NEX80Ⅲ-12EG(Equipped with options)

Technological Solutions from NISSEI
Smart Technology

01 Eliminating Molding Defects
- Plasticization Stability Improved by "the All-New Plasticization Device" (2EG~12EG)
- High-Precision Metering Control "Pre Pack Ⅱ"

02 Increasing Productivity
- "Linear Pressure Toggle," which possesses the advantages of toggle mechanism and characteristics similar to the Straight-Hydraulic Clamping System
- Shorter Molding Cycle
- Environmental Load Reduction by Energy-Efficient Performance

03 Expanding Moldable Range
- Faster, Higher, and Quicker Response Injection Velocity/Pressure
- Versatile V-P Changeover Methods
- V-P Changeover Reaction Control
- K-SAPLI: Low-Pressure Molding System for Electric Type Injection Molding Machine
- High-Quality Molding by Clamping Compression Molding (CPN3)
- Simplifying Operation Process by Mold Inside Process (MIP)
- Electric Type Machines for Special Applications
- Excellent "Clean Operation" in Clean Room under Class 10,000

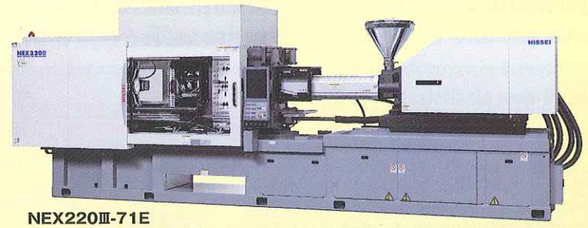
04 Protecting Mold
- High-Sensitivity Mold Protection

05 Comprehending the Manufacturing Operations
- Reinforcing Quality Control Function to Grasp Productions

06 Improving Operability
- High-Performance & High-Functional Controller TACT Ⅳ

NEX-Ⅲ Series

NEX50Ⅲ-5EG
(Japanese specifications)



NEX220Ⅲ-71E
(Japanese specifications)

ELJECT ELECTRIC TYPE

Clamping unit

It possesses the characteristics similar to the direct pressure mechanism, yet it utilizes the advantages of the toggle mechanism…"Linear Pressure Toggle" materialized!

Injection unit

New type plasticization device with further stability developed!

Controller

A large 15-inch vertical LCD controller and premium software make it even easier to use!

Variations & injection specifications

Clamping unit / Clamping force	Injection unit	Screw diameter / Max. injection pressure			Injection velocity: Standard	High velocity	High load
NEX15Ⅲ 16.5 US tons	2EG	mm / inch	14※ / 0.55	16 / 0.63	19 / 0.75	mm/s / in/s	500 / 19.7	350 / 13.8
		Mpa / psi	225 / 36970	265 / 38380	196 / 28440			
NEX30Ⅲ 33 US tons	3EG	mm / inch	19 / 0.75	22 / 0.87		mm/s / in/s	500 / 19.7	
		Mpa / psi	265 / 38400	210 / 30430				
NEX50Ⅲ 55 US tons	5EG	mm / inch	22 / 0.87	26 / 1.02	28 / 1.1	mm/s / in/s	500 / 19.7	350 / 13.8
		Mpa / psi	280 / 40560	196 / 28440	169 / 24530			
NEX80Ⅲ 88 US tons	9EG	mm / inch	26 / 1.02	28 / 1.1	32 / 1.26	mm/s / in/s	300 / 11.8	500 / 19.7	300 / 11.8
		Mpa / psi	280 / 40560	243 / 35300	186 / 27020				
NEX110Ⅲ 121 US tons	12EG	mm / inch	28 / 1.1	32 / 1.26	36 / 1.42	mm/s / in/s	270 / 10.6	400 / 15.7	240 / 9.4
		Mpa / psi	280 / 40530	223 / 32400	177 / 25600				
NEX140Ⅲ 154 US tons	18E	mm / inch	32 / 1.26	36 / 1.42	40 / 1.57	mm/s / in/s	200 / 7.9	300 / 11.8	200 / 7.9
		Mpa / psi	276 / 40000	218 / 31600	177 / 25600				
	25E	mm / inch	36 / 1.42	40 / 1.57	45 / 1.77	mm/s / in/s	180 / 7.1	270 / 10.6	180 / 7.1
		Mpa / psi	261 / 37780	211 / 30600	167 / 24180				
NEX180Ⅲ 198 US tons	36E	mm / inch	40 / 1.57	45 / 1.77	50 / 1.97	mm/s / in/s	180 / 7.1	270 / 10.6	180 / 7.1
		Mpa / psi	260 / 37770	206 / 29850	167 / 24180				
NEX220Ⅲ 242 US tons	50E	mm / inch	45 / 1.77	50 / 1.97	56 / 2.20	mm/s / in/s	180 / 7.1	270 / 10.6	180 / 7.1
		Mpa / psi	250 / 36275	202 / 20308	161 / 123364				
	71E	mm / inch	50 / 1.97	56 / 2.20	63 / 2.48	mm/s / in/s	160 / 6.3	200 / 7.9	160 / 6.3
		Mpa / psi	249 / 36120	199 / 28870	157 / 22750				
NEX280Ⅲ 309 US tons	100LE	mm / inch	50 / 1.97	56 / 2.20	63 / 2.48	mm/s / in/s	160 / 6.3	200 / 7.9	160 / 6.3
		Mpa / psi	249 / 36120	199 / 28870	157 / 22750				
NEX360Ⅲ 397 US tons	140LE	mm / inch	63 / 2.48	71 / 2.80		mm/s / in/s	160 / 6.3		
		Mpa / psi	201 / 29150	158 / 22900					
NEX460Ⅲ 507 US tons	210LE	mm / inch	80 / 3.10	90 / 3.50		mm/s / in/s	160 / 6.3		
		Mpa / psi	186 / 27020	147 / 21330					

Standard combination

※2EG φ14 screw is available for NEX15Ⅲ only.

01 Eliminating Molding Defects

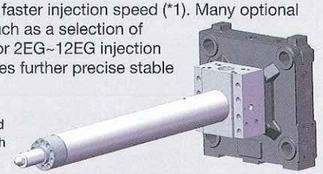
Plasticization Stability Improved by "the All-New Plasticization Device" (2EG~12EG) *New!!*

It solves plasticization problems caused by the materials that are prone to become unstable due to cycle time and resin temperature factors.

The all-new plasticization device

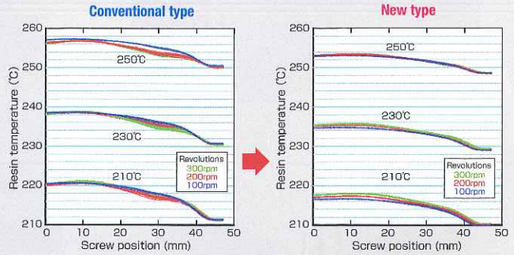
In order to reduce molding defects, the barrel temperature control zones have been subdivided and optimized to improve plasticization performance. New NEX Series offers improved basic functions, such as higher injection pressure and faster injection speed (*1). Many optional features are also available, such as a selection of high precision specification for 2EG~12EG injection unit classes, which materializes further precise stable molding.

(*1) Faster injection speed: improved injection velocity for 9E~50E high speed specifications



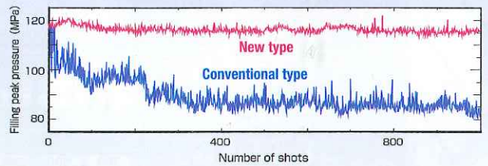
▲Image of "the all-new plasticization device"

▼Improved resin temperature stability (PP)



Effect of the all-new plasticization device

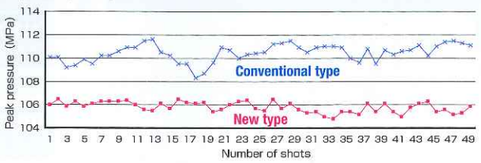
▼Improved LCP molding startup stability



▼Improved molding stability in processing non-reinforced PBT

Injection end position

Injection peak pressure



▼Stability evaluations of the materials containing regrind (non-reinforced PBT)

		Plasticization time (s)	Average metering torque (%)	Peak pressure (MPa)	Most forward position (mm)
Virgin material	Ave.	2.49	14.39	134.4	3.53
	Range	0.07	0.31	3.3	0.01
	SD	0.0134	0.0734	0.5482	0.0049
Regrind rate50%	Ave.	2.55	13.77	128.9	3.53
	Range	0.08	0.60	3.1	0.02
	SD	0.0138	0.0992	0.6154	0.0041
Regrind rate70%	Ave.	2.56	13.51	127.9	3.53
	Range	0.07	0.45	1.7	0.03
	SD	0.0141	0.1001	0.3942	0.0040

High-Precision Metering Control "Pre Pack Ⅱ" *New!!* OPTION

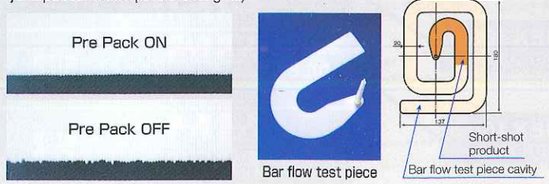
It materializes stable metering with a standard screw tip as well as automatically setting key control parameters to the optimum conditions.

What is "Pre Pack"?

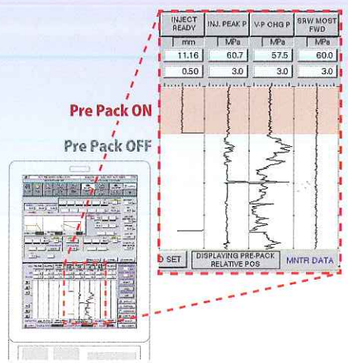
Metering → Pre-injection → Reversing → Injection

It maintains consistency in metering density and injection volume and stabilizes the check valve response. It is effective for suppressing fluctuations due to inconsistencies, such as processing regrind materials and materials from different lot.

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



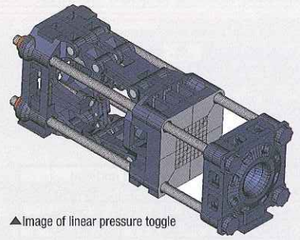
Improved filling pressure stability in processing PPS



02 Increasing Productivity

"Linear Pressure Toggle," which possesses the advantages of toggle mechanism and characteristics similar to the Straight-Hydraulic Clamping System

Movable platen and center-supported stationary platen, which are designed through the structural analysis, materialize less deflection and ensure uniform clamping force transmission.

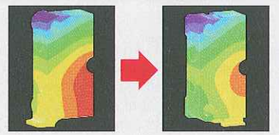


▲Image of linear pressure toggle

Linear pressure toggle

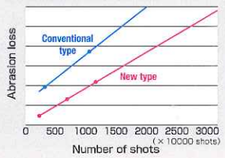
The clamping unit is equipped with a Flat Clamp mechanism, automatic clamping force adjuster, and direct clamping force setting to materialize uniform clamping force transmission. Rigidity and wear-resistance of almost every component for sliding surfaces, such as toggle pins and movable platen slide, has been improved. This machine utilizes the high-cycle property of a toggle mechanism while possessing the characteristics similar to the straight-hydraulic clamping system.

Structural analysis of stationary platens [Displacement] ... Displaying 1/2 of the die plate



Conventional type (both-end support) — New type (one-point center support)

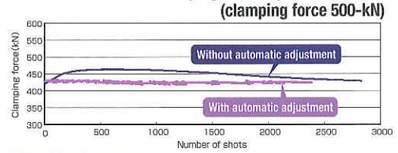
Comparison of abrasion loss of the new toggle pin ... Approximately twice as durable as existing toggle pins



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. (Not available for NEX460Ⅲ)

▼Effect of automatic clamping force adjustment (clamping force 500-kN)



Direct clamping force setting

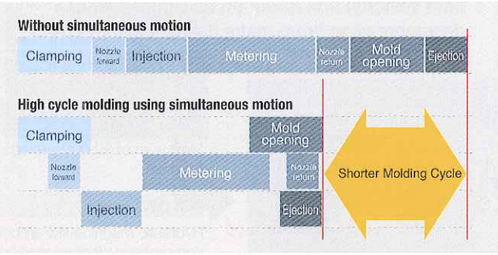
Just like a straight-hydraulic machine, changing clamping force setting during continuous molding operation is possible. (Not available for NEX460Ⅲ)

Simple setting

▲Automatic clamping force adjustment/direct clamping force settings

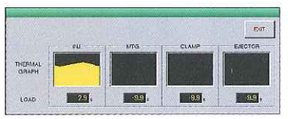
Shorter Molding Cycle

Simultaneous motion control, which is peculiar to electric type injection molding machines, is provided as a standard feature.



Support for higher cycle molding

Servomotor load monitoring function comes standard, permitting molding that requires long pressure holding time or faster cycle.



▲Servomotor load monitoring function

High-cycle mass production by general-purpose machine materialized

May 12, 2008, Nikkan Kogyo Shimbun (The Business & Technology Daily News) Copyright 2008 THE NIKKAN KOGYO SHIMBUN, LTD.

One-second molding of connectors allowed 75% cut in production cost

Environmental Load Reduction by Energy-Efficient Performance

NISSEI supports their customers to reduce environmental load from the molding plants.

Reduction of power consumption and heat-up time New plasticization device on 2~12EG

New plasticization device equipped machines consume 8% less energy than conventional types, and heat-up time to reach preset temperature is 25% quicker. Quicker heat-up time also means saving time for material/color change, purging, and setup, contributing to improve productivity further.

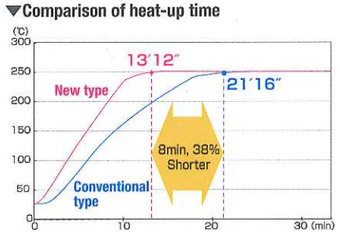
Barrel heat retention cover OPTION

It saves about 7% of power consumption compared to the standard barrel cover.

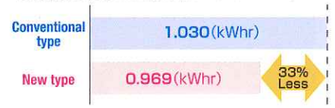
Hybrid hydraulic unit OPTION

Hydraulic pump unit is used for mold's core movement.
Hybrid hydraulic unit consumes 40% less energy and achieves 70% less CO_2 emission compared to the conventional variable pumps.

▼Comparison of heat-up time



▼Comparison of integral power consumption



03 Expanding Moldable Range

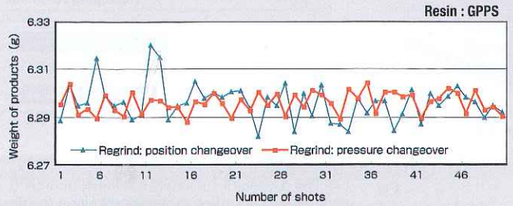
Faster, Higher, and Quicker Response Injection Velocity/Pressure

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

Versatile V-P Changeover Methods

Versatile 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
σn	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 control comes standard. Selections of ideal changeover methods according to the type of molded products can be selected.

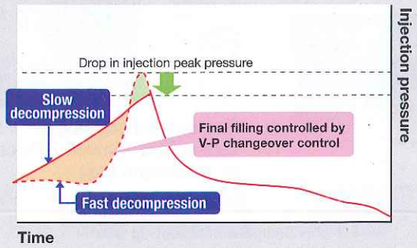
Four pressure control modes

"Pressure/positioning/pressure⇒positioning /positioning ⇒pressure" pressure control comes 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.

Infinitely variable control of compression/decompression is possible with the V-P changeover reaction control. Various kinds of delicate compression/decompression and final filling, which majorly affects the quality of the molded products, can be controlled freely. It is highly effective in reducing many types of molding defects.



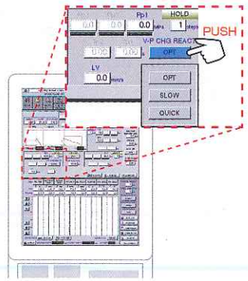
Improve defective appearance

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

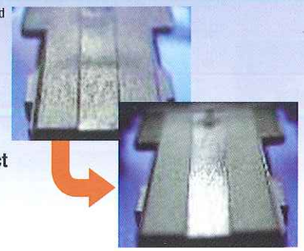
"SLOW" mode
Hydraulic machine-like smooth compression/decompression that eliminates sink marks

"QUICK" mode
Quick compression/ decompression that eliminates flashes

Example: effect on sink mark

Product with sink mark

Sink mark appeared due to fast decompression

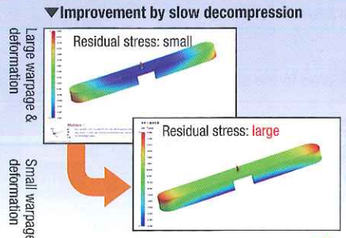


Good product

Sink mark improved by slow decompression

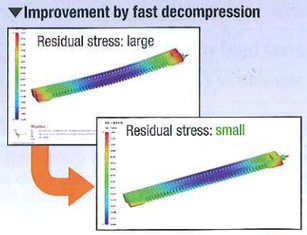
Example: effect on warping and twisting

▼Improvement by slow decompression



Deformation amount down to 1/2!

▼Improvement by fast decompression

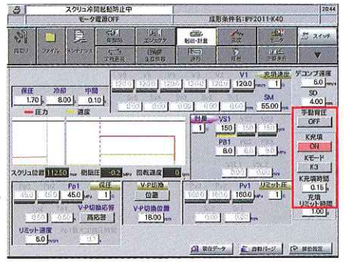


Deformation amount down to 1/10!

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

It can reduce the workload for molding engineers.

SAPLI Series is a low-pressure molding software application that brings profits by helping users to increase yield, reduce mold maintenance work, and lower running cost.



SAPLI Series... A supplement that materializes smarter injection molding
Smart Applications for PLastic Injection

Reduce molding defects
Reduce flash, warpage, sink mark, burn, and short shot as well as facilitating gas release

Shorten cycle
Shorten injection (holding pressure) time and cooling time

Expand moldable range (range of condition to mold quality products)
Simplify molding condition

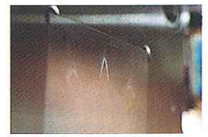
Longer service life of mold
Reduce mold maintenance cost

Workload reduction effect by zero clamping force molding

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

◀Image of molded product

▼Comparison of mold surfaces

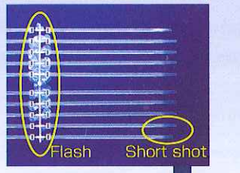


Clamping force: 15t
Mold deposits were observed on the mold surface

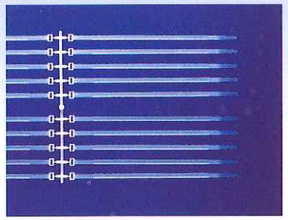
Clamping force: 0t
It can reduce the workload for mold maintenance.

Example1: eliminating flash and short shot

Normal molding with a 20-cavity unequal length runner mold has had bad filling balance, and flash and short shot were observed. K-SAPLI eliminated the problems.

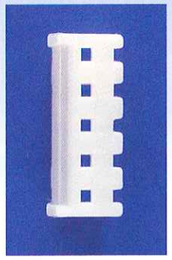


Molded product: cable ties
Resin : PP



Example2: eliminating gas burn and sink mark

Molded product: connector
Resin: PBT (reinforced)



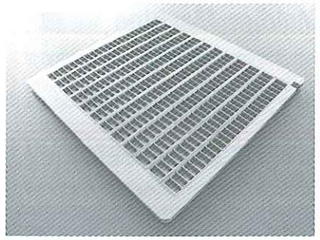
Normal molding with a 4-cavity connector mold has had bad filling balance, and gas burn and sink mark caused by insufficient gas release were observed in one of the cavities. K-SAPLI eliminated the problems.

Excellent "Clean Operation" in Clean Room under Class 10,000

The amount of particle emission during continuous operation in an enclosed clean room is very minimal.

Example: cleanroom

Scattering of grease and oil mist peculiar to the electric machines is minimal, and NISSEI electric machines have been continuously running in clean rooms under Class 10,000.



High Quality Molding by Clamping Compression Molding (CPN3)

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

Example: effect of clamping compression molding (CPN3)

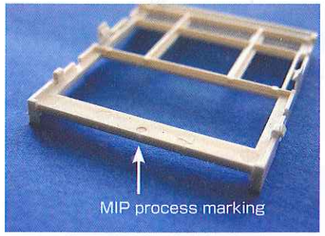
Molding defect — Warpage and deformation due to the filling pressure and residual stress were occurred. Change in injection velocity and holding pressure condition did not solve the problem.

CPN3 — Reducing the stress on the molded products
Facilitating gas release

Improve — The residual stress was reduced by the CPN3's clamping compression effect. Warpage and deformation were significantly reduced, and molding of non-defective products were made possible.

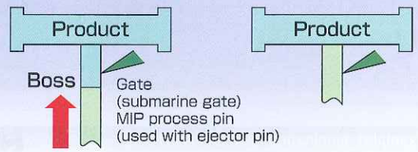
Simplifying Operation Process by Mold Inside Process (MIP)

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



Example: use of mold inside process (MIP)

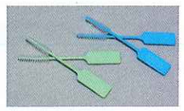
This is a gate cutting method that forwards MIP process pin by ejector forward motion before the boss cools and solidifies, and the resin filled inside the boss is pushed into the cavity. This eliminates the finishing process and has partial compression effect since the resin inside the boss is pushed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



Electric Type Machines for Special Applications

NISSEI special-purpose machines are highly reputed for special material processing and molding methods, such as liquid silicone rubber and microcellular foam moldings.

Liquid silicone rubber (LSR) injection molding machine
NEX80Ⅲ-9ELM



◀Example of LSR molding
[Tooth brush]

Main equipment for liquid silicone rubber (LSR) injection molding machine

1	Molding machine cooling circuit
2	Water jacket
3	Mold temperature controller (display)
4	Shut off nozzle (RV)
5	Heat shield
6	Vacuum circuit (vacuum drawing)
7	Machine specification chart
8	Material permutation
9	Foaming stop circuit
10	Cooling time display
11	Material shut off valve (~12E)
12	Material feeding device (pressure pump)
13	Chiller (cooling device)*
14	Vacuum pump*
15	LSR metering device (2-liquid)*
16	Liquid B permutation
17	Material hose
18	Anti-freeze measures
19	Material feeding port temperature control circuit

Metering device specifications

Injection type	Metering device volume
2E	20cc
5E	50cc
9E	90cc
12E	120cc

Pressure pump specifications

Pressure pump type	Output volume
1kg	6cc/cycle
4kg	6cc/cycle
5kg	6cc/cycle
18L pail can	30cc/cycle
200L drum	100cc/cycle

* These auxiliary equipments are only supported on the injection molding machine side.

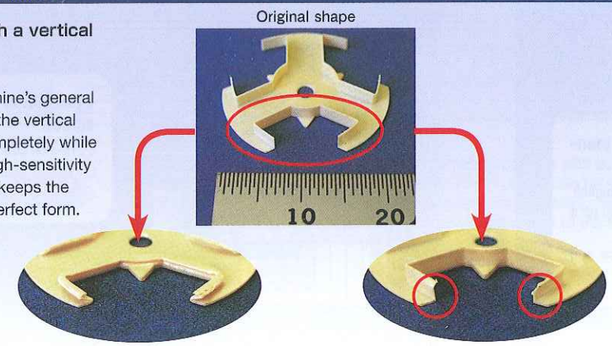
High-Sensitivity Mold Protection

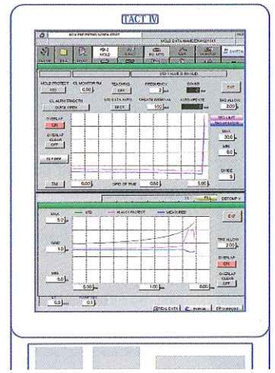
It opens mold instantaneously with "ultra high-speed reaction" after detecting a foreign object during mold close to protect valuable mold.

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-Ⅲ Series with the high-sensitivity mold protection function keeps the original shape in nearly perfect form.





▲Mold protection

Reinforcing Quality Control Function to Grasp Productions

It permits networking of machines as well as accumulating and handing down the molding expertise.

Reinforced product pass/fail judgment function

- Arbitrary selection of all process monitoring categories
- Full-range monitoring of injection pressure waveform

Numerical support of molding conditions by the automatic scatter diagram analysis and waveform analysis

- A variety of useful features that support the optimization of molding conditions
- Automatic scatter diagram analysis, waveform analysis, and monitor data trend graph display functions

Significantly larger operation data storage capacity

- Event/monitor data: max. 100,000 events
- Molding condition: max. 500 conditions

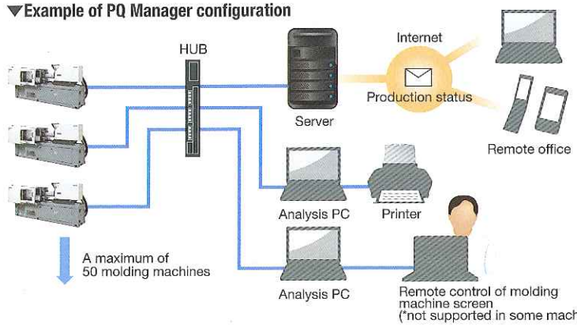
LAN and USB come standard

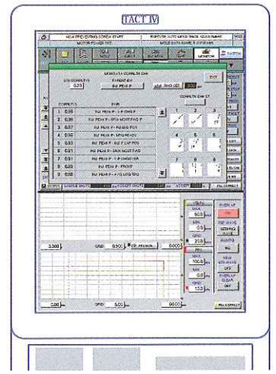
Remote control and diagnosis from a PC via LAN

Connection capability to the quality & production management system PQ Manager (sold separately)

PQ Manager is package software that collects and analyzes quality/production information for up to 50 molding machines. It handles versatile applications, ranging from the quality analysis of one machine to the cluster management of multiple machines, offering 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

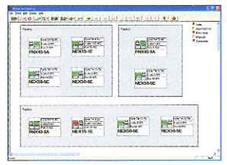




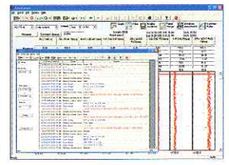
▲Correlation analysis/injection pressure monitoring

PQ Manager's status monitoring screen

▲Operation/stop



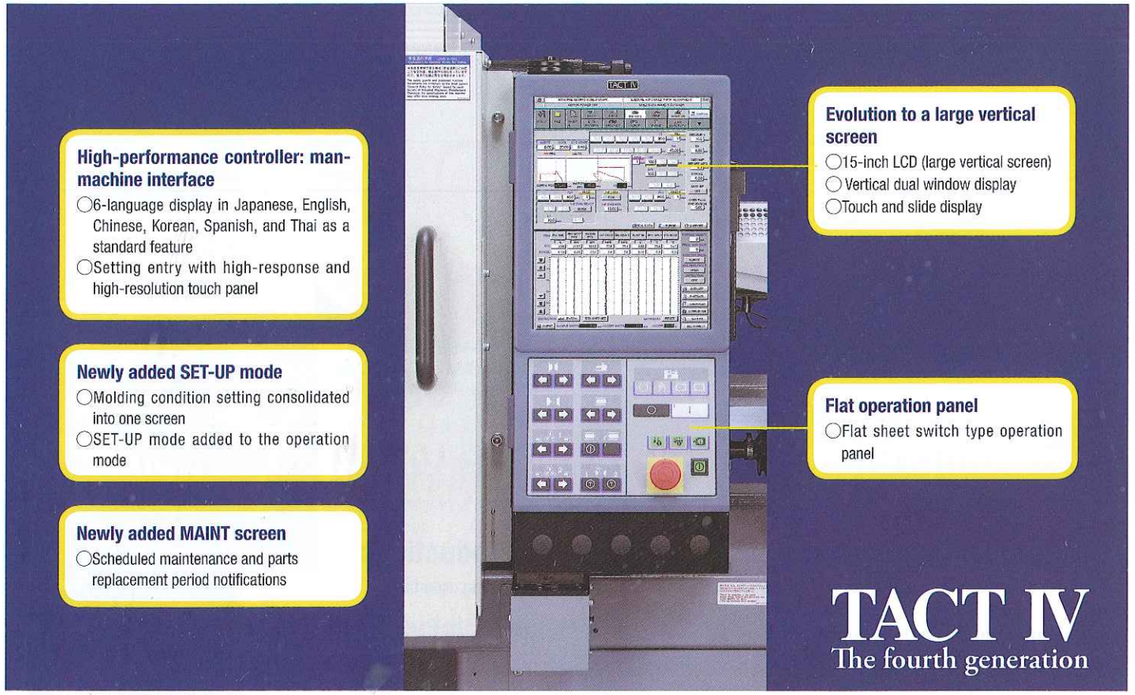
▲Molding machine status monitoring



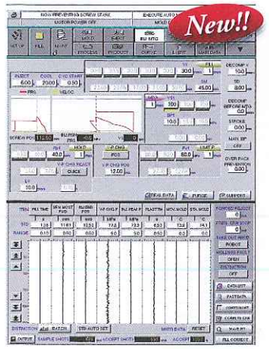
▲Trend

High-Performance & High-Functional Controller TACT Ⅳ

Materialize molding you desire…the new controller that pursues better operability and workability



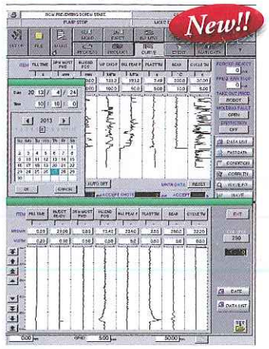
Easier to Use



▲ Bright and easy-to-see vertical dual window display

The combination of two windows can be selected, such as mold trend data and molding condition windows. It meets the needs of the molding operators to minimize troublesome screen switching.

Traceability Support

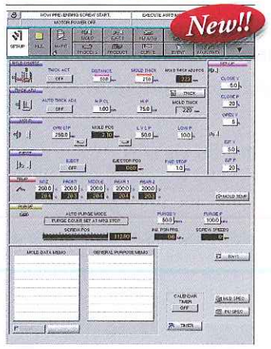


▲Calendar

Date specified event and monitor data display became 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.).

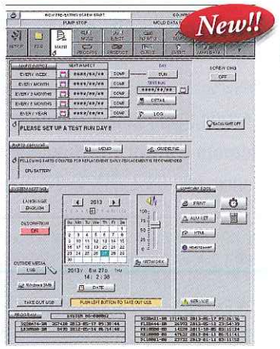
SET-UP Mode/SET-UP Screen



▲SET-UP screen

Troublesome screen switching during setup has been eliminated. Setting related to molding setup is consolidated onto one page. When SET-UP mode is selected, it automatically switches the screen.

Enriched Maintenance Functions

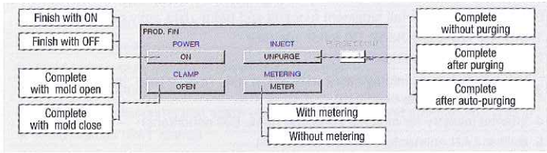


▲Newly added MAINT screen

TACT IV can notify when recommended scheduled maintenance and consumable parts replacement time arrive, and its related notes can be entered. It can notify arbitrary messages, such as for mold, screw, lubrication, maintenance period, etc. on specified dates or shots. Remote control of TACT screen from a PC via LAN is also possible.

Shutdown Sequence

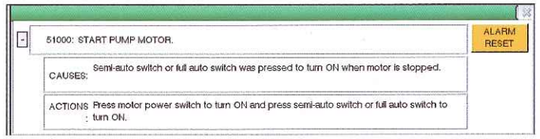
A variety of finishing states after completing production is available. Operating power state and shutdown sequence for each driving units can be freely selected.



▲Selection of shutdown sequence after completing production

Descriptions of Errors

It displays error message and solution.



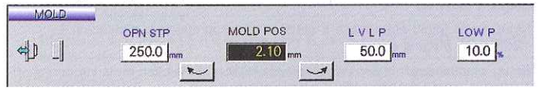
▲Error message and its solution (touch [Error message] to show details)

Automatic Mold Thickness Adjustment Function Mold Position Reading Function

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

▲Automatic mold thickness adjustment

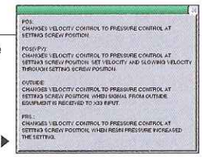
Mold open stop position and low-speed/low-pressure position can be set with a simple step.



▲Mold Position Reading

Descriptions of Adjusters

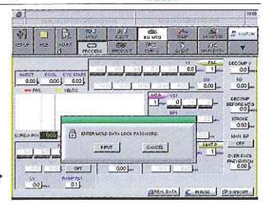
It displays easy-to-understand definitions of the technical terms used for the adjusters.



Description of V-P changeover ▶

Screen Lock and Adjuster Masking Functions

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

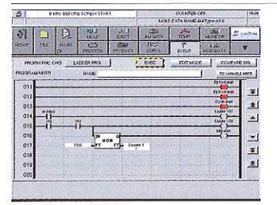


Password and masking screen ▶

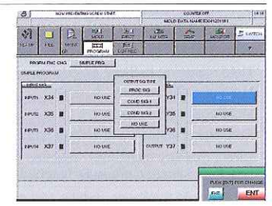
External Connections

[USB port] It can be connected to an external storage device (USB memory stick).
[LAN port] Connections to quality & production management software PQ Manager, molding data recorder/analyzer, and PC are possible.

Enriched Programming Function



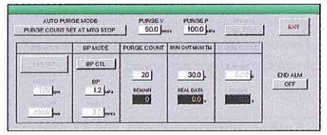
▲Ladder programming



▲Simple programming

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).

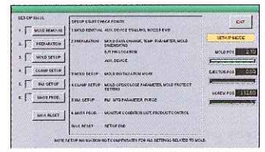
Flexible Purging Function



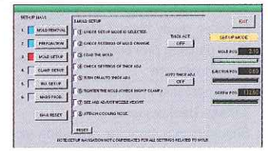
◀ Auto purging mode

This makes troublesome material and color change more efficient. It materializes flexible purging operations, such as purging with a fixed cycle, purging with added back pressure, and force retreat purging.

Setup Support Software "SET-UP Navigation" OPTION

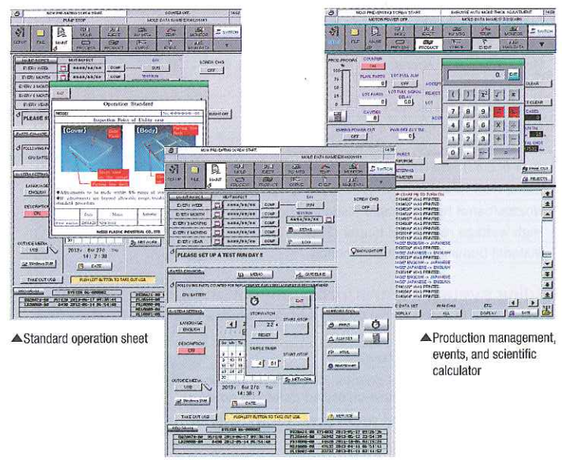


▲Initial screen



▲Mold installation (step 3)

Operations from removing mold to mass production preparation are divided into six steps, and this support function will guide you through each step. It educates inexperienced workers and reduces set-up time.



▲Standard operation sheet

▲Production management, events, and scientific calculator

▲Stopwatch and simple timer function

Clamping unit/mold

1 High-sensitivity mold protection (with graph overlay function/clamping torque display for mold protection)
2 Mold protection error re-confirmation circuit (motion selection upon the occurrence of abnormality)
3 Mold clamping halfway slowdown
4 Mold opening velocity: 4-stage
5 Mold opening pause
6 Processing inside mold·MIP (a mold design fitting MIP function is necessary.)
7 CPN3 (primary clamping→injection filling→specified injection position or specified injection pressure reached→secondary clamping)
8 Preset mold thickness shifting and mold position reading functions
9 Automatic mold thickness adjustment
10 Automatic clamping force adjustment (automatically adjust clamping force fluctuations due to outside factors) (Not available for NEX460Ⅲ)
11 Direct clamping force setting (high-pressure clamping setting value is able to change during machine running) (Not available for NEX460Ⅲ)
12 Optimal clamping force molding: 10%~100% (Not available for NEX460Ⅲ)
13 Ejector (continuous operation/pause)
14 Ejector delay timer
15 Ejector forward velocity (halfway change/2-stage)
16 Ejector forward/backward stroke variable setting
17 Ejector plate backward confirmation (up to terminal)
18 Simultaneous operation of mold opening and ejection (ejector on the fly)
19 Simultaneous operation of mold and nozzle movement

Injection unit

1 Injection process control : 6-speed, 3-holding 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 (voluntary/slow/high response)
4 Holding pressure control: 4 modes (pressure/positioning/pressure→positioning/positioning→pressure)
5 Injection during mold clamping (IDMC) and nozzle forward during mold clamping
6 Injection volume compensation control
7 Injection delay timer / Metering delay timer / Nozzle retraction delay timer
8 Over packing prevention circuit
9 Decompression
10 Decompression before metering
11 3-stage Backpressure
12 Simultaneous metering operation (screw recovery on the fly)
13 High precision metering control (pre-pack/precision metering)
14 Automatic purging circuit (with flexible purging mode)
15 Purging cover (with interlock)
16 Screw cold start prevention (all-zone sequential type)
17 Nozzle/barrel temperature upper/lower limit alarm
18 Nozzle/barrel temperature PID control
19 Simultaneous heating of nozzle and barrel
20 Hopper throat temperature screen display
21 Hopper throat temperature control (2EG~12EG, NEX110Ⅲ-18E)
22 Nozzle heater circuit SSR
23 Barrel heater circuit SSR (2EG~36E)
24 4-zone barrel temperature control
25 Barrel heat retention circuit (forced heat retention and heat retention when an error occurs)
26 Barrel heat radiation/burn prevention cover
27 Nozzle/barrel heater simple disconnection alarm (detection by thermometers)
28 High wattage rear barrel heater (2EG~12EG)
29 Material burning prevention function

Molding system control/production management

1 TACT Ⅳ (15-inch vertical display and dual window display)
2 Flat operation panel
3 Shot counter/free shot counter
4 Production management counter /Production lot management counter (signal output is optional) / Cause-classified defective counter
5 Monitor data display and output (max. 100,000 events)
6 Statistic processing function
7 Display of scatter diagram
8 Display of injection velocity and pressure waveform
9 Waveform analysis and injection waveform pass/fail judgment function
10 Monitor data pass/fail judgment function and batch data entry of the condition
11 SPI AN 116 (EUROMAP 12) robot interface
12 Barrel heat-up (calendar timer)
13 Molding condition management with image data (jpg. or bmp. data can be saved with molding condition)
14 Internal memory for molding condition (max. 500 conditions)
15 Built-in LAN connector (10/100 BASE-TX)
16 USB port (× 1)
17 Saving data to an external USB memory
18 Connection to PC
19 Display of 100,000 (max.) cases of operation history
20 Molding support message
21 6-language display system (English, Japanese, Chinese, Spanish, Korean, and Thai)
22 Hour meter (molding machine total operation time display)
23 Clock function (stopwatch, countdown timer, and calendar display)
24 Calculator function
25 Servomotor load monitor
26 Ladder programming function open to users (4 I/O signals programmable)
27 Signal I/O allocation (error processing input and various output signals can be assigned to four of the I/O terminals)
28 Signal recorder (analysis of motor signal or I/O signal waveforms)
29 Notification function by shot or running hour
30 Alarm overview (reset method)
31 Emergency power shut off (shut off the heater and motor circuits when a critical error occurs)
32 Emergency power shut off delay timer
33 Selectable production finish state
34 Cycle alarm
35 Remote maintenance function (remote control of TACT screen from PC possible)
36 Selectable Metric or US standard unit (injection pressure, injection velocity, injection position, metering speed, temperature, and clamping force)
37 Setpoint overview
38 Setup mode (mold open/close & ejection by setup speed and injection & metering by purging speed)
39 Setup simultaneous motion (simultaneous motion of injection metering during automatic mold thickness adjustment in setup mode)
40 SPC function (molding machine process management by statistical method)

Cooling

1 Cooling water manifold for hopper throat

Operation safety

1 Alarm bell
2 Alarm lamp
3 Alarm buzzer
4 Emergency stop button (operator side)
5 Mold clamping safety device (mechanical/electrical)
6 Safety upper cover on clamping unit (NEX30Ⅲ~140Ⅲ)
7 High-pressure clamping and nozzle touch reset check after power turned off
8 Non-operator side safety door with acrylic plate
9 Screen lock and adjuster masking function (password protection)

Power

1 Main power breaker

Maintenance, installation, and miscellaneous

1 Automatic central grease lubrication
2 Periodical inspection support function (display of scheduled inspection date)
3 Parts replacement support function (display of recommended parts replacement period)
4 Tools

※May take longer ○Popular specification

Clamping unit/mold

1 Locating ring attachment (non-fixed type) or locating ring assembly (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 Mold temperature control (without thermocouple)
7 Mold temperature upper/lower limit alarm
8 Mold heater disconnection alarm (monitoring of the heater's electrical current)
9 Mold clamps (SAT clamp)
10 Quick mold change system (hydraulic, pneumatic, and magnetic)
11 Mold locating pin and block
12 Daylight extension (NEX30Ⅲ: 70mm and NEX50Ⅲ~ NEX180Ⅲ: 100mm)
13 Daylight extension (other than above) ※
14 T-slot plate (for NEX220Ⅲ~ NEX460Ⅲ, use together with daylight extension)
15 Direct grooved T-slot
16 Linear guide movable platen support
17 Die plate cooling circuit (recommended for clamping linear guide) ※
18 Dual hydraulic cylinder nozzle carriage
19 Ejector plate return confirmation (with metal interface box)

Injection unit (EG・E・LE injection unit)

1 Nozzle/barrel heater disconnection alarm
2 Special-purpose nozzle, screw, screw tip, barrel, and end-cap (consultation required)
3 High-temperature resistant barrel ※
4 Barrel insulation cover
5 High-velocity injection (2EG ~ 100LE)
6 Ultra high-velocity injection (18E: 400mm/s and 25E ~ 36E: 350mm/s) ※
7 High-load injection (2EG ~ 100LE)
8 Injection high-precision (2EG ~ 12EG) ※
9 High precision metering control (pre-packⅡ)
10 Low-pressure molding application K-SAPLI
11 Hopper throat temperature control (NEX140Ⅲ-18E, 25E ~ 210LE)
12 Hopper / Hopper slider
13 Hopper spacer (required if a hopper drier is used, and it touches the injection cover)
14 Hopper magnet

Molding system control/production management

1 Unscrewing circuit (contact us for details)
② Air blow circuit
3 Hydraulic core pull circuit (signaling only; hydraulic unit is a separate option)
4 Special core pull ※
⑤ Fixed chute
6 Swing chute
7 AC outlet and electrical current to the mold heater (calendar timer)
8 USB memory
9 Water cut off alarm
10 Air cut off alarm

Cooling

1 Cooling water filter (Y strainer)
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-freeze cooling hose

Operation safety

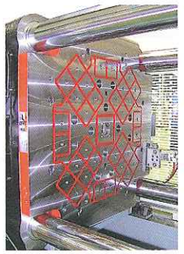
1 Alarm lamp with a stand
2 Rotary beacon light
3 Signal tower
4 Emergency stop button (non-operator side)
5 Non-operator side safety door lock (mechanical type) ※
6 Safety door with clear wide cover (non-operator side)
7 Clamping upper cover (standard for NEX140Ⅲ and below) ※
8 Safety door automatic open/close (NEX220Ⅲ and above)
9 Primary power indicator lamp

Power

1 Main power leakage breaker
2 Additional AC outlet
3 Electrical outlet circuit power shutdown
4 Installation of a step-down transformer

Maintenance, installation, and miscellaneous

1 Spear grease (specified grease type: NS1)
② Mounting pad
3 Custom paint ※
4 Hoist stand ※



◀ Magnetic clamp

◀ Cooling water filter (Y strainer)
Cooling water circuit (with a return stop valve)
Cooling water circuit (with a flow checker)

◀ Additional AC outlet

■EG・E・LE injection unit

Models			NEX15Ⅲ			NEX30Ⅲ				NEX50Ⅲ					NEX80Ⅲ					
Specification item		Unit \ Injection type	2EG (Standard)			2EG (Standard)		3EG		3EG		5EG (Standard)			5EG			9EG (Standard)		
Injection	Screw diameter	in (mm)	AA 0.55(14)	A 0.63(16)	B 0.75(19)	A 0.63(16)	B 0.75(19)	A 0.75(19)	B 0.87(22)	A 0.75(19)	B 0.87(22)	A 0.87(22)	B 1.02(26)	BB 1.10(28)	A 0.87(22)	B 1.02(26)	BB 1.10(28)	AA 1.02(26)	A 1.10(28)	B 1.26(32)
	Injection capacity	inch³ (cm³) (oz)	0.5(8) (0.3)	0.8(13) (0.4)	1.1(18) (0.6)	0.8(13) (0.4)	1.1(18) (0.6)	1.4(23) (0.8)	2.1(35) (1.2)	1.4(23) (0.8)	2.1(35) (1.2)	2.1(35) (1.2)	3.0(49) (1.6)	3.5(57) (1.9)	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)
	Plasticization capacity (PS)	lbs/h (kg/h)	11.0(5)	17.6(8)	28.7(13)	17.6(8)	28.7(13)	24.3(11)	35.3(16)	24.3(11)	35.3(16)	35.3(16)	50.7(23)	70.5(32)	35.3(16)	50.7(23)	70.5(32)	41.9(19)	61.7(28)	88.2(40)
	Max. injection pressure	psi (MPa) (kgf/cm²)	32649(225) (2295)	38452(265) (2704)	28440(196) (2000)	38452(265) (2704)	28440(196) (2000)	38452(265) (2704)	30430(210) (2140)	38452(265) (2704)	30430(210) (2140)	40629(280) (2857)	28440(196) (2000)	24530(169) (1725)	40629(280) (2857)	28440(196) (2000)	24530(169) (1725)	40629(280) (2857)	35270(243) (2480)	27020(186) (1900)
	Injectiona rate Standard	inch³/s (cm³/s)	4.7(77)	6.2(101)	8.7(142)	6.2(101)	8.7(142)	8.7(142)	11.6(190)	8.7(142)	11.6(190)	11.6(190)	16.2(265)	18.8(308)	11.6(190)	16.2(265)	18.8(308)	9.7(159)	11.3(185)	14.7(241)
	Injectiona rate High velocity	inch³/s (cm³/s)																16.2(265)	18.8(308)	24.5(402)
	Injectiona rate High load	inch³/s (cm³/s)	—	4.3(70)	6.0(99)	4.3(70)	6.0(99)	—	—	—	—	8.1(133)	11.3(186)	13.2(216)	8.1(133)	11.3(186)	13.2(216)	7.7(127)	9.0(148)	11.8(193)
	Injection velocity Standard	inch/s (mm/s)	19.7(500)			19.7(500)		19.7(500)		19.7(500)		19.7(500)			19.7(500)			11.8(300)		
	Injection velocity High velocity	inch/s (mm/s)																19.7(500)		
	Injection velocity High load	inch/s (mm/s)	—	13.8(350)		13.8(350)		—		—		13.8(350)			13.8(350)			11.8(300)		
	Screw speeds	rpm	0~400			0~400		0~350		0~350		0~350			0~350			0~300		
	Nozzle touch force	US ton (kN) (tf)	0.6(5) (0.5)			1.1(10) (1.0)		1.1(10) (1.0)		1.4(13) (1.3)		1.4(13) (1.3)			1.4(13) (1.3)			1.4(13) (1.3)		
	Hopper capacity (Optional)	Gal (L)	4.0(15)			4.0(15)		4.0(15)		4.0(15)		4.0(15)			4.0(15)			6.6(25)		
Clamping	**Clamping force**	**US ton (kN) (tf)**	**16.5(147) (15)**			**33(294) (30)**		**33(294) (30)**		**55(490) (50)**		**55(490) (50)**			**88(784) (80)**			**88(784) (80)**		
	Clamping stroke	inch (mm)	6.3 (160)			9.1(230)		9.1(230)		9.8(250)		9.8(250)			11.8(300)			11.8(300)		
	Mold thickness (min.-max.)	inch (mm)	5.1~10.2 (130~260)			5.9~12.0(150~305)		5.9~12.0(150~305)		6.7~14.2(170~360)		6.7~14.2(170~360)			7.9~15.2(200~385)			7.9~15.2(200~385)		
	Max. daylight opening	inch (mm)	16.5 (420)			21.1(535)		21.1(535)		24.0(610)		24.0(610)			27.0(685)			27.0(685)		
	Tie bar clearance (H×V)	inch (mm)	10.2×10.2 (260×260)			12.2×12.2(310×310)		12.2×12.2(310×310)		14.2×14.2(360×360)		14.2×14.2(360×360)			16.5×16.5(420×420)			16.5×16.5(420×420)		
	Die plate dimensions (H×V)	inch (mm)	14.6×14.6 (370×370)			17.7×17.7(450×450)		17.7×17.7(450×450)		19.9×19.9(505×505)		19.9×19.9(505×505)			22.8×22.8(580×580)			22.8×22.8(580×580)		
	Min. mold dimensions (H×V)	inch (mm)	7.1×7.1 (180×180)			8.5×8.5(215×215)		8.5×8.5(215×215)		10.0×10.0(255×255)		10.0×10.0(255×255)			11.6×11.6(295×295)			11.6×11.6(295×295)		
	Locating ring diameter	inch (mm)	2.4 (60)			2.4(60)		2.4(60)		3.9(100)		3.9(100)			3.9(100)			3.9(100)		
	Ejector force	US ton (kN) (tf)	1.1 (10) (1.0)			1.1(10) (1.0)		1.1(10) (1.0)		2.2(20) (2.0)		2.2(20) (2.0)			2.2(20) (2.0)			2.2(20) (2.0)		
	Ejector stroke	inch (mm)	2.0 (50)			2.0(50)		2.0(50)		2.8(70)		2.8(70)			3.0(75)			3.0(75)		
Electrical & others	Heater band capacity	kW	—	3.12	3.55	3.12	3.55	4.21	4.86	4.21	4.86	4.91	5.75	6.05	4.91	5.75	6.05	7.17	8.29	9.41
	Machine dimensions (LxWxH)	inch (m)	105.5×34.6×59.4 (2.68×0.88×1.51)			121.9×41.1×60.6 (3.10×1.04×1.54)		124.6×41.1×60.6 (3.17×1.04×1.54)	126.6×41.1×60.6 (3.22×1.04×1.54)	140.4×42.3×62.8 (3.57×1.08×1.60)		140.4×42.3×62.8 (3.57×1.08×1.60)			164.0×44.3×65.9 (4.17×1.13×1.68)			164.0×44.3×65.9 (4.17×1.13×1.68)	164.2×44.3×65.9 (4.17×1.13×1.68)	168.1×44.3×65.9 (4.27×1.13×1.68)
	Floor dimensions (LxW)	inch (m)	92.5×22.4 (2.35×0.57)			112.6×27.6 (2.68×0.70)		112.6×27.6 (2.68×0.70)		122.0×28.3 (3.10×0.72)		122.0×28.3 (3.10×0.72)			141.7×29.5 (3.60×0.75)			141.7×29.5 (3.60×0.75)		
	Machine weight	lbs (t)	—	—	—	4630(2.1)		4850(2.2)		5732(2.6)		5732(2.6)			7716(3.5)			8157(3.7)		

Models			NEX80Ⅲ			NEX110Ⅲ			NEX110Ⅲ				NEX140Ⅲ		
Specification item		Unit \ Injection type	12EG			9EG			12EG (Standard)			18E			12EG
Injection	Screw diameter	in (mm)	AA 1.10(28)	A 1.26(32)	B 1.42(36)	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)	AA 1.10(28)	A 1.26(32)	B 1.42(36)
	Injection capacity	inch³ (cm³) (oz)	4.2(69) (2.3)	6.2(101) (3.4)	7.7(127) (4.3)	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)	7.1(117) (3.9)	9.0(148) (5.0)	11.1(182) (6.1)	4.2(69) (2.3)	6.2(101) (3.4)	7.7(127) (4.3)
	Plasticization capacity (PS)	lbs/h (kg/h)	61.7(28)	88.2(40)	119(54)	41.9(19)	61.7(28)	88.2(40)	61.7(28)	88.2(40)	119(54)	88.2(40)	119(54)	165(75)	61.7(28)	88.2(40)	119(54)
	Max. injection pressure	psi (MPa) (kgf/cm²)	40629(280) (2857)	32420(223) (2280)	25683(177) (1806)	40629(280) (2857)	35270(243) (2480)	27020(186) (1900)	40629(280) (2857)	32420(223) (2280)	25683(177) (1806)	40048(276) (2816)	31570(218) (2220)	25683(177) (1806)	40629(280) (2857)	32420(223) (2280)	25683(177) (1806)
	Injectiona rate Standard	inch³/s (cm³/s)	10.1(166)	13.2(217)	16.8(275)	9.7(159)	11.3(185)	14.7(241)	10.1(166)	13.2(217)	16.8(275)	9.8(161)	12.4(204)	15.3(251)	10.1(166)	13.2(217)	16.8(275)
	Injectiona rate High velocity	inch³/s (cm³/s)	15.0(246)	19.6(322)	24.8(407)	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)	15.0(246)	19.6(322)	24.8(407)
	Injectiona rate High load	inch³/s (cm³/s)	9.0(148)	11.8(193)	14.9(244)	9.7(159)	11.3(185)	14.7(241)	9.0(148)	11.8(193)	14.9(244)	9.8(161)	12.4(204)	15.3(251)	9.0(148)	11.8(193)	14.9(244)
	Injection velocity Standard	inch/s (mm/s)	10.6(270)			11.8(300)			10.6(270)			7.9(200)			10.6(270)		
	Injection velocity High velocity	inch/s (mm/s)	15.7(400)			19.7(500)			15.7(400)			11.8(300)			15.7(400)		
	Injection velocity High load	inch/s (mm/s)	9.4(240)			11.8(300)			9.4(240)			7.9(200)			9.4(240)		
	Screw speeds	rpm	0~300			0~300			0~300			0~300			0~300		
	Nozzle touch force	US ton (kN) (tf)	1.4(13) (1.3)			1.9(17) (1.7)			1.9(17) (1.7)			1.9(17) (1.7)			1.9(17) (1.7)		
	Hopper capacity (Optional)	Gal (L)	6.6(25)			6.6(25)			6.6(25)			6.6(25)			6.6(25)		
Clamping	**Clamping force**	**US ton (kN) (tf)**	**88(784) (80)**			**121(1080) (110)**			**121(1080) (110)**			**121(1080) (110)**			**154(1373) (140)**		
	Clamping stroke	inch (mm)	11.8(300)			13.8(350)			13.8(350)			13.8(350)			15.7(400)		
	Mold thickness (min.-max.)	inch (mm)	7.9~15.2(200~385)			8.7~16.1(220~410)			8.7~16.1(220~410)			8.7~16.1(220~410)			8.7~17.7(220~450)		
	Max. daylight opening	inch (mm)	27.0(685)			29.9(760)			29.9(760)			29.9(760)			33.5(850)		
	Tie bar clearance (H×V)	inch (mm)	16.5×16.5(420×420)			18.1×18.1(460×460)			18.1×18.1(460×460)			18.1×18.1(460×460)			20.1×18.1(510×460)		
	Die plate dimensions (H×V)	inch (mm)	22.8×22.8(580×580)			25.5×25.5(647×647)			25.5×25.5(647×647)			25.5×25.5(647×647)			28.3×26.4(720×670)		
	Min. mold dimensions (H×V)	inch (mm)	11.6×11.6(295×295)			12.8×12.8(325×325)			12.8×12.8(325×325)			12.8×12.8(325×325)			12.8×12.8(325×325)		
	Locating ring diameter	inch (mm)	3.9(100)			3.9(100)			3.9(100)			3.9(100)			4.7(120)		
	Ejector force	US ton (kN) (tf)	2.2(20) (2.0)			2.6(24) (2.4)			2.6(24) (2.4)			2.6(24) (2.4)			4.0(35) (3.6)		
	Ejector stroke	inch (mm)	3.0(75)			3.3(85)			3.3(85)			3.3(85)			4.3(110)		
Electrical & others	Heater band capacity	kW	8.29	9.41	10.22	7.17	8.29	9.41	8.29	9.41	10.22	8.88	10.57		8.29	9.41	10.22
	Machine dimensions (LxWxH)	inch (m)	164.4×44.3×65.9 (4.18×1.13×1.68)	167.9×44.3×65.9 (4.27×1.13×1.68)	170.5×44.3×65.9 (4.33×1.13×1.68)	181.5×47.0×70.9 (4.61×1.20×1.80)			181.5×47.0×70.9 (4.61×1.20×1.80)			183.9×47.0×70.9 (4.67×1.20×1.80)	188.6×47.0×70.9 (4.79×1.20×1.80)		197.0×52.0×71.5 (5.01×1.32×1.82)		
	Floor dimensions (LxW)	inch (m)	141.7×29.5 (3.60×0.75)			162.6×30.7 (4.13×0.78)			162.6×30.7 (4.13×0.78)			162.6×30.7 (4.13×0.78)			172.4×36.6 (4.38×0.93)		
	Machine weight	lbs (t)	8157(3.7)			10582(4.8)			10582(4.8)			11023(5.0)			13448(6.1)		

- 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.
- 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/cm² ≒ 10 kgf/cm², 1 kN = 0.102 tf ≒ 0.1 tf

■EG・E・LE injection unit

Models			NEX140Ⅲ						NEX180Ⅲ								
Specification item		Unit \ Injection type	18E(Standard)			25E			18E			25E(Standard)			36E(Standard)		
Injection	Screw diameter	in (mm)	AA 1.26(32)	A 1.42(36)	B 1.57(40)	AA 1.42(36)	A 1.57(40)	B 1.77(45)	AA 1.26(32)	A 1.42(36)	B 1.57(40)	AA 1.42(36)	A 1.57(40)	B 1.77(45)	AA 1.57(40)	A 1.77(45)	B 1.97(50)
	Injection capacity	inch³ (cm³) (oz)	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)	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)	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)	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/cm²)	40048(276)(2816)	31570(218)(2220)	25683(177)(1806)	37872(261)(2663)	30580(211)(2150)	24250(167)(1705)	40048(276)(2816)	31570(218)(2220)	25683(177)(1806)	37872(261)(2663)	30580(211)(2150)	24250(167)(1705)	37727(260)(2653)	29860(206)(2100)	24250(167)(1705)
	Injectiona rate Standard	inch³/s (cm³/s)	9.8(161)	12.4(204)	15.3(251)	11.2(183)	13.8(226)	17.5(286)	9.8(161)	12.4(204)	15.3(251)	11.2(183)	13.8(226)	17.0(278)	13.8(226)	17.5(286)	21.0(344)
	Injectiona rate High velocity	inch³/s (cm³/s)	14.7(241)	18.6(305)	23.0(377)	16.8(275)	20.7(339)	26.2(429)	14.1(241)	18.6(305)	23.0(377)	16.8(275)	20.7(339)	24.3(398)	20.7(339)	30.0(492)	30.0(491)
	Injectiona rate High load	inch³/s (cm³/s)	9.8(161)	12.4(204)	15.3(251)	11.2(183)	13.8(226)	17.5(286)	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)			7.9(200)			7.1(180)			7.1(180)		
	Injection velocity High velocity	inch/s (mm/s)	11.8(300)			10.6(270)			11.8(300)			10.6(270)			10.6(270)		
	Injection velocity High load	inch/s (mm/s)	7.9(200)			7.1(180)			7.9(200)			7.1(180)			7.1(180)		
	Screw speeds	rpm	0~300			0~300			0~300			0~300			0~250		
	Nozzle touch force	US ton (kN) (tf)	1.9(17)(1.7)			2.5(23)(2.3)			2.5(23)(2.3)			2.5(23)(2.3)			2.5(23)(2.3)		
	Hopper capacity (Optional)	Gal (L)	6.6(25)			11.9(45)			6.6(25)			11.9(45)			11.9(45)		
Clamping	**Clamping force**	**US ton (kN) (tf)**	**154(1373)(140)**			**154(1373)(140)**			**198(1765)(180)**			**198(1765)(180)**			**198(1765)(180)**		
	Clamping stroke	inch (mm)	15.7(400)			15.7(400)			17.7(450)			17.7(450)			17.7(450)		
	Mold thickness (min.-max.)	inch (mm)	8.7~17.7(220~450)			8.7~17.7(220~450)			9.8~20.1(250~510)			9.8~20.1(250~510)			9.8~20.1(250~510)		
	Max. daylight opening	inch (mm)	33.5(850)			33.5(850)			37.8(960)			37.8(960)			37.8(960)		
	Tie bar clearance (H×V)	inch (mm)	20.1×18.1(510×460)			20.1×18.1(510×460)			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)	28.3×26.4(720×670)			28.3×26.4(720×670)			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)	12.8×12.8(325×325)			12.8×12.8(325×325)			15.6×15.6(395×395)			15.6×15.6(395×395)			15.6×15.6(395×395)		
	Locating ring diameter	inch (mm)	4.7(120)			4.7(120)			4.7(120)			4.7(120)			4.7(120)		
	Ejector force	US ton (kN) (tf)	4.0(35)(3.6)			4.0(35)(3.6)			4.4(39)(4.0)			4.4(39)(4.0)			4.4(39)(4.0)		
	Ejector stroke	inch (mm)	4.3(110)			4.3(110)			4.3(110)			4.3(110)			4.3(110)		
Electrical & others	Heater band capacity	kW	8.88	10.57		10.54	13.01		8.88	10.57		10.54	13.01		12.53	15.53	
	Machine dimensions (L×W×H)	inch (m)	197.0×52.0×71.5 (5.01×1.32×1.82)	198.8×52.0×71.5 (5.05×1.32×1.82)		197.0×52.0×71.5 (5.01×1.32×1.82)	203.5×52.0×71.5 (5.17×1.32×1.82)		219.3×53.9×81.5 (5.57×1.37×2.07)			219.3×53.9×81.5 (5.57×1.37×2.07)			221.8×53.9×81.5 (5.64×1.37×2.07)	225.8×53.9×81.5 (5.74×1.37×2.07)	
	Floor dimensions (L×W)	inch (m)	172.4×36.6 (4.38×0.93)			172.4×36.6 (4.38×0.93)			192.9×37.8 (4.9×0.96)			192.9×37.8 (4.9×0.96)			190.9×37.8 (4.85×0.96)		
	Machine weight	lbs (t)	13889(6.3)			16212(6.9)			15432(7.0)			16755(7.6)			17417(7.9)		

Models			NEX220Ⅲ						NEX280Ⅲ						NEX360Ⅲ		
Specification item		Unit \ Injection type	50E(Standard)			71E			71E(Standard)			100LE			100LE(Standard)		
Injection	Screw diameter	in (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)	AA 1.97(50)	A 2.20(56)	B 2.48(63)	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	inch³ (cm³) (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)	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)	33.6(550)(18.4)	47.4(776)(26.0)	59.9(982)(32.9)
	Plasticization capacity (PS)	lbs/h (kg/h)	201(91)	254(115)	342(155)	254(115)	344(156)	461(209)	254(115)	344(156)	461(209)	254(115)	344(156)	461(209)	254(115)	344(156)	461(209)
	Max. injection pressure	psi (MPa) (kgf/cm²)	36275(250)(2551)	29308(202)(2061)	23364(161)(1643)	36120(249)(2540)	28870(199)(2030)	22750(157)(1600)	36120(249)(2540)	28870(199)(2030)	22750(157)(1600)	36120(249)(2540)	28870(199)(2030)	22750(157)(1600)	36120(249)(2540)	28870(199)(2030)	22750(157)(1600)
	Injectiona rate Standard	inch³/s (cm³/s)	17.5(286)	21.5(353)	27.0(443)	19.2(314)	24.0(394)	30.4(499)	19.2(314)	24.0(394)	30.4(499)	19.2(314)	24.0(394)	30.4(499)	19.2(314)	24.0(394)	30.4(499)
	Injectiona rate High velocity	inch³/s (cm³/s)	26.2(429)	32.3(530)	40.6(665)	24.0(393)	30.1(493)	38.0(623)	24.0(393)	30.1(493)	38.0(623)	24.0(393)	30.1(493)	38.0(623)	24.0(393)	30.1(493)	38.0(623)
	Injectiona rate High load	inch³/s (cm³/s)	17.5(286)	21.5(353)	27.0(443)	19.2(314)	24.0(394)	30.4(499)	19.2(314)	24.0(394)	30.4(499)	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)	7.1(180)			6.3(160)			6.3(160)			6.3(160)			6.3(160)		
	Injection velocity High velocity	inch/s (mm/s)	10.6(270)			7.9(200)			7.9(200)			7.9(200)			7.9(200)		
	Injection velocity High load	inch/s (mm/s)	7.1(180)			6.3(160)			6.3(160)			6.3(160)			6.3(160)		
	Screw speeds	rpm	0~250			0~250			0~250			0~250			0~250		
	Nozzle touch force	US ton (kN) (tf)	2.5(23)(2.3)			3.3(29)(3.0)			3.3(29)(3.0)			3.3(29)(3.0)			3.3(29)(3.0)		
	Hopper capacity (Optional)	Gal (L)	23.8(90)			23.8(90)			23.8(90)			23.8(90)			23.8(90)		
Clamping	**Clamping force**	**US ton (kN) (tf)**	**242(2160)(220)**			**242(2160)(220)**			**309(2740)(280)**			**309(2740)(280)**			**397(3530)(360)**		
	Clamping stroke	inch (mm)	20.9(530)			20.9(530)			23.6(600)			23.6(600)			25.6(650)		
	Mold thickness (min.-max.)	inch (mm)	10.8~22.0(275~560)			10.8~22.0(275~560)			12.6~24.0(320~610)			12.6~24.0(320~610)			13.8~27.2(350~690)		
	Max. daylight opening	inch (mm)	42.9(1090)			42.9(1090)			47.6(1210)			47.6(1210)			52.8(1340)		
	Tie bar clearance (H×V)	inch (mm)	23.2×23.2(590×590)			23.2×23.2(590×590)			26.0×26.0(660×660)			26.0×26.0(660×660)			28.9×28.9(735×735)		
	Die plate dimensions (H×V)	inch (mm)	33.5×33.5(850×850)			33.5×33.5(850×850)			37.6×37.6(955×955)			37.6×37.6(955×955)			41.5×41.5(1055×1055)		
	Min. mold dimensions (H×V)	inch (mm)	16.3×16.3(415×415)			16.3×16.3(415×415)			18.3×18.3(465×465)			18.3×18.3(465×465)			20.5×20.5(520×520)		
	Locating ring diameter	inch (mm)	4.7(120)			4.7(120)			4.7(120)			4.7(120)			4.7(120)		
	Ejector force	US ton (kN) (tf)	6.6(59)(6.0)			6.6(59)(6.0)			6.6(59)(6.0)			6.6(59)(6.0)			8.8(78)(8.0)		
	Ejector stroke	inch (mm)	4.7(120)			4.7(120)			5.1(130)			5.1(130)			5.9(150)		
Electrical & others	Heater band capacity	kW	14.62	18.19		17.74	21.98		17.74	21.98		17.53	22.17		17.53	22.17	
	Machine dimensions (L×W×H)	inch (m)	240.9×58.7×86.6 (6.12×1.49×2.20)	245.3×58.7×86.6 (6.23×1.49×2.20)		242.7×61.4×86.6 (6.17×1.56×2.20)	248.4×61.4×86.6 (6.31×1.56×2.20)		258.9×64.4×86.6 (6.56×1.64×2.20)	269.8×64.4×86.6 (6.60×1.64×2.20)		258.9×64.4×86.6 (6.58×1.64×2.20)	264.6×64.4×86.6 (6.72×1.64×2.20)		268.5×68.5×86.6 (6.82×1.74×2.20)	274.2×68.5×86.6 (6.97×1.74×2.20)	
	Floor dimensions (L×W)	inch (m)	220.5×35.0 (5.60×0.89)			222.0×35.0 (5.64×0.89)			235.6×39.4 (5.99×1.00)			235.6×39.4 (5.99×1.00)			243.5×42.1 (6.19×1.07)		
	Machine weight	lbs (t)	23369(10.6)			27117(12.3)			31967(14.5)			32628(14.8)			35274(16.0)		

- 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.
- 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/cm² ≒ 10 kgf/cm², 1 kN = 0.102 tf ≒ 0.1 tf

■EG・E・LE injection unit

Models			NEX360Ⅲ		NEX460Ⅲ			
Specification item		Injection type / Unit	140LE		140LE (Standard)		210LE★	
Injection	Screw diameter	in (mm)	A 2.48(63)	B 2.80(71)	A 2.48(63)	B 2.80(71)	A 3.10(80)	B 3.50(90)
	Injection capacity	inch³ (cm³) (oz)	67.5(1107)(37.1)	85.8(1406)(47.1)	67.5(1107)(37.1)	85.8(1406)(47.1)	128.8(2111)(70.7)	163.0(2672)(89.5)
	Plasticization capacity (PS)	lbs/h (kg/h)	461(209)	542(246)	461(209)	542(246)	611(277)	827(375)
	Max. injection pressure	psi (MPa) (kgf/cm²)	29150(201)(2050)	22900(158)(1610)	29150(201)(2050)	22900(158)(1610)	27020(186)(1900)	21330(147)(1500)
	Injectiona rate Standard	inch³/s (cm³/s)	30.4(499)	38.6(633)	30.4(499)	38.6(633)	49.1(804)	62.1(1018)
	Injectiona rate High velocity	inch³/s (cm³/s)	—	—	—	—	—	—
	Injectiona rate High load	inch³/s (cm³/s)	—	—	—	—	—	—
	Injection velocity Standard	inch/s (mm/s)	6.3(160)		6.3(160)		6.3(160)	
	Injection velocity High velocity	inch/s (mm/s)	—		—		—	
	Injection velocity High load	inch/s (mm/s)	—		—		—	
	Screw speeds	rpm	0~250	0~210	0~250	0~210	0~160	
	Nozzle touch force	US ton (kN) (tf)	4.4(39)(4.0)		4.4(39)(4.0)		4.4(39)(4.0)	
	Hopper capacity (Optional)	Gal (L)	23.8(90)		23.8(90)		—	
Clamping	**Clamping force**	**US ton (kN) (tf)**	**397(3530)(360)**		**507(4510)(460)**		**507(4510)(460)**	
	Clamping stroke	inch (mm)	25.6(650)		31.5(800)		31.5(800)	
	Mold thickness (min.-max.)	inch (mm)	13.8~27.2(350~690)		14.8~30.3(375~770)		14.8~30.3(375~770)	
	Max. daylight opening	inch (mm)	52.8(1340)		61.8(1570)		61.8(1570)	
	Tie bar clearance (H×V)	inch (mm)	28.9×28.9(735×735)		32.3×32.3(820×820)		32.3×32.3(820×820)	
	Die plate dimensions (H×V)	inch (mm)	41.5×41.5(1055×1055)		46.9×46.9(1190×1190)		46.9×46.9(1190×1190)	
	Min. mold dimensions (H×V)	inch (mm)	20.5×20.5(520×520)		22.8×22.8(580×580)		22.8×22.8(580×580)	
	Locating ring diameter	inch (mm)	4.7(120)		5.9(150)		5.9(150)	
	Ejector force	US ton (kN) (tf)	8.8(78)(8.0)		11(98)(10.0)		11(98)(10.0)	
	Ejector stroke	inch (mm)	5.9(150)		6.3(160)		6.3(160)	
Electrical & others	Heater band capacity	kW	31.5		31.5		35.9	
	Machine dimensions (L×W×H)	inch (m)	290.7×70.1×90.7 (7.41×1.78×2.31)		316.1×78.1×101.0 (8.03×1.99×2.57)		—	
	Floor dimensions (L×W)	inch (m)	266.1×42.1 (6.76×1.07)		293.3×53.9 (7.45×1.37)		—	
	Machine weight	lbs (t)	40785(18.5)		57761(26.2)		—	

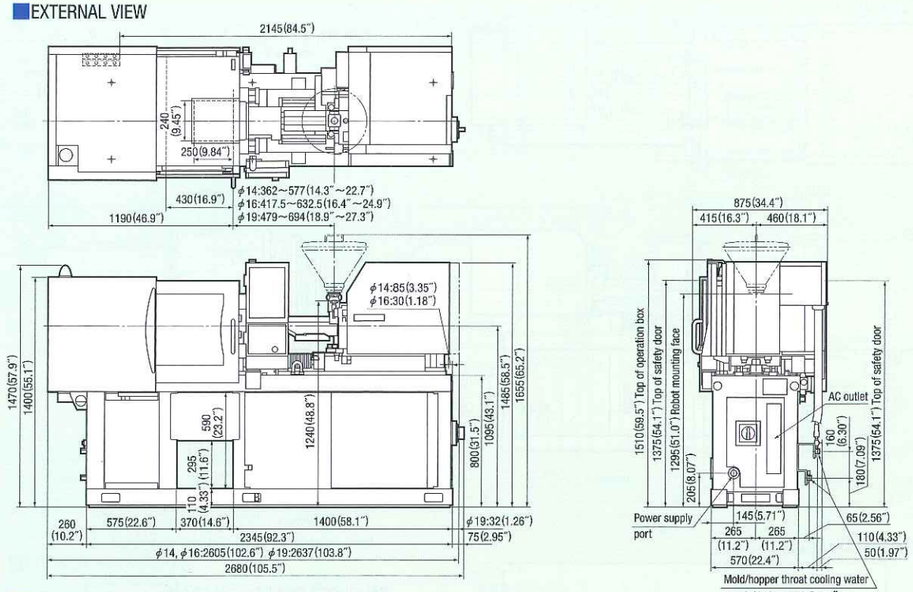
■EN injection unit (High-velocity and high-pressure injection)

Models			NEX80Ⅲ		NEX110Ⅲ		NEX180Ⅲ	
Specification item		Injection type / Unit	9EN		9EN		18EN	
Injection	Screw diameter	in (mm)	AA 1.02(26)	B 1.26(32)	AA 1.02(26)	B 1.26(32)	AAA 1.10(28)	AA 1.26(32)
	Injection capacity	inch³ (cm³) (oz)	3.0(49)(1.6)	4.5(74)(2.5)	3.0(49)(1.6)	4.5(74)(2.5)	3.2(52)(1.7)	7.1(117)(3.9)
	Plasticization capacity (PS)	lbs/h (kg/h)	41.9(19)	88.2(40)	41.9(19)	88.2(40)	61.7(28)	88.2(40)
	Max. injection pressure	psi (MPa) (kgf/cm²)	32649(225)(2296)	21614(149)(1520)	32649(225)(2296)	21614(149)(1520)	49486(341)(3480)	40040(276)(2816)
	Peak injection pressure	psi (MPa) (kgf/cm²)	42077(290)(2959)	27715(191)(1949)	42077(290)(2959)	27715(191)(1949)	—	—
	Max. injection holding pressure	psi (MPa) (kgf/cm²)	32649(225)(2296)	24273(168)(1714)	32649(225)(2296)	24273(168)(1714)	49329(340)(3469)	40044(276)(2816)
	Injection rate	inch³/s (cm³/s)	25.9(425)	39.2(643)	25.9(425)	39.2(643)	15.0(246)	19.6(322)
	Injection velocity	inch/s (mm/s)	31.5(800)		31.5(800)		15.7(400)	
	Screw speeds	rpm	0~300		0~300		0~300	
	Nozzle touch force	US ton (kN) (tf)	1.4(13)(1.3)		1.9(17)(1.7)		2.5(23)(2.3)	
	Hopper capacity (optional)	Gal (L)	6.6(25)		6.6(25)		6.6(25)	
Clamping	**Clamping force**	**US ton (kN) (tf)**	**88(784)(80)**		**121(1080)(110)**		**198(1765)(180)**	
	Clamping stroke	inch (mm)	11.8(300)		13.8(350)		17.7(450)	
	Mold thickness (min.-max.)	inch (mm)	7.9~15.2(200~385)		8.7~16.1(220~410)		9.8~20.1(250~510)	
	Max. daylight opening	inch (mm)	27.0(685)		29.9(760)		37.8(960)	
	Tie bar clearance (H×V)	inch (mm)	16.5×16.5(420×420)		18.1×18.1(460×460)		22.0×22.0(560×560)	
	Die plate dimensions (H×V)	inch (mm)	22.8×22.8(580×580)		25.5×25.5(647×647)		31.5×31.5(800×800)	
	Min. mold dimensions (H×V)	inch (mm)	11.6×11.6(295×295)		12.8×12.8(325×325)		15.6×15.6(395×395)	
	Locating ring diameter	inch (mm)	3.9(100)		3.9(100)		4.7(120)	
	Ejector force	US ton (kN) (tf)	2.2(20)(2.0)		2.6(24)(2.4)		4.4(39)(4.0)	
	Ejector stroke	inch (mm)	3.0(75)		3.3(85)		4.3(110)	
Electrical & others	Heater band capacity	kW	7.17	9.41	7.41	9.45	6.12	9
	Main breaker capacity	A	125		125		125	
	Machine dimensions (L×W×H)	inch (m)	—		—		—	
	Floor dimensions (L×W)	inch (m)	—		—		—	
	Machine weight	lbs (t)	—		—		—	

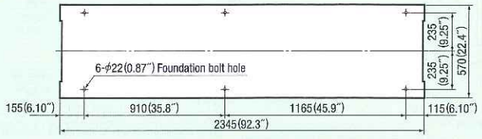
- Actual plasticizing capacities may vary, depending on the molding conditions and materials.
- Maximum injection pressures indicate the maximum output of the injection units, not the resin pressures.
- Maximum injection pressures are the highest values that can be set on the machines. These values may 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/cm² ≒ 10 kgf/cm², 1 kN = 0.102 tf ≒ 0.1 tf

Injection type : 2EG [Screw diameter : φ14(0.55″) / φ16(0.63″) / φ19(0.75″)]

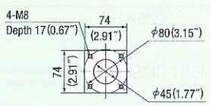
■EXTERNAL VIEW



■FOUNDATION DIAGRAM

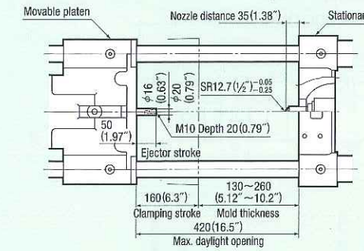


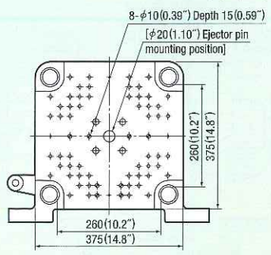
■HOPPER FIXATION DIAGRAM



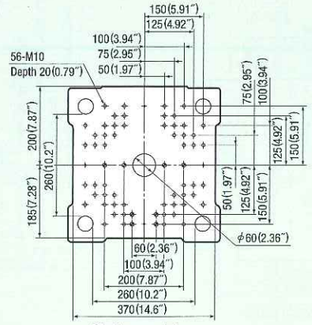
■MOLD ATTACHMENT DIAGRAM

*The minimum mold dimensions of 180(7.09")×180(7.09") are required in order to achieve the maximum clamping force.



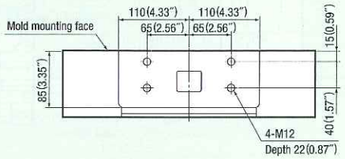


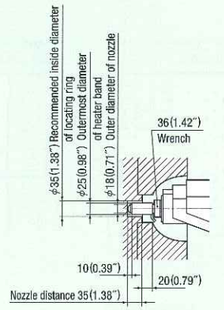
Movable platen



Stationary platen

■ROBOT FIXATION DIAGRAM





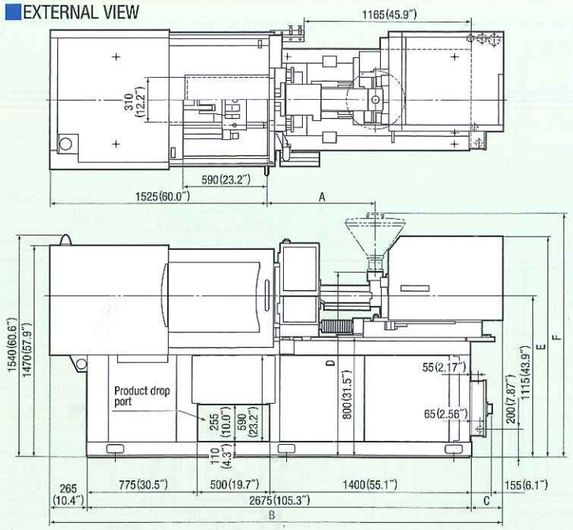
Nozzle section

NEX-Ⅲ Series | NEX30Ⅲ-2EG★ / NEX30Ⅲ-3EG

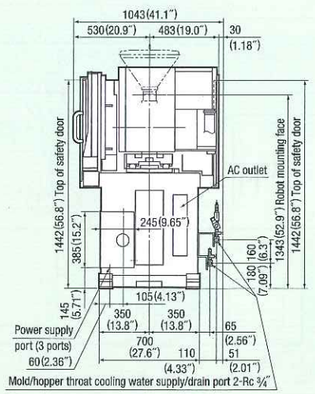
The ★ indicates the standard combination.

Injection type : ① **2EG**[Screw diameter : φ**16**(**0.63**″) / φ**19**(**0.75**″)]★
: ② **3EG**[Screw diameter : φ**19**(**0.75**″) / φ**22**(**0.87**″)]

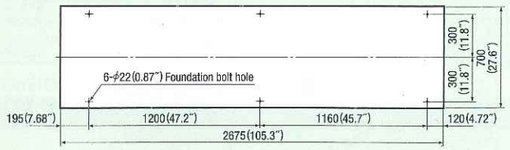
EXTERNAL VIEW



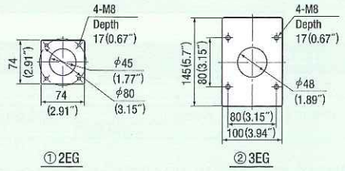
Injection type	Screw dia.	A	B	C	D	E	F
①2EG★	16(0.63″)	422.5～642.5 (16.6″～25.3″)	3095 (121.9″)	—	1260 (49.6″)	1505 (59.3″)	1670 (65.7″)
	19(0.75″)	484～704 (19.1″～27.7″)		42 (1.65″)			
②3EG	19(0.75″)	529～749 (20.8″～29.5″)	3165 (124.6″)	225 (8.86″)	1285 (50.6″)	1530 (60.2″)	1692 (66.6″)
	22(0.87″)	578.5～807.5 (22.8″～31.8″)	3215 (126.6″)	275 (10.8″)			



FOUNDATION DIAGRAM

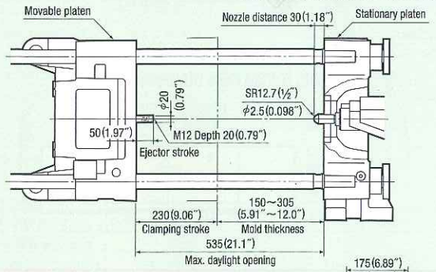


HOPPER FIXATION DIAGRAM

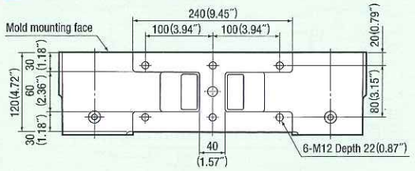


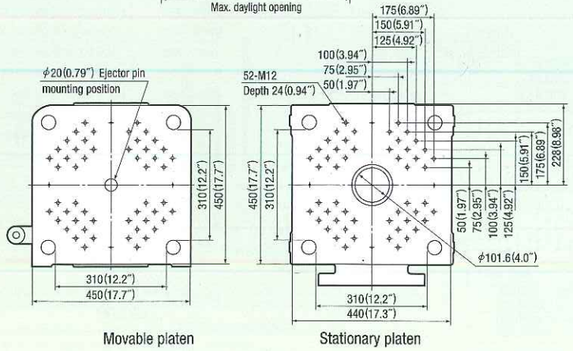
MOLD ATTACHMENT DIAGRAM

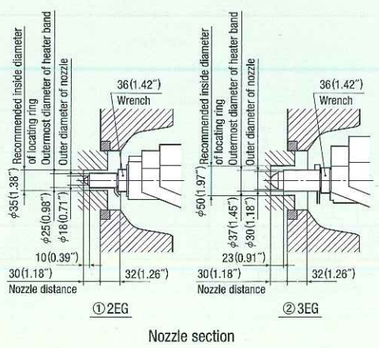
*The minimum mold dimensions of 215(8.46″)×215(8.46″) are required in order to achieve the maximum clamping force.



ROBOT FIXATION DIAGRAM





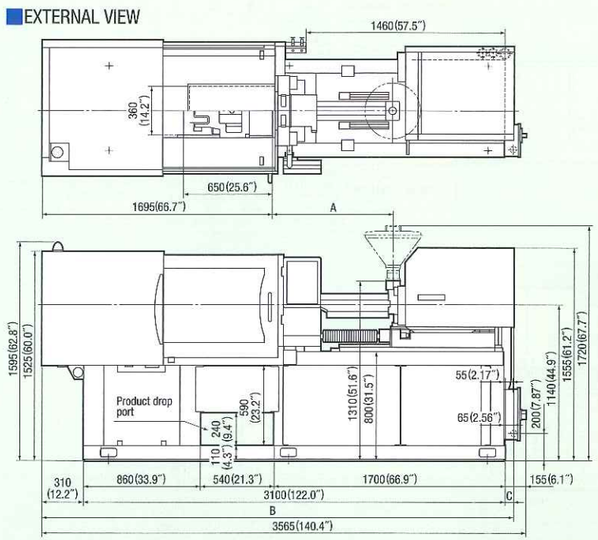


NEX-Ⅲ Series | NEX50Ⅲ-3EG / NEX50Ⅲ-5EG★

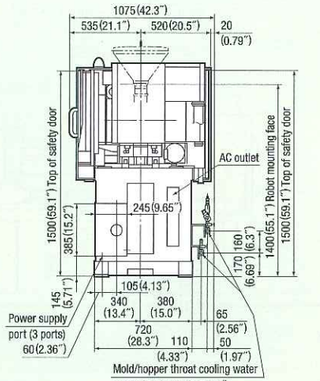
The ★ indicates the standard combination.

Injection type : ① **3EG**[Screw diameter : φ**19**(**0.75**″) / φ**22**(**0.87**″)]
: ② **5EG**[Screw diameter : φ**22**(**0.87**″) / φ**26**(**1.02**″) / φ**28**(**1.10**″)]★

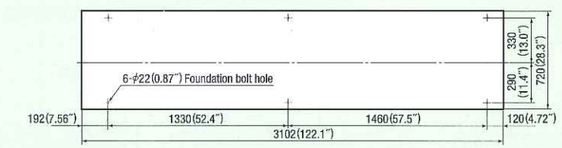
EXTERNAL VIEW



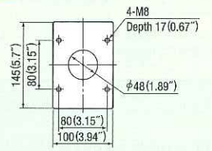
Injection type	Screw dia.	A	B	C
①3EG	19(0.75″)	530～755 (20.9″～29.7″)	—	—
	22(0.87″)	580～805 (22.8″～31.7″)		
②5EG★	22(0.87″)	580～805 (22.8″～31.7″)	—	—
	26(1.02″)	665～890 (26.2″～35.0″)	3475 (136.8″)	65 (2.56″)
	28(1.1″)	705～930 (27.8″～36.6″)	3515 (138.4″)	105 (4.13″)



FOUNDATION DIAGRAM

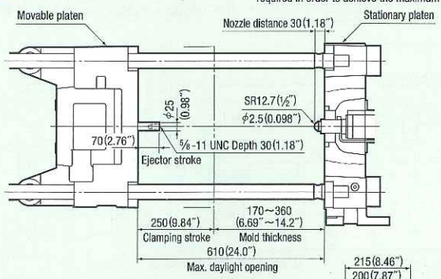


HOPPER FIXATION DIAGRAM

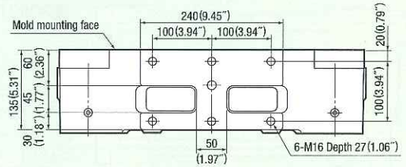


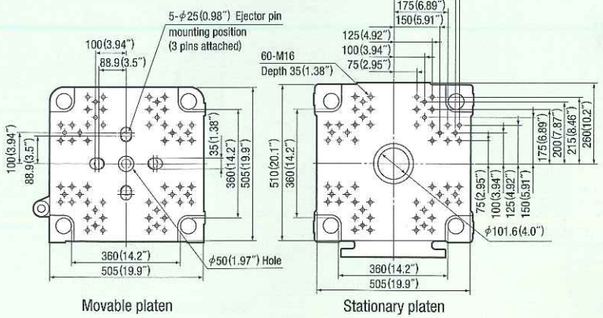
MOLD ATTACHMENT DIAGRAM

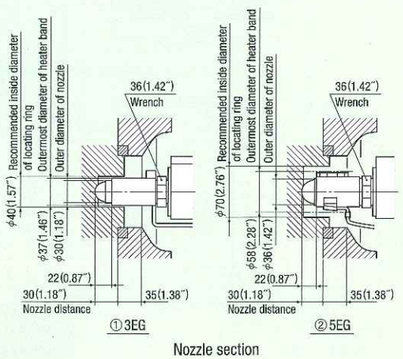
*The minimum mold dimensions of 255(10.0″)×255(10.0″) are required in order to achieve the maximum clamping force.



ROBOT FIXATION DIAGRAM





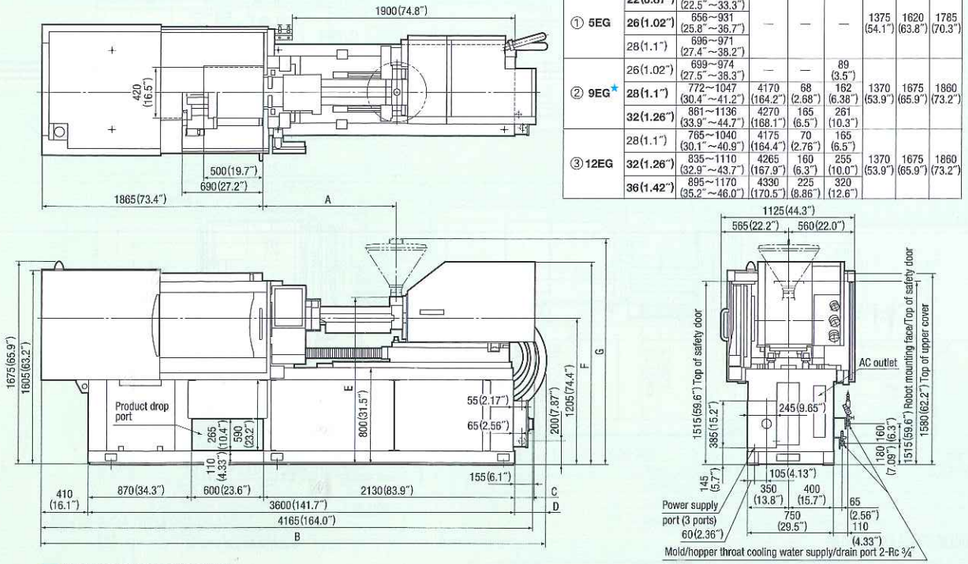


NEX-Ⅲ Series | NEX80Ⅲ-5EG / NEX80Ⅲ-9EG★ / NEX80Ⅲ-12EG

The ★ indicates the standard combination.

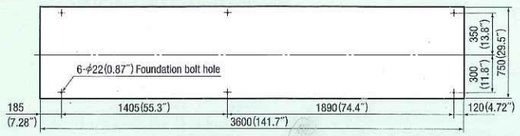
Injection type : ① 5EG [Screw diameter : φ22 (0.87″) / φ26 (1.02″) / φ28 (1.10″)]
: ② 9EG [Screw diameter : φ26 (1.02″) / φ28 (1.10″) / φ32 (1.26″)] ★
: ③12EG [Screw diameter : φ28 (1.10″) / φ32 (1.26″) / φ36 (1.42″)]

EXTERNAL VIEW

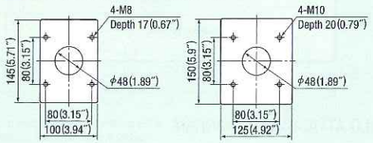


Injection type	Screw dia.	A	B	C	D	E	F	G
① 5EG	22(0.87″)	572~847 (22.5″~33.3″)	—	—	—	1375 (54.1″)	1620 (63.8″)	1785 (70.3″)
	26(1.02″)	656~931 (25.8″~36.7″)						
	28(1.1″)	696~971 (27.4″~38.2″)						
② 9EG★	26(1.02″)	699~974 (27.5″~38.3″)	—	—	89 (3.5″)			
	28(1.1″)	772~1047 (30.4″~41.2″)	4170 (164.2″)	68 (2.68″)	162 (6.38″)	1370 (53.9″)	1675 (65.9″)	1860 (73.2″)
	32(1.26″)	861~1136 (33.9″~44.7″)	4270 (168.1″)	165 (6.5″)	261 (10.3″)			
③12EG	28(1.1″)	765~1040 (30.1″~40.9″)	4175 (164.4″)	70 (2.76″)	165 (6.5″)			
	32(1.26″)	835~1110 (32.9″~43.7″)	4265 (167.9″)	160 (6.3″)	255 (10.0″)	1370 (53.9″)	1675 (65.9″)	1860 (73.2″)
	36(1.42″)	895~1170 (35.2″~46.0″)	4330 (170.5″)	225 (8.86″)	320 (12.6″)			

FOUNDATION DIAGRAM

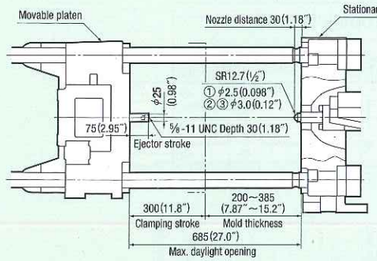


HOPPER FIXATION DIAGRAM

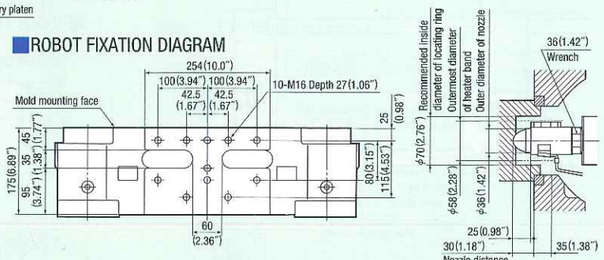


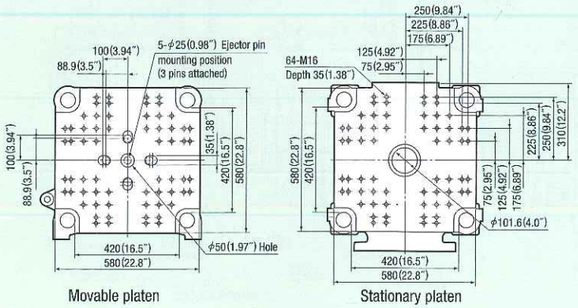
MOLD ATTACHMENT DIAGRAM

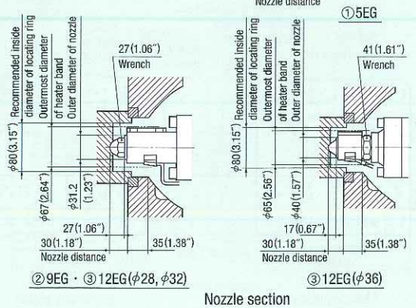
*The minimum mold dimensions of 295(11.6″)×295(11.6″) are required in order to achieve the maximum clamping force.



ROBOT FIXATION DIAGRAM





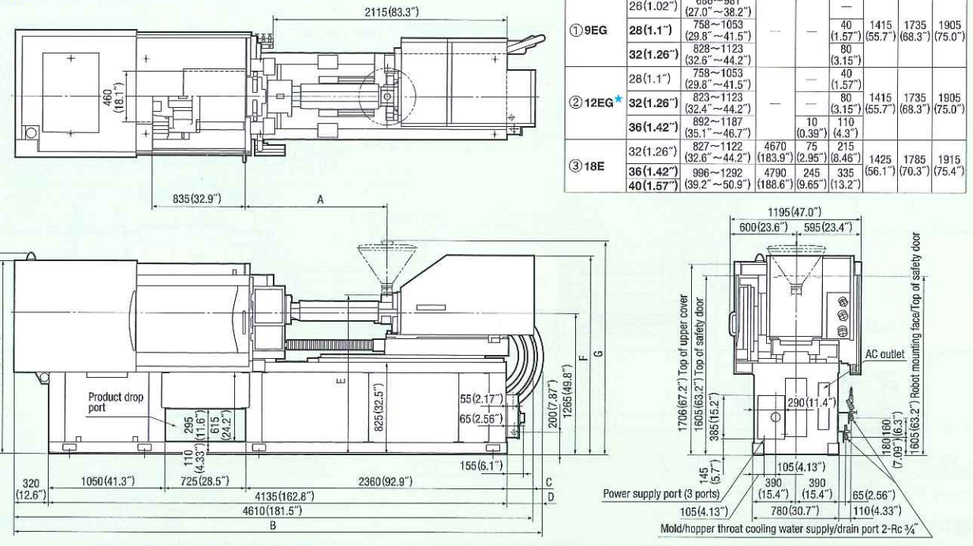


NEX-Ⅲ Series | NEX110Ⅲ-9EG / NEX110Ⅲ-12EG★ / NEX110Ⅲ-18E

The ★ indicates the standard combination.

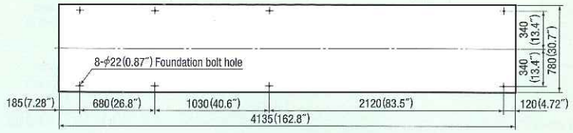
Injection type : ① 9EG [Screw diameter : φ26 (1.02″) / φ28 (1.10″) / φ32 (1.26″)]
: ②12EG [Screw diameter : φ28 (1.10″) / φ32 (1.26″) / φ36 (1.42″)] ★
: ③18E [Screw diameter : φ32 (1.26″) / φ36 (1.42″) / φ40 (1.57″)]

EXTERNAL VIEW

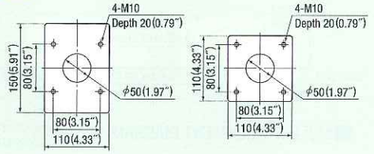


Injection type	Screw dia.	A	B	C	D	E	F	G
①9EG	26(1.02″)	686~981 (27.0″~38.2″)	—	—	—			
	28(1.1″)	758~1053 (29.8″~41.5″)			40 (1.57″)	1415 (55.7″)	1735 (68.3″)	1905 (75.0″)
	32(1.26″)	828~1123 (32.6″~44.2″)			80 (3.15″)			
②12EG★	28(1.1″)	758~1053 (29.8″~41.5″)	—	—	40 (1.57″)			
	32(1.26″)	823~1123 (32.4″~44.2″)			80 (3.15″)	1415 (55.7″)	1735 (68.3″)	1905 (75.0″)
	36(1.42″)	892~1187 (35.1″~46.7″)		10 (0.39″)	110 (4.3″)			
③18E	32(1.26″)	827~1122 (32.6″~44.2″)	4670 (183.9″)	75 (2.95″)	215 (8.46″)	1425 (56.1″)	1785 (70.3″)	1915 (75.4″)
	36(1.42″) 40(1.57″)	996~1292 (39.2″~50.9″)	4790 (188.6″)	245 (9.65″)	335 (13.2″)			

FOUNDATION DIAGRAM

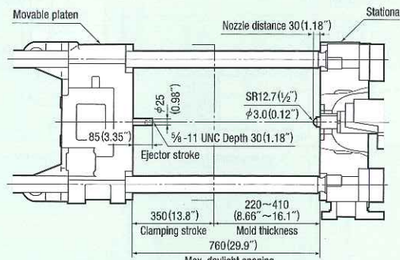


HOPPER FIXATION DIAGRAM

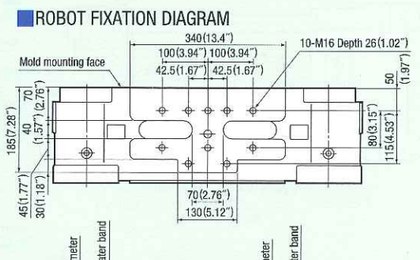


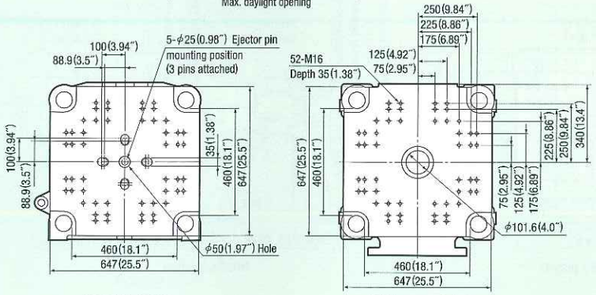
MOLD ATTACHMENT DIAGRAM

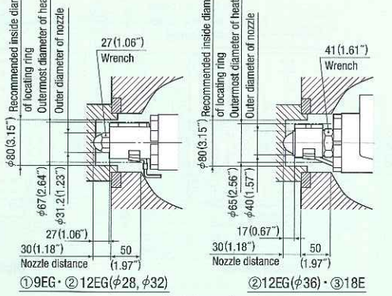
*The minimum mold dimensions of 325(12.8″)×325(12.8″) are required in order to achieve the maximum clamping force.



ROBOT FIXATION DIAGRAM





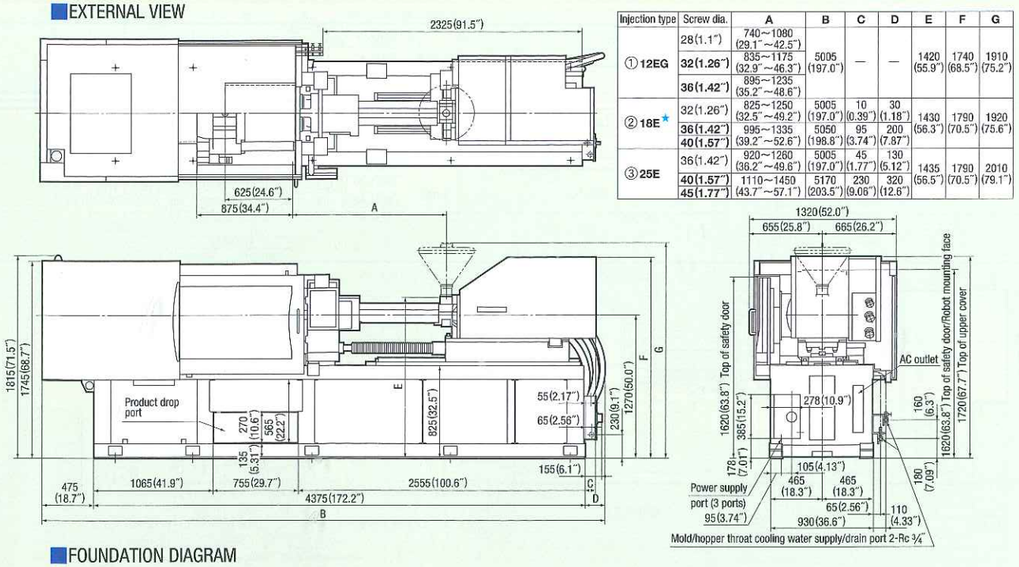


NEX-Ⅲ Series | NEX140Ⅲ-12EG ／ NEX140Ⅲ-18E★／ NEX140Ⅲ-25E

The ★ indicates the standard combination.

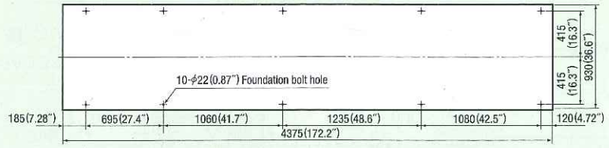
Injection type : ①12EG [Screw diameter : φ28(1.10″) ／ φ32(1.26″) ／ φ36(1.42″)]
: ②18E [Screw diameter : φ32(1.26″) ／ φ36(1.42″) ／ φ40(1.57″)] ★
: ③25E [Screw diameter : φ36(1.42″) ／ φ40(1.57″) ／ φ45(1.77″)]

EXTERNAL VIEW

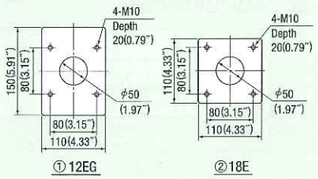


Injection type	Screw dia.	A	B	C	D	E	F	G
①12EG	28(1.1″)	740～1080 (29.1″～42.5″)	5005 (197.0″)	—	—	1420 (55.9″)	1740 (68.5″)	1910 (75.2″)
	32(1.26″)	835～1175 (32.9″～46.3″)						
	36(1.42″)	895～1235 (35.2″～48.6″)						
②18E★	32(1.26″)	825～1250 (32.5″～49.2″)	5005 (197.0″)	10 (0.39″)	30 (1.18″)	1430 (56.3″)	1790 (70.5″)	1920 (75.6″)
	36(1.42″)	995～1335 (39.2″～52.6″)	5050 (198.8″)	95 (3.74″)	200 (7.87″)			
	40(1.57″)							
③25E	36(1.42″)	920～1260 (36.2″～49.6″)	5005 (197.0″)	45 (1.77″)	130 (5.12″)	1435 (56.5″)	1790 (70.5″)	2010 (79.1″)
	40(1.57″)	1110～1450 (43.7″～57.1″)	5170 (203.5″)	230 (9.06″)	320 (12.6″)			
	45(1.77″)							

FOUNDATION DIAGRAM

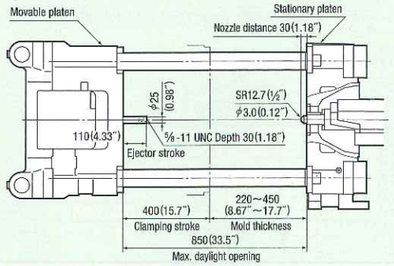


HOPPER FIXATION DIAGRAM

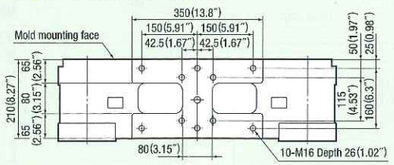


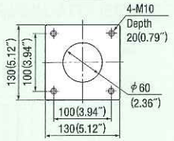
MOLD ATTACHMENT DIAGRAM

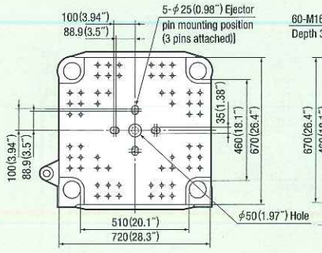
*The minimum mold dimensions of 325(12.8″)×325(12.8″) are required in order to achieve the maximum clamping force.



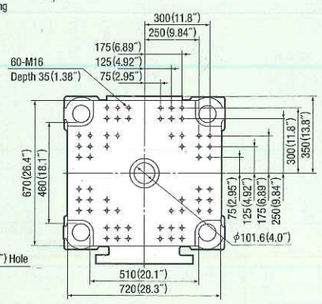
ROBOT FIXATION DIAGRAM



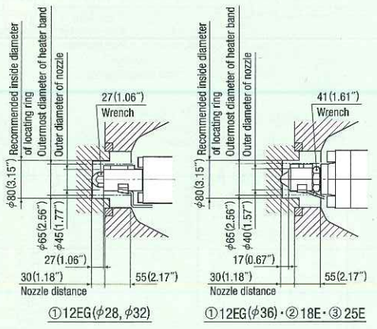




Movable platen



Stationary platen



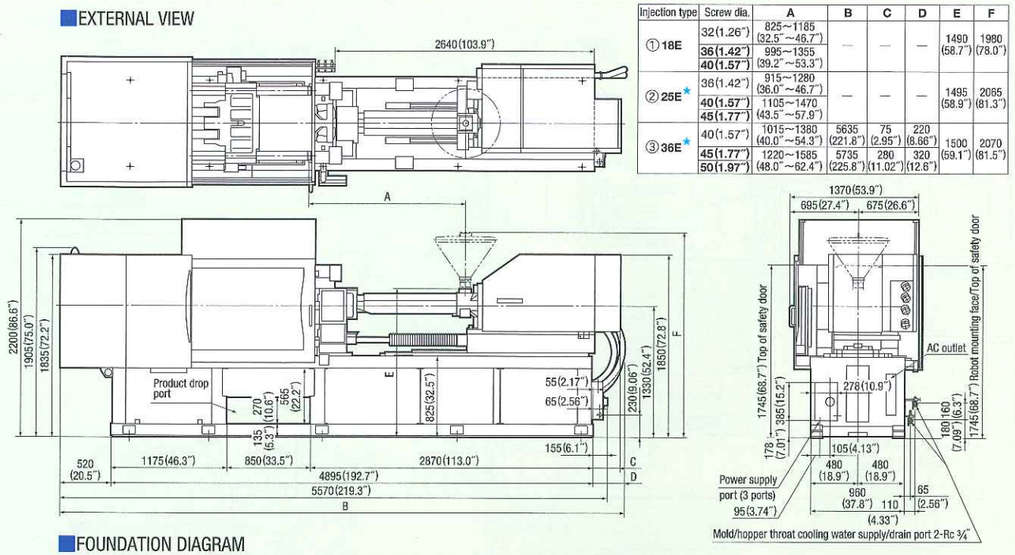
Nozzle section

NEX-Ⅲ Series | NEX180Ⅲ-18E ／ NEX180Ⅲ-25E★／ NEX180Ⅲ-36E★

The ★ indicates the standard combination.

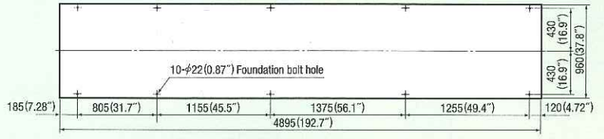
Injection type : ①18E [Screw diameter : φ32(1.26″) ／ φ36(1.42″) ／ φ40(1.57″)]
: ②25E [Screw diameter : φ36(1.42″) ／ φ40(1.57″) ／ φ45(1.77″)] ★
: ③36E [Screw diameter : φ40(1.57″) ／ φ45(1.77″) ／ φ50(1.97″)] ★

EXTERNAL VIEW

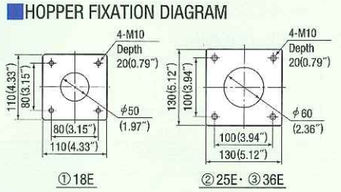


Injection type	Screw dia.	A	B	C	D	E	F
①18E	32(1.26″)	825～1185 (32.5″～46.7″)	—	—	—	1490 (58.7″)	1980 (78.0″)
	36(1.42″)	995～1355 (39.2″～53.3″)					
	40(1.57″)						
②25E★	36(1.42″)	915～1280 (36.0″～46.7″)	—	—	—	1495 (58.9″)	2065 (81.3″)
	40(1.57″)	1105～1470 (43.5″～57.9″)					
	45(1.77″)						
③36E★	40(1.57″)	1015～1380 (40.0″～54.3″)	5635 (221.8″)	75 (2.95″)	220 (8.66″)	1500 (59.1″)	2070 (81.5″)
	45(1.77″)	1220～1585 (48.0″～62.4″)	5735 (225.8″)	280 (11.02″)	320 (12.6″)		
	50(1.97″)						

FOUNDATION DIAGRAM

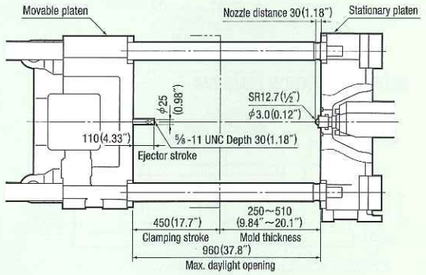


HOPPER FIXATION DIAGRAM

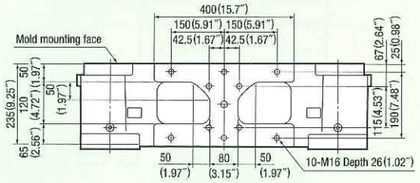


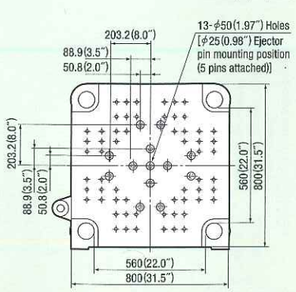
MOLD ATTACHMENT DIAGRAM

*The minimum mold dimensions of 395(15.6″)×395(15.6″) are required in order to achieve the maximum clamping force.

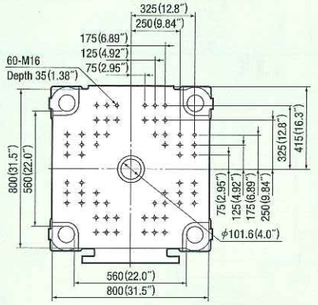


ROBOT FIXATION DIAGRAM

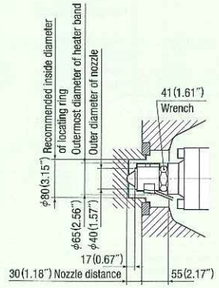




Movable platen



Stationary platen



Nozzle section

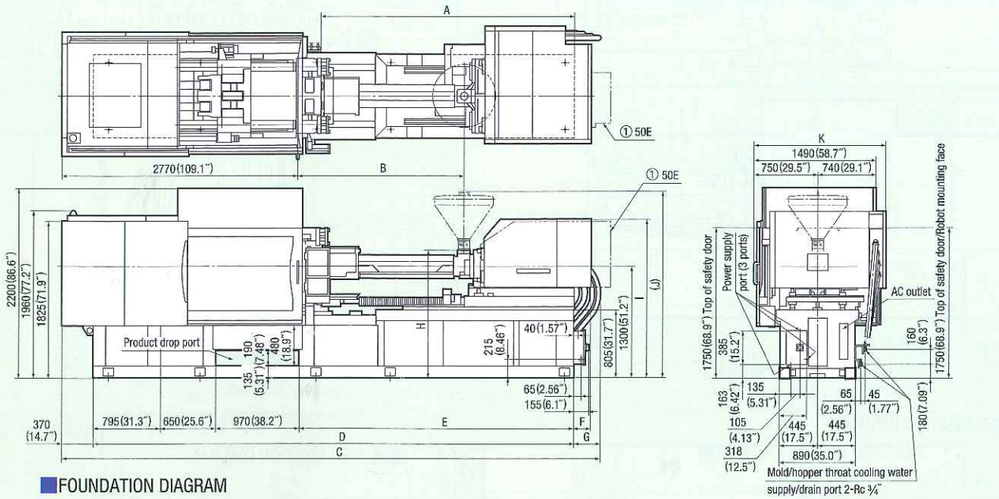
NEX-Ⅲ Series | NEX220Ⅲ-50E★ / NEX220Ⅲ-71E

The ★ indicates the standard combination.

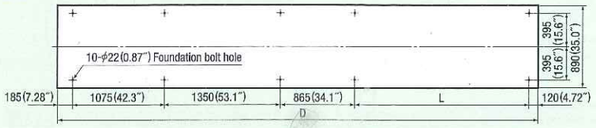
Injection type : ①50E[Screw diameter : φ45(1.77″) / φ50(1.97″) / φ56(2.20″)]★
: ②71E[Screw diameter : φ50(1.97″) / φ56(2.20″) / φ63(2.48″)]

Injection type	Screw dia.	A	B	C	D	E	F	G	H	I	J	K	L
① 50E★	45(1.77″)	2945 (115.9″)	1147～1527 (45.2″～60.1″)	6120 (240.9″)	5595 (220.3″)	3180 (125.2″)	40 (1.57″)	—	1465 (57.7″)	1820 (71.7″)	2148 (84.6″)	—	2000 (78.7″)
	50(1.97″)		1374～1754 (54.1″～69.1″)	6230 (245.3″)			265 (10.4″)						
	56(2.2″)												
② 71E	50(1.97″)	2990 (117.7″)	1279～1659 (50.4″～65.3″)	6165 (242.7″)	5640 (222.0″)	3225 (130.9″)	—	30 (1.18″)	1485 (58.5″)	1940 (76.4″)	2170 (85.4″)	1560 (61.4″)	2045 (80.6″)
	56(2.2″)		1547～1927 (60.9″～75.9″)	6310 (248.4″)			190 (7.48″)	300 (11.8″)					
	63(2.48″)												

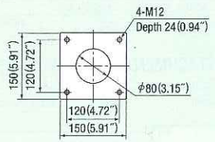
■EXTERNAL VIEW



■FOUNDATION DIAGRAM

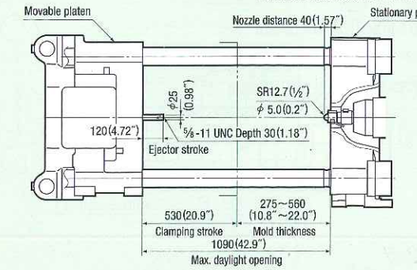


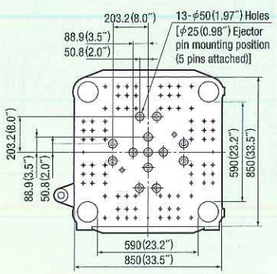
■HOPPER FIXATION DIAGRAM



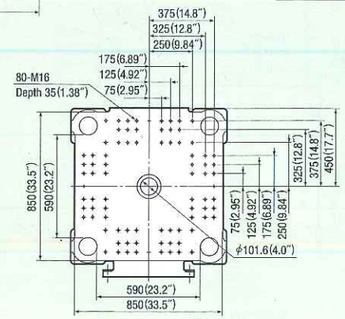
■MOLD ATTACHMENT DIAGRAM

*The minimum mold dimensions of 415(16.3″)×415(16.3″) are required in order to achieve the maximum clamping force.

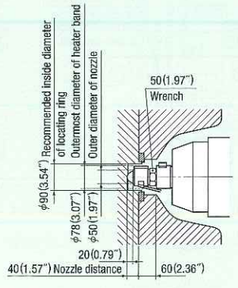




Movable platen

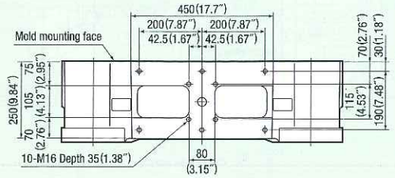


Stationary platen



Nozzle section

■ROBOT FIXATION DIAGRAM



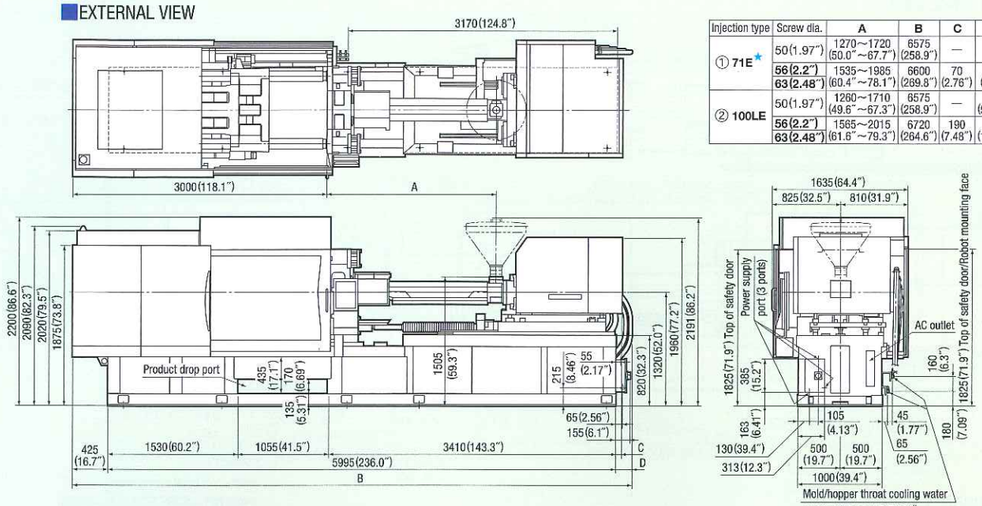
NEX-Ⅲ Series | NEX280Ⅲ-71E★ / NEX280Ⅲ-100LE

The ★ indicates the standard combination.

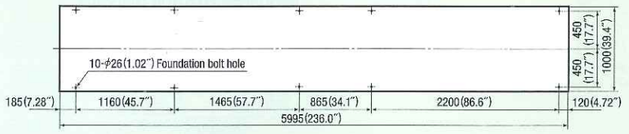
Injection type : ① 71E[Screw diameter : φ50(1.97″) / φ56(2.20″) / φ63(2.48″)]★
: ②100LE[Screw diameter : φ50(1.97″) / φ56(2.20″) / φ63(2.48″)]

Injection type	Screw dia.	A	B	C	D
① 71E★	50(1.97″)	1270～1720 (50.0″～67.7″)	6575 (258.9″)	—	—
	56(2.2″)	1535～1985 (60.4″～78.1″)	6600 (269.8″)	70 (2.76″)	180 (7.9″)
	63(2.48″)				
② 100LE	50(1.97″)	1260～1710 (49.6″～67.3″)	6575 (258.9″)	—	150 (5.91″)
	56(2.2″)	1565～2015 (61.6″～79.3″)	6720 (264.6″)	190 (7.48″)	300 (11.8″)
	63(2.48″)				

■EXTERNAL VIEW



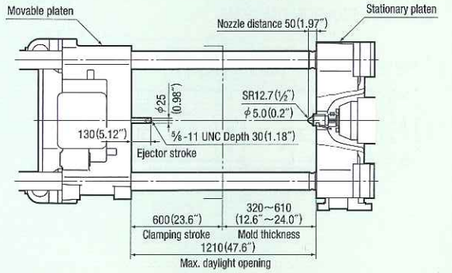
■FOUNDATION DIAGRAM



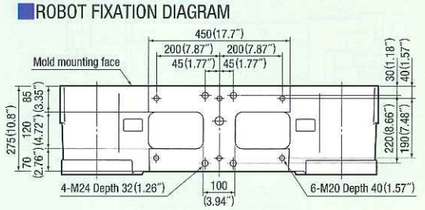
■HOPPER FIXATION DIAGRAM

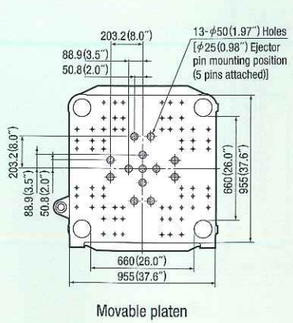
■MOLD ATTACHMENT DIAGRAM

*The minimum mold dimensions of 465(18.3″)×465(18.3″) are required in order to achieve the maximum clamping force.

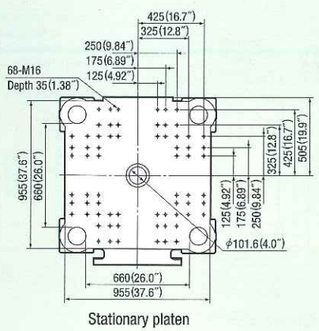


■ROBOT FIXATION DIAGRAM

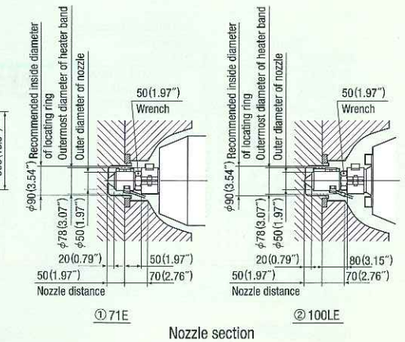




Movable platen



Stationary platen



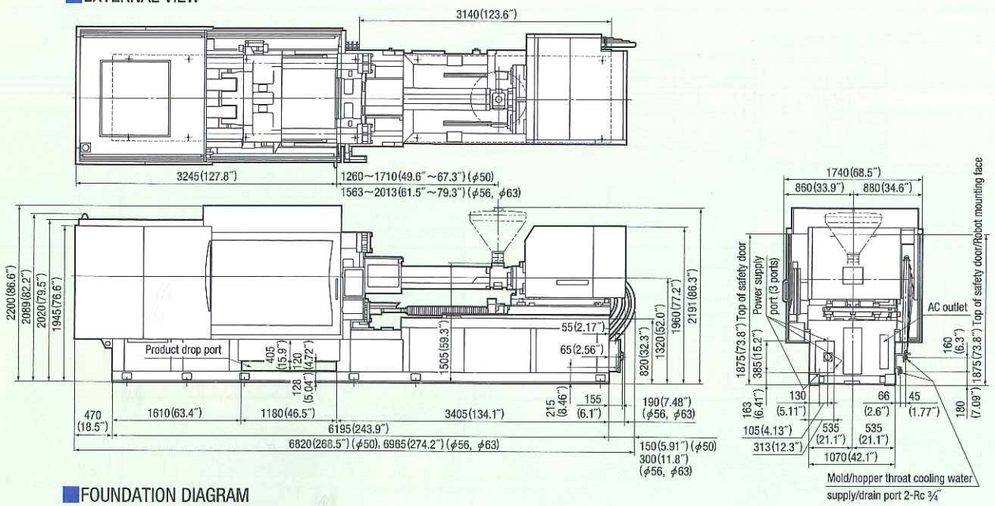
① 71E ② 100LE

Nozzle section

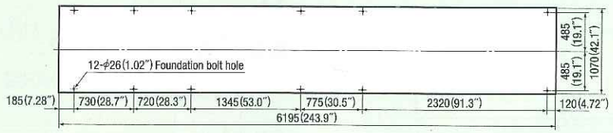
The ★ indicates the standard combination.

Injection type : 100LE [Screw diameter : φ50 (1.97″) / φ56 (2.20″) / φ63 (2.48″)] ★

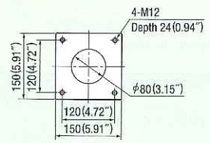
EXTERNAL VIEW



FOUNDATION DIAGRAM

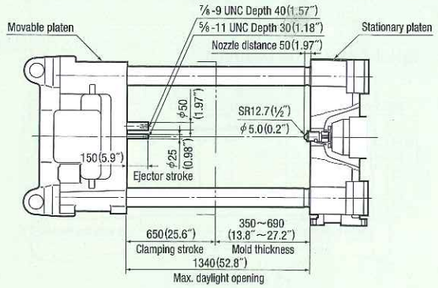


HOPPER FIXATION DIAGRAM

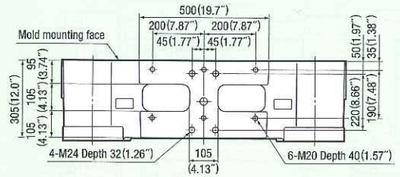


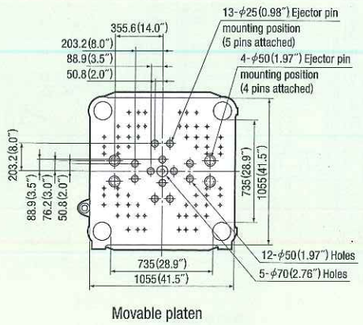
MOLD ATTACHMENT DIAGRAM

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

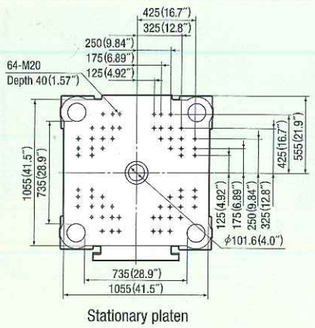


ROBOT FIXATION DIAGRAM

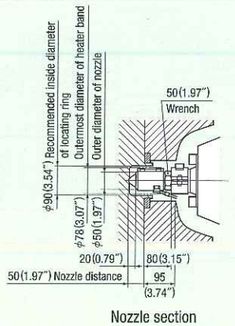




Movable platen



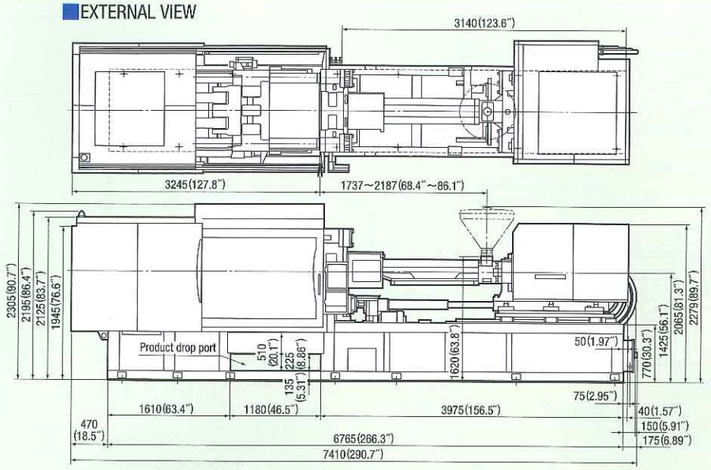
Stationary platen

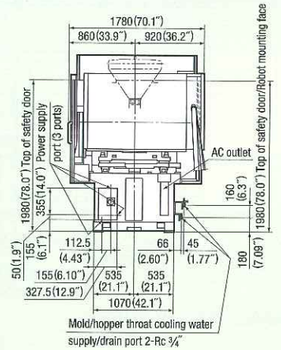


Nozzle section

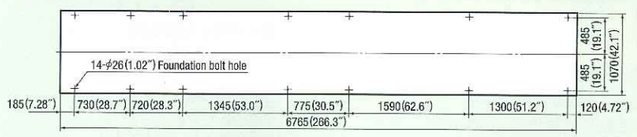
Injection type : 140LE [Screw diameter : φ63 (2.48″) / φ71 (2.80″)]

EXTERNAL VIEW

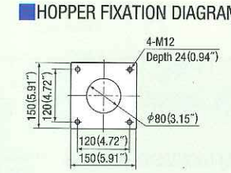




FOUNDATION DIAGRAM

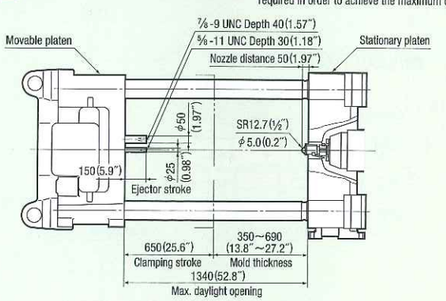


HOPPER FIXATION DIAGRAM

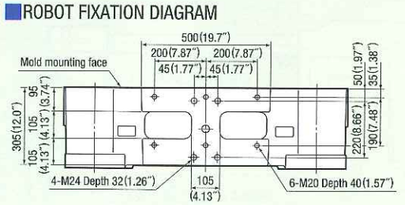


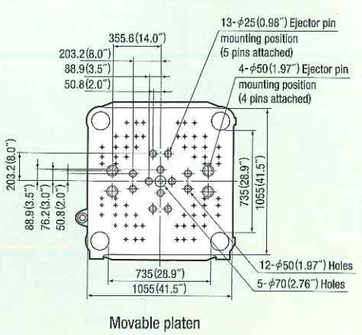
MOLD ATTACHMENT DIAGRAM

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

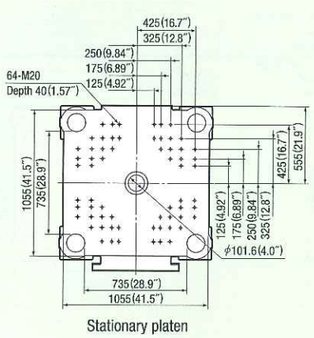


ROBOT FIXATION DIAGRAM

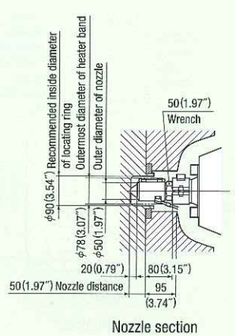




Movable platen



Stationary platen

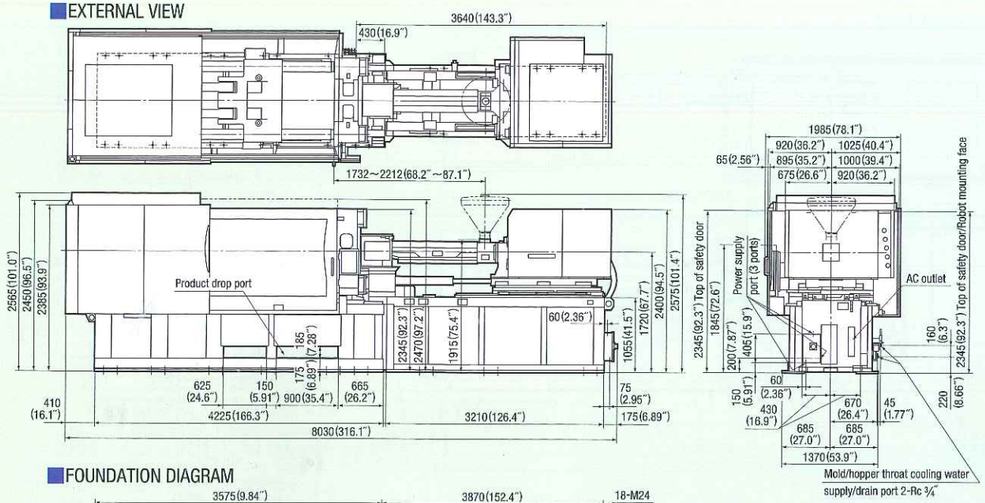


Nozzle section

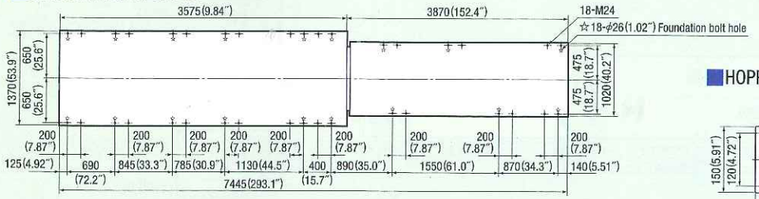
NEX460Ⅲ-140LE

Injection type : 140LE[Screw diameter : ϕ63(2.48″) / ϕ71(2.80″)]

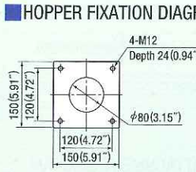
EXTERNAL VIEW



FOUNDATION DIAGRAM

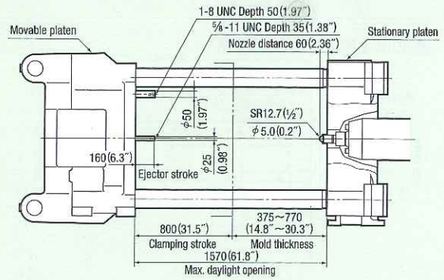


HOPPER FIXATION DIAGRAM

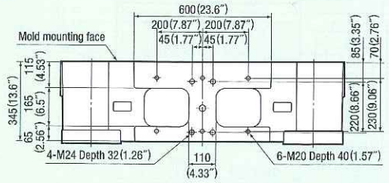


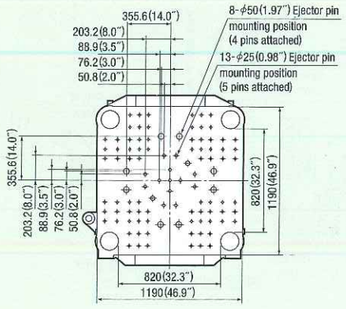
MOLD ATTACHMENT DIAGRAM

*The minimum mold dimensions of 580(22.8")×580(22.8") are required in order to achieve the maximum clamping force.

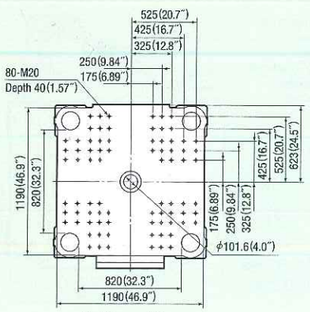


ROBOT FIXATION DIAGRAM

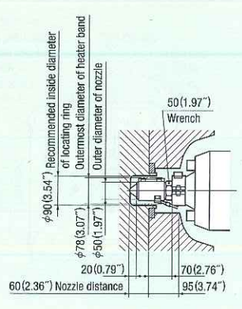




Movable platen



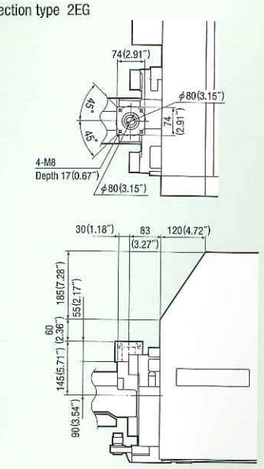
Stationary platen



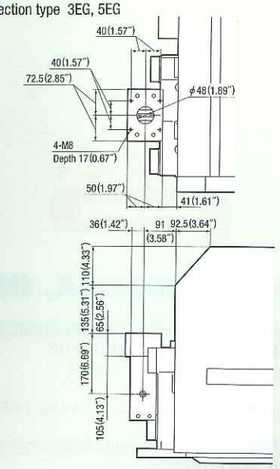
Nozzle section

Diagram of hopper installation sections

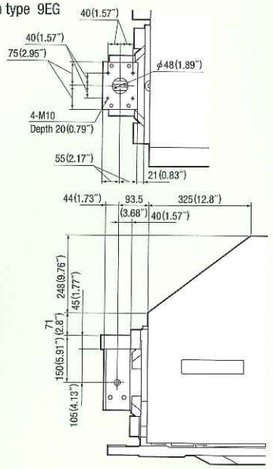
Injection type 2EG



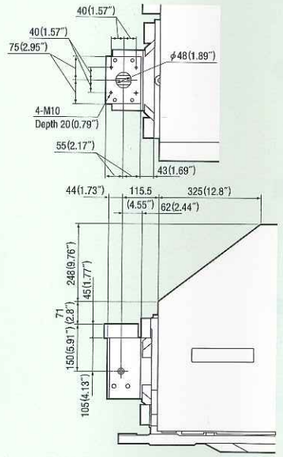
Injection type 3EG, 5EG



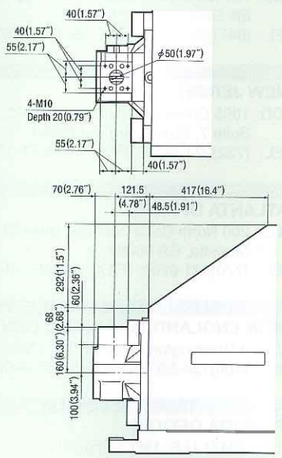
Injection type 9EG



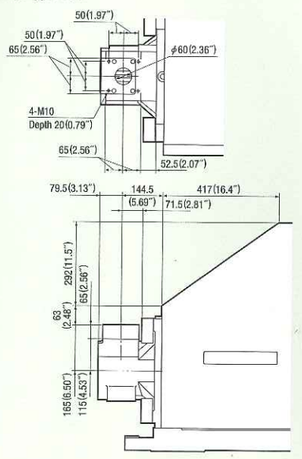
Injection type 12EG



Injection type 18E



Injection type 25E



Injection type 36E