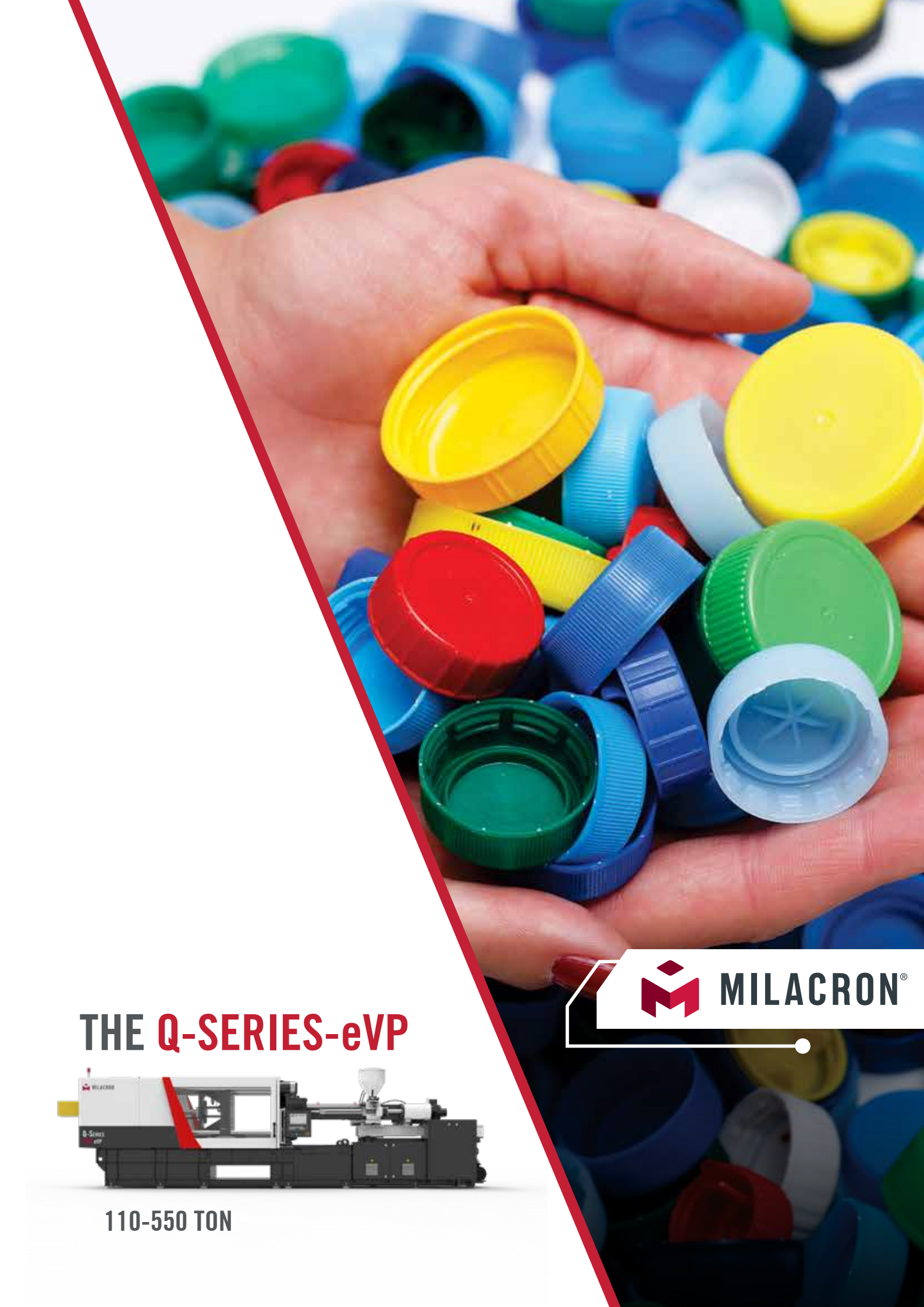


MILACRON®

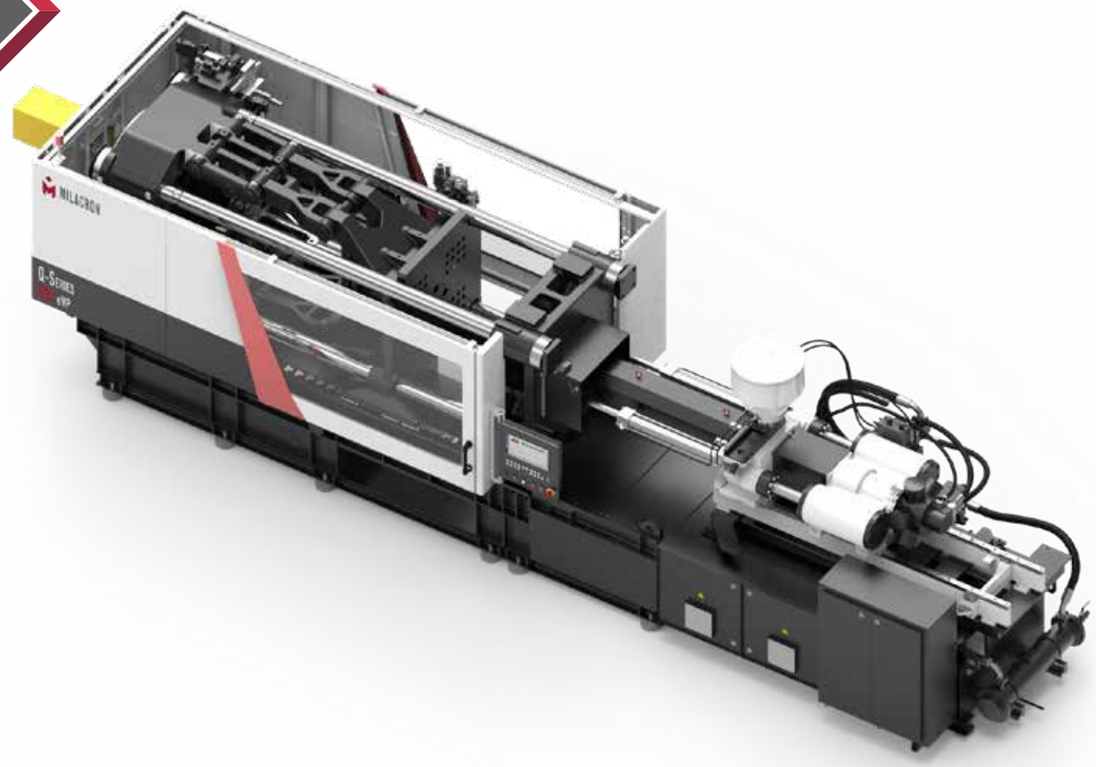
THE Q-SERIES-eVP

110-550 TON

THE Q-SERIES-eVP

110-550

Performance wrapped up in a durable package. The Q-Series-eVP leverages a Electronically Controlled Variable Volume Pump package to deliver quality parts at a rapid pace while minimizing energy use. The Q-Series-eVP performance and features surpass injection molding expectations of higher priced machinery. The reliable Q-Series-eVP provides clamp specifications with greater tie bar spacing, clamp stroke, ejector stroke, and force, delivered in a smaller machine footprint.



THE HIGH-PERFORMANCE DOUBLE TOGGLE Q-SERIES-eVP OFFERS SOME OF THE BEST TECHNICAL SPECIFICATIONS, VERSATILITY, DURABILITY, PRECISION, AND PRODUCTIVITY PROVIDED ON A ELECTRONICALLY CONTROLLED VARIABLE VOLUME PUMP TOGGLE.

- A energy-efficient hybrid powered by Electronically Controlled Variable Volume Pump
- Exceptional toggle kinematics offer a smooth and quick clamp velocity profile
- Refined clamp control and rigid base reduced vibration from prior designed toggles
- Enhanced optional application capability: stack tools, extended day light, intrusion, increased base height
- Innovative platen design ensures uniform load distribution across the mold face
- Designed for quick mold changes with an advanced auto die height setup and inter changeable mold files from similar machines
- Precise platen parallelism to reduce machine and mold wear
- Offering 8 clamp tonnages that are paired with 8 variations of injection units, the Q-Series-eVP offers a wide range of operation capacity

THE Q-SERIES-eVP

TOGGLE DESIGN

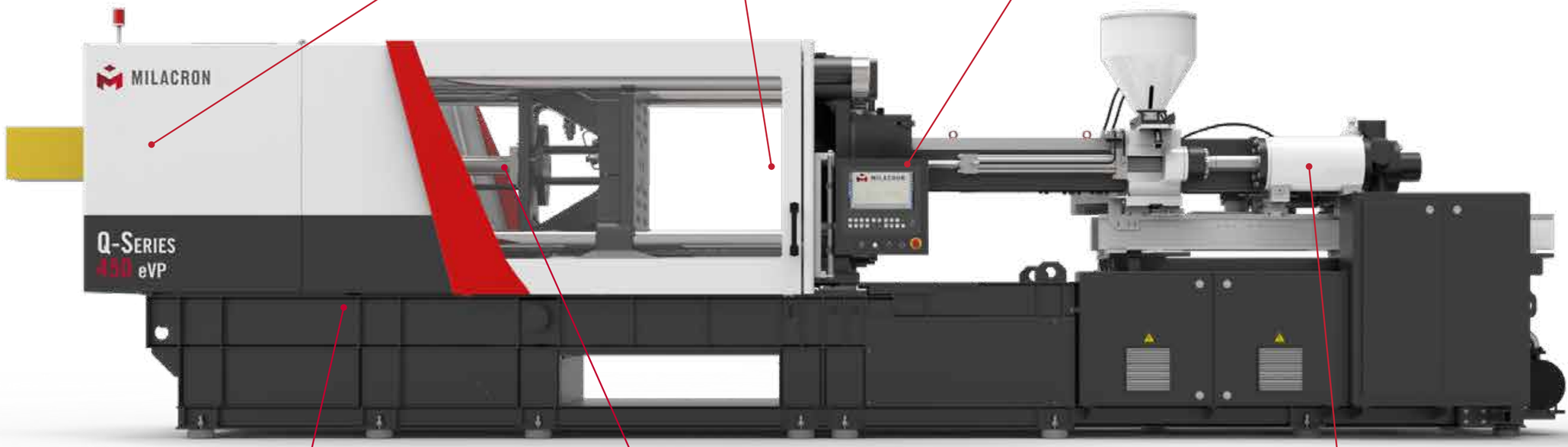
- Improved speeds and reduced footprint with new toggle design
- Durable double toggle 5/pin design
- Rectangular platen designs accept a wide range of molds (see specification tables)
- New toggle design allows for consistent lower tonnage operations at 30% of maximum clamping force
- Auto lubrications to critical toggle components
- Grease free mold area

ADVANCED MOLD PROTECTION

- Advanced Mold Safety
- Ejector Spring in Position

MOSAIC G3 CONTROL SYSTEM

- 15.6" FHD Multi Touch Capacitive Display
- Faster processor which helps to handle most of the critical applications
- Configurable Cores have been expanded to add Ejector & Air Ejection
- Very easy to configure complex molds
- Clamp Speeds can be adjusted graphically for ease of setting of speed & position
- Temperature Trend of last 30 minutes help to monitor the behavior and identify abnormalities



DIE HEIGHT MECHANISM

- Repeatable and accurate die height adjustments with use of a linear transducer
- Easy auto die height setup through the control screen
- Adjustable manual die height setup speeds
- Durable mechanical design ensures accurate clamp position is maintained during production

EJECTOR

- Improved ejector stroke and force from prior toggle designs
- SPI knockout pattern
- Programmable settings and pulsating eject functions

ENHANCED MOLD LIFE

The Rigid base and clamp design provides:

- Higher mold carrying capacity
- Enhanced parallelism and squarness

TWIN CYLINDER INJECTION UNIT

- Uniform load distribution across screw centerline
- Standard barrel swivel for convenient screw removal
- Precision linear guide ways for precise screw and barrel alignment
- Optimized hydraulic hose routing to minimize footprint and improve hose life
- Durable ceramic insulated heater bands

PROVIDING THE HIGHEST PERFORMANCE, PRECISION, AND FLEXIBILITY.

Q-SERIES-eVP

The latest in Milacron's low-to-mid tonnage range of injection molding machines. The NEW high-performance double toggle Q-Series-eVP product line offers a 5 pin double toggle machine with enhanced productivity, performance, and precision.

Injection Unit Specifications

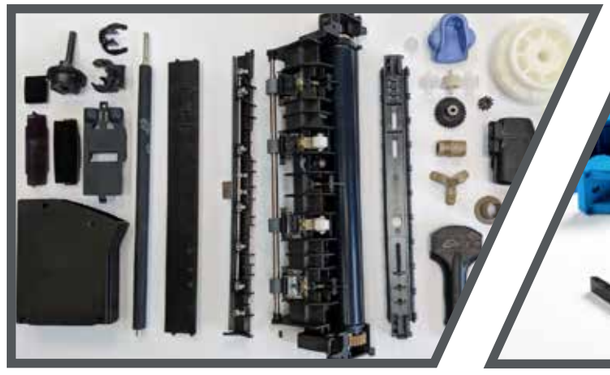
IU	300	450	630	970	1540	2290	3470	4880
Q-SERIES-eVP 110								
Q-SERIES-eVP 150								
Q-SERIES-eVP 180								
Q-SERIES-eVP 230								
Q-SERIES-eVP 280								
Q-SERIES-eVP 350								
Q-SERIES-eVP 450								
Q-SERIES-eVP 550								

Clamp Specifications

MODEL	TONNAGE	PLATEN SIZE (H X V)	TIE BAR SPACING (H X V)	MAX DAYLIGHT	MIN / MAX MOLD
	Metric Tons	mm	mm	mm	mm
Q-Series-eVP 110	110	690 x 645	480 x 435	900	150 / 520
Q-Series-eVP 150	150	780 x 740	550 x 510	1060	200 / 600
Q-Series-eVP 180	180	810 x 770	575 x 525	1100	200 / 600
Q-Series-eVP 230	230	920 x 820	660 x 560	1260	200 / 710
Q-Series-eVP 280	280	990 x 940	710 x 660	1400	250 / 750
Q-Series-eVP 350	350	1120 x 1035	810 x 725	1520	300 / 800
Q-Series-eVP 450	450	1245 x 1200	875 x 830	1670	350 / 820
Q-Series-eVP 550	550	1330 x 1300	1,000 x 900	1820	400 / 900

APPLICATIONS

• MEDICAL *• CONSUMER* *• ELECTRONICS*



APPLICATIONS

• CONSTRUCTION *• PACKAGING* *• AUTOMOTIVE*

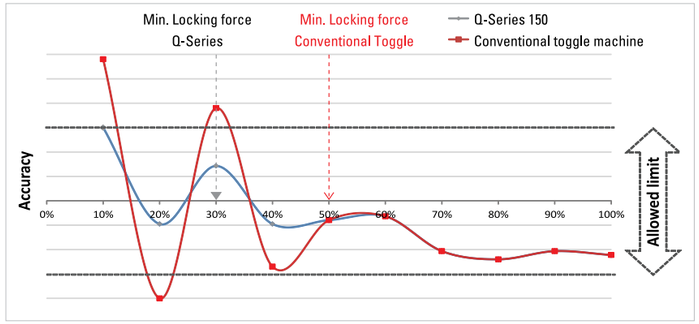
CLAMPING UNIT

- A toggle manufactured on a robust platform, designed for repeatable performance
- Leveling pads and rugged base strategically designed to reduce machine vibration
- Robust base allows for larger mold weights than prior toggle designs
- Generous tie bar distance accommodates a vast wide range of molds
- The rectangular platen design opens up the die space for a wide range of molds
- The improved toggle kinematics provide for fast clamp velocities and a smooth velocity profile
- Clamp traverses on guide ways for smooth low friction operation
- Better strain linearity provides for a larger span of tonnage operations, allowing for repeatable low tonnage settings
- Chrome plated strain rods (standard)

CLAMPING UNIT

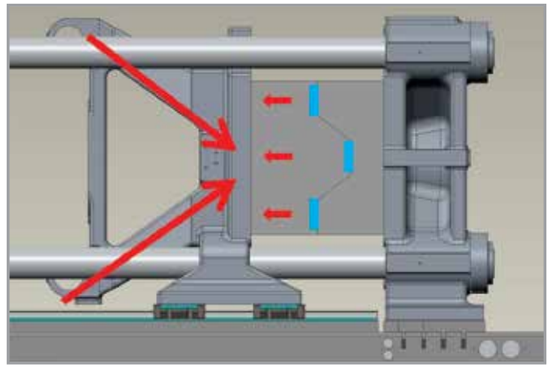
- Clamp Euromap dry cycle times improve approximately 30% over conventional toggle designs
- Grease free tiebars with bushing free moving platen
- Auto lubrication to toggle linkage and the precision linear skates
- Tri-directional part removal

MINIMUM CLAMPING FORCE IMPROVED FROM 50% TO 30% OF MAX CLAMPING FORCE



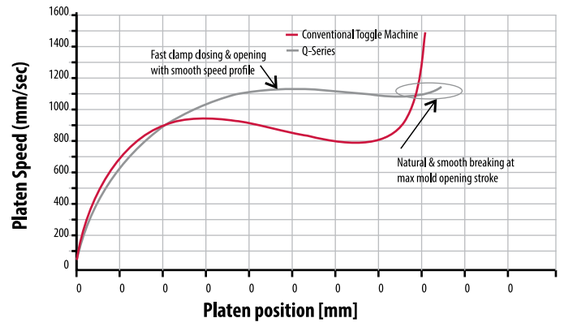
Minimum clamping force improved to 30% of the maximum clamping force, so you can try more variety of applications with the same precision levels.

UNIFORM LOAD DISTRUBUTION



The moving platen design is improved for centrally applied force on the mold thereby ensuring uniform load distribution across the mold face and reduces platen deformation at the center.

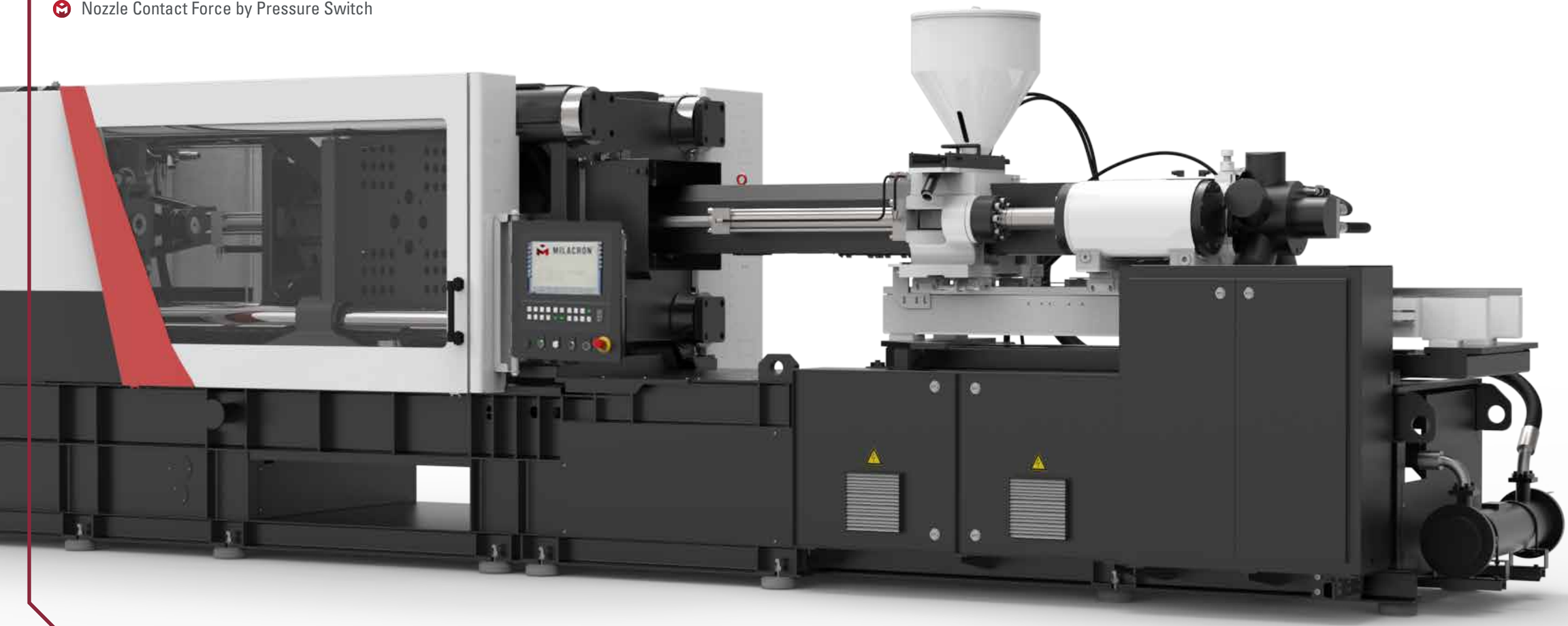
FAST & SMOOTH MOLD CLOSING / OPENING SPEED



INJECTION UNIT

The Q-Series-eVP is one of Milacron's global product lines, presenting a comprehensive line of injection units, barrels, and screws that are prefect for vast assortment of high-quality processing applications.

- 20 Configurable Velocity Steps
- 10 Fill Pressure Steps
- 10 Configurable Pack/Hold Pressure Steps
- Transfer Ti = Time; Po = Position; Pr = Pressure
- Linear Position Transducer
- Digital Readout Injection Position
- Nozzle Contact Force by Pressure Switch
- Injection Decompression Before/After/Both
- Sliding Hopper
- Insulated Ceramic Heaters
- Proportional Extruder RPM control
- 5 Steps Extruder RPM - Refilling Cycle
- Proportional Back Pressure Control



INJECTION UNIT

- Cold start protection
- Digital Setting of Extruder RPM & Digital Read Out of Actual RPM
- Auto tuning of temperatures provides for accurate closed loop temperature control
- Standard current monitoring of each heat zone provides for heater band burn out detection
- Barrel swivel allows for easy screw replacements
- Standard sliding hopper with shutoff
- Auto Heat Start Programme
- Zonewise Heater Failure Detection & Monitoring on screen

MOSAIC G3 CONTROL SYSTEM

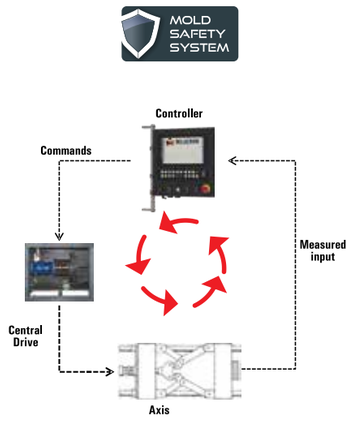
The refined control provides a straightforward format for the operator with 17 different language selections. Move mold files between similar machines with the use of a simple USB stick to minimizing operator setup time. The Q-Series-eVP programmable core provides over 25 different configurable selections to operate before, during, or after clamp, injection, or ejector axis movements.

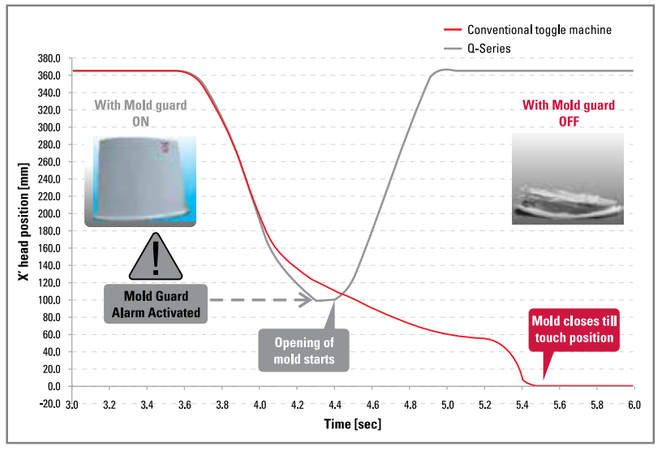
EXCEPTIONAL STANDARD FEATURES

- Faster processor which helps to handle most of the critical applications.
- Easy connectivity to outside world thru OPC U/A
- PDF viewer included
- VNC Slave available – Easily integrate the auxiliaries which support VNC
- Futuristic looks with unique design of Multicolour LED
- Flyout added to Select of functions like Cores, Air & MGO to operate in Manual/Set mode.
- Favorite Page helps customer to easily access frequently used pages from a single page.
- Monitoring with right Flyout for Alarm / help / cycle time / production information
- Alarm Diagnostics provides the Cause & Remedy for each fault, making it easier for customer to troubleshoot & solve the error
- User can understand operation of each page with Help file for each page.

MOLD SAFETY SYSTEM

- A closed loop control process which senses any presence of left over articles from the last process cycle or any foreign article between the core and the cavity
- Auto or manual configuration to monitor clamp pressure during high velocity stages or clamp closure





NOTES

STANDARD FEATURES

CLAMP	
Moving Platen on LM Guides	●
Auto Lubrication	●
Grease Collection Trays below Toggle Area and Moving Platen	●
Auto Mold Height Adjustment	●
Mold Guard Safety Feature	●
Contactless Transducer for Clamp Position	●
Rear Door Handle	●
Clamp try again	●
Position Based Ramping for Accurate Position Switching, Precise Speed & Pressure Control	●
Proportional Speed Control with Operator Adjustable 5 Opening & 5 Closing Speeds	●
Jam Bar	○
T-Slot Platens	○
Part Drop Chute	○
Part Drop Detect	○
Extended Daylight	○
Electric Power Gate - Front	○

INJECTION	
Auto Screw Protection	●
Nozzle Contact Force by Pressure Switch for main IU	●
Cold Slug Removal by Extruder / Injection	●
Layin Hopper Magnet	●
Bimetallic Barrel	○
Extra Heating Zone	○
Nozzle Shut-Off Valve w/o Parallel Operation (Not for Glass Filled Material)	○

EJECTOR	
Proportional Speed control through Pump (operator adjustable at control)	●
Knock-Out Bar for Multipoint Ejection	●
Pilot Operated Check Valve for Ejector	●
Pulsating Ejector Strokes upto 9 Pulses	●
2 Stage Programmable Forward & Retract Speeds	●
Intermediate Retract Set Point	●
Digital Readout Ejector Position	●
Pause Time between Ejector Forward Profile	●
Air Eject - Single & Double	○
Parallel Ejection - Ejector on Fly	○
Eject Retract Verification by Limit Switch	○
Hydraulic Core Pull - Single & Double Sequence	○

TEMPERATURE CONTROL	
PID Control Nozzle & Barrel	●
High / Low Temperature Alarms	●
Oil Temperature Control for Heat Exchanger	○
Feed Throat Temperature Control with Indication	○

CONTROLLER	
15.6" FHD Multi-Touch Capacitive Display	●
20 function keys with LEDs	●
Actual Injection Speed & Pressure Graph Display	●
30 Parameter monitoring for last 3000 cycles	●
500 Mold data storage	●
High / Low Limit Display for Each Adjustable Parameter	●
I/O diagnosis - Analog & Digital	●
Manual in PDF format for help	●
Overview Menu for Easy access of all axis parameters	●
Choice of Multiple Languages	●
Unit Selection (Metric or English)	●
Data Protection with four level of access	●
Graphical Representation of last 48 Hours Production	●
Daily Production Data of last 1 Year	●
Graphical Representation of Cycle Analysis	●
Energy Consumption analysis for each axis	●
Automatic Reporting of Process Data, Alarms, Change log (USB or Network location)	●
Change Log Menu:logs last 3000 Set Points Changes with Time/Date & User	●
3000 Alarms History with Date & Time Log	●
Process Mode:Functions with its Co-functions on a Single Key Press	●
Note Pad	●
Freely Programmable Smart Outputs & Inputs (total 3 inputs and outputs)	●
Freely Configurable Cores, Ejector & Air	●
4 User Configurable actual parameters for ease of monitoring for operator	●
Soft Keys for selection of Cores, Air & Mold Gates to operate in Set/Manual Mode	●
Favorite Page - Select 4 frequently used pages & operate from single page	●
Graphical display of Actual Zone Temperature of last 30 mins.	●
Favourite Page - Select 5 frequently used pages & operate from single page	●
Filtering of Alarm - Helps in quick analysis of specific alarm	●
Filtering & sort of Changelog - Helps in quick review / analysis of parameter changes	●
Configurable FlyOut area for viewing frequently used Monitoring Pages	●
No Page more than two click away	●
Auto shut down	●
Visual & Audible Alarm	●
Set point and actual values shown as absolute values	●
Pausibility check on values entered	●
Data saving in USB-Mold Data, Change log, Trend Data, Log book, Alarm History, Screen Shot	●
Shift wise Production Counter	●
Servo Motor / Drive diagnostic screen	●
Semi Auto Purge	●
Cold slug removal by extruder/ Injection	●
Intrusion Molding	●
Insert Molding	●
Freely Programmable Core pull Sequence	●
Energy meter on screen	●

● - Standard Feature ○ - Optional Feature

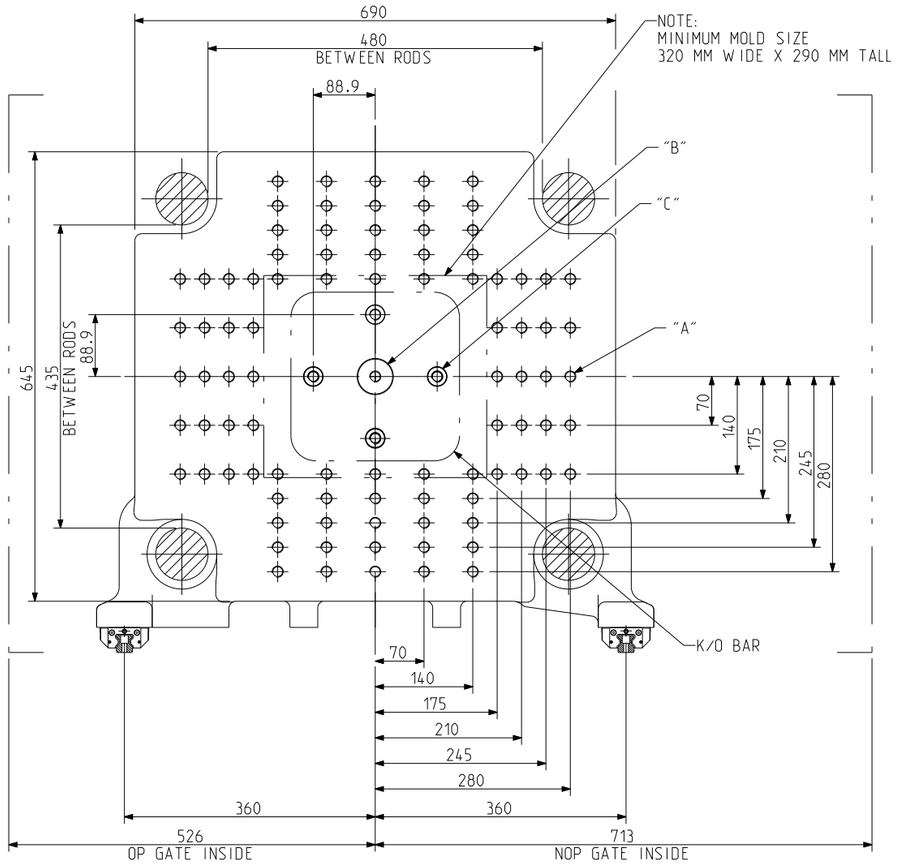
STANDARD FEATURES

ADDITIONAL FEATURES	
Levelling Pads	●
Surge Suppressor Device	●
Y Strainer in Heat Exchanger Inlet	●
Butter Fly Valve at Pump Suction Line	●
UV/OV Monitoring Relay-Voltage Monitor Relay	●
Filter Element IFR-2-06B-20-10B for Oil Filling	●
Hour Meter on Electrical Panel	●
Visual ON/OFF Indication with Z4 LED	●
Power on Push Button	●
Gauge Port for all Major Functions	●
Electronically Controlled Variable Volume Pump	●
Hydraulic Solenoid Valve Connector with ON/OFF LED Indicator	●
Water Manifold	○
Electrical Unscrewing	○
Hydraulic Unscrewing	○
Electric UPS for Control	○
Tubelight in Clamp Area	○
Dome Lamp 3-Tier, 4-Tier	○
Good / Defective Part Signal	○
Gas Assist Injection Interface	○
Latch & Blender Unit Interface	○
Integrated Hot Runner Controller	○
Mold Gate - Hydraulic / Pneumatic	○
Stand Alone Hot Runner Controller	○
Water Battery with Temperature Indicator	○
Robot Interface (SPI & Euromap -12 & -67)	○
Water Saver Valve for Mold / Pulse Cooling	○
Extra Power Supply Outlets with Available Combination	○
Safety Interlock Between Hot Runner & Water Saver Valve through Flow Switch	○

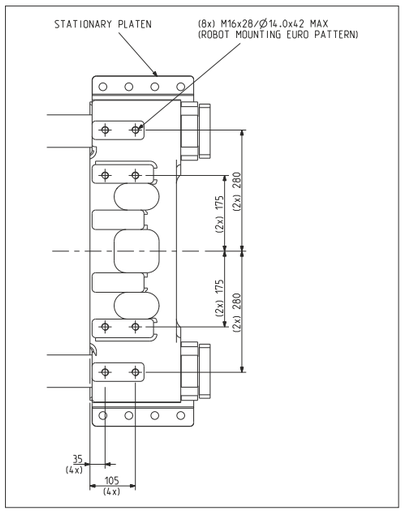
● - Standard Feature ○ - Optional Feature

THE Q-SERIES-eVP
TONNAGE: 110

Injection Unit 300, 450, 630
TECHNICAL SPECIFICATIONS



MOVING PLATEN



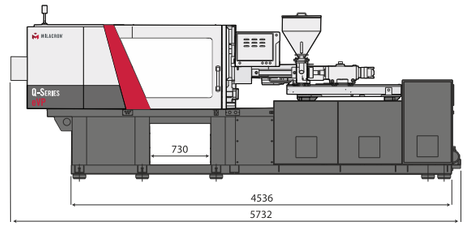
Not applicable for T-Slot Platens

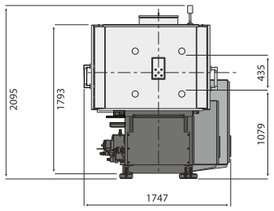
ALL DIMENSIONS ARE IN MM

A M16X32 (90) PLACES ON BOTH PLATEN

B MOVING PLATEN: Ø50(+0.025/-0.0) THRU BORE,
K/0 BAR CENTRE HOLE M16 THRU
STATIONARY PLATEN:
Ø100(+0.035/-0.0) WITH LOCATING RING,
Ø125(+0.04/-0.0) x 10(+0.15/-0.0) DEEP, WITHOUT LOCATING RING

C Ø27 THRU, (4) HOLES IN MOVING PLATEN,
K/O BAR M16 THRU (4) HOLES





Q-SERIES-eVP 110	UNIT	300			450			630		
	METRIC	A'	A	B	A'	A	B	A'	A	B
INJECTION UNIT SPECIFICATIONS										
INJECTION CAPACITY MAX. (GPPS)	gm	108	146	191	165	215	272	239	303	374
THEORETICAL DISPLACEMENT	cc	113	154	201	173	226	286	251	318	393
INJECTION PRESSURE MAX.	bar	2510	1958	1499	2443	1984	1568	2492	1969	1595
INJECTION RATE *	cc/sec	86	117	153	90	117	148	93	118	146
INJECTION SCREW STROKE	mm	160	160	160	180	180	180	200	200	200
SCREW DIAMETER	mm	30	35	40	35	40	45	40	45	50
SCREW L/D RATIO		26.6	22.9	20	25.7	22.5	20	25	22.2	20
SCREW SPEED	rpm	317	317	317	245	245	245	194	194	194
SCREW TORQUE @ 172 BAR	NM	676	676	676	876	876	876	1080	1080	1080
PLASTICIZING RATE (GPPS) *	g/sec	10	14	20	11	15	21	12	17	22
PLASTICIZING RATE (GPPS BARRIER) *	g/sec	-	20	26	15	20	28	16	22	29
NO.OF PYROMETERS (BARREL+NOZZLE)		4+1			4+1			4+1		
TOTAL HEAT CAPACITY	KW	9.2			11.3			15.7		
CLAMP UNIT SPECIFICATIONS										
CLAMP FORCE	Ton	110			110			110		
OPENING FORCE	Ton	11			11			11		
CLAMP STROKE	mm	380			380			380		
MAXIMUM DAYIGHT	mm	900			900			900		
MINIMUM MOULD HEIGHT #	mm	150			150			150		
MAXIMUM MOULD HEIGHT	mm	520			520			520		
PLATEN SIZE (H X V)	mm	690 X 645			690 X 645			690 X 645		
DISTANCE BETWEEN TIE ROD	mm	480 X 435			480 X 435			480 X 435		
TIE ROD DIAMETER	mm	75			75			75		
EJECTOR STROKE	mm	150			150			150		
EJECTOR FORCE	Ton	3.5						3.5		
MOULD WEIGHT CAPACITY (STAT. / MOVING)	kg	1540 (770 / 770)			1540 (770 / 770)			1540 (770 / 770)		
DRY CYCLE TIME (EUROMAP 6) ***	sec-mm	1.65 - 336			1.65 - 336			1.65 - 336		
GENERAL										
ELECTRIC MOTOR	kW (HP)	15 (20)			15 (20)			15 (20)		
TOTAL OIL CAPACITY	L	280			280			280		
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	55			55			55		
CONNECTED LOAD	kW	24.2			26.3			30.7		
MACHINE DIMENSION (L X W X H)	m	5.73 X 1.75 X 2.1			5.73 X 1.75 X 2.1			5.73 X 1.75 X 2.1		
MACHINE WEIGHT	kg	5600			5750			5900		

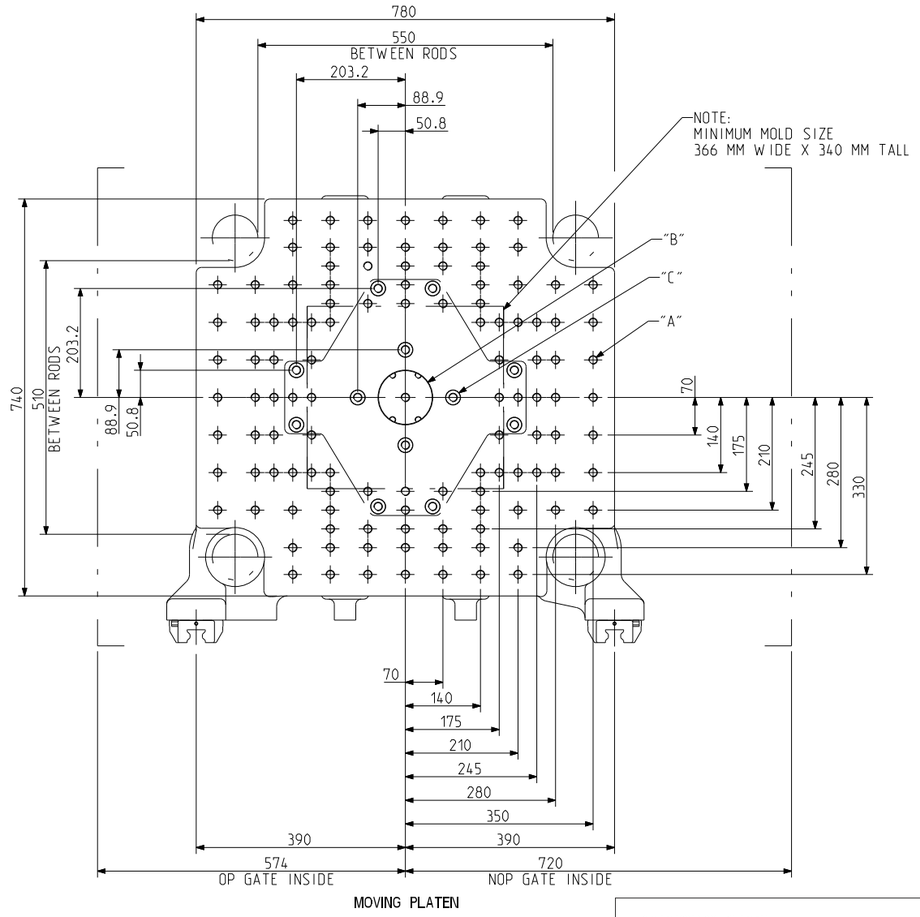
* WITH OPEN NOZZLE
# THIS WILL INCREASE INCASE OF 1) EXTRA MOULD SHOE & 2) MORE THAN 250 EDL
***BREAKAWAY AND TONNAGE DECOMPRESSION TIMES ARE NOT INCLUDED IN DRY CYCLE TIME
All machine dimensions and specifications are subject to change. Values are for reference only. These values are for standard machine power.

THE Q-SERIES-eVP

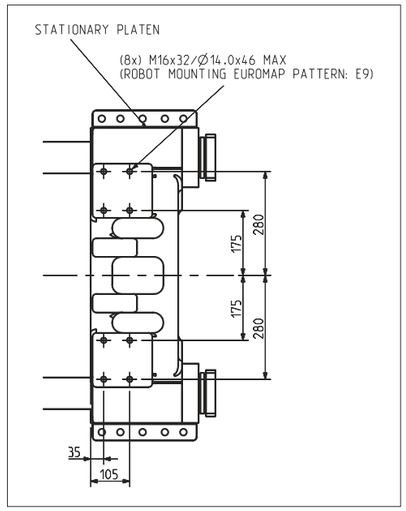
TONNAGE: 150

Injection Unit 450, 630, 970

TECHNICAL SPECIFICATIONS



MOVING PLATEN



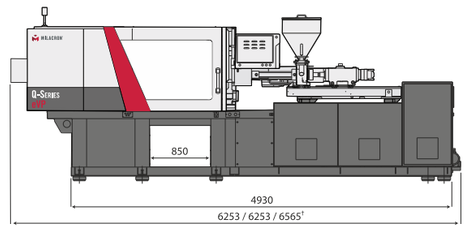
Not applicable for T-Slot Platens

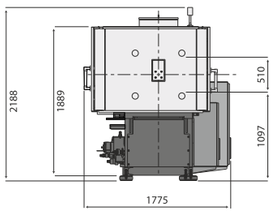
ALL DIMENSIONS ARE IN MM

A MOVING PLATEN: M16X32 DEEP (116) PLACES,
STATIONARY PLATEN: M16X32 DEEP (116) PLACES.

B MOVING PLATEN: Ø100(+0.035/-0.0) THRU BORE,
K/O BAR CENTRE HOLE M16x40 DEEP.
STATIONARY PLATEN:
Ø125(+0.04/-0.0) WITH LOCATING RING,
Ø160(+0.04/-0.0) x 10(+0.15/-0.0) DEEP, WITHOUT LOCATING RING.

C Ø27 THRU, (12) HOLES IN MOVING PLATEN,
K/O BAR M16x40 DEEP (12) HOLES





†IU 450 / 630 / 970

Q-SERIES-eVP 150	UNIT	450			630			970		
	METRIC	A'	A	B	A'	A	B	A'	A	B
INJECTION UNIT SPECIFICATIONS										
INJECTION CAPACITY MAX. (GPPS)	gm	165	215	272	239	303	374	363	448	646
THEORETICAL DISPLACEMENT	cc	173	226	286	251	318	393	382	471	679
INJECTION PRESSURE MAX.	bar	2443	1984	1568	2492	1969	1595	2249	2057	1428
INJECTION RATE *	cc/sec	109	142	180	113	144	177	111	137	198
INJECTION SCREW STROKE	mm	180	180	180	200	200	200	240	240	240
SCREW DIAMETER	mm	35	40	45	40	45	50	45	50	60
SCREW L/D RATIO		25.7	22.5	20	25	22.2	20	26.7	24	20
SCREW SPEED	rpm	297	297	297	236	236	236	199	199	199
SCREW TORQUE @ 172 BAR	NM	876	876	876	1080	1080	1080	1305	1305	1305
PLASTICIZING RATE (GPPS) *	g/sec	13	18	25	15	20	27	17	23	36
PLASTICIZING RATE (GPPS BARRIER) *	g/sec	18	24	33	19	27	35	22	30	46
NO.OF PYROMETERS (BARREL+NOZZLE)		4+1			4+1			4+1		
TOTAL HEAT CAPACITY	KW	11.3			15.7			16.9		
CLAMP UNIT SPECIFICATIONS										
CLAMP FORCE	Ton	150			150			150		
OPENING FORCE	Ton	15			15			15		
CLAMP STROKE	mm	460			460			460		
MAXIMUM DAYIGHT	mm	1060			1060			1060		
MINIMUM MOULD HEIGHT#	mm	200			200			200		
MAXIMUM MOULD HEIGHT	mm	600			600			600		
PLATEN SIZE (H X V)	mm	780 X 740			780 X 740			780 X 740		
DISTANCE BETWEEN TIE ROD	mm	550 X 510			550 X 510			550 X 510		
TIE ROD DIAMETER	mm	85			85			85		
EJECTOR STROKE	mm	175			175			175		
EJECTOR FORCE	Ton	5			5			5		
MOULD WEIGHT CAPACITY (STAT. / MOVING)	kg	2300 (1100 / 1200)			2300 (1100 / 1200)			2300 (1100 / 1200)		
DRY CYCLE TIME (EUROMAP 6) ***	sec-mm	1.70 - 385			1.70 - 385			1.70 - 385		
GENERAL										
ELECTRIC MOTOR	kW (HP)	18.5 (25)			18.5 (25)			18.5 (25)		
TOTAL OIL CAPACITY	L	365			365			365		
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	55			55			55		
CONNECTED LOAD	kW	29.8			34.2			35.4		
MACHINE DIMENSION (L X W X H)	m	6.3 x 1.8 x 2.19			6.3 x 1.8 x 2.19			6.57 x 1.8 x 2.19		
MACHINE WEIGHT	kg	7200			7350			7600		

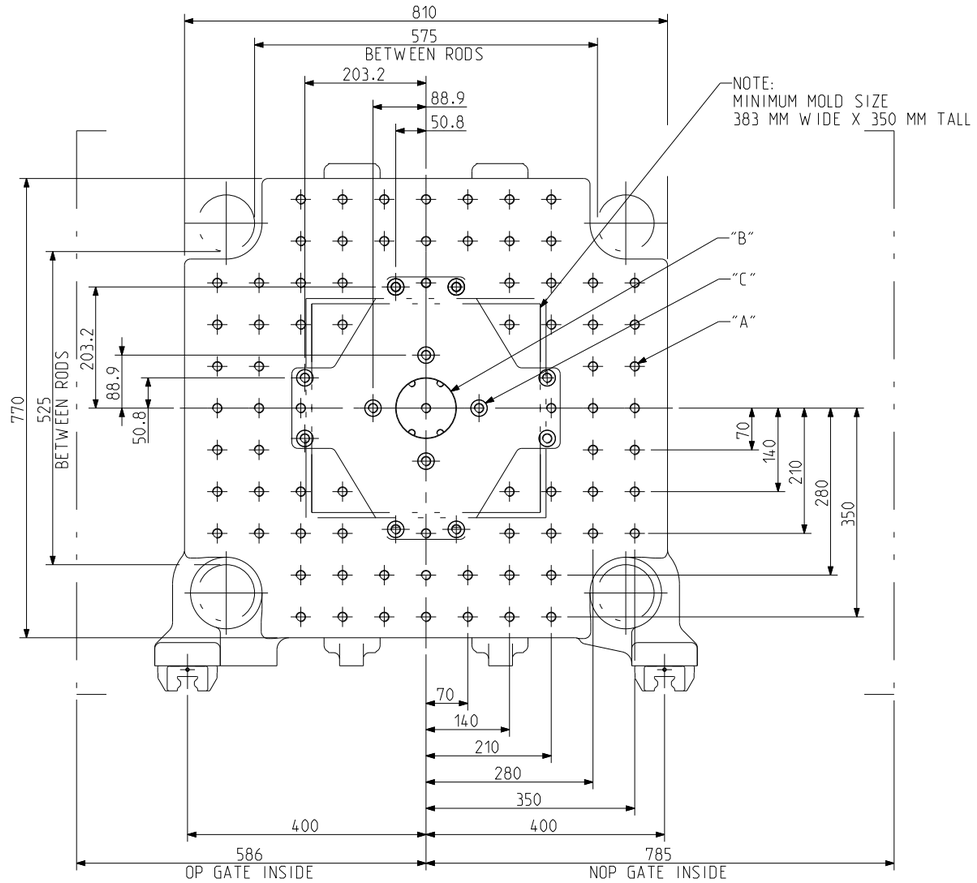
* WITH OPEN NOZZLE
# THIS WILL INCREASE INCASE OF 1) EXTRA MOULD SHOE & 2) MORE THAN 300 EDL
***BREAKAWAY AND TONNAGE DECOMPRESSION TIMES ARE NOT INCLUDED IN DRY CYCLE TIME
All machine dimensions and specifications are subject to change. Values are for reference only. These values are for standard machine power.

THE Q-SERIES-eVP

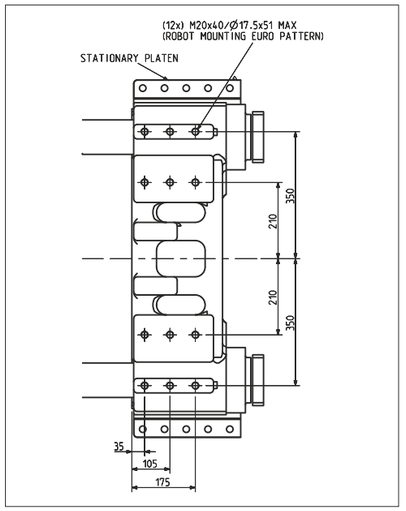
TONNAGE: 180

Injection Unit 450, 630, 970

TECHNICAL SPECIFICATIONS



MOVING PLATEN



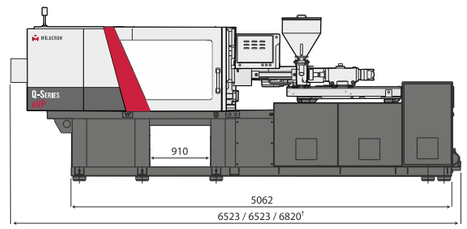
Not applicable for T-Slot Platens

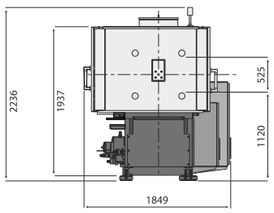
ALL DIMENSIONS ARE IN MM

A MOVING PLATEN: M16X32 (76) PLACES,
STATIONARY PLATEN: M16X32 DEEP (84) PLACES

B MOVING PLATEN: Ø100(+0.035/-0.0) THRU BORE,
K/0 BAR CENTRE HOLE M16X40 DEEP
STATIONARY PLATEN:
Ø125(+0.04/-0.0) WITH LOCATING RING,
Ø160(+0.04/-0.0) X 10(+0.15/-0.0) DEEP, WITHOUT LOCATING RING

C Ø27 THRU, (12) HOLES IN MOVING PLATEN
K/O BAR M16X40 THRU (12) HOLES





†IU 450 / 630 / 970

Q-SERIES-eVP 180	UNIT	450			630			970		
	METRIC	A'	A	B	A'	A	B	A'	A	B
INJECTION UNIT SPECIFICATIONS										
INJECTION CAPACITY MAX. (GPPS)	gm	165	215	272	239	303	374	363	448	646
THEORETICAL DISPLACEMENT	cc	173	226	286	251	318	393	382	471	679
INJECTION PRESSURE MAX.	bar	2443	1984	1568	2492	1969	1595	2249	2057	1428
INJECTION RATE *	cc/sec	109	142	180	113	144	177	111	137	198
INJECTION SCREW STROKE	mm	180	180	180	200	200	200	240	240	240
SCREW DIAMETER	mm	35	40	45	40	45	50	45	50	60
SCREW L/D RATIO		25.7	22.5	20	25	22.2	20	26.7	24	20
SCREW SPEED	rpm	297	297	297	236	236	236	199	199	199
SCREW TORQUE @ 172 BAR	NM	876	876	876	1080	1080	1080	1305	1305	1305
PLASTICIZING RATE (GPPS) *	g/sec	13	18	25	15	20	27	17	23	36
PLASTICIZING RATE (GPPS BARRIER) *	g/sec	18	24	33	19	27	35	22	30	46
NO.OF PYROMETERS (BARREL+NOZZLE)		4+1			4+1			4+1		
TOTAL HEAT CAPACITY	KW	11.3			15.7			16.9		
CLAMP UNIT SPECIFICATIONS										
CLAMP FORCE	Ton	180			180			180		
OPENING FORCE	Ton	18			18			18		
CLAMP STROKE	mm	500			500			500		
MAXIMUM DAYIGHT	mm	1100			1100			1100		
MINIMUM MOULD HEIGHT #	mm	200			200			200		
MAXIMUM MOULD HEIGHT	mm	600			600			600		
PLATEN SIZE (H X V)	mm	810 X 770			810 X 770			810 X 770		
DISTANCE BETWEEN TIE ROD	mm	575 X 525			575 X 525			575 X 525		
TIE ROD DIAMETER	mm	95			95			95		
EJECTOR STROKE	mm	175			175			175		
EJECTOR FORCE	Ton	5			5			5		
MOULD WEIGHT CAPACITY (STAT. / MOVING)	kg	2500 (1200 / 1300)			2500 (1200 / 1300)			2500 (1200 / 1300)		
DRY CYCLE TIME (EUROMAP 6) ***	sec-mm	1.85 - 402			1.85 - 402			1.85 - 402		
GENERAL										
ELECTRIC MOTOR	kW (HP)	18.5 (25)			18.5 (25)			18.5 (25)		
TOTAL OIL CAPACITY	L	365			365			365		
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	55			55			55		
CONNECTED LOAD	kW	29.8			34.2			35.4		
MACHINE DIMENSION (L X W X H)	m	6.52 x 1.85 x 2.24			6.52 x 1.85 x 2.24			6.82 x 1.85 x 2.24		
MACHINE WEIGHT	kg	7800			8050			8300		

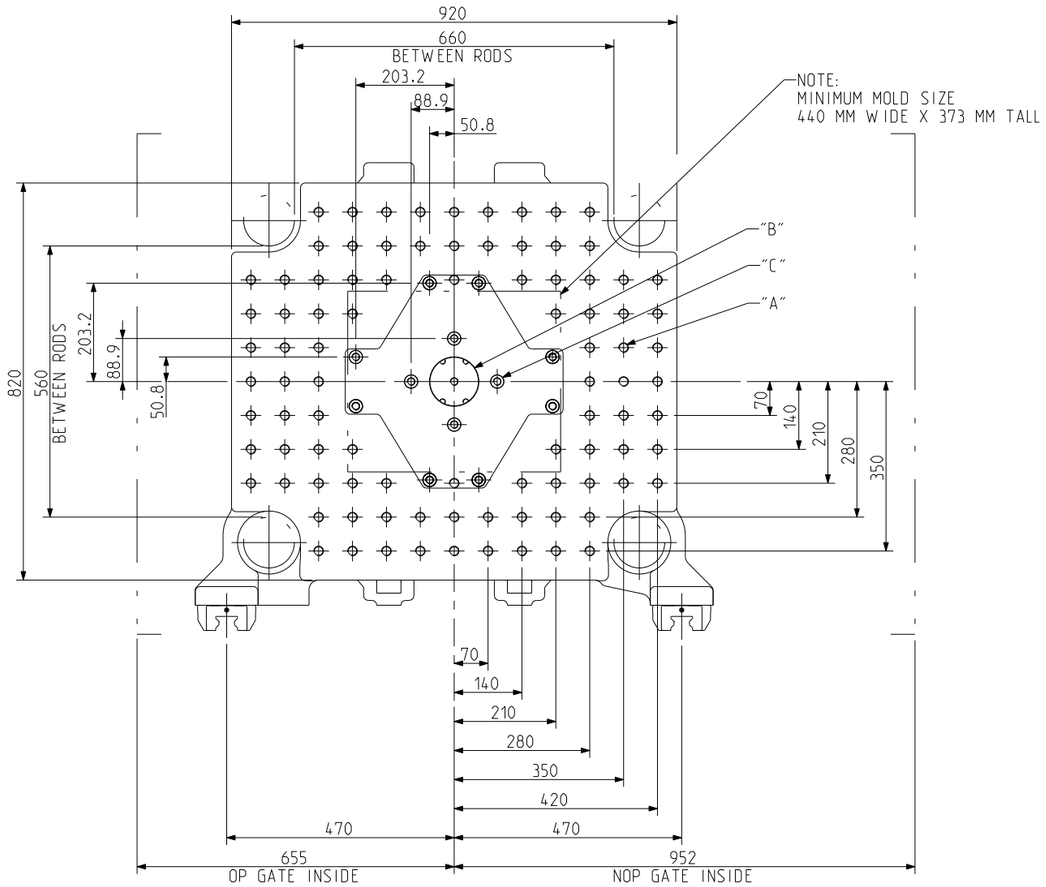
* WITH OPEN NOZZLE
# THIS WILL INCREASE INCASE OF 1) EXTRA MOULD SHOE & 2) MORE THAN 300 EDL
***BREAKAWAY AND TONNAGE DECOMPRESSION TIMES ARE NOT INCLUDED IN DRY CYCLE TIME
All machine dimensions and specifications are subject to change. Values are for reference only. These values are for standard machine power.

THE Q-SERIES-eVP

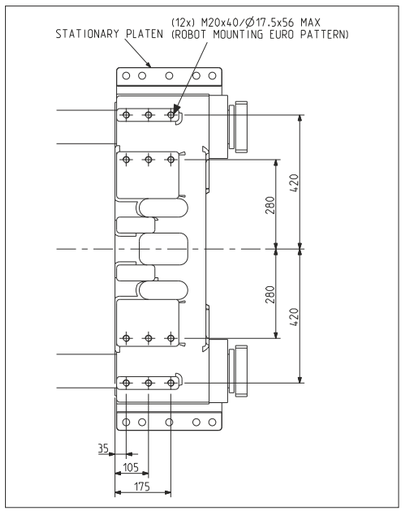
TONNAGE: 230

Injection Unit 630, 970, 1540

TECHNICAL SPECIFICATIONS



MOVING PLATEN



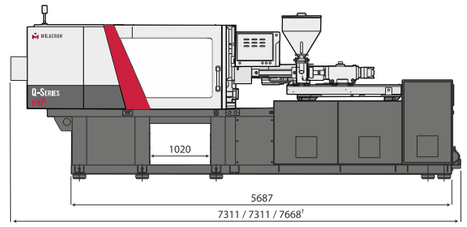
Not applicable for T-Slot Platens

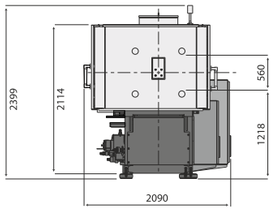
ALL DIMENSIONS ARE IN MM

A MOVING PLATEN: M20X45 (92) PLACES,
STATIONARY PLATEN: M20X45 DEEP (96) PLACES

B MOVING PLATEN: Ø100(+0.035/-0.0) THRU BORE,
K/0 BAR CENTRE HOLE M16X40 DEEP
STATIONARY PLATEN:
Ø125(+0.04/-0.0) WITH LOCATING RING,
Ø160(+0.04/-0.0) X 10(+0.15/-0.0) DEEP, WITHOUT LOCATING RING

C Ø27 THRU, (12) HOLES IN MOVING PLATEN
K/O BAR M16X40 THRU (12) HOLES





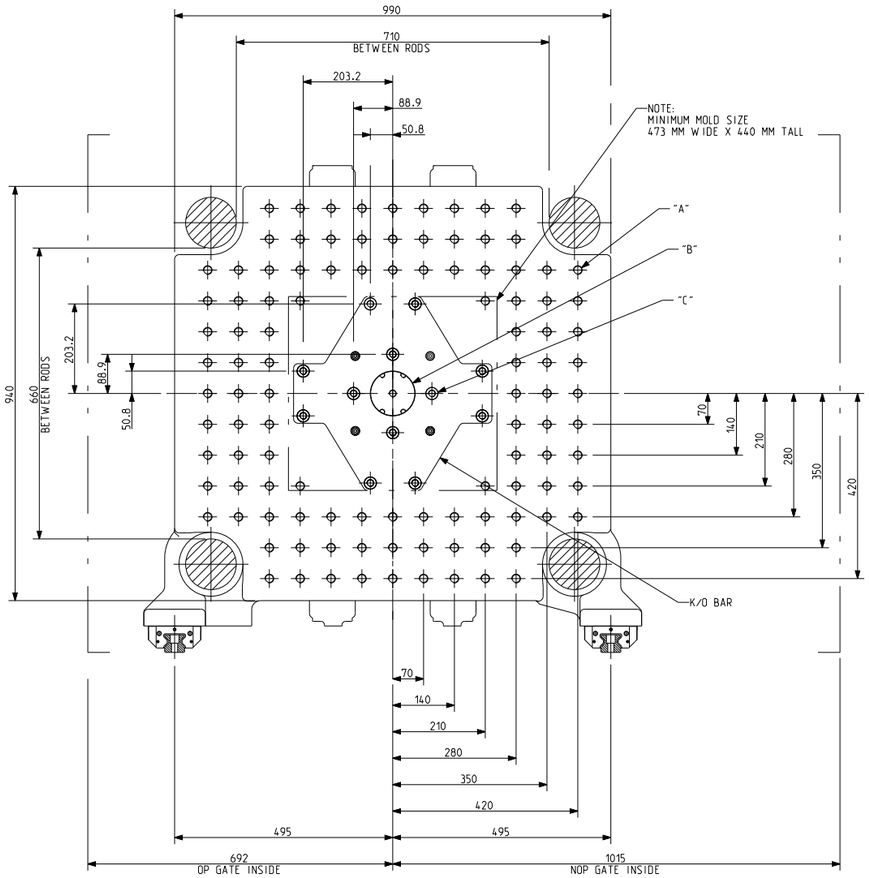
[1]IU 630 / 970 / 1540

Q-SERIES-eVP 230	UNIT	630			970			1540		
	METRIC	A'	A	B	A'	A	B	A'	A	B
INJECTION UNIT SPECIFICATIONS										
INJECTION CAPACITY MAX. (GPPS)	gm	239	303	374	363	448	646	523	753	1025
THEORETICAL DISPLACEMENT	cc	251	318	393	382	471	679	550	792	1078
INJECTION PRESSURE MAX.	bar	2492	1969	1595	2249	2057	1428	2236	1941	1426
INJECTION RATE *	cc/sec	161	204	252	158	195	281	144	207	282
INJECTION SCREW STROKE	mm	200	200	200	240	240	240	280	280	280
SCREW DIAMETER	mm	40	45	50	45	50	60	50	60	70
SCREW L/D RATIO		25	22.2	20	26.7	24	20	28	23.3	20
SCREW SPEED	rpm	305	305	305	283	283	283	174	174	174
SCREW TORQUE @ 172 BAR	NM	1080	1080	1080	1305	1305	1305	2126	2126	2126
PLASTICIZING RATE (GPPS) *	g/sec	19	26	35	24	32	51	20	32	49
PLASTICIZING RATE (GPPS BARRIER) *	g/sec	25	34	46	32	42	65	26	40	64
NO.OF PYROMETERS (BARREL+NOZZLE)		4+1			4+1			5+1		
TOTAL HEAT CAPACITY	KW	15.7			16.9			24.9		
CLAMP UNIT SPECIFICATIONS										
CLAMP FORCE	Ton	230			230			230		
OPENING FORCE	Ton	23			23			23		
CLAMP STROKE	mm	550			550			550		
MAXIMUM DAYIGHT	mm	1260			1260			1260		
MINIMUM MOULD HEIGHT[#]	mm	200			200			200		
MAXIMUM MOULD HEIGHT	mm	710			710			710		
PLATEN SIZE (H X V)	mm	920 X 820			920 X 820			920 X 820		
DISTANCE BETWEEN TIE ROD	mm	660 X 560			660 X 560			660 X 560		
TIE ROD DIAMETER	mm	105			105			105		
EJECTOR STROKE	mm	200			200			200		
EJECTOR FORCE	Ton	6.5			6.5			6.5		
MOULD WEIGHT CAPACITY (STAT. / MOVING)	kg	3200 (1500 / 1700)			3200 (1500 / 1700)			3200 (1500 / 1700)		
DRY CYCLE TIME (EUROMAP 6) ***	sec-mm	1.95 - 462			1.95 - 462			1.95 - 462		
GENERAL										
ELECTRIC MOTOR	kW (HP)	30 (40)			30 (40)			30 (40)		
TOTAL OIL CAPACITY	L	530			530			530		
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	130			130			130		
CONNECTED LOAD	kW	45.7			46.9			54.9		
MACHINE DIMENSION (L X W X H)	m	7.3 x 2.1 x 2.42			7.3 x 2.1 x 2.42			7.67 x 2.1 x 2.42		
MACHINE WEIGHT	kg	9700			9950			10450		

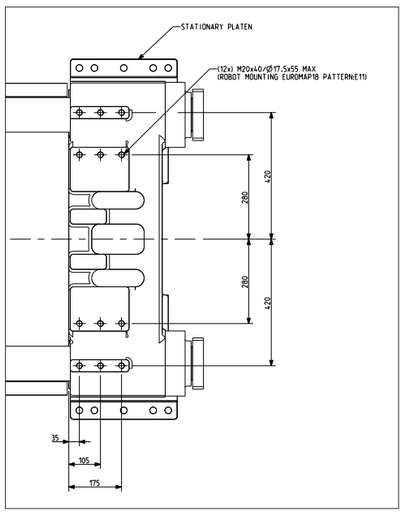
* WITH OPEN NOZZLE
[#] THIS WILL INCREASE INCASE OF 1) EXTRA MOULD SHOE & 2) MORE THAN 400 EDL
***BREAKAWAY AND TONNAGE DECOMPRESSION TIMES ARE NOT INCLUDED IN DRY CYCLE TIME
All machine dimensions and specifications are subject to change. Values are for reference only. These values are for standard machine power.

THE Q-SERIES-eVP
TONNAGE: 280

Injection Unit 970,1540, 2290
TECHNICAL SPECIFICATIONS



MOVING PLATEN



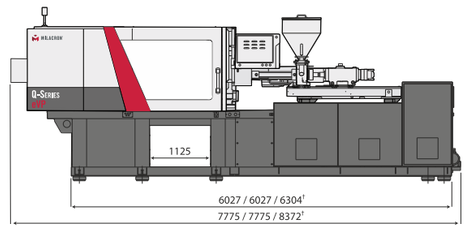
Not applicable for T-Slot Platens

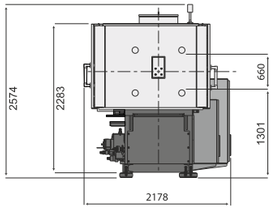
ALL DIMENSIONS ARE IN MM

A M20X45 (108) PLACES ON BOTH PLATEN

B MOVING PLATEN: Ø100(+0.035/-0.0) THRU BORE,
K/0 BAR CENTRE HOLE M16X40 THRU
STATIONARY PLATEN:
Ø125(+0.04/-0.0) WITH LOCATING RING,
Ø160(+0.04/-0.0) x 10(+0.15/-0.0) DEEP, WITHOUT LOCATING RING

C Ø27 THRU, (12) HOLES IN MOVING PLATEN
K/O BAR M16X40 THRU (12) HOLES





[1]IU 970 / 1540 / 2290

Q-SERIES-eVP 280	UNIT	970			1540			2290		
	METRIC	A'	A	B	A'	A	B	A'	A	B
INJECTION UNIT SPECIFICATIONS										
INJECTION CAPACITY MAX. (GPPS)	gm	363	448	646	523	753	1025	861	1172	1530
THEORETICAL DISPLACEMENT	cc	382	471	679	550	792	1078	905	1232	1608
INJECTION PRESSURE MAX.	bar	2249	2057	1428	2236	1941	1426	2238	1856	1421
INJECTION RATE *	cc/sec	228	282	405	207	298	406	229	312	407
INJECTION SCREW STROKE	mm	240	240	240	280	280	280	320	320	320
SCREW DIAMETER	mm	45	50	60	50	60	70	60	70	80
SCREW L/D RATIO		26.7	24	20	28	23.3	20	26.7	22.9	20
SCREW SPEED	rpm	409	382	318	251	251	251	159	159	159
SCREW TORQUE @ 172 BAR	NM	1305	1305	1305	2126	2126	2126	3347	3347	3347
PLASTICIZING RATE (GPPS) *	g/sec	35	43	58	28	46	70	29	45	62
PLASTICIZING RATE (GPPS BARRIER) *	g/sec	46	57	73	38	58	92	37	58	79
NO.OF PYROMETERS (BARREL+NOZZLE)		4+1			5+1			5+1		
TOTAL HEAT CAPACITY	KW	16.9			24.9			39.6		
CLAMP UNIT SPECIFICATIONS										
CLAMP FORCE	Ton	280			280			280		
OPENING FORCE	Ton	28			28			28		
CLAMP STROKE	mm	650			650			650		
MAXIMUM DAYIGHT	mm	1400			1400			1400		
MINIMUM MOULD HEIGHT[#]	mm	250			250			250		
MAXIMUM MOULD HEIGHT	mm	750			750			750		
PLATEN SIZE (H X V)	mm	990 X 940			990 X 940			990 X 940		
DISTANCE BETWEEN TIE ROD	mm	710 X 660			710 X 660			710 X 660		
TIE ROD DIAMETER	mm	115			115			115		
EJECTOR STROKE	mm	200			200			200		
EJECTOR FORCE	Ton	6.5			6.5			6.5		
MOULD WEIGHT CAPACITY (STAT. / MOVING)	kg	4400 (1900 / 2500)			4400 (1900 / 2500)			4400 (1900 / 2500)		
DRY CYCLE TIME (EUROMAP 6) ***	sec-mm	2.15 - 497			2.15 - 497			2.15 - 497		
GENERAL										
ELECTRIC MOTOR	kW (HP)	37 (50)			37 (50)			37 (50)		
TOTAL OIL CAPACITY	L	530			530			530		
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	180			180			180		
CONNECTED LOAD	kW	53.9			61.9			76.6		
MACHINE DIMENSION (L X W X H)	m	7.78 X 2.2 X 2.57			7.78 X 2.2 X 2.57			8.37 X 2.2 X 2.6		
MACHINE WEIGHT	kg	12800			13200			14000		

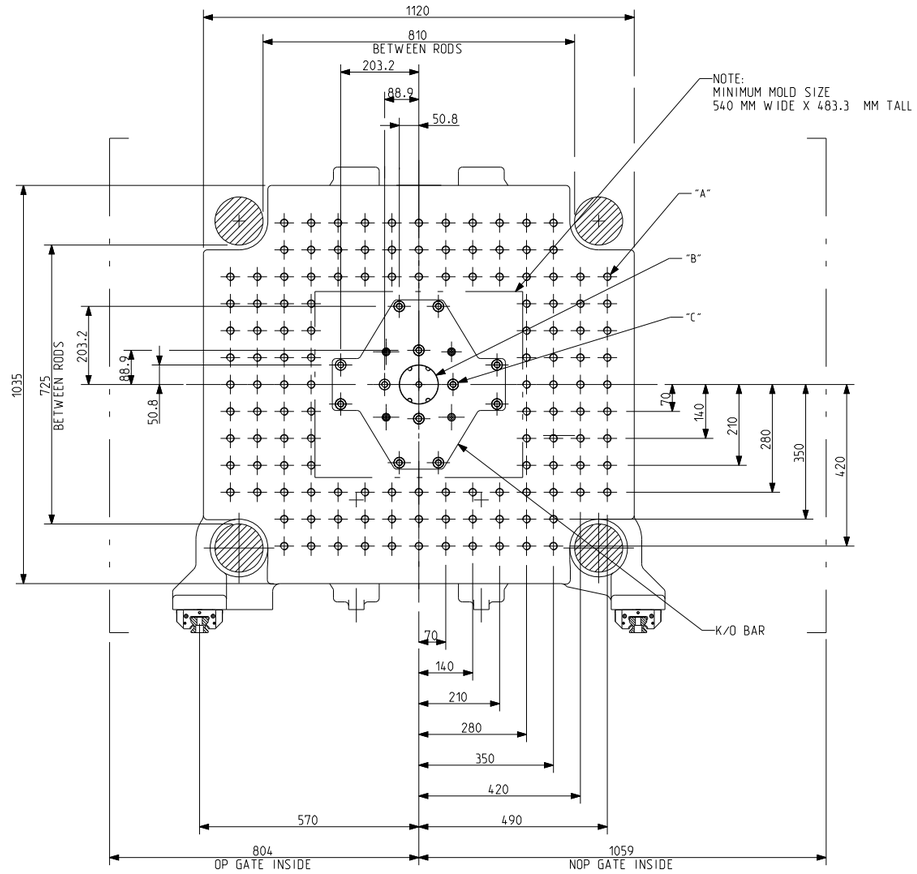
* WITH OPEN NOZZLE
[#] THIS WILL INCREASE INCASE OF 1) EXTRA MOULD SHOE & 2) MORE THAN 400 EDL
***BREAKAWAY AND TONNAGE DECOMPRESSION TIMES ARE NOT INCLUDED IN DRY CYCLE TIME
All machine dimensions and specifications are subject to change. Values are for reference only. These values are for standard machine power.

THE Q-SERIES-eVP

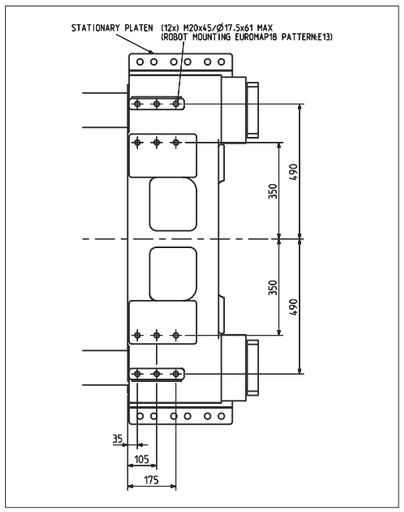
TONNAGE: 350

Injection Unit 1540, 2290, 3470

TECHNICAL SPECIFICATIONS



MOVING PLATEN



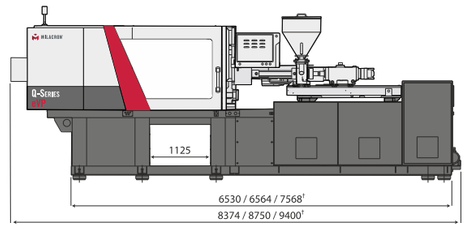
Not applicable for T-Slot Platens

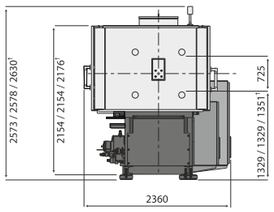
ALL DIMENSIONS ARE IN MM

A M20X45 (130) PLACES ON BOTH PLATEN

B MOVING PLATEN: Ø100(+0.035/-0.0) THRU BORE,
K/0 BAR CENTRE HOLE M16X40 THRU
STATIONARY PLATEN:
Ø160(+0.040/-0.0) WITH LOCATING RING,
Ø200(+0.046/-0.0) x 10(+0.15/-0.0) DEEP, WITHOUT LOCATING RING

C Ø27 THRU, (12) HOLES IN MOVING PLATEN
K/O BAR M16X40 THRU (12) HOLES





†IU 1540 / 2290 / 3470

Q-SERIES-eVP 350	UNIT	1540			2290			3470		
	METRIC	A'	A	B	A'	A	B	A'	A	B
INJECTION UNIT SPECIFICATIONS										
INJECTION CAPACITY MAX. (GPPS)	gm	523	753	1025	861	1172	1530	1318	1722	2179
THEORETICAL DISPLACEMENT	cc	550	792	1078	905	1232	1608	1385	1810	2290
INJECTION PRESSURE MAX.	bar	2236	1941	1426	2238	1856	1421	2289	1917	1515
INJECTION RATE *	cc/sec	207	298	406	229	312	407	272	356	450
INJECTION SCREW STROKE	mm	280	280	280	320	320	320	360	360	360
SCREW DIAMETER	mm	50	60	70	60	70	80	70	80	90
SCREW L/D RATIO		28	23.3	20	26.7	22.9	20	25.7	22.5	20
SCREW SPEED	rpm	251	251	251	159	159	159	142	142	142
SCREW TORQUE @ 172 BAR	NM	2126	2126	2126	3347	3347	3347	4424	4424	4424
PLASTICIZING RATE (GPPS) *	g/sec	28	46	70	29	45	62	40	55	73
PLASTICIZING RATE (GPPS BARRIER) *	g/sec	38	58	92	37	58	79	52	70	94
NO.OF PYROMETERS (BARREL+NOZZLE)		5+1			5+1			5+1		
TOTAL HEAT CAPACITY	KW	24.9			39.6			57.9		
CLAMP UNIT SPECIFICATIONS										
CLAMP FORCE	Ton	350			350			350		
OPENING FORCE	Ton	35			35			35		
CLAMP STROKE	mm	720			720			720		
MAXIMUM DAYIGHT	mm	1520			1520			1520		
MINIMUM MOULD HEIGHT#	mm	300			300			300		
MAXIMUM MOULD HEIGHT	mm	800			800			800		
PLATEN SIZE (H X V)	mm	1120 X 1035			1120 X 1035			1120 X 1035		
DISTANCE BETWEEN TIE ROD	mm	810 X 725			810 X 725			810 X 725		
TIE ROD DIAMETER	mm	125			125			125		
EJECTOR STROKE	mm	250			250			250		
EJECTOR FORCE	Ton	7.5			7.5			7.5		
MOULD WEIGHT CAPACITY (STAT. / MOVING)	kg	6000 (2700 / 3300)			6000 (2700 / 3300)			6000 (2700 / 3300)		
DRY CYCLE TIME (EUROMAP 6) ***	sec-mm	2.40 - 567			2.40 - 567			2.40 - 567		
GENERAL										
ELECTRIC MOTOR	kW (HP)	37 (50)			37 (50)			45 (60)		
TOTAL OIL CAPACITY	L	650			650			650		
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	180			180			220		
CONNECTED LOAD	kW	61.9			76.6			102.9		
MACHINE DIMENSION (L X W X H)	m	8.4 X 2.3 X 2.6			8.75 X 2.3 X 2.6			9.4 X 2.3 X 2.65		
MACHINE WEIGHT	kg	16500			18000			18500		

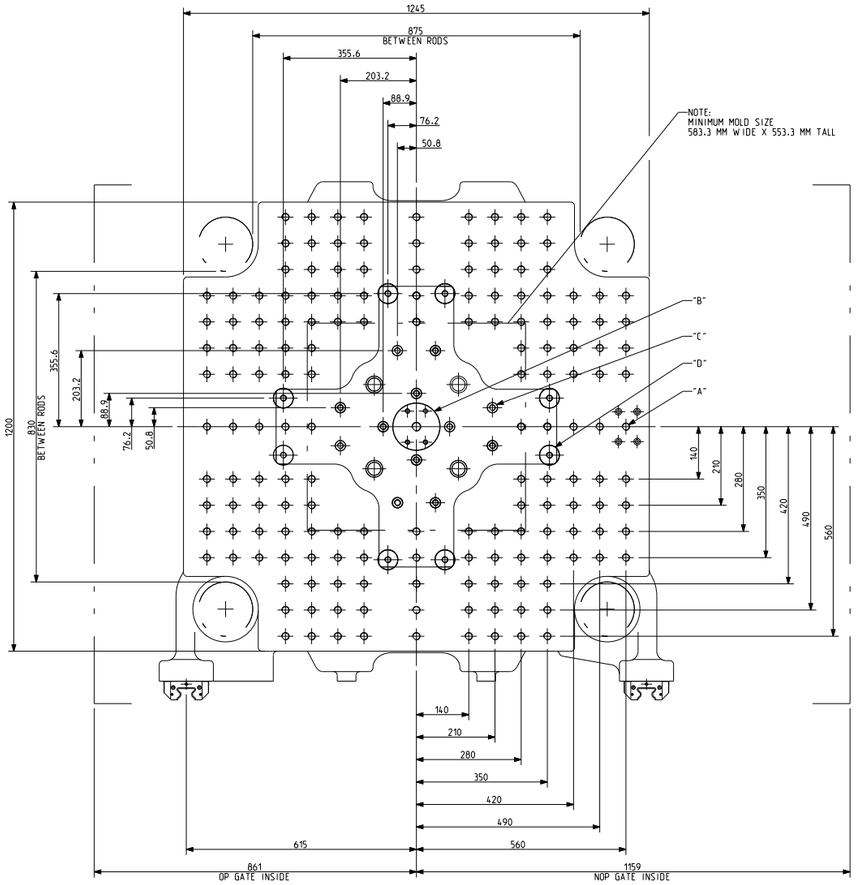
* WITH OPEN NOZZLE
# THIS WILL INCREASE INCASE OF 1) EXTRA MOULD SHOE & 2) MORE THAN 250 EDL
***BREAKAWAY AND TONNAGE DECOMPRESSION TIMES ARE NOT INCLUDED IN DRY CYCLE TIME
All machine dimensions and specifications are subject to change. Values are for reference only. These values are for standard machine power.

THE Q-SERIES-eVP

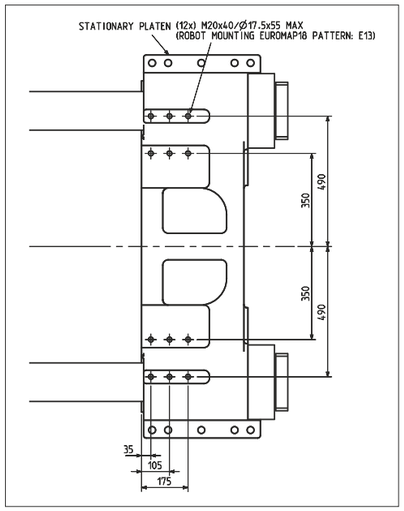
TONNAGE: 450

Injection Unit 1540, 2290, 3470

TECHNICAL SPECIFICATIONS



MOVING PLATEN



Not applicable for T-Slot Platens

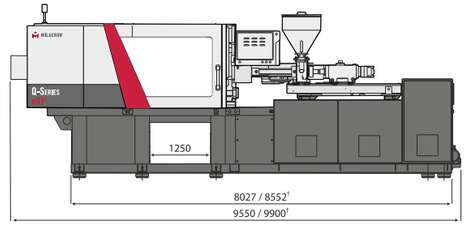
ALL DIMENSIONS ARE IN MM

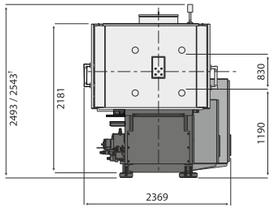
A M20X45 (164) PLACES ON BOTH PLATEN

B MOVING PLATEN: Ø125(+0.04/-0.0) THRU BORE,
K/0 BAR CENTRE HOLE M24X43 THRU
STATIONARY PLATEN:
Ø160(+0.040/-0.0) WITH LOCATING RING,
Ø200(+0.046/-0.0) x 10(+0.15/-0.0) DEEP, WITHOUT LOCATING RING

C Ø27 THRU, (12) HOLES IN MOVING PLATEN
K/O BAR M16X40 THRU (20) HOLES

D Ø52.4 THRU (8) HOLES





†IU 2290 / 3470

Q-SERIES-eVP 450	UNIT	1540			2290			3470		
	METRIC	A'	A	B	A'	A	B	A'	A	B
INJECTION UNIT SPECIFICATIONS										
INJECTION CAPACITY MAX. (GPPS)	gm	523	753	1025	861	1172	1530	1318	1722	2179
THEORETICAL DISPLACEMENT	cc	550	792	1078	905	1232	1608	1385	1810	2290
INJECTION PRESSURE MAX.	bar	2236	1941	1426	2238	1856	1421	2289	1917	1515
INJECTION RATE *	cc/sec	244	351	478	270	367	480	272	356	450
INJECTION SCREW STROKE	mm	280	280	280	320	320	320	360	360	360
SCREW DIAMETER	mm	50	60	70	60	70	80	70	80	90
SCREW L/D RATIO		28	23.3	20	26.7	22.9	20	25.7	22.5	20
SCREW SPEED	rpm	295	295	273	187	187	187	142	142	142
SCREW TORQUE @ 172 BAR	NM	2126	2126	2126	3347	3347	3347	4424	4424	4424
PLASTICIZING RATE (GPPS) *	g/sec	37	60	81	34	53	73	40	55	73
PLASTICIZING RATE (GPPS BARRIER) *	g/sec	44	68	100	43	69	93	52	70	94
NO.OF PYROMETERS (BARREL+NOZZLE)		5+1			5+1			5+1		
TOTAL HEAT CAPACITY	KW	24.9			39.6			57.9		
CLAMP UNIT SPECIFICATIONS										
CLAMP FORCE	Ton	450			450			450		
OPENING FORCE	Ton	45			45			45		
CLAMP STROKE	mm	850			850			850		
MAXIMUM DAYIGHT	mm	1670			1670			1670		
MINIMUM MOULD HEIGHT #	mm	350			350			350		
MAXIMUM MOULD HEIGHT	mm	820			820			820		
PLATEN SIZE (H X V)	mm	1245 X 1200			1245 X 1200			1245 X 1200		
DISTANCE BETWEEN TIE ROD	mm	875 X 830			875 X 830			875 X 830		
TIE ROD DIAMETER	mm	145			145			145		
EJECTOR STROKE	mm	250			250			250		
EJECTOR FORCE	Ton	12			12			12		
MOULD WEIGHT CAPACITY (STAT. / MOVING)	kg	8000 (4000 / 4000)			8000 (4000 / 4000)			8000 (4000 / 4000)		
DRY CYCLE TIME (EUROMAP 6) ***	sec-mm	2.95 - 612			2.95 - 612			2.95 - 612		
GENERAL										
ELECTRIC MOTOR	kW (HP)	45 (60)			45 (60)			45 (60)		
TOTAL OIL CAPACITY	L	800			800			800		
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	160			220			220		
CONNECTED LOAD	kW	69.9			84.6			102.9		
MACHINE DIMENSION (L X W X H)	m	9.6 X 2.4 X 2.5			9.6 X 2.4 X 2.5			9.9 X 2.4 X 2.5		
MACHINE WEIGHT	kg	23000			24500			25500		

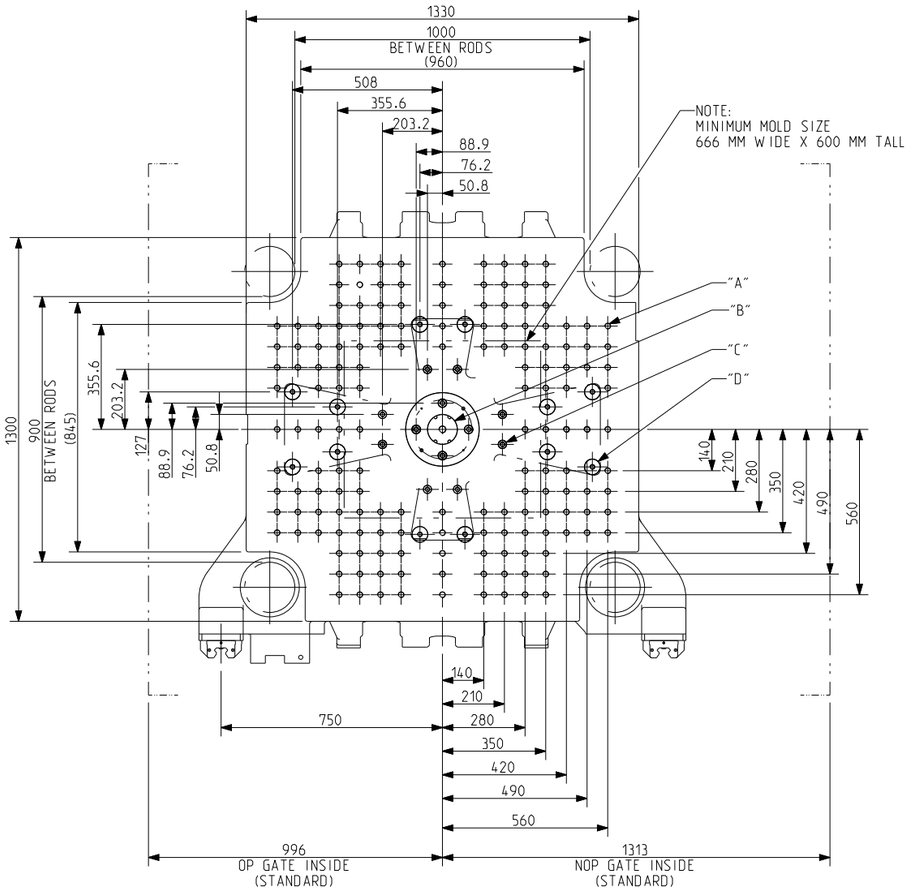
* WITH OPEN NOZZLE
# THIS WILL INCREASE INCASE OF 1) EXTRA MOULD SHOE & 2) MORE THAN 350 EDL
***BREAKAWAY AND TONNAGE DECOMPRESSION TIMES ARE NOT INCLUDED IN DRY CYCLE TIME
All machine dimensions and specifications are subject to change. Values are for reference only. These values are for standard machine power.

THE Q-SERIES-eVP

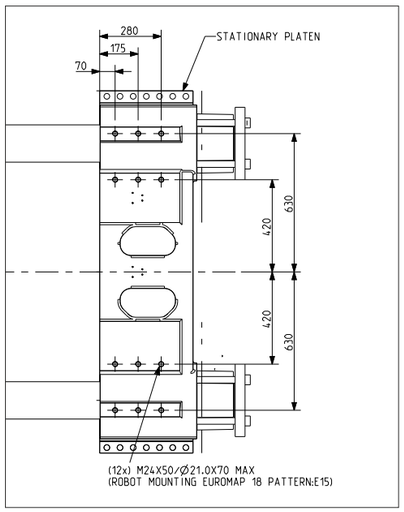
TONNAGE: 550

Injection Unit 2290, 3470, 4880

TECHNICAL SPECIFICATIONS



MOVING PLATEN



Not applicable for T-Slot Platens

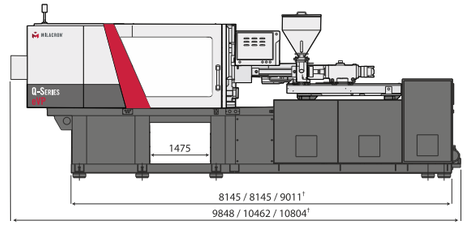
ALL DIMENSIONS ARE IN MM

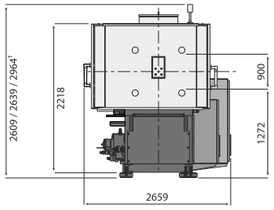
A MOVING PLATEN: M20X50 (160) PLACES,
STATIONARY PLATEN: M20X50 DEEP (164) PLACES

B MOVING PLATEN:
Ø100(+0.035/-0.0) WITH LOCATING RING
Ø250(+0.046/-0.0) X 20.07(+0.08/-0.0) DEEP, WITHOUT LOCATING RING
K/0 BAR CENTRE HOLE M24X60 DEEP
STATIONARY PLATEN:
Ø160(+0.040/-0.0) WITH LOCATING RING,
Ø250(+0.046/-0.0) X 20.07(+0.08/-0.0) DEEP, WITHOUT LOCATING RING

C (12X) Ø27 THRU HOLES
K/O BAR HOLES: (12X) M16 THRU

D (12X) Ø52.4 THRU HOLES
K/O BAR HOLES: (12X) M16 THRU

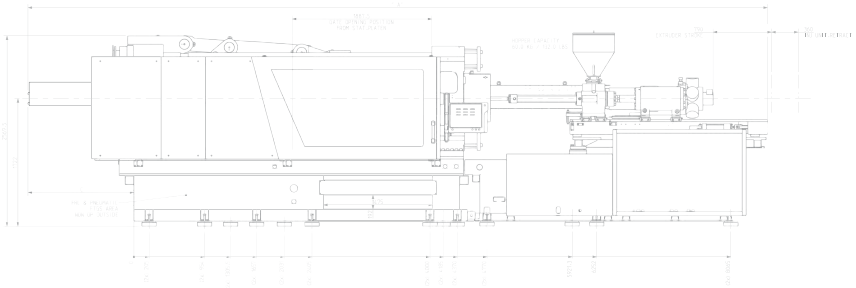




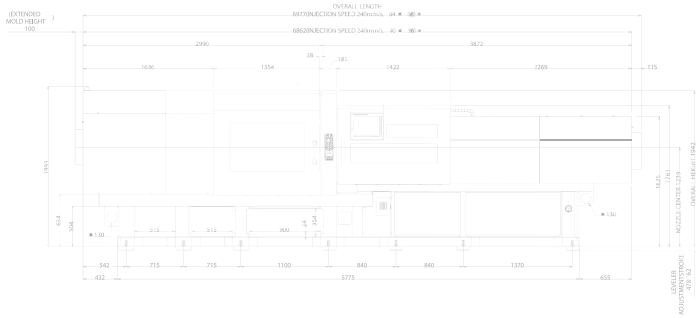
†IU 2290 / 3470 / 4880

Q-SERIES-eVP 550	UNIT	2290			3470			4880	
	METRIC	A'	A	B	A'	A	B	A	B
INJECTION UNIT SPECIFICATIONS									
INJECTION CAPACITY MAX. (GPPS)	gm	861	1172	1530	1318	1722	2179	2421	2989
THEORETICAL DISPLACEMENT	cc	905	1232	1608	1385	1810	2290	2545	3142
INJECTION PRESSURE MAX.	bar	2238	1856	1421	2289	1917	1515	1896	1538
INJECTION RATE *	cc/sec	329	448	585	332	434	549	434	535
INJECTION SCREW STROKE	mm	320	320	320	360	360	360	400	400
SCREW DIAMETER	mm	60	70	80	70	80	90	90	100
SCREW L/D RATIO		26.7	22.9	20	25.7	22.5	20	22.2	20
SCREW SPEED	rpm	229	229	229	173	173	173	136	136
SCREW TORQUE @ 172 BAR	NM	3347	3347	3347	4424	4424	4424	5613	4424
PLASTICIZING RATE (GPPS) *	g/sec	42	64	89	48	67	89	71	92
PLASTICIZING RATE (GPPS BARRIER) *	g/sec	53	84	113	63	86	114	90	115
NO.OF PYROMETERS (BARREL+NOZZLE)		5+1			5+1			5+1	
TOTAL HEAT CAPACITY	KW	39.6			57.9			53.9	
CLAMP UNIT SPECIFICATIONS									
CLAMP FORCE	Ton	550			550			550	
OPENING FORCE	Ton	55			55			55	
CLAMP STROKE	mm	920			920			920	
MAXIMUM DAYIGHT	mm	1820			1820			1820	
MINIMUM MOULD HEIGHT #	mm	400			400			400	
MAXIMUM MOULD HEIGHT	mm	900			900			900	
PLATEN SIZE (H X V)	mm	1330 X 1300			1330 X 1300			1330 x 1300	
DISTANCE BETWEEN TIE ROD	mm	1000 X 900			1000 X 900			1000 x 900	
TIE ROD DIAMETER	mm	170			170			170	
EJECTOR STROKE	mm	250			250			250	
EJECTOR FORCE	Ton	12			12			12	
MOULD WEIGHT CAPACITY (STAT. / MOVING)	kg	9650 (4150 / 5500)			9650 (4150 / 5500)			9650 (4150 / 5500)	
DRY CYCLE TIME (EUROMAP 6) ***	sec-mm	3.20 - 700			3.20 - 700			3.20 - 700	
GENERAL									
ELECTRIC MOTOR	kW (HP)	55 (75)			55 (75)			55 (75)	
TOTAL OIL CAPACITY	L	815			815			815	
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	220			220			220	
CONNECTED LOAD	kW	94.6			112.9			108.9	
MACHINE DIMENSION (L X W X H)	m	9.9 x 2.66 x 2.9			10.46 x 2.66 x 2.9			10.62 x 2.66 x 2.9	
MACHINE WEIGHT	kg	30750			32750			33150	

* WITH OPEN NOZZLE
# THIS WILL INCREASE INCASE OF 1) EXTRA MOULD SHOE & 2) MORE THAN 500 EDL
***BREAKAWAY AND TONNAGE DECOMPRESSION TIMES ARE NOT INCLUDED IN DRY CYCLE TIME
All machine dimensions and specifications are subject to change. Values are for reference only. These values are for standard machine power.



All specifications reflect average values based on typical machine layouts. Actual figures will vary depending on final machine configuration. Performance specifications are based on theoretical data. Photograph may show attachments or accessories, which may not be part of the standard scope of supply. Due to continual improvements, specifications & some components are subject to change without notice.



OFFICE	PHONE NUMBER
BENGALURU	+91 99169 51333
PANCHKULA	+91-172-415 5955
CHENNAI	+91-44-2378 3648/0456/3318
HYDERABAD	+91-40-4539 2595
KOLKATA	+91-33-4601 7768
MUMBAI	+91-22-4005 5459/65
NEW DELHI	+91-11-4630 1114/5/6
PUNE	+91-20-4861 5001/02
VAPI	+91-75674 11133

MILACRON®

Milacron India Pvt. Ltd.
93/2 & 94/1, Phase-I, G.I.D.C. Vatva,
Ahmedabad - 382445, Gujarat, India.

+91-79-61341700
enquiry@milacron.com
www.milacron.com