	Die plate dimensions (H×V)	inch (mm)	31.5×31.5 (800×800)			31.5×31.5 (800×800)			31.5×31.5 (800×800)			
	Min. mold dimensions (H×V)	inch (mm)	15.6×15.6 (395×395)			15.6×15.6 (395×395)			15.6×15.6 (395×395)			
	Locating ring diameter	inch (mm)	4.0 (101.6)			4.0 (101.6)			4.0 (101.6)			
	Ejector force	US tons (kN) (tf)	4.4 (39) (4.0)			4.4 (39) (4.0)			4.4 (39) (4.0)			
	Ejector stroke	inch (mm)	5.91 (150)			5.91 (150)			5.91 (150)			
Electrical & others	Heater band capacity	kW	8.88	10.57		10.54	13.01	12.53	15.53			
	Machine dimensions (L×W×H)	inch (m)	220.1×55.1×74.8 (5.59×1.40×1.90)			220.1×55.1×74.8 (5.59×1.40×1.90)			220.1×55.1×74.8 (5.59×1.40×1.90)		223.2×55.1×74.8 (5.67×1.40×1.90)	
	Floor dimensions (L×W)	inch (m)	203.9×36.2 (5.18×0.92)			203.9×36.2 (5.18×0.92)			203.9×36.2 (5.18×0.92)			
	Machine weight	lbs (t)	17416 (7.9)			17637 (8.0)			18298 (8.3)			

- Actual plasticizing capacities may vary, depending on the molding conditions and materials.
- Maximum injection pressures indicate the maximum output of the injection units, not the resin pressures.
- Machine dimensions, floor dimensions, and machine weights are approximate values. The listed machine weights do not include the weights of optional equipments.
- Maximum injection pressures are the highest values that can be set on the machines. These values may be limited, depending on the molding conditions.

Models			NEX220IV						
Specification item		Injection type Unit	50E			71E			
Injection	Screw diameter	inch (mm)	AA 1.77 (45)	A 1.97 (50)	B 2.20 (56)	AA 1.97 (50)	A 2.20 (56)	B 2.48 (63)	
	Injection capacity	inch <sup>3</sup> (cm <sup>3</sup> ) (oz)	19.9 (326) (10.9)	24.6 (403) (13.5)	30.8 (505) (16.9)	27.0 (442) (14.8)	33.8 (554) (18.6)	42.8 (701) (23.5)	
	Plasticization capacity (PS)	lbs/h (kg/h)	201 (91)	254 (115)	342 (155)	254 (115)	344 (156)	461 (209)	
	Max. injection pressure	psi (MPa) (kgf/cm <sup>2</sup> )	36280 (250) (2551)	29310 (202) (2061)	23360 (161) (1643)	36130 (249) (2541)	28880 (199) (2031)	22780 (157) (1602)	
	Injection rate	Standard	inch <sup>3</sup> /s (cm <sup>3</sup> /s)	17.5 (286)	21.5 (353)	27.0 (443)	19.2 (314)	24.0 (394)	30.4 (499)
		High velocity (OP)	inch <sup>3</sup> /s (cm <sup>3</sup> /s)	26.2 (429)	32.3 (530)	40.6 (665)	24.0 (393)	30.1 (493)	38.0 (623)
		High load (OP)	inch <sup>3</sup> /s (cm <sup>3</sup> /s)	17.5 (286)	21.5 (353)	27.0 (443)	19.2 (314)	24.0 (394)	30.4 (499)
	Injection velocity	Standard	inch/s (mm/s)		7.1 (180)			6.3 (160)	
		High velocity (OP)	inch/s (mm/s)		10.6 (270)			7.9 (200)	
		High load (OP)	inch/s (mm/s)		7.1 (180)			6.3 (160)	
	Screw speeds	rpm		0~250			0~250		
	Nozzle touch force	US tons (kN) (tf)		2.5 (23) (2.3)			3.3 (29) (3.0)		
	Hopper capacity (OP)	Gal (L)		23.8 (90)			23.8 (90)		
Clamping	<b>Clamping force</b>	<b>US tons (kN) (tf)</b>	<b>243 (2160) (220)</b>			<b>243 (2160) (220)</b>			
	Clamping stroke	inch (mm)	21.7 (550)			21.7 (550)			
	Mold thickness (min.-max.)	inch (mm)	10.8~26.8 (275~680)			10.8~26.8 (275~680)			
	Max. daylight opening	inch (mm)	48.4 (1230)			48.4 (1230)			
	Tie bar clearance (HXV)	inch (mm)	26.0×24.0 (660×610)			26.0×24.0 (660×610)			
	Die plate dimensions (HXV)	inch (mm)	36.2×34.3 (920×870)			36.2×34.3 (920×870)			
	Min. mold dimensions (HXV)	inch (mm)	16.3×16.3 (415×415)			16.3×16.3 (415×415)			
	Locating ring diameter	inch (mm)	4.0 (101.6)			4.0 (101.6)			
	Ejector force	US tons (kN) (tf)	6.6 (59) (6.0)			6.6 (59) (6.0)			
	Ejector stroke	inch (mm)	5.91 (150)			5.91 (150)			
	Electrical & others	Heater band capacity	kW	14.62	18.19		17.74	21.98	
Machine dimensions (L×W×H)		inch (m)	248.0×63.4×78.3 (6.30×1.61×1.99)	249.2×63.4×78.3 (6.33×1.61×1.99)			249.6×63.4×78.3 (6.34×1.61×1.99)		
Floor dimensions (L×W)		inch (m)	224.8×38.2 (5.71×0.97)			226.4×38.2 (5.75×0.97)			
Machine weight		lbs (t)	25133 (11.4)			26235 (11.9)			

Models			NEX280IV						
Specification item		Injection type Unit	71E			100LE			
Injection	Screw diameter	inch (mm)	AA 1.97 (50)	A 2.20 (56)	B 2.48 (63)	AA 1.97 (50)	A 2.20 (56)	B 2.48 (63)	
	Injection capacity	inch <sup>3</sup> (cm <sup>3</sup> ) (oz)	27.0 (442) (14.8)	33.8 (554) (18.6)	42.8 (701) (23.5)	33.6 (550) (18.4)	47.4 (776) (26.0)	59.9 (982) (32.9)	
	Plasticization capacity (PS)	lbs/h (kg/h)	254 (115)	344 (156)	461 (209)	254 (115)	344 (156)	461 (209)	
	Max. injection pressure	psi (MPa) (kgf/cm <sup>2</sup> )	36130 (249) (2541)	28880 (199) (2031)	22780 (157) (1602)	36130 (249) (2541)	28880 (199) (2031)	22780 (157) (1602)	
	Injection rate	Standard	inch <sup>3</sup> /s (cm <sup>3</sup> /s)	19.2 (314)	24.0 (394)	30.4 (499)	19.2 (314)	24.0 (394)	30.4 (499)
		High velocity (OP)	inch <sup>3</sup> /s (cm <sup>3</sup> /s)	24.0 (393)	30.1 (493)	38.0 (623)	24.0 (393)	30.1 (493)	38.0 (623)
		High load (OP)	inch <sup>3</sup> /s (cm <sup>3</sup> /s)	19.2 (314)	24.0 (394)	30.4 (499)	19.2 (314)	24.0 (394)	30.4 (499)
	Injection velocity	Standard	inch/s (mm/s)		6.3 (160)			6.3 (160)	
		High velocity (OP)	inch/s (mm/s)		7.9 (200)			7.9 (200)	
		High load (OP)	inch/s (mm/s)		6.3 (160)			6.3 (160)	
	Screw speeds	rpm		0~250			0~250		
	Nozzle touch force	US tons (kN) (tf)		3.3 (29) (3.0)			3.3 (29) (3.0)		
	Hopper capacity (OP)	Gal (L)		23.8 (90)			23.8 (90)		
Clamping	<b>Clamping force</b>	<b>US tons (kN) (tf)</b>	<b>308 (2740) (280)</b>			<b>308 (2740) (280)</b>			
	Clamping stroke	inch (mm)	23.6 (600)			23.6 (600)			
	Mold thickness (min.-max.)	inch (mm)	11.8~29.5 (300~750)			11.8~29.5 (300~750)			
	Max. daylight opening	inch (mm)	53.1 (1350)			53.1 (1350)			
	Tie bar clearance (HXV)	inch (mm)	29.9×26.0 (760×660)			29.9×26.0 (760×660)			
	Die plate dimensions (HXV)	inch (mm)	41.5×37.6 (1055×955)			41.5×37.6 (1055×955)			
	Min. mold dimensions (HXV)	inch (mm)	18.3×18.3 (465×465)			18.3×18.3 (465×465)			
	Locating ring diameter	inch (mm)	4.0 (101.6)			4.0 (101.6)			
	Ejector force	US tons (kN) (tf)	6.6 (59) (6.0)			6.6 (59) (6.0)			
	Ejector stroke	inch (mm)	5.91 (150)			5.91 (150)			
	Electrical & others	Heater band capacity	kW	17.74	21.98		17.53	22.17	
Machine dimensions (L×W×H)		inch (m)	264.2×69.7×80.7 (6.71×1.77×2.05)			264.2×69.7×80.7 (6.71×1.77×2.05)			
Floor dimensions (L×W)		inch (m)	241.7×44.1 (6.14×1.12)			241.7×44.1 (6.14×1.12)			
Machine weight		lbs (t)	32408 (14.7)			32628 (14.8)			

- Maximum injection rates in the tables are the estimated values that were derived from a formula, and these are not guaranteed values when the maximum injection pressures are reached.
- Clamping forces may be lower than the values in the tables if molds smaller than indicated minimum mold sizes are used.
- Specifications are subject to change without notice due to continuous performance improvement.
- 1 MPa = 10.2 kgf/cm<sup>2</sup> ≈ 10 kgf/cm<sup>2</sup>, 1 kN = 0.102 tf ≈ 0.1 tf

Models			NEX360IV			
Specification item		Unit	100LE			
			AA	A	B	
Injection	Screw diameter	inch (mm)	1.97 (50)	2.20 (56)	2.48 (63)	
	Injection capacity	inch <sup>3</sup> (cm <sup>3</sup> ) (oz)	33.6 (550) (18.4)	47.4 (776) (26.0)	59.9 (982) (32.9)	
	Plasticization capacity (PS)	lbs/h (kg/h)	254 (115)	344 (156)	461 (209)	
	Max. injection pressure	psi (MPa) (kgf/cm <sup>2</sup> )	36130 (249) (2541)	28880 (199) (2031)	22780 (157) (1602)	
	Injection rate	Standard	inch <sup>3</sup> /s (cm <sup>3</sup> /s)	19.2 (314)	24.0 (394)	30.4 (499)
		High velocity (OP)	inch <sup>3</sup> /s (cm <sup>3</sup> /s)	24.0 (393)	30.1 (493)	38.0 (623)
		High load (OP)	inch <sup>3</sup> /s (cm <sup>3</sup> /s)	19.2 (314)	24.0 (394)	30.4 (499)
	Injection velocity	Standard	inch/s (mm/s)	6.3 (160)	7.9 (200)	6.3 (160)
		High velocity (OP)	inch/s (mm/s)	6.3 (160)	7.9 (200)	6.3 (160)
		High load (OP)	inch/s (mm/s)	6.3 (160)	7.9 (200)	6.3 (160)
	Screw speeds	rpm		0~250		
	Nozzle touch force	US tons (kN) (tf)		3.3 (29) (3.0)		
Hopper capacity (OP)	Gal (L)		23.8 (90)			
Clamping	<b>Clamping force</b>	<b>US tons (kN) (tf)</b>	<b>397 (3530) (360)</b>			
	Clamping stroke	inch (mm)	25.6 (650)			
	Mold thickness (min.-max.)	inch (mm)	11.8~31.1 (300~790)			
	Max. daylight opening	inch (mm)	56.7 (1440)			
	Tie bar clearance (H×V)	inch (mm)	31.9×29.9 (810×760)			
	Die plate dimensions (H×V)	inch (mm)	44.5×42.5 (1130×1080)			
	Min. mold dimensions (H×V)	inch (mm)	20.5×20.5 (520×520)			
	Locating ring diameter	inch (mm)	4.0 (101.6)			
	Ejector force	US tons (kN) (tf)	8.2 (73) (7.4)			
	Ejector stroke	inch (mm)	7.87 (200)			
	Electrical & others	Heater band capacity	kW	17.53		22.17
Machine dimensions (L×W×H)		inch (m)	276.0×75.2×83.5 (7.01×1.91×2.12)			
Floor dimensions (L×W)		inch (m)	252.0×47.2 (6.40×1.20)			
Machine weight		lbs (t)	38140 (17.3)			

- Actual plasticizing capacities may vary, depending on the molding conditions and materials.
- Maximum injection pressures indicate the maximum output of the injection units, not the resin pressures.
- Machine dimensions, floor dimensions, and machine weights are approximate values. The listed machine weights do not include the weights of optional equipments.
- Maximum injection pressures are the highest values that can be set on the machines. These values may be limited, depending on the molding conditions.
- Maximum injection rates in the tables are the estimated values that were derived from a formula, and these are not guaranteed values when the maximum injection pressures are reached.
- Clamping forces may be lower than the values in the tables if molds smaller than indicated minimum mold sizes are used.
- Specifications are subject to change without notice due to continuous performance improvement.
- 1 MPa = 10.2 kgf/cm<sup>2</sup> ≈ 10 kgf/cm<sup>2</sup>, 1 kN = 0.102 tf ≈ 0.1 t

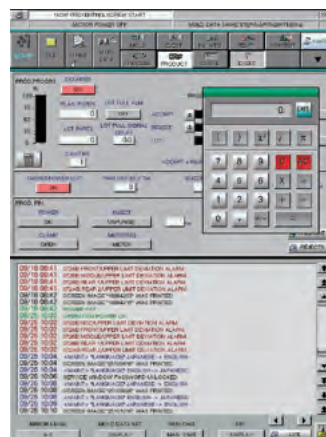
**NEX-IV Series TACT IV Screen shots (various software that supports production)**



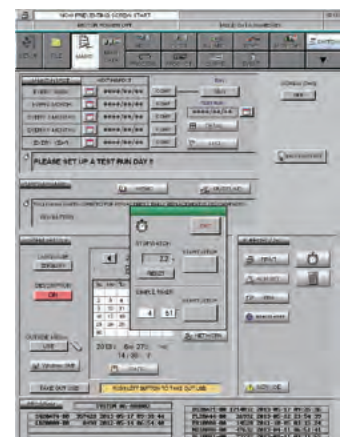
▲Standard operation sheets



▲Correlation check/injection pressure monitoring



▲Production management, events, and scientific calculator

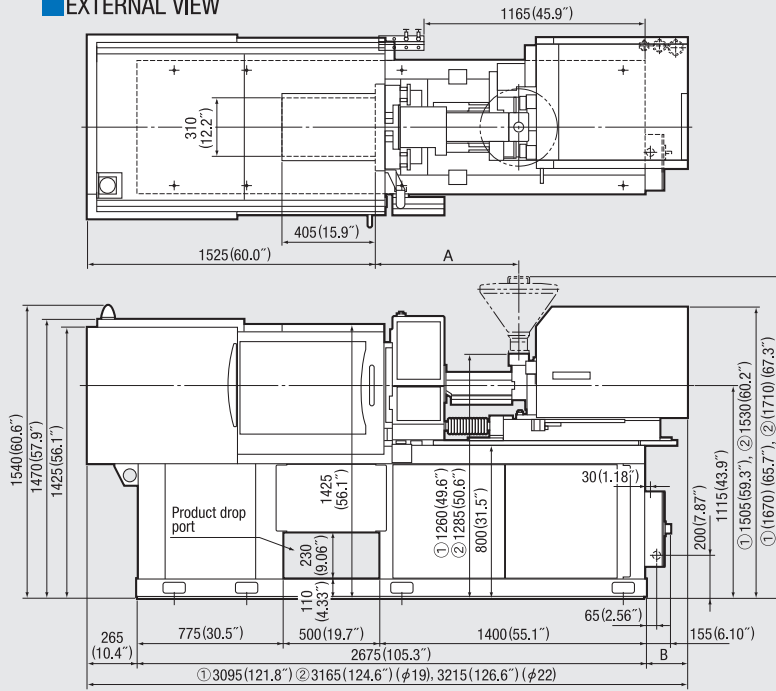


▲Stopwatch and simple timer function

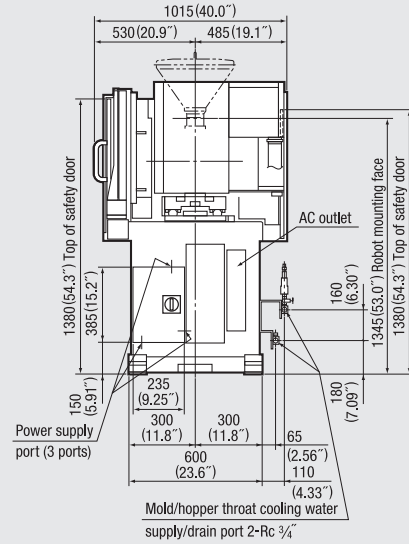


Injection type: ①2EG [Screw diameter:  $\phi 16$  (0.63") /  $\phi 19$  (0.75")]  
 ②3EG [Screw diameter:  $\phi 19$  (0.75") /  $\phi 22$  (0.87")]

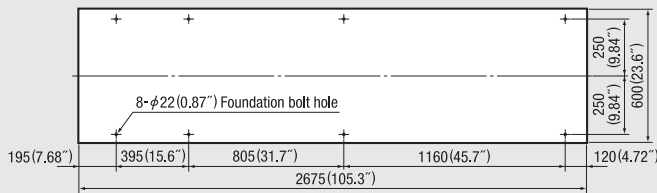
**EXTERNAL VIEW**



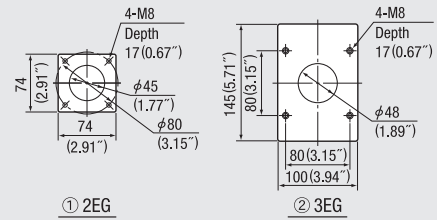
Injection type	Screw dia.	A	B
① 2EG	16 (0.63")	423~643 (16.7~25.3")	—
	19 (0.75")	483~703 (19.0~27.7")	40 (1.57")
② 3EG	19 (0.75")	529~749 (20.8~29.5")	225 (8.86")
	22 (0.87")	579~799 (22.8~31.5")	275 (10.8")



**FOUNDATION DIAGRAM**

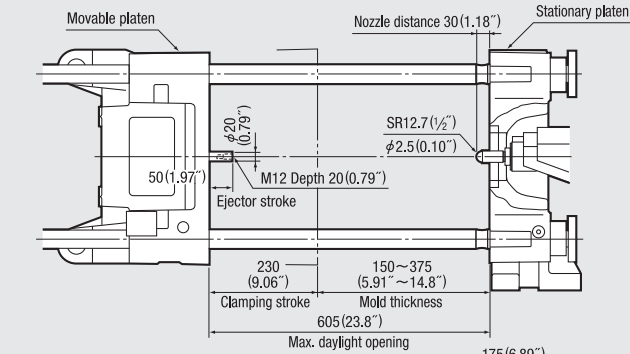


**HOPPER FIXATION DIAGRAM**

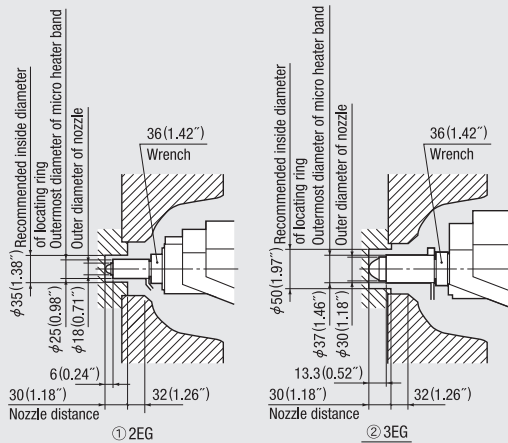
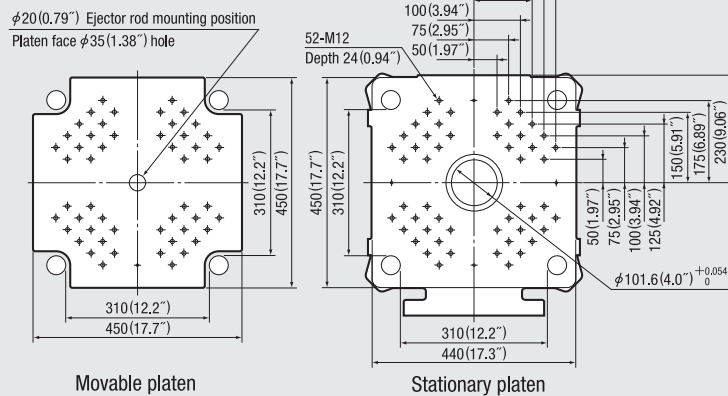
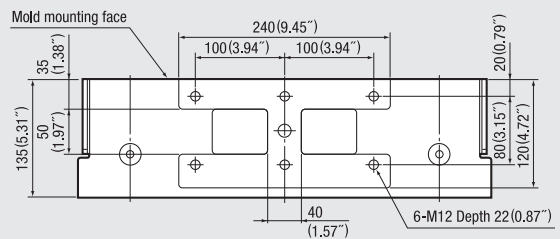


**MOLD ATTACHMENT DIAGRAM**

\* The minimum mold dimensions of 215 mm (8.46") (H) × 215 mm (8.46") (V) are required in order to achieve the maximum clamping force.

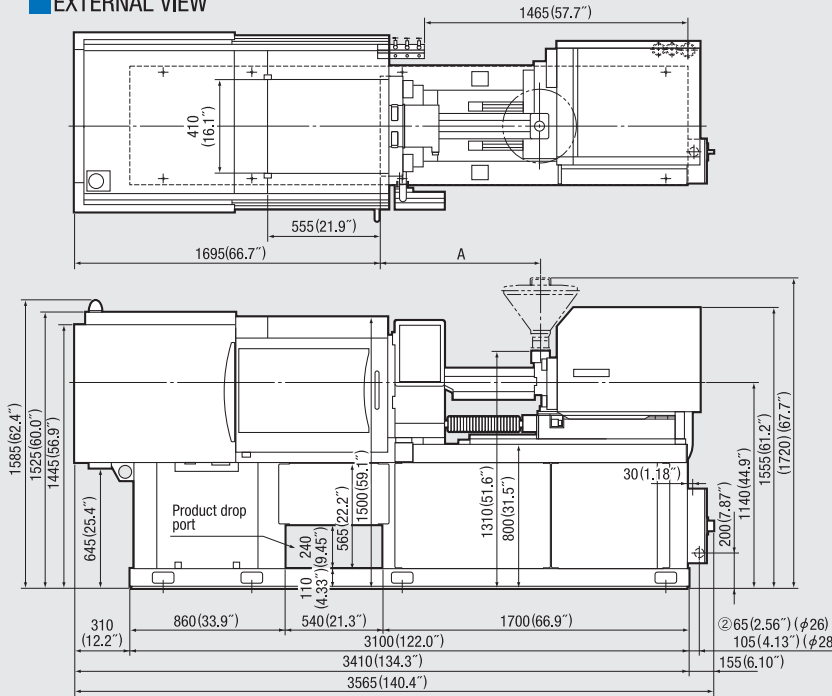


**ROBOT FIXATION DIAGRAM**

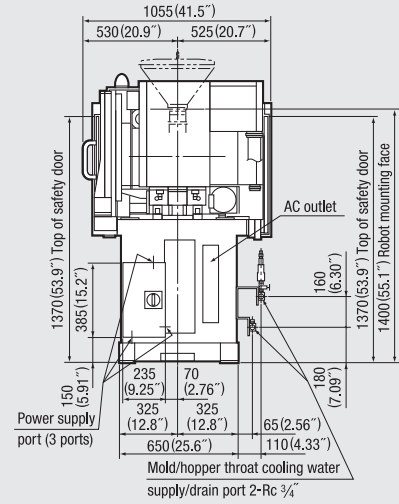


Injection type: ①3EG [Screw diameter:  $\phi 19(0.75")$  /  $\phi 22(0.87")$ ]  
 ②5EG [Screw diameter:  $\phi 22(0.87")$  /  $\phi 26(1.02")$  /  $\phi 28(1.10")$ ]

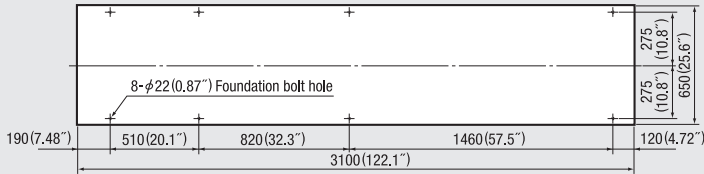
EXTERNAL VIEW



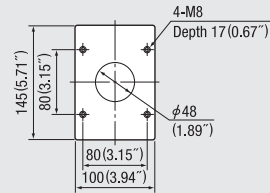
Injection type	Screw dia.	A
①3EG	19(0.75")	530~755 (20.9"~29.7")
	22(0.87")	580~805 (22.8"~31.7")
②5EG	22(0.87")	580~805 (22.8"~31.7")
	26(1.02")	665~890 (26.2"~35.0")
	28(1.10")	705~930 (27.8"~36.6")



FOUNDATION DIAGRAM

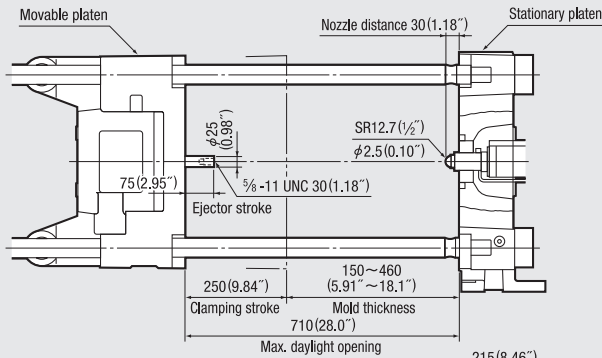


HOPPER FIXATION DIAGRAM

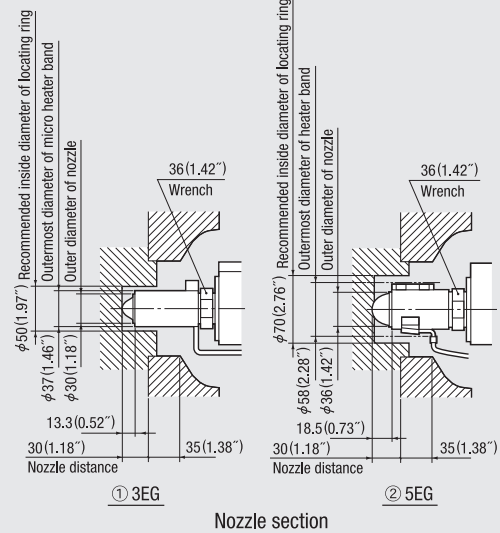
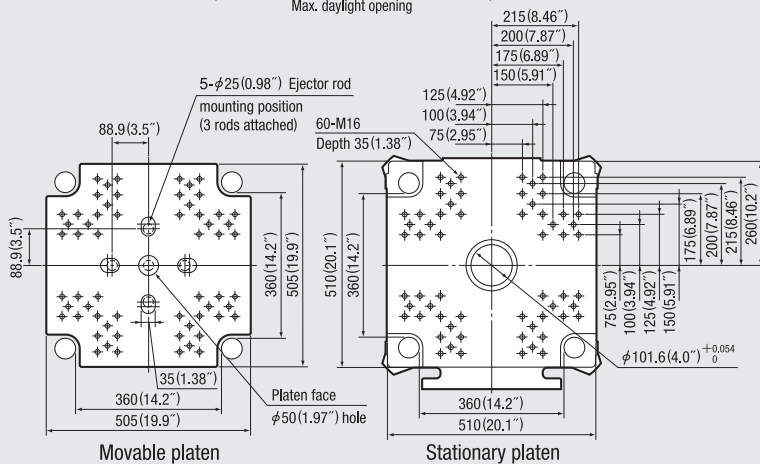
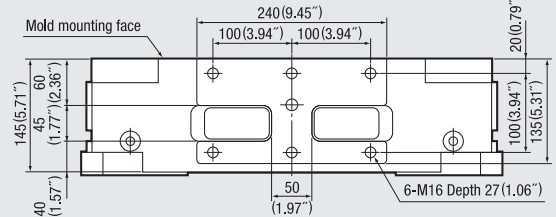


MOLD ATTACHMENT DIAGRAM

\* The minimum mold dimensions of 255mm(10.0") (H) x 255mm(10.0") (V) are required in order to achieve the maximum clamping force.

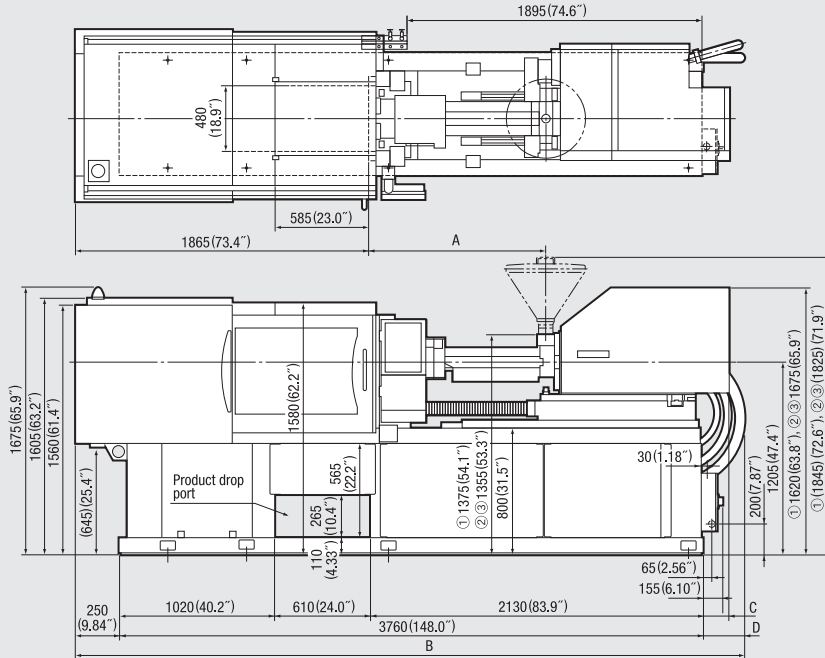


ROBOT FIXATION DIAGRAM

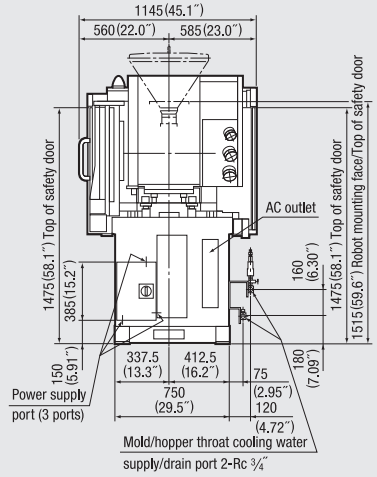


- Injection type: ① 5EG [Screw diameter: φ22 (0.87") / φ26 (1.02") / φ28 (1.10")]  
 ② 9EG [Screw diameter: φ26 (1.02") / φ28 (1.10") / φ32 (1.26")]  
 ③ 12EG [Screw diameter: φ28 (1.10") / φ32 (1.26") / φ36 (1.42")]

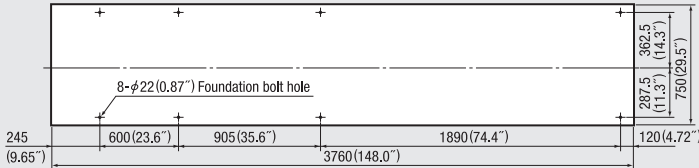
EXTERNAL VIEW



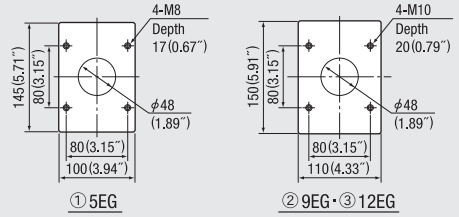
Injection type	Screw dia.	A	B	C	D
① 5EG	22 (0.87")	579~854 (22.8~33.6")	4165 (164.0")	—	—
	26 (1.02")	663~938 (26.1~36.9")	4165 (164.0")	—	—
	28 (1.10")	702~977 (27.6~38.5")	4165 (164.0")	—	—
② 9EG	26 (1.02")	692~967 (27.2~38.1")	4165 (164.0")	—	90 (3.54")
	28 (1.10")	764~1039 (30.1~40.9")	4170 (164.2")	70 (2.76")	160 (6.30")
	32 (1.26")	834~1109 (32.8~43.7")	4270 (168.1")	160 (6.30")	260 (10.2")
③ 12EG	28 (1.10")	765~1040 (30.1~40.9")	4175 (164.4")	70 (2.76")	165 (6.50")
	32 (1.26")	835~1110 (32.9~43.7")	4265 (167.9")	160 (6.30")	255 (10.0")
	36 (1.42")	895~1170 (35.2~46.1")	4330 (170.5")	225 (8.86")	320 (12.6")



FOUNDATION DIAGRAM

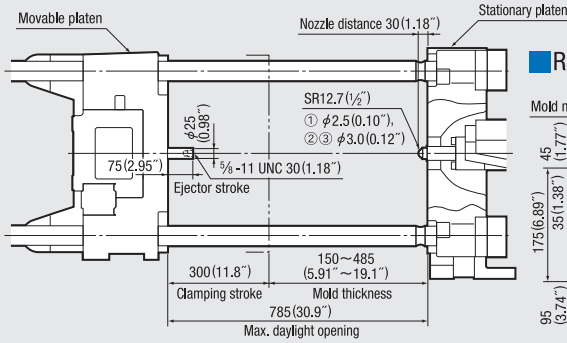


HOPPER FIXATION DIAGRAM

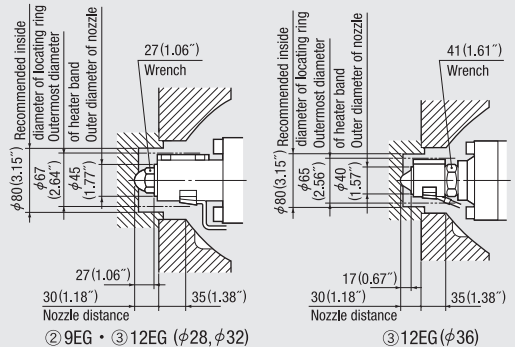
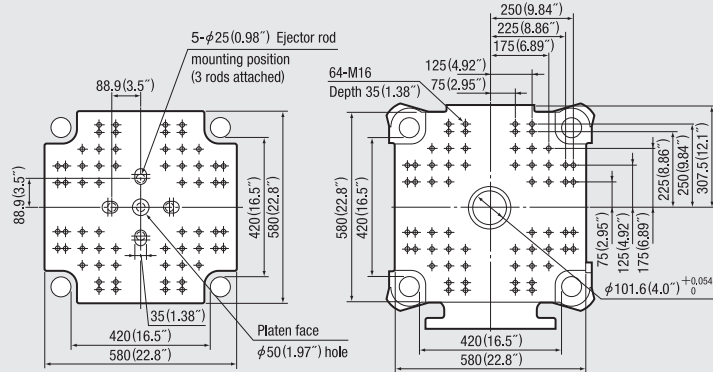
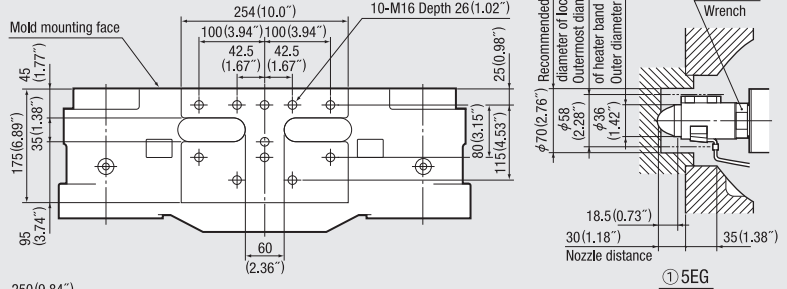


MOLD ATTACHMENT DIAGRAM

\* The minimum mold dimensions of 295 mm (11.6") (H) × 295 mm (11.6") (W) are required in order to achieve the maximum clamping force.



ROBOT FIXATION DIAGRAM



Movable platen

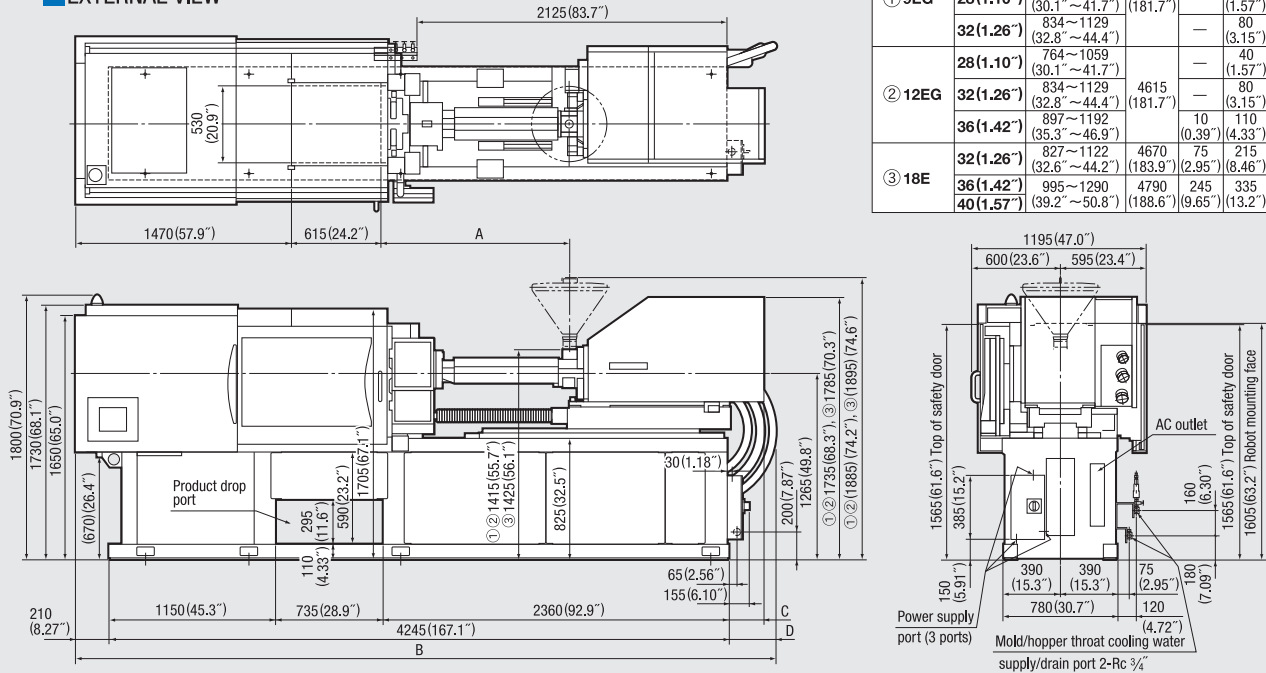
Stationary platen

Nozzle section

**NEX-IV Series** **NEX110IV-9EG / NEX110IV-12EG / NEX110IV-18E**

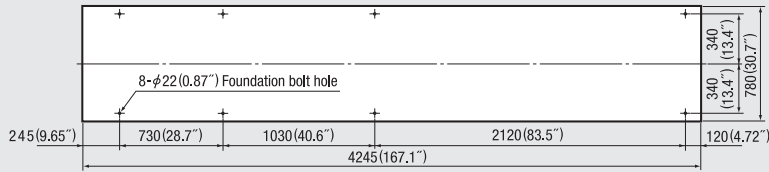
Injection type: ① 9EG [Screw diameter:  $\phi 26$  (1.02") /  $\phi 28$  (1.10") /  $\phi 32$  (1.26")]  
 ② 12EG [Screw diameter:  $\phi 28$  (1.10") /  $\phi 32$  (1.26") /  $\phi 36$  (1.42")]  
 ③ 18E [Screw diameter:  $\phi 32$  (1.26") /  $\phi 36$  (1.42") /  $\phi 40$  (1.57")]

**EXTERNAL VIEW**

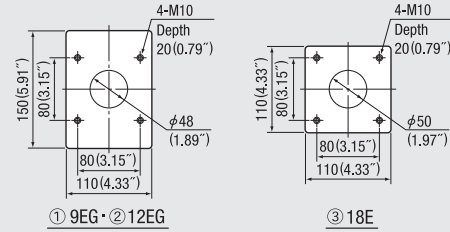


Injection type	Screw dia.	A	B	C	D
① 9EG	26 (1.02")	692~987 (27.2"~38.9")	4615 (181.7")	—	—
	28 (1.10")	764~1059 (30.1"~41.7")			
	32 (1.26")	834~1129 (32.8"~44.4")			
② 12EG	28 (1.10")	764~1059 (30.1"~41.7")	4615 (181.7")	—	40 (1.57")
	32 (1.26")	834~1129 (32.8"~44.4")			
	36 (1.42")	897~1192 (35.3"~46.9")			
③ 18E	32 (1.26")	827~1122 (32.6"~44.2")	4670 (183.9")	75 (2.95")	215 (8.46")
	36 (1.42")	995~1290 (39.2"~50.8")			
	40 (1.57")	995~1290 (39.2"~50.8")			

**FOUNDATION DIAGRAM**

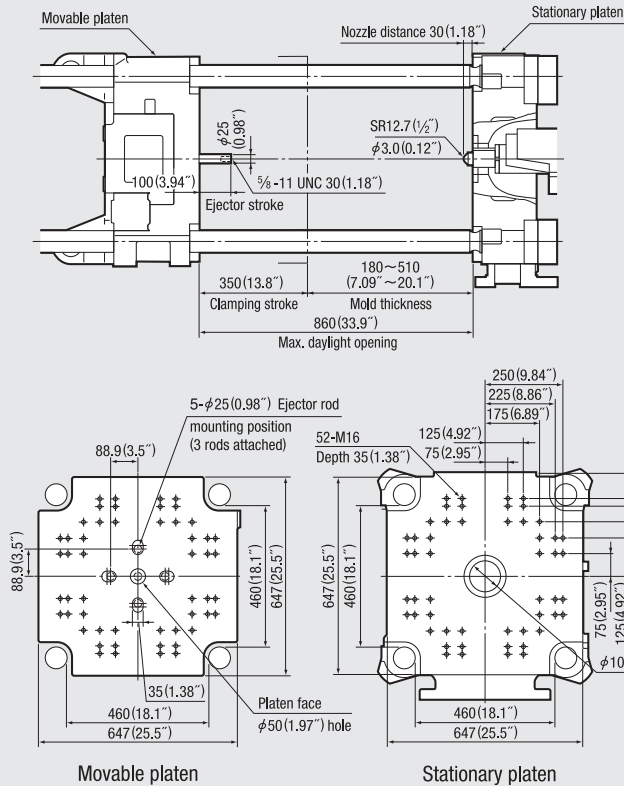


**HOPPER FIXATION DIAGRAM**

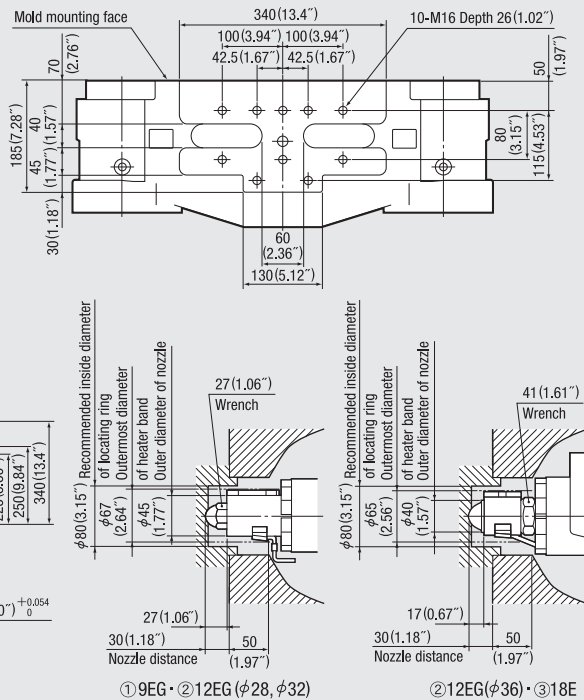


**MOLD ATTACHMENT DIAGRAM**

\* The minimum mold dimensions of 325 mm (12.8") (H) × 325 mm (12.8") (V) are required in order to achieve the maximum clamping force.



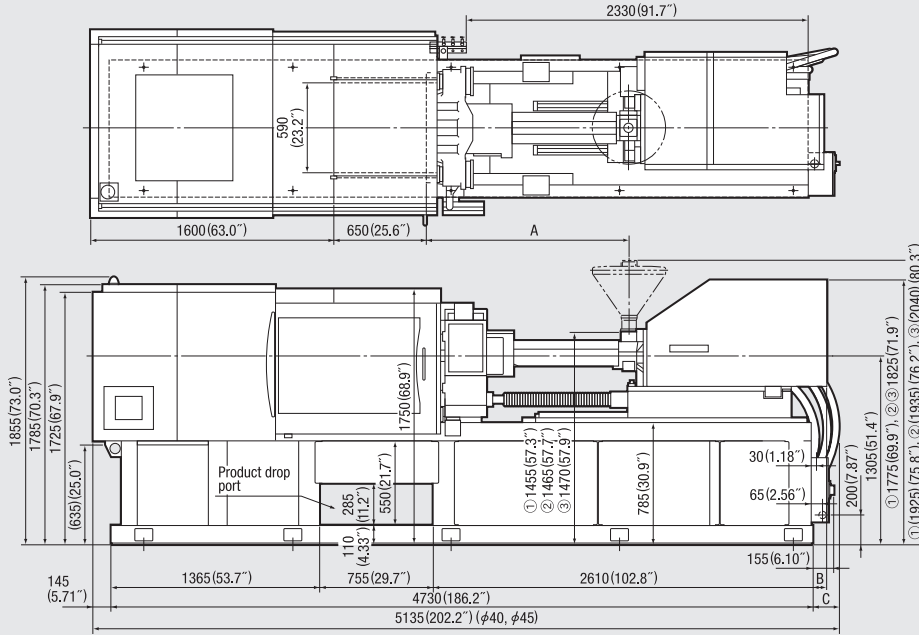
**ROBOT FIXATION DIAGRAM**



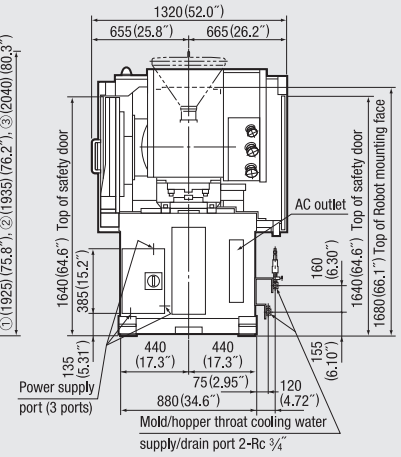


- Injection type: ① 12EG [Screw diameter:  $\phi 28$  (1.10") /  $\phi 32$  (1.26") /  $\phi 36$  (1.42")]  
 ② 18E [Screw diameter:  $\phi 32$  (1.26") /  $\phi 36$  (1.42") /  $\phi 40$  (1.57")]  
 ③ 25E [Screw diameter:  $\phi 36$  (1.42") /  $\phi 40$  (1.57") /  $\phi 45$  (1.77")]

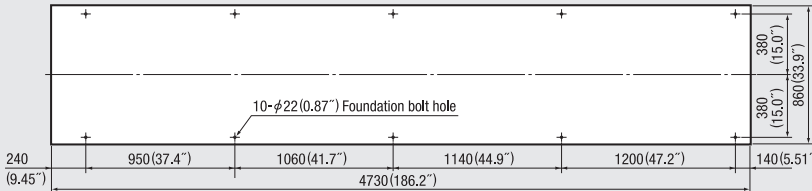
**EXTERNAL VIEW**



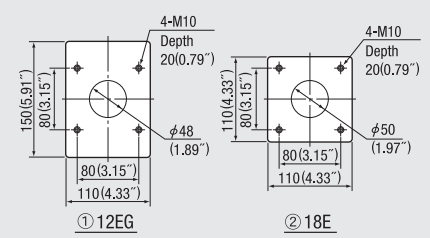
Injection type	Screw dia.	A	B	C
① 12EG	28 (1.10")	765~1105 (30.1"~43.5")	—	—
	32 (1.26")	835~1175 (32.9"~46.3")	—	—
	36 (1.42")	895~1235 (35.2"~48.6")	—	—
② 18E	32 (1.26")	825~1250 (32.5"~49.2")	—	—
	36 (1.42")	995~1335 (39.2"~52.6")	40 (1.57")	140 (5.51")
	40 (1.57")	920~1260 (36.2"~49.6")	—	70 (2.76")
③ 25E	40 (1.57")	1110~1450 (43.7"~57.1")	175 (6.89")	260 (10.2")
	45 (1.77")	—	—	—



**FOUNDATION DIAGRAM**

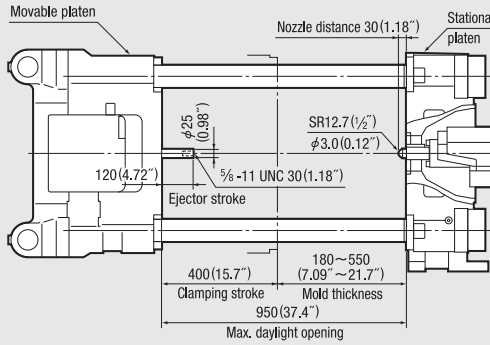


**HOPPER FIXATION DIAGRAM**

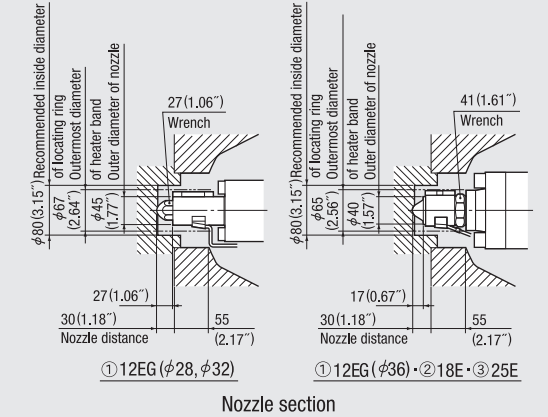
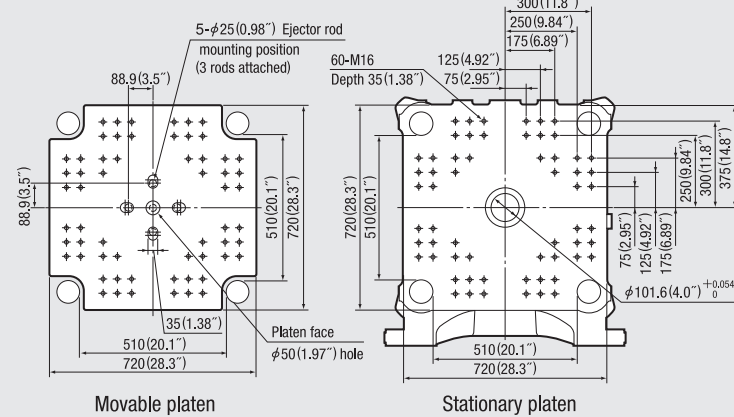
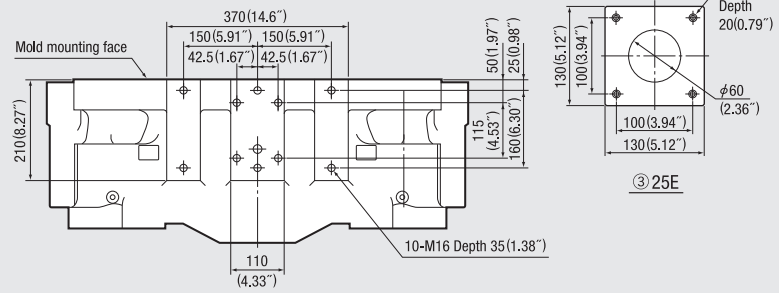


**MOLD ATTACHMENT DIAGRAM**

\* The minimum mold dimensions of 325 mm (12.8") (H) × 325 mm (12.8") (V) are required in order to achieve the maximum clamping force.



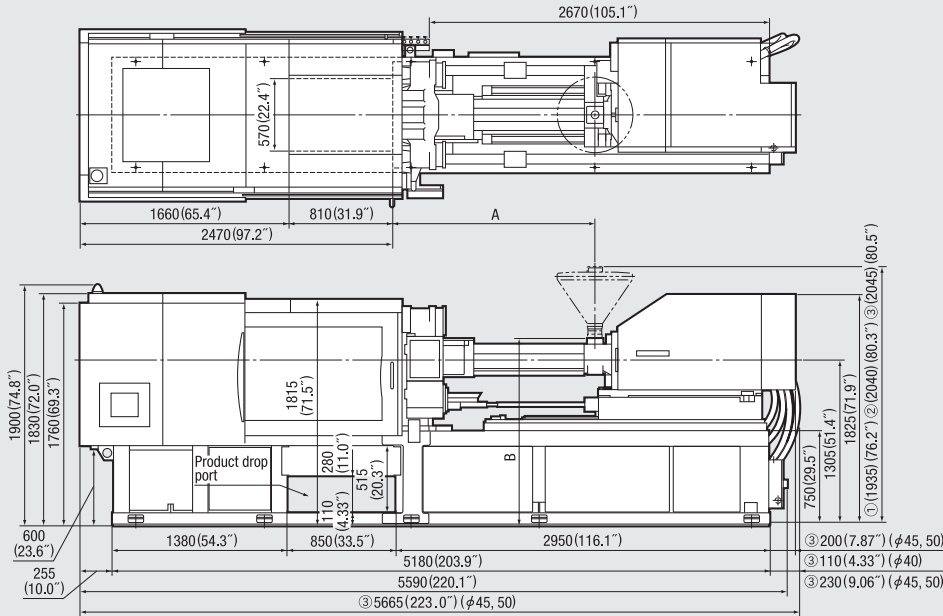
**ROBOT FIXATION DIAGRAM**



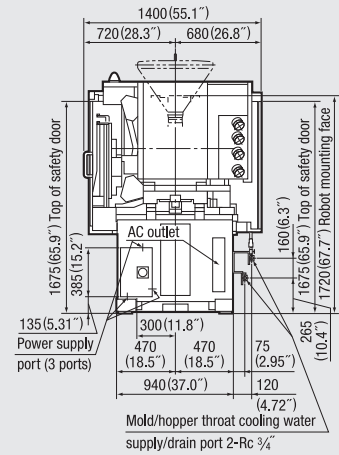
**NEX-IV Series** **NEX180IV-18E** / **NEX180IV-25E** / **NEX180IV-36E**

**Injection type:** ① 18E [Screw diameter:  $\phi$  32 (1.26") /  $\phi$  36 (1.42") /  $\phi$  40 (1.57")]  
 ② 25E [Screw diameter:  $\phi$  36 (1.42") /  $\phi$  40 (1.57") /  $\phi$  45 (1.77")]  
 ③ 36E [Screw diameter:  $\phi$  40 (1.57") /  $\phi$  45 (1.77") /  $\phi$  50 (1.97")]

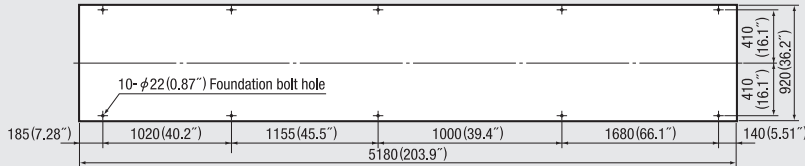
**EXTERNAL VIEW**



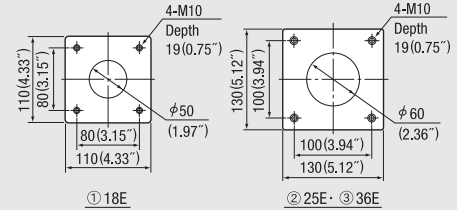
Injection type	Screw dia.	A	B
① 18E	32 (1.26")	825~1185 (32.5"~46.7")	1465 (57.7")
	36 (1.42")	995~1355 (39.2"~53.3")	
	40 (1.57")		
② 25E	36 (1.42")	915~1280 (36.0"~50.4")	1470 (57.9")
	40 (1.57")	1105~1470 (43.5"~57.9")	
	45 (1.77")		
③ 36E	40 (1.57")	1015~1380 (40.0"~54.3")	1475 (58.1")
	45 (1.77")	1220~1585 (48.0"~62.4")	
	50 (1.97")		



**FOUNDATION DIAGRAM**

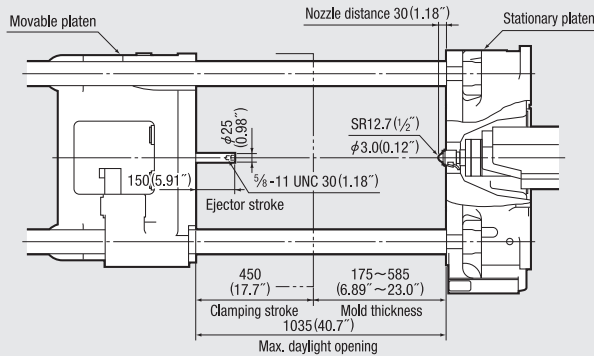


**HOPPER FIXATION DIAGRAM**

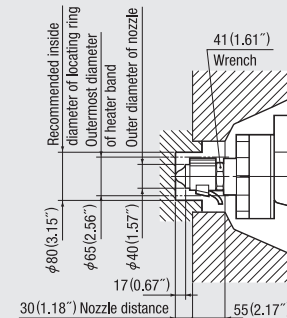
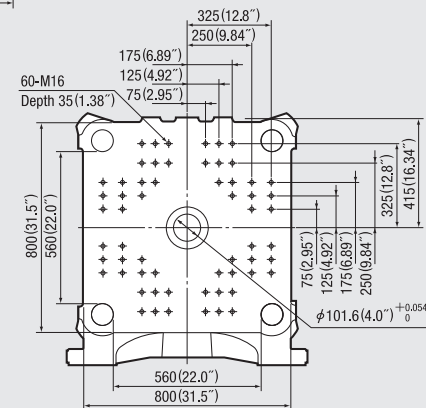
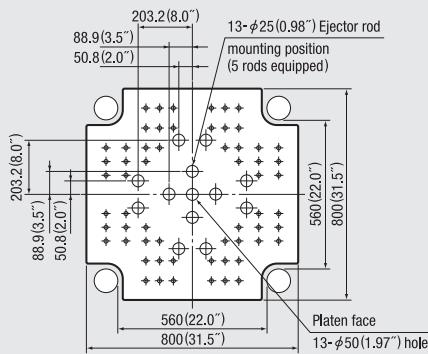
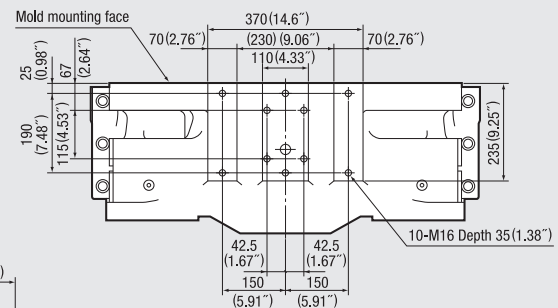


**MOLD ATTACHMENT DIAGRAM**

\* The minimum mold dimensions of 395 mm (15.6") (H) x 395 mm (15.6") (V) are required in order to achieve the maximum clamping force.



**ROBOT FIXATION DIAGRAM**



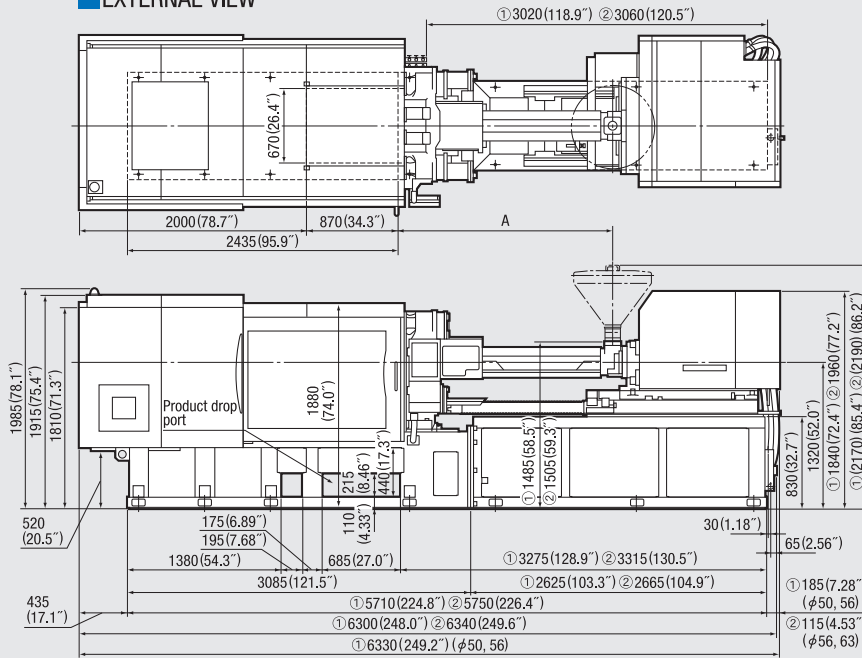
Movable platen

Stationary platen

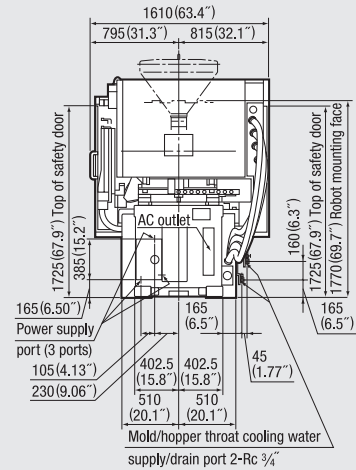
Nozzle section

Injection type: ① 50E [Screw diameter:  $\phi 45$  (1.77") /  $\phi 50$  (1.97") /  $\phi 56$  (2.2")]  
 ② 71E [Screw diameter:  $\phi 50$  (1.97") /  $\phi 56$  (2.2") /  $\phi 63$  (2.48")]

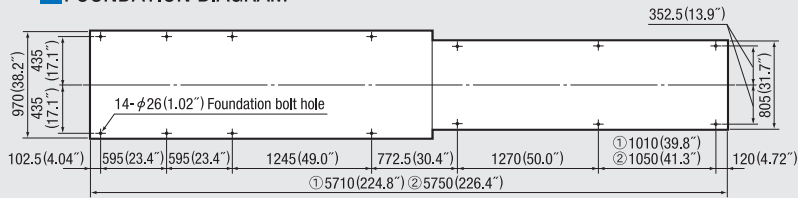
**EXTERNAL VIEW**



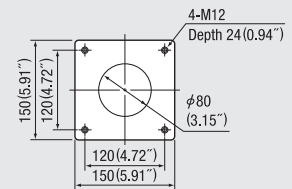
Injection type	Screw dia.	A
① 50E	45 (1.77")	1147~1527 (45.2"~60.1")
	50 (1.97")	1374~1754 (54.1"~69.1")
	56 (2.2")	1279~1659 (50.4"~65.3")
② 71E	50 (1.97")	1279~1659 (50.4"~65.3")
	56 (2.2")	1547~1927 (60.9"~75.9")
	63 (2.48")	1547~1927 (60.9"~75.9")



**FOUNDATION DIAGRAM**

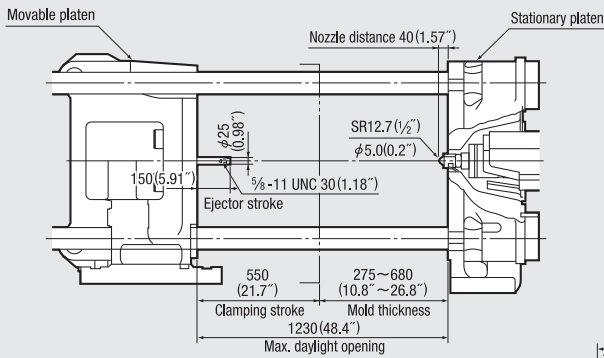


**HOPPER FIXATION DIAGRAM**

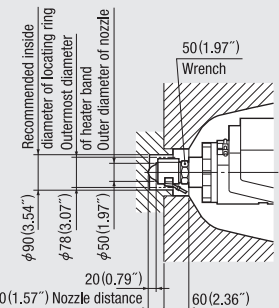
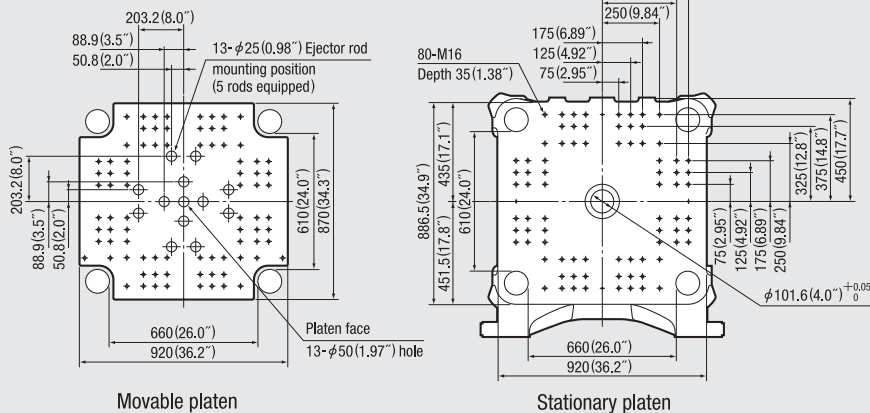
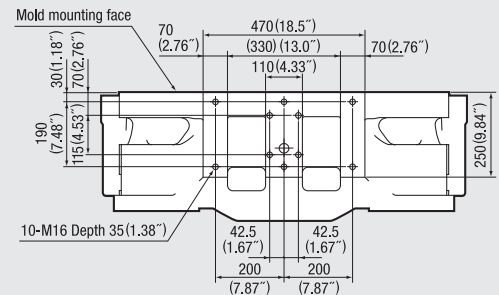


**MOLD ATTACHMENT DIAGRAM**

\* The minimum mold dimensions of 415 mm (16.3") (H) × 415 mm (16.3") (W) are required in order to achieve the maximum clamping force.



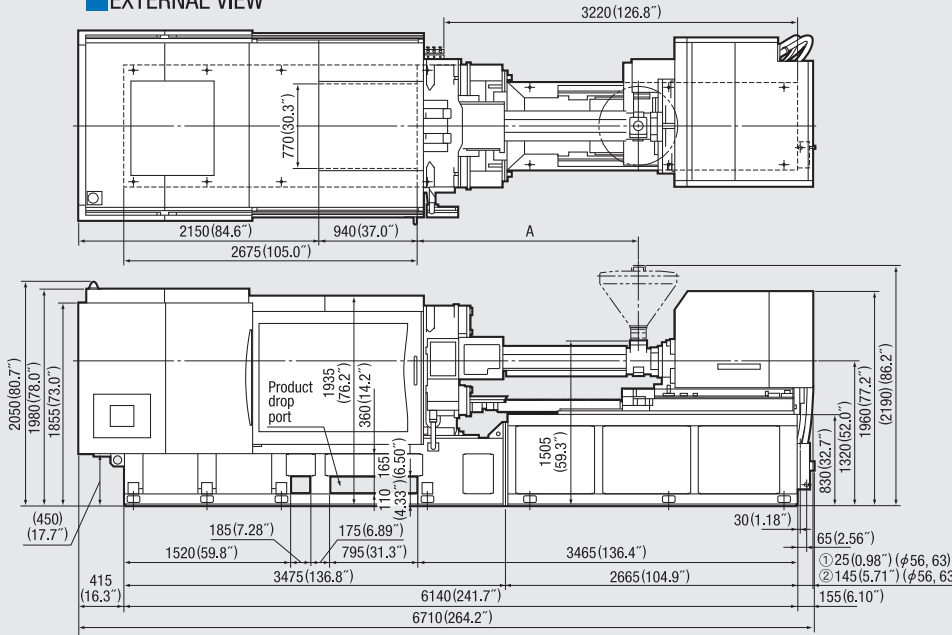
**ROBOT FIXATION DIAGRAM**



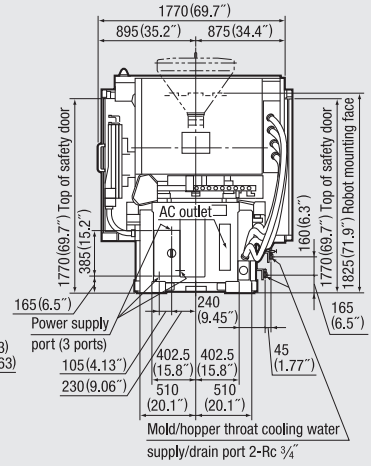
**NEX-IV Series** **NEX280IV-71E / NEX280IV-100LE**

Injection type: ① 71E [Screw diameter:  $\phi 50$  (1.97") /  $\phi 56$  (2.2") /  $\phi 63$  (2.48")]  
 ② 100LE [Screw diameter:  $\phi 50$  (1.97") /  $\phi 56$  (2.2") /  $\phi 63$  (2.48")]

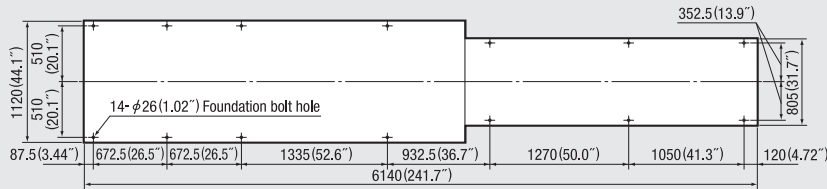
**EXTERNAL VIEW**



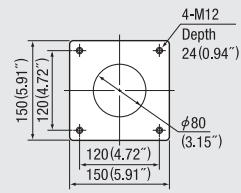
Injection type	Screw dia.	A
① 71E	50 (1.97")	1270~1720 (50.0"~67.7")
	56 (2.2")	1535~1985 (60.4"~78.1")
	63 (2.48")	1565~2015 (61.6"~79.3")
② 100LE	50 (1.97")	1260~1710 (49.6"~67.3")
	56 (2.2")	1565~2015 (61.6"~79.3")
	63 (2.48")	1565~2015 (61.6"~79.3")



**FOUNDATION DIAGRAM**

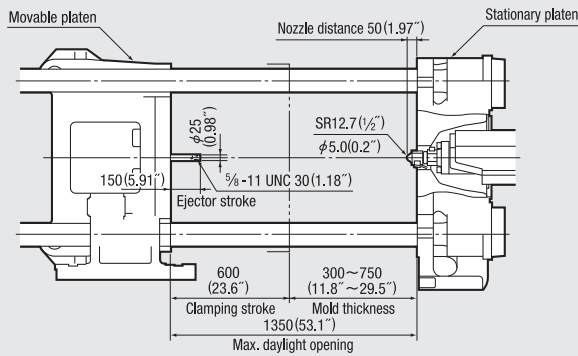


**HOPPER FIXATION DIAGRAM**

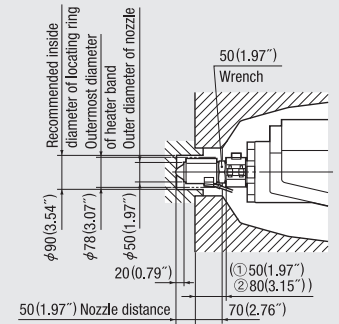
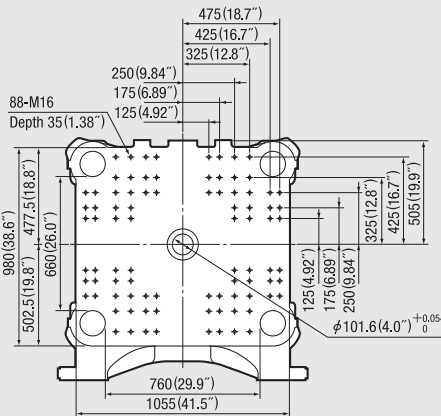
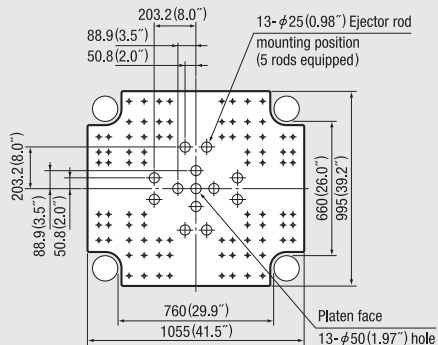
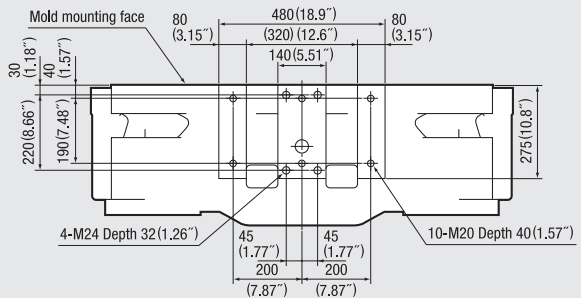


**MOLD ATTACHMENT DIAGRAM**

\* The minimum mold dimensions of 465mm (18.3") (H) × 465mm (18.3") (V) are required in order to achieve the maximum clamping force.



**ROBOT FIXATION DIAGRAM**



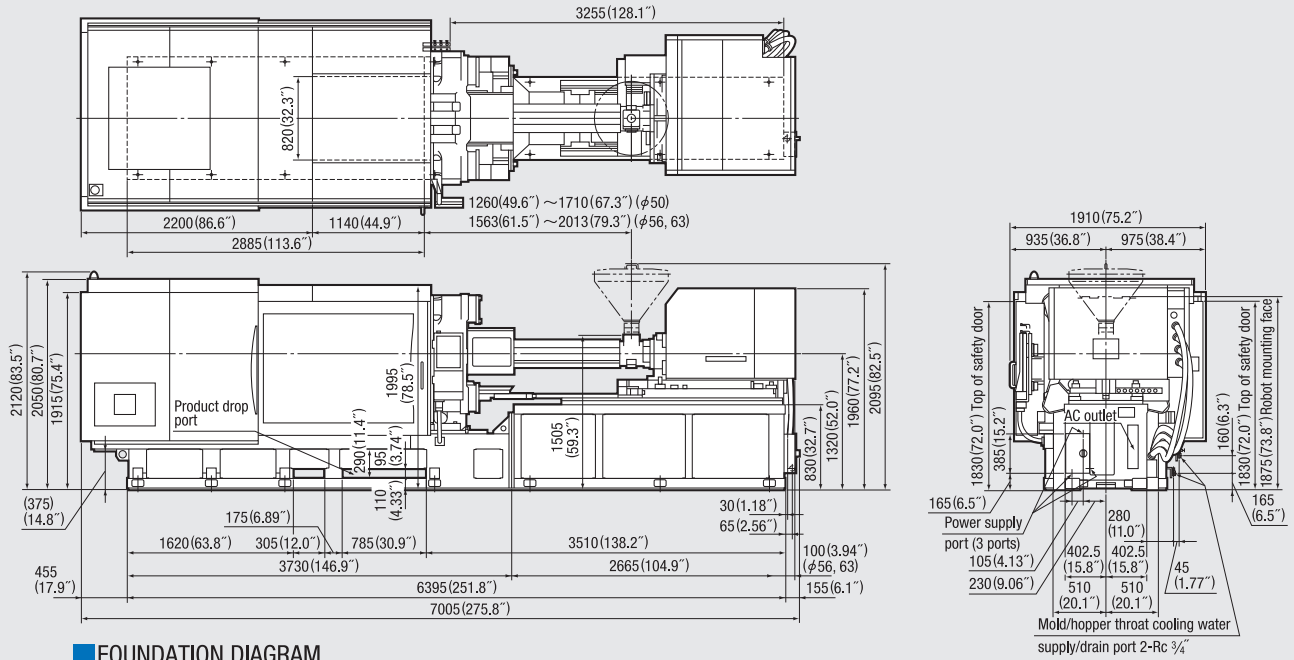
Movable platen

Stationary platen

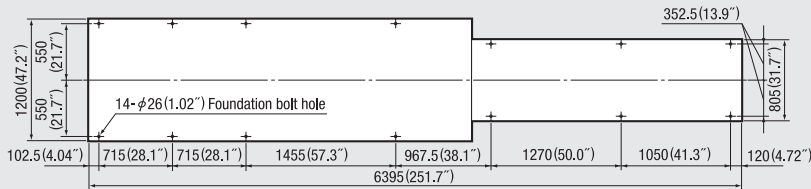
Nozzle section



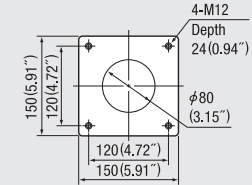
**EXTERNAL VIEW**



**FOUNDATION DIAGRAM**

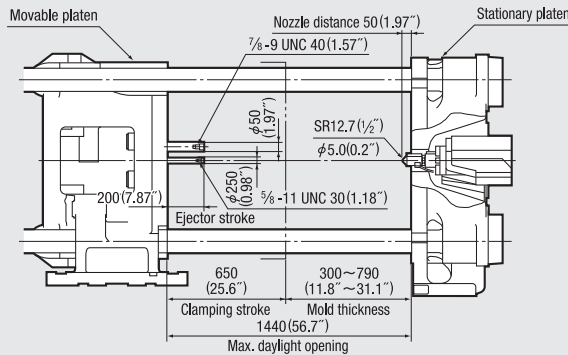


**HOPPER FIXATION DIAGRAM**

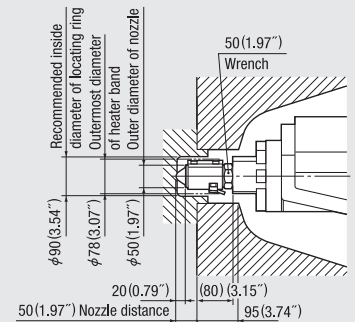
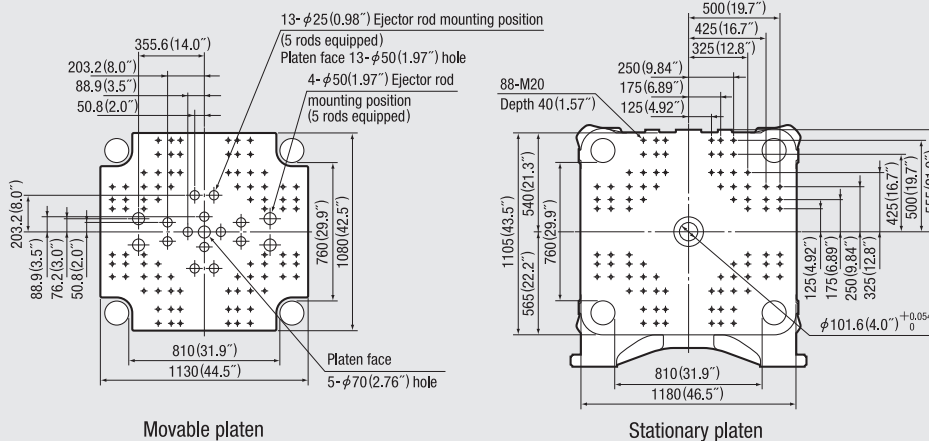
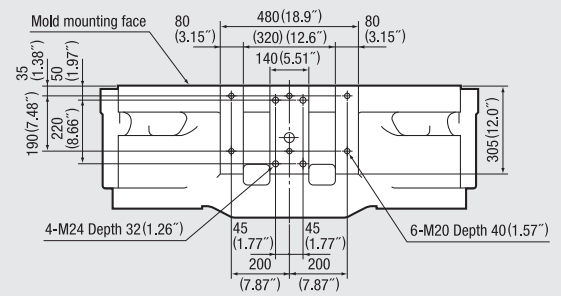


**MOLD ATTACHMENT DIAGRAM**

\* The minimum mold dimensions of 520 mm (20.5") (H) × 520 mm (20.5") (V) are required in order to achieve the maximum clamping force.



**ROBOT FIXATION DIAGRAM**

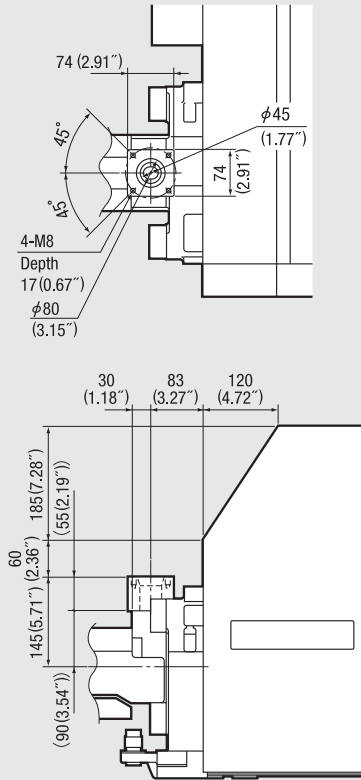


Movable platen

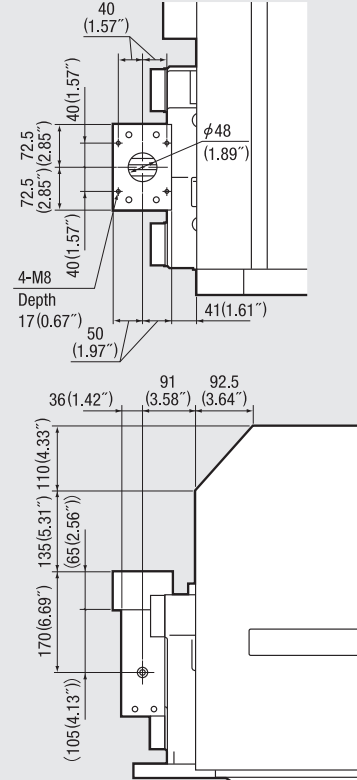
Stationary platen

Nozzle section

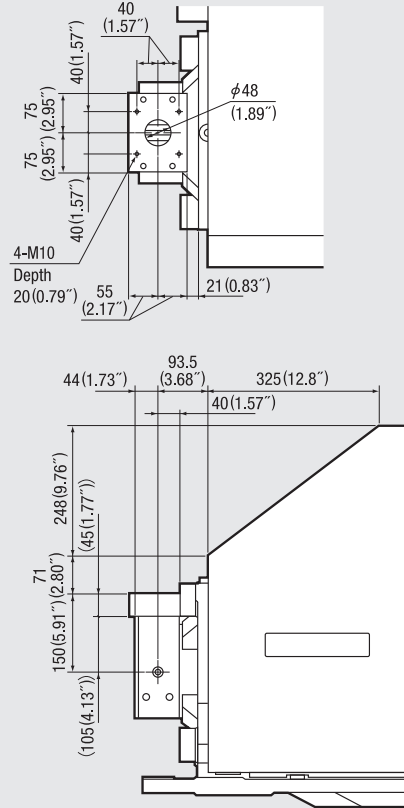
Injection type 2EG



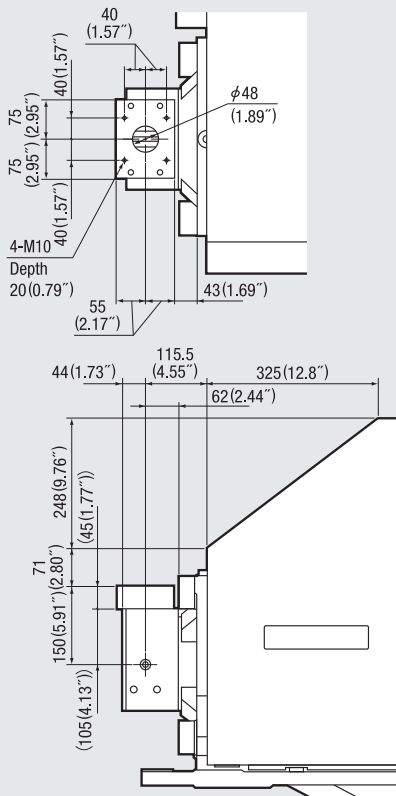
Injection type 3EG, 5EG



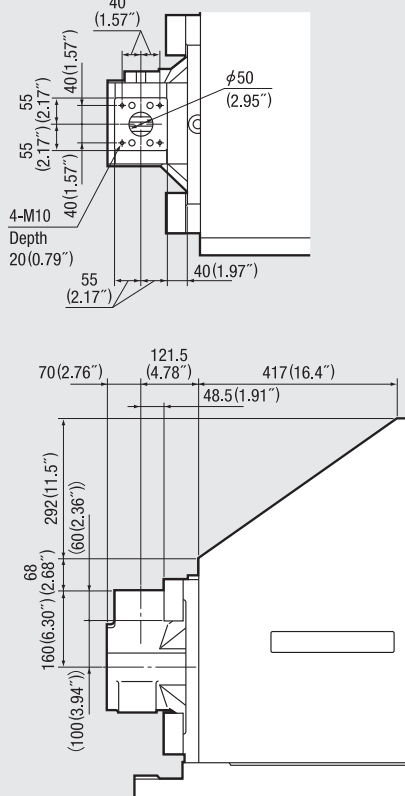
Injection type 9EG



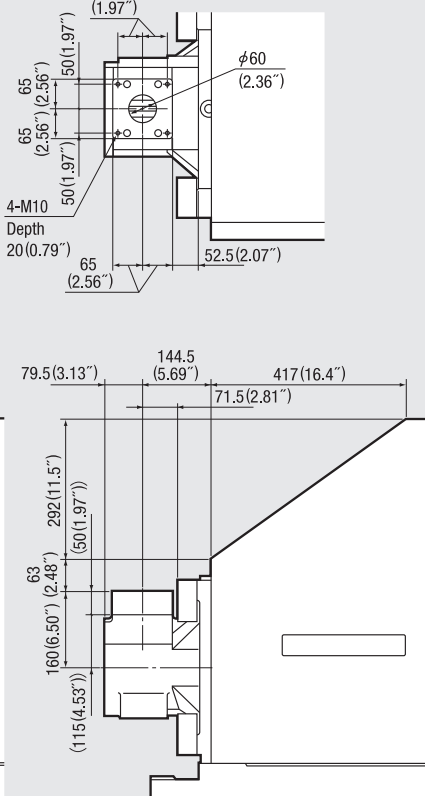
Injection type 12EG



Injection type 18E

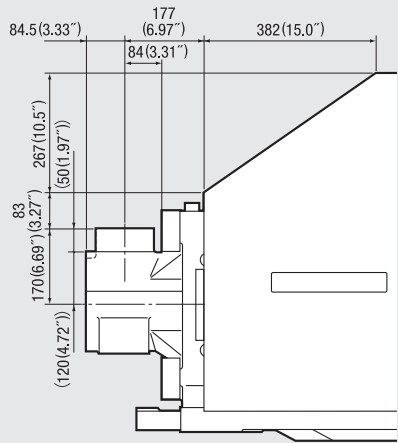
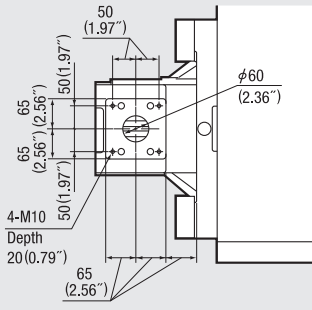


Injection type 25E

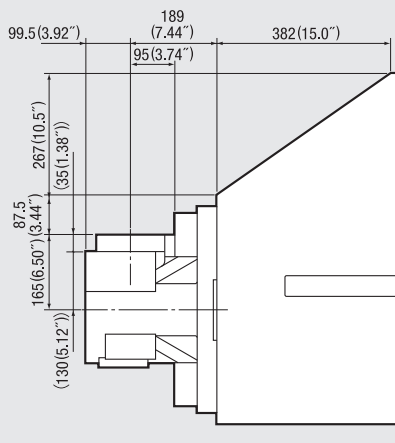
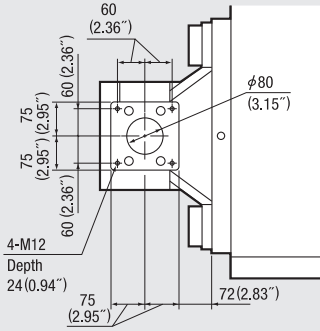


**NEX-IV Series** | **Diagram of hopper installation sections**

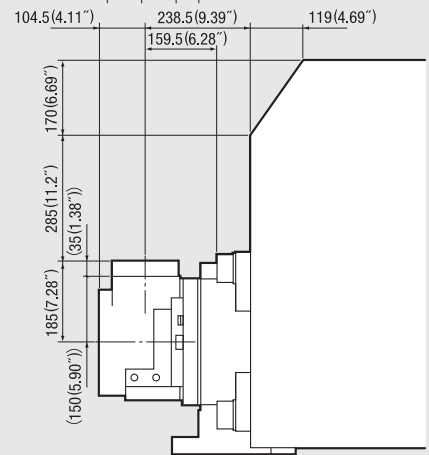
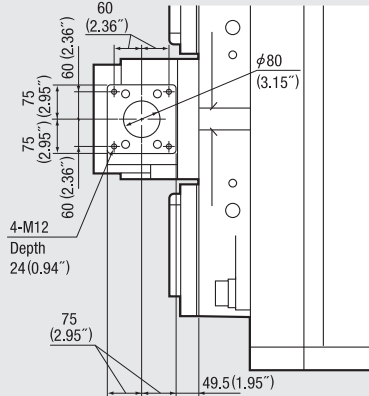
■ Injection type 36E



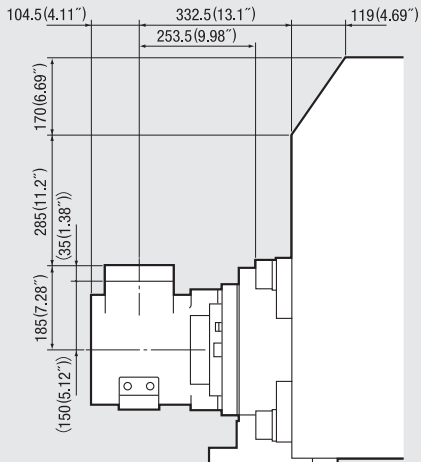
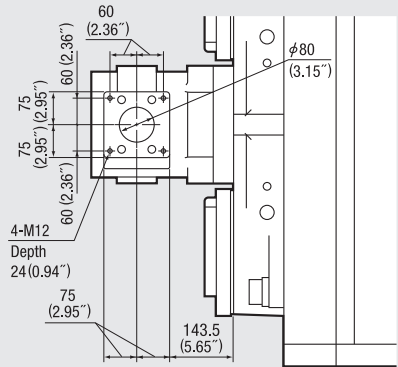
■ Injection type 50E



■ Injection type 71E



■ Injection type 100LE





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