



MILACRON®

THE Q-SERIES



55-610

THE Q-SERIES

55-610

Performance wrapped up in a durable package. The Q-Series leverages a Servo hydraulic package to deliver quality parts at a rapid pace while minimizing energy use. The Q-Series performance and features surpass injection molding expectations of higher priced machinery. The reliable Q-Series 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 OFFERS SOME OF THE BEST TECHNICAL SPECIFICATIONS, VERSATILITY, DURABILITY, PRECISION, AND PRODUCTIVITY PROVIDED ON A SERVO CONTROLLED HYDRAULIC TOGGLE.

- Ⓜ An energy-efficient hybrid powered by a reliable RexRoth servo system
- Ⓜ 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 interchangeable mold files from similar machines
- Ⓜ Precise platen parallelism to reduce machine and mold wear
- Ⓜ Offering 10 clamp tonnages that are paired with 6 variations of injection units the Q-Series offers a wide range of operation capacity



TOGGLE DESIGN

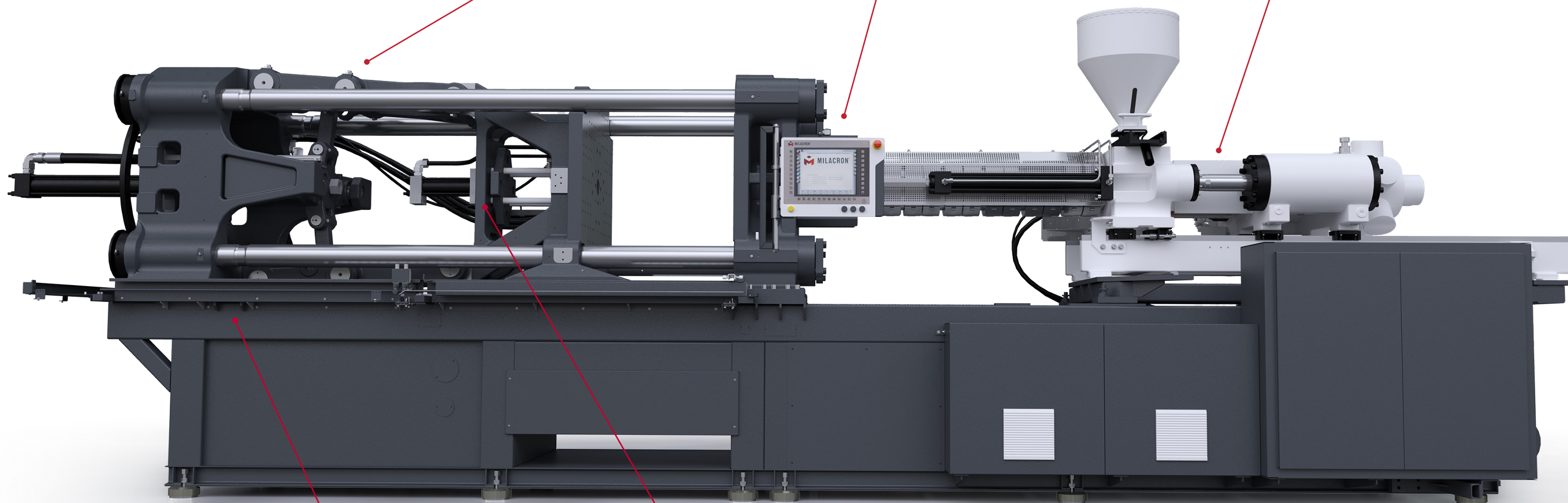
- Improved speeds and reduced footprint with new toggle design
- Durable double toggle 10 pin design
- Rectangular platen designs accept a wide range of molds (see specification tables)
- New toggle design allows for consistent lower tonnage operations at 30% of maximum clamping force
- Auto lubrications to critical toggle components
- Grease free mold area

ENDURA TOUCH CONTROL

- 15-inch color screen
- Real time energy monitor
- Data storage for up to 500 molds
- New core configurator for custom sequences
- Ergonomic design with adjustable height and swing arm positioning
- SPC process monitoring with graphic capabilities
- Euromap 67 robot interface
- Configurable inputs and outputs

TWIN CYLINDER INJECTION UNIT

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

**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 squareness

**MILACRON M-POWERED**

- Designed to fully utilize our M-Powered suite of connectivity products
- Reduce failures, improve uptime and OEE
- Remote monitoring capable

**PROVIDING THE HIGHEST PERFORMANCE,
PRECISION, AND FLEXIBILITY.**

Q-SERIES

The latest in Milacron's low-to-mid tonnage range of injection molding machines. The NEW high-performance double toggle Q-Series product line offers a 10 pin double toggle machine with enhanced productivity, performance, and precision.

MULTIPLE STANDARD INJECTION FRAMES

- A-B-C barrel combination for part standardization
- Twin cylinder injection unit distributes the load evenly across the screw centerline
- Injection unit travels on precision liner guides
- Injection unit swivel for easy maintenance

INJECTION UNIT SPECIFICATIONS

Frame	28	32	40	450	630	970	1540	2290	3470	4880
Q-Series 55										
Q-Series 90										
Q-Series 125										
Q-Series 170										
Q-Series 200										
Q-Series 260										
Q-Series 315										
Q-Series 400										
Q-Series 500										
Q-Series 610										

CLAMP SPECIFICATIONS

MODEL	TONNAGE	PLATEN SIZE (H X V)	TIE BAR SPACING (H X V)	MAX DAYLIGHT	MIN / MAX MOLD
	US Tons	mm	mm	mm	mm
Q-Series 55	55	500 x 485	325 x 310	630	150 / 350
Q-Series 90	90	610 x 565	405 x 360	710	150 / 400
Q-Series 125	125	690 x 645	480 x 435	900	150 / 520
Q-Series 170	170	780 x 740	550 x 510	1060	200 / 600
Q-Series 200	200	810 x 770	575 x 525	1100	200 / 600
Q-Series 260	260	920 x 820	660 x 560	1260	200 / 710
Q-Series 315	315	990 x 940	710 x 660	1400	250 / 750
Q-Series 400	400	1120 x 1035	810 x 725	1520	300 / 800
Q-Series 500	500	1245 x 1200	875 x 830	1670	350 / 820
Q-Series 610	610	1330 x 1300	1,000 x 900	1820	400 / 900

APPLICATIONS

Leveraging the use of a servo motor in combination with hydraulic components, the Q-Series provides exceptional repeatability and energy savings with oversized clamp specs, increased max mold weights, and outstanding dry cycle times to meet the demands of all the major industry market segments.

- CONSTRUCTION
- MEDICAL

- PACKAGING
- CONSUMER

- AUTOMOTIVE
- ELECTRONICS



CLAMPING UNIT

- Ⓜ A toggle manufactured on a robust platform and 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 range of molds
- Ⓜ The rectangular platen design opens up the die space for advanced mold versatility
- Ⓜ 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

Q-SERIES	EUROMAP 6 DRYCYCLE TIME (SEC - MM)
Q-55	2.40 - 227 mm
Q-90	2.05 - 284 mm
Q-125	1.65 - 336mm
Q-170	1.70 - 385mm
Q-200	1.85 - 402mm
Q-260	1.95 - 462mm
Q-315	2.15 - 497mm
Q-400	2.40 - 567mm
Q-500	2.95 - 612mm
Q-610	3.20 - 700mm

- Ⓜ Clamp Euromap dry cycle time improvements approximately 30% over conventional toggle designs
- Ⓜ Grease free tie bars with bushing free moving platen
- Ⓜ Auto lubrication to toggle linkage and the precision linear skates
- Ⓜ Tri-directional part removal



INJECTION UNIT

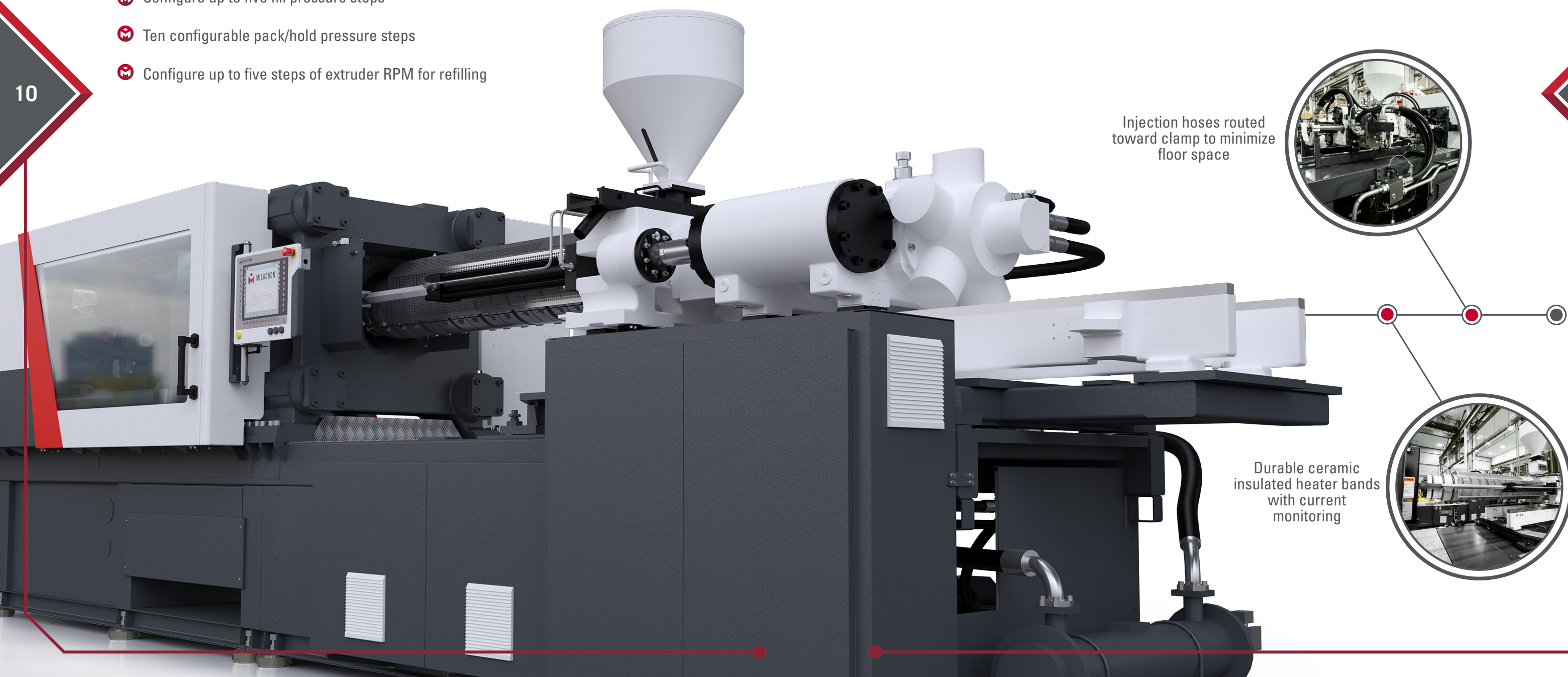
The Q-Series is one of the Milacron's global product lines, presenting a comprehensive line of injection units, barrels, and screws that are perfect for vast assortment of high-quality processing applications.

- Twin cylinder injection unit keeps a uniform load distributed across the centerline of the screw
- Frictionless precision linear guides, precise screw and barrel alignment resulting in reduced wear
- Improved hydraulic hose routing to minimize footprint and enhance hose life
- Six stage configurable injection velocity profile
- Configure up to five fill pressure steps
- Ten configurable pack/hold pressure steps
- Configure up to five steps of extruder RPM for refilling

INJECTION UNIT

- 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 magnet included in hopper
- Standard sliding hopper with shutoff (Q-125 to 610) and swivel with shutoff on (Q-55 to 90)

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Injection hoses routed toward clamp to minimize floor space



Durable ceramic insulated heater bands with current monitoring



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SERVO- HYDRAULIC SYSTEM

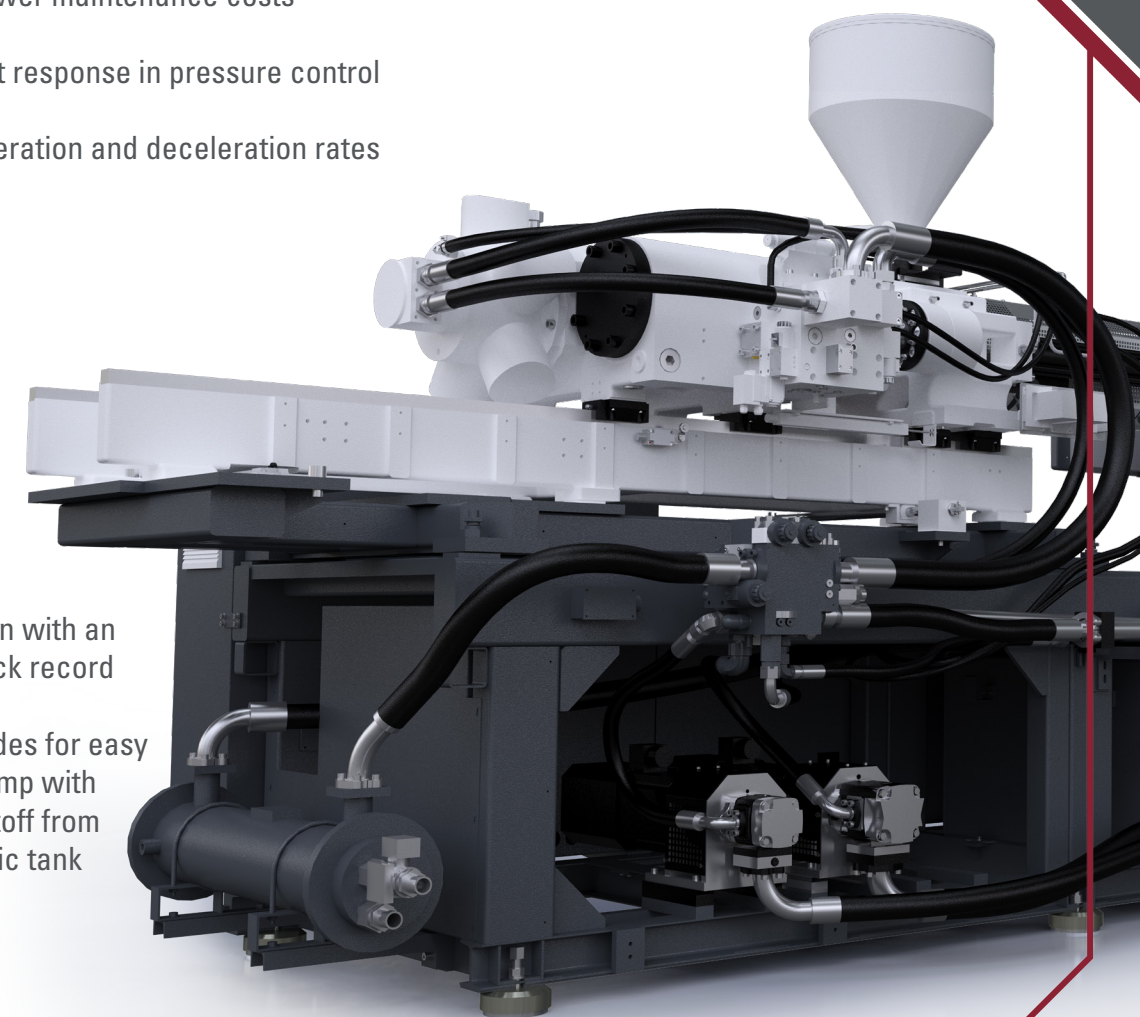
The proven servo hydraulic package offers peace of mind during operations. The Q-Series reliability is elevated by operating with fewer moving parts. The bi-directional pump driven by a servo motor is engineered for quick response to your process while operating at low maintenance cost. The closed loop servo hydraulic system provides for consistent operations.

BENEFITS INCLUDE

- Ⓜ Cycle precision and repeatability using a closed loop system
- Ⓜ Motor speeds vary between 0-3000 RPM
- Ⓜ Easy access power system for maintenance
- Ⓜ Reduced energy consumption
- Ⓜ Increased accuracy and precision – rotational control to a fraction of a degree
- Ⓜ High response – low inertia
- Ⓜ Noise reduction – quieter than conventional toggle machines
- Ⓜ Secure remote monitoring available for troubleshooting and analysis
- Ⓜ Reduced sensitivity to contamination
- Ⓜ Increased reliability and lower maintenance costs
- Ⓜ Bi-directional pump for fast response in pressure control
- Ⓜ Provides aggressive acceleration and deceleration rates

Ⓜ Proven design with an excellent track record

Ⓜ Design provides for easy access to pump with butterfly shutoff from main hydraulic tank



ENDURA TOUCH CONTROL SYSTEM

The refined control provides a straightforward format for the operator with 19 different language selections. Mold files can be moved with a simple USB stick, minimizing operator setup time. The Q-Series programmable core provides over 25 different configurable selections to operate before, during, or after clamp, injection, or ejector axis movements.

EXCEPTIONAL STANDARD FEATURES

- 15-inch color touch screen display
- 32 function keys with LEDs arranged around the touch screen
- Actual injection speed & pressure graph display
- 39 parameter monitoring last 3000 cycles
- (Statistical Process Control) SPC
- 500 mold data storage (Internal + USB)
- Insert molding
- Operator programmable I/O
- Ergo-friendly design with adjustable height and rotation for easy viewing of the screen



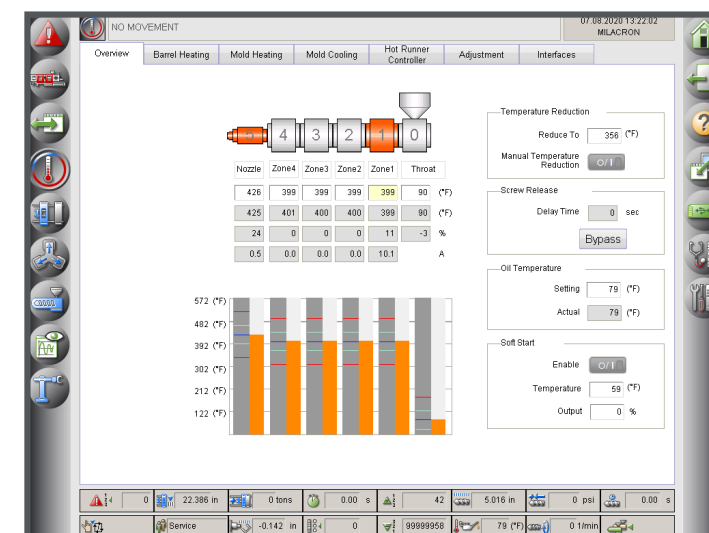
MOLD SAFETY SYSTEM

- 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

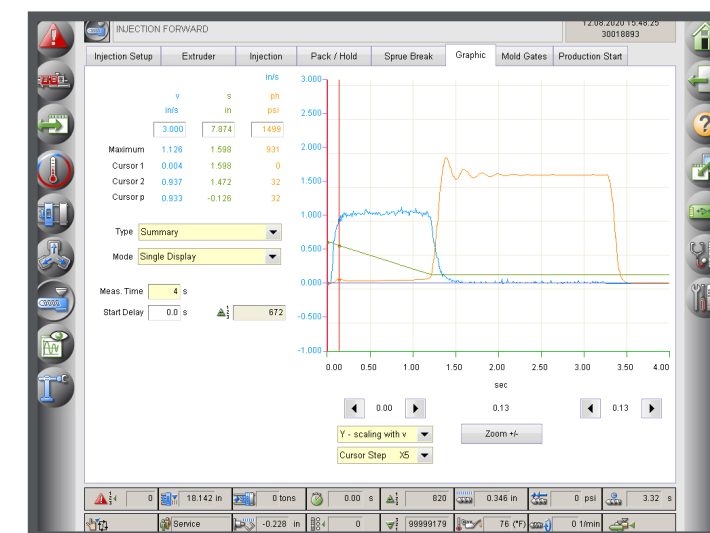
CONTROL THE PROCESS

- Refined control provides a straightforward format for the operator
- 19 different language selections
- Precise control of clamp operations using mold guard technology

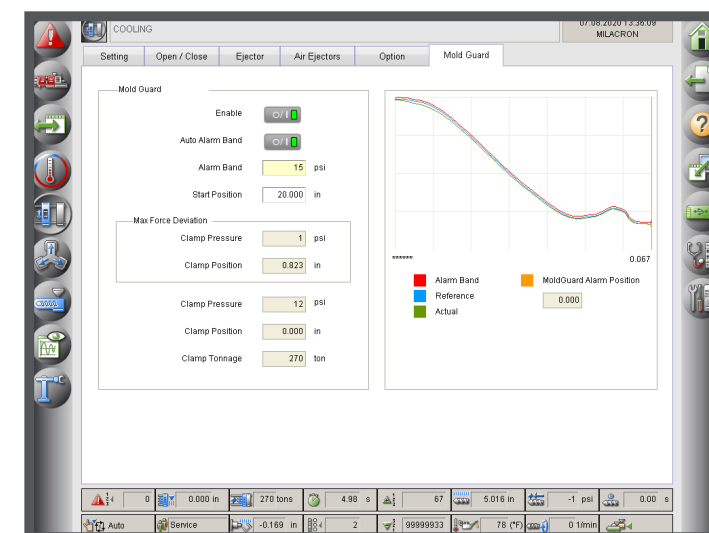
TEMPERATURE OVERVIEW



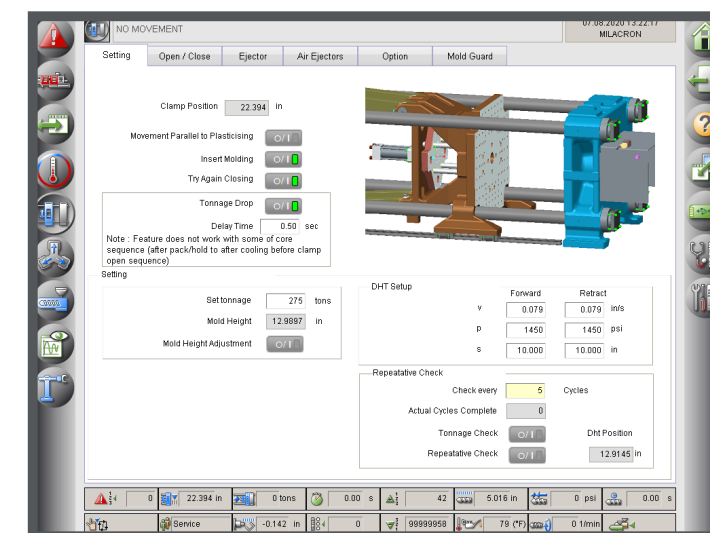
INJECTION GRAPH



MOLD GUARD



CLAMP SETUP



MINIMIZE ENERGY CONSUMPTION WITH RELIABLE PERFORMANCE

- Lower power consumption and water requirements
- Minimized hydraulic fluid reservoir contributes to a reduced environmental impact
- Standard water saver valve provided for the heat exchange regulates the cooling water usage to minimize water usage
- Ceramic insulated heater bands require less energy consumption, helping to keep the heat against the injection barrel

HIGH-QUALITY COMPONENTS

The Q-Series was designed to be durable and deliver exceptional performance in any environment. Built with the highest quality components, the Q-Series requires very little ongoing maintenance. Year over year, The Q-Series will continue to produce.



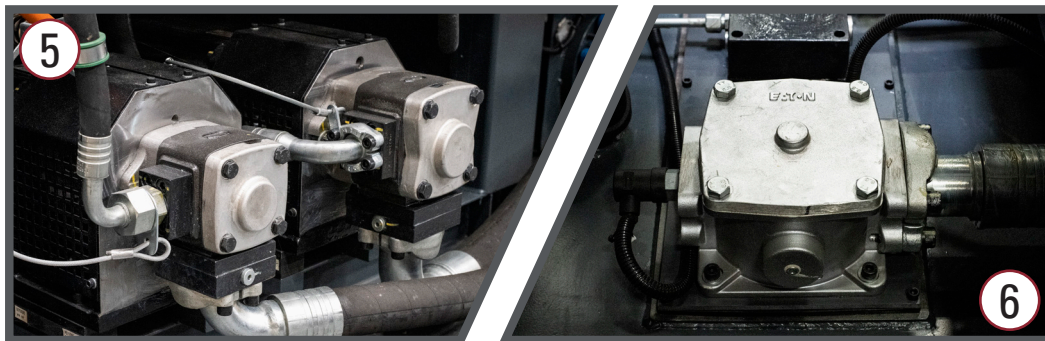
1. Motor/Drives – RexRoth

2. Control Hardware – B&R



3. Non-Contact Linear Transducers – Gefran

4. Control Valves – RexRoth/ ATOS



5. Fixed Gear Pump – Voith

6. Filtration – EATON

SERVO DRIVEN GEAR PUMP

- Servo driven performance for quick acceleration and repeatable response
- Bi-directional gear pump provides fewer moving parts and low maintenance
- The pump, motor, and drives are paired together for a more efficient control of power
- Lower cooling requirements for hydraulic oil than conventional hydraulic systems

STANDARD FEATURES

	Standard	Optional
GENERAL		
Advanced Toggle technology powered by energy efficient servo motor hydraulic system	●	
Direct control of pressure and flow via internal gear pumps	●	
* Multiple servo motor systems ... (multiple for Q315 and up)	●	
Improved layout of manifolds and hoses on non-operator side	●	
Monitored shut off valve to pump suction lines	●	
Solenoid indicator lights (Q-Series 125-610)	●	
Designed for serviceability (test ports, access, etc)	●	
Filtration to 10 micron with clog detection and alarm	●	○
Ports for external auxiliary filtration plumbing	●	
Option of additional loop filter		○
Open access to ejector area for quick/easy mold change	●	
Tri-directional part removal	●	
Robot mounting pads on stationary platen (optional SPI plates)	●	○
Euromap 67 robot interface	●	
SPI 3.0 robot interface		○
Filtered ventilated control cabinet with overtemperature alarm (cooling options)	●	○
Receptacle Package		○
Operator settable oil temperature control	●	○
Alarm light multiple tiered (option)	●	○
Leveling pads	●	
Low oil level monitoring	●	
Freely programmable cores	●	

	Standard	Optional
CLAMP		
Durable 10 pin Double toggle with improved clamp kinematics	●	
Precision linear guides on moving platen	●	
Compact footprint	●	
Increased max mold weight capacity	●	
Reduced (Euro-map 6) dry cycle times	●	
Grease free mold area bushingless moving platen	●	
Chrome plated strain rods with shot peen threads	●	
Insert Molding (Standard)	●	
*"Mold Guard" Enhanced full stroke mold protection	●	
SPI mold mounting pattern on platens	●	
Auto linkage and clamp skate lubrication (Q-Series 125-610)	●	
Die height bull gear adjustment (Q-Series 125-610), Chain sprocket adjustment (Q-Series 55-90)	●	
Repeatable auto die height adjustment is supported with a linear transducer	●	
Extended day light package available		○
Real time tonnage readout		○
Automatic lubrication of skates	●	
Self adjusting ratchet style jam bar		○
Proportional speed control with 5 opening and 5 closing speeds	●	

	Standard	Optional
INJECTION		
Twin cylinder injection units for compact footprint	●	
Twin pull-in cylinders for even nozzle force distribution	●	
Closed loop injection velocity and pressure control	●	
Cold slug removal	●	○
Injection fill to pack by screw position, pressure, or time	●	
Direct drive single stage hydraulic screw motor	●	
Short stroke slider ring	●	
Sprue break	●	
Injection unit swivel for easy nozzle, screw, and barrel maintenance	●	
J-Style thermocouples	●	
Hopper slide with shutoff, open/close, op side emptying	●	
Ceramic insulated heater bands	●	
Nitrided barrel	●	
Medium compression screw 45mm and smaller	●	
Barrier screw 50mm and larger	●	
Slider ring non-return valve	●	
Heaterband burnout detect	●	
Configure up to 5 injection high velocity steps	●	
Configure up to 10 injection pressure pack and hold steps	●	
Closed loop back pressure control	●	
Configure up to 5 backpressure steps	●	
Feed throat temperature monitoring alarm (closed loop control option)	●	○
Hopper swivel with shut-off (Q-Series 55-90)	●	
Sliding hopper with shut-off (Q-Series 125-610)	●	
Intrusion option available		○
Programmable auto heat startup	●	
End of production run shutdown	●	

	Standard	Optional
EJECT		
Machine mounted eject system (SPI)	●	
Eject on the fly (std: Q-Series 315-610)	●	○
Auxiliary Power unit (for EOF Q-Series 55-260)		○
Pulsating ejection	●	
Position transducer used for setup and readout of ejector positions	●	
Proportional control of eject speed and pressure (operator adjustable at control)	●	
Two forward eject speed set points	●	
Eject forward dwell timer	●	
Eject retract override	●	
Intermediate eject retract set point	●	
Eject retract limit switch verification (software/signals only)	●	
Eject forward limit switch verification (software and signals only)		○

* Features not available on all models.

WORKCELL INTEGRATION & APPLICATIONS

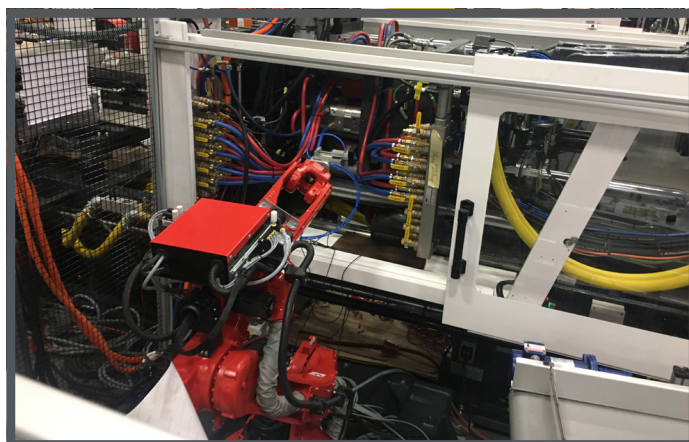
AUXILIARY SOLUTIONS

- 🔴 Hot runner controllers
- 🔴 Integrated robot cells
- 🔴 Hydraulic mold clamping systems
- 🔴 Conveyors
- 🔴 Thermoset stuffers
- 🔴 Rack circuit encoders



APPLICATIONS

- 🔴 PVC / CPVC solutions
- 🔴 Two component Injection
- 🔴 Integrated iMFLUX technology
- 🔴 Stack molds
- 🔴 Thermoset application options
- 🔴 Intrusion
- 🔴 Rotary tables



EUROMAP

- 🔴 Euromap 67 Robot interface (standard)
- 🔴 Euromap 73 interface (option available to operate with rear gate open)
- 🔴 Euromap 70 (option available for magnetic mold clamp integration)



M-POWERED

M-POWERED INTELLIGENCE

- 🔴 M-POWERED leverages the latest in Industrial Internet of Things (IIoT) and data science to contribute unique insights and intelligence into your machine's current operations and future needs.
- 🔴 Accompany the growing list of M-Powered customers that are experiencing a reduction in service trips and up to a 50% reduction in time to resolve unplanned downtime events.
- 🔴 Once an appointment is confirmed, a Milacron technician will be at your facility within the next 10 days to bring your machine online. Alternative connection choices are possible in the event of a more complex IT setup.



M-Powered Applications	ADVANTAGE	ESSENTIAL	PREMIER
Connect Portal	✓	✓	✓
Technical Support	On Demand (payable per hour)	✓	✓ (24/7)
Production Monitoring	✓	✓	✓
Downtime Tracking		✓	✓
Preventative Maintenance			✓
Predictive Analytics			✓

THE Q-SERIES

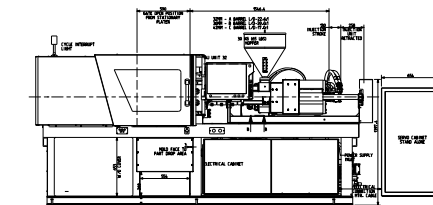
TONNAGE: 55US

Machines available for Quick Delivery

Frame Sizes: 28MM, 32MM
TECHNICAL SPECIFICATIONS



Not actual model, for visual reference only.



	METRIC	28mm Frame			ENGLISH	28mm Frame		
		A	B	C		A	B	C
INJECTION UNIT SPECIFICATIONS								
BACK PRESSURE LIMITS	bar	40			psi	580		
INJ.CAPACITY MAX. (GPPS)	gms	64	84	106	oz	2.3	3.0	3.7
THEORETICAL DISPLACEMENT	cc	67	88	112	in3	4.1	5.4	6.8
INJECTION PRESSURE MAX.	bar	2068	1584	1251	psi	29900	22900	18100
INJECTION RATE **	cc/sec	102	133	168	in3/sec	6.2	8.1	10.3
INJECTION VELOCITY	mm/sec	166			in/sec	7		
INJECTION SCREW STROKE	mm	110	110	110	in	4.3	4.3	4.3
SCREW DIAMETER	mm	28	32	36	in	1.10	1.26	1.42
SCREW L/D RATIO	L/D	23	20	17.7	L/D	23	20	17.7
SCREW SPEED	rpm	400	400	400	rpm	400	400	400
SCREW TORQUE	Nm	425	425	425	in-lb	3800	3800	3800
	at bar	170	170	170	at psi	2466	2466	2466
PLASTICIZING CAPACITY (GPPS)**	gm/sec	12	15	20	oz/sec	0.4	0.5	0.7
NO. OF PYROMETERS (BARREL/NOZZLE)**		3/1	3/1	3/1	qty	3/1	3/1	3/1
TOTAL HEAT CAPACITY	kW	6.4	6.4	6.4	kW	6.4	6.4	6.4
CLAMP UNIT SPECIFICATIONS								
MOLD PROTECT PRESSURE	bar	34.4			psi	500		
CLAMP FORCE	kN	500			ton	56		
OPENING FORCE	kN	150			ton	16		
CLAMP STROKE	mm	280			in	11.0		
CLAMP CLOSE VELOCITY	mm/sec	450			in/sec	17.7		
CLAMP OPEN VELOCITY	mm/sec	400			in/sec	15.8		
MAX. DAYLIGHT	mm	630			in	24.8		
MINIMUM MOLD HEIGHT	mm	150			in	5.9		
MAXIMUM MOLD HEIGHT	mm	350			in	13.8		
PLATEN SIZE (H x V)	mm	500 x 485			in	19.68 X 19.09		
DISTANCE BET. TIE RODS (H x V)	mm	325 x 310			in	12.79 X 12.2		
TIE ROD DIAMETER	mm	55			in	2.2		
EJECTOR FORWARD SPEED	mm/sec	325			in/sec	12.8		
EJECTOR RETRACT SPEED	mm/sec	325			in/sec	12.8		
EJECTOR STROKE MAX.	mm	100			in	3.9		
EJECTOR FORCE	kn	32			ton	3.6		
MOLD WEIGHT CAPACITY	kg	420			lbs	926		
DRY CYCLE TIME	sec	2.4			sec	2.4		
GENERAL								
ELECTRIC MOTOR	kW	11.5			hp	15		
MAIN CIRCUIT BREAKER	Amps	80			Amps	80		
FLI / FLA (FULL LOAD)	Amps	47			Amps	47		
TOTAL OIL CAPACITY	ltr	208			gal	55		
WATER REQUIREMENT	lpm	40			gal/min	10.6		
CONNECTED LOAD	kW	17.9			kW	17.9		
MACHINE DIMENSION (L x W x H)	m	4.1 x 1.4 x 2.1*			ft	13.45 x 4.6 x 6.9*		
MACHINE WEIGHT	kg	2900			lbs	6393		

* Additional drive cabinet 1.96 x 1.4 x 4.2ft

** With open nozzle

	METRIC	32mm Frame			ENGLISH	32mm Frame		
		A	B	C		A	B	C
INJECTION UNIT SPECIFICATIONS								
BACK PRESSURE LIMITS	bar	40			psi	580		
INJ.CAPACITY MAX. (GPPS)	gms	99	125	171	oz	3.5	4.4	6.0
THEORETICAL DISPLACEMENT	cc	104	132	180	in3	6.3	8.1	11.0
INJECTION PRESSURE MAX.	bar	2074	1639	1204	psi	30000	23700	17400
INJECTION RATE **	cc/sec	99	126	171	in3/sec	6.0	7.7	10.4
INJECTION VELOCITY	mm/sec	125			in/sec	5		
INJECTION SCREW STROKE	mm	130	130	130	in	5.1	5.1	5.1
SCREW DIAMETER	mm	32	36	42	in	1.26	1.42	1.65
SCREW L/D RATIO	L/D	22.6	20	17.7	L/D	23	20	17.7
SCREW SPEED	rpm	298	298	298	rpm	298	298	298
SCREW TORQUE	Nm	665	671	671	in-lb	6000	6100	6100
	at bar	170	172	172	at psi	2466	2495	2495
PLASTICIZING CAPACITY (GPPS)**	gm/sec	11	15	23	oz/sec	0.4	0.5	0.8
NO. OF PYROMETERS (BARREL/NOZZLE)**		3/1	3/1	3/1	qty	3/1	3/1	3/1
TOTAL HEAT CAPACITY	kW	7.3	7.3	7.3	kW	7.3	7.3	7.3
CLAMP UNIT SPECIFICATIONS								
MOLD PROTECT PRESSURE	bar	34.4			psi	500		
CLAMP FORCE	kN	500			ton	56		
OPENING FORCE	kN	150			ton	16		
CLAMP STROKE	mm	280			in	11.0		
CLAMP CLOSE VELOCITY	mm/sec	450			in/sec	17.7		
CLAMP OPEN VELOCITY	mm/sec	400			in/sec	15.8		
MAX. DAYLIGHT	mm	630			in	24.8		
MINIMUM MOLD HEIGHT	mm	150			in	5.9		
MAXIMUM MOLD HEIGHT	mm	350			in	13.8		
PLATEN SIZE (H x V)	mm	500 x 485			in	19.68 X 19.09		
DISTANCE BET. TIE RODS (H x V)	mm	325 x 310			in	12.79 X 12.2		
TIE ROD DIAMETER	mm	55			in	2.2		
EJECTOR FORWARD SPEED	mm/sec	325			in/sec	12.8		
EJECTOR RETRACT SPEED	mm/sec	325			in/sec	12.8		
EJECTOR STROKE MAX.	mm	100			in	3.9		
EJECTOR FORCE	kn	32			ton	3.6		
MOLD WEIGHT CAPACITY	kg	420			lbs	926		
DRY CYCLE TIME	sec	2.4			sec	2.4		
GENERAL								
ELECTRIC MOTOR	kW	11.5			hp	15		
MAIN CIRCUIT BREAKER	Amps	80			Amps	80		
FLI / FLA (Full Load)	Amps	48			Amps	48		
TOTAL OIL CAPACITY	ltr	208			gal	55		
WATER REQUIREMENT	lpm	40			gal/min	10.6		
CONNECTED LOAD	kW	18.8			kW	18.8		
MACHINE DIMENSION (L x W x H)	m	4.1 x 1.4 x 2.1*			ft	13.45 x 4.6 x 6.9*		
MACHINE WEIGHT	kg	3200			lbs	7055		

Notes

1) All machine dimensions and specifications are subject to change. Values are for reference only. These values are for standard machine horsepower and voltage (460v/3ph/60Hz).

THE Q-SERIES

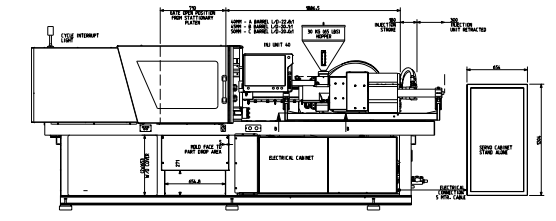
TONNAGE: 90US

Machines available for Quick Delivery

Frame Sizes: 32MM, 40MM
TECHNICAL SPECIFICATIONS



Not actual model, for visual reference only.



		32mm Frame						
	METRIC	A	B	C	ENGLISH	A	B	C
INJECTION UNIT SPECIFICATIONS								
BACK PRESSURE LIMITS	bar		40		psi		580	
INJ.CAPACITY MAX. (GPPS)	gms	99	125	171	oz	3.5	4.4	6.0
THEORETICAL DISPLACEMENT	cc	104	132	180	in3	6.3	8.1	11.0
INJECTION PRESSURE MAX.	bar	2074	1639	1204	psi	30000	23700	17400
INJECTION RATE **	cc/sec	99	126	171	in3/sec	6.0	7.7	10.4
INJECTION VELOCITY	mm/sec		125				5	
INJECTION SCREW STROKE	mm	130	130	130	in	5.1	5.1	5.1
SCREW DIAMETER	mm	32	36	42	in	1.26	1.42	1.65
SCREW L/D RATIO	L/D	22.6	20	175.7	L/D	23	20	17.7
SCREW SPEED	rpm	298	298	298	rpm	298	298	298
SCREW TORQUE	Nm	665	671	671	in-lb	6000	6100	6100
	at bar	170	172	172	at psi	2466	2495	2495
PLASTICIZING CAPACITY (GPPS)**	gm/sec	11	15	23	oz/sec	0.4	0.5	0.8
NO. OF PYROMETERS (BARREL/NOZZLE)**	qty	3/1	3/1	3/1	qty	3/1	3/1	3/1
TOTAL HEAT CAPACITY	kW	7.3	7.3	7.3	kW	7.3	7.3	7.3
CLAMP UNIT SPECIFICATIONS								
MOLD PROTECT PRESSURE	bar		34		psi		500	
CLAMP FORCE	kN		800		ton		89	
OPENING FORCE	kN		240		ton		26	
CLAMP STROKE	mm		310		in		12.2	
CLAMP CLOSE VELOCITY	mm/sec		400		in/sec		15.8	
CLAMP OPEN VELOCITY	mm/sec		400		in/sec		15.8	
MAX. DAYLIGHT	mm		710		in		28.0	
MINIMUM MOLD HEIGHT	mm		150		in		5.9	
MAXIMUM MOLD HEIGHT	mm		400		in		15.7	
PLATEN SIZE (H x V)	mm		610 x 565		in		24.0 X 22.2	
DISTANCE BET. TIE RODS (H x V)	mm		405 x 360		in		15.9 X 14.1	
TIE ROD DIAMETER	mm		70		in		2.8	
EJECTOR FORWARD SPEED	mm/sec		343		in/sec		13.5	
EJECTOR RETRACT SPEED	mm/sec		343		in/sec		13.5	
EJECTOR STROKE MAX.	mm		120		in		4.7	
EJECTOR FORCE	kn		34		ton		3.7	
MOLD WEIGHT CAPACITY	kg		693		lbs		1528	
DRY CYCLE TIME	sec		2.05		sec		2.05	
GENERAL								
ELECTRIC MOTOR	kW		11.5		hp		15	
MAIN CIRCUIT BREAKER	Amps		80		Amps		80	
FLI / FLA (FULL LOAD)	Amps		48		Amps		48	
TOTAL OIL CAPACITY	ltr		220		gal		58	
WATER REQUIREMENT	lpm		40		gal/min		10.6	
CONNECTED LOAD	kW		18.8		kW		18.8	
MACHINE DIMENSION (L x W x H)	m		4.7 x 1.6 x 2.1*		ft		15.1 x 5.25 x 6.89*	
MACHINE WEIGHT	kg		4150		lbs		9149	

* Additional drive cabinet 1.96 x 1.4 x 4.2ft

** With open nozzle

		40mm Frame						
	METRIC	A	B	C	ENGLISH	A	B	C
INJECTION UNIT SPECIFICATIONS								
BACK PRESSURE LIMITS	bar		40		psi		580	
INJ.CAPACITY MAX. (GPPS)	gms	215	272	336	oz	7.6	9.6	11.9
THEORETICAL DISPLACEMENT	cc	226	286	353	in3	13.8	17.4	21.5
INJECTION PRESSURE MAX.	bar	1901	1502	1217	psi	27500	21700	17600
INJECTION RATE **	cc/sec	117	148	183	in3/sec	7.1	9.0	11.2
INJECTION VELOCITY			93		in/sec		4	
INJECTION SCREW STROKE	mm	180	180	180	in	7.1	7.1	7.1
SCREW DIAMETER	mm	40	45	50	in	1.57	1.77	1.97
SCREW L/D RATIO	L/D	22.5	20	18	L/D	22.5	20	18
SCREW SPEED	rpm	237	237	237	rpm	237	237	237
SCREW TORQUE	Nm	846	846	846	in-lb	7600	7600	7600
	at bar	172	172	172	at psi	2495	2495	2495
PLASTICIZING CAPACITY (GPPS)**	gm/sec	16	22	30	oz/sec	0.6	0.8	1.1
NO. OF PYROMETERS (BARREL/NOZZLE)**	qty	3/1	3/1	3/1	qty	3/1	3/1	3/1
TOTAL HEAT CAPACITY	kW	13.1	13.1	13.1	kW	13.1	13.1	13.1
CLAMP UNIT SPECIFICATIONS								
MOLD PROTECT PRESSURE	bar		34		psi		500	
CLAMP FORCE	kN		800		ton		89	
OPENING FORCE	kN		240		ton		26	
CLAMP STROKE	mm		310		in		12.2	
CLAMP CLOSE VELOCITY	mm/sec		400		in/sec		15.8	
CLAMP OPEN VELOCITY	mm/sec		400		in/sec		15.8	
MAX. DAYLIGHT	mm		710		in		28.0	
MINIMUM MOLD HEIGHT	mm		150		in		5.9	
MAXIMUM MOLD HEIGHT	mm		400		in		15.7	
PLATEN SIZE (H x V)	mm		610 x 565		in		24.0 X 22.2	
DISTANCE BET. TIE RODS (H x V)	mm		405 x 360		in		15.9 X 14.1	
TIE ROD DIAMETER	mm		70		in		2.8	
EJECTOR FORWARD SPEED	mm/sec		343		in/sec		13.5	
EJECTOR RETRACT SPEED	mm/sec		343		in/sec		13.5	
EJECTOR STROKE MAX.	mm		120		in		4.7	
EJECTOR FORCE	kn		34		ton		3.7	
MOLD WEIGHT CAPACITY	kg		693		lbs		1528	
DRY CYCLE TIME	Sec		2.05		Sec		2.05	
GENERAL								
ELECTRIC MOTOR	kW		11.5		hp		15	
MAIN CIRCUIT BREAKER	Amps		80		Amps		80	
FLI / FLA (FULL LOAD)	Amps		55		Amps		55	
TOTAL OIL CAPACITY	L		220		gal		58	
WATER REQUIREMENT	L/min		40		gal/min		10.6	
CONNECTED LOAD	kW		24.6		kW		24.6	
MACHINE DIMENSION (L x W x H)	m		4.7 x 1.6 x 2.1 *		ft		15.1 x 5.25 x 6.89 *	
MACHINE WEIGHT	kg		4476		lbs		9868	

Notes

1) All machine dimensions and specifications are subject to change. Values are for reference only. These values are for standard machine horsepower and voltage (460v/3ph/60Hz).

THE Q-SERIES

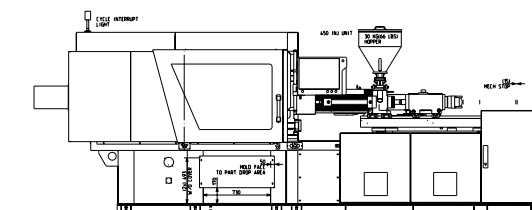
TONNAGE: 125US

Machines available for Quick Delivery

Frame Sizes: 450MM, 630MM
TECHNICAL SPECIFICATIONS



Not actual model, for visual reference only.



450mm Frame								
	METRIC	A	B	C	ENGLISH	A	B	C
INJECTION UNIT SPECIFICATIONS								
BACK PRESSURE LIMITS	bar	40			psi	580		
INJECTION CAPACITY MAX. (GPPS)	gms	165	215	272	oz	5.8	7.6	9.6
THEORETICAL DISPLACEMENT	cc	173	226	286	in3	10.6	13.8	17.4
INJECTION PRESSURE MAX.	bar	2443	1984	1568	psi	35400	28700	22700
INJECTION RATE *	cc/sec	103	134	170	in3/sec	6.3	8.2	10.4
INJECTION VELOCITY	mm/sec	107			in/sec	4.2		
INJECTION SCREW STROKE	mm	180	180	180	in	7.1	7.1	7.1
SCREW DIAMETER	mm	35	40	45	in	1.38	1.57	1.77
SCREW L/D RATIO		25.7	22.5	20	L/D	25.7	22.5	20
SCREW SPEED	rpm	279	279	279	rpm	279	279	279
SCREW TORQUE @ 172 BAR	Nm	876	876	876	in-lb	7900	7900	7900
PLASTICIZING RATE (GPPS) *	gm/sec	13	19	26	oz/sec	0.5	0.7	0.9
PLASTICIZING RATE (GPPS BARRIER) *	gm/sec				oz/sec			
NO.OF PYROMETERS (BARREL+NOZZLE)	qty	4+1			qty	4+1		
TOTAL HEAT CAPACITY	kW	11.3			kW	11.3		
CLAMP UNIT SPECIFICATIONS								
MOLD PROTECT PRESSURE	bar	68			psi	986		
CLAMP FORCE	ton	110			ton	123		
OPENING FORCE	ton	11			ton	12		
CLAMP STROKE	mm	380			in	15.0		
CLAMP CLOSE VELOCITY	mm/sec	800			in/sec	31.5		
CLAMP OPEN VELOCITY	mm/sec	650			in/sec	26		
MAXIMUM DAYIGHT	mm	900			in	35.4		
MINIMUM MOLD HEIGHT	mm	150			in	5.9		
MAXIMUM MOLD HEIGHT	mm	520			in	20.5		
PLATEN SIZE (H X V)	mm	690 X 645			in	27.16 X 25.4		
DISTANCE BETWEEN TIE ROD	mm	480 X 435			in	18.9 x 17.1		
TIE ROD DIAMETER	mm	75			in	3.0		
EJECTOR FORWARD SPEED	mm/sec	300			in/sec	11.8		
EJECTOR RETRACT SPEED	mm/sec	300			in/sec	11.8		
EJECTOR STROKE	mm	150			in	5.9		
EJECTOR FORCE	ton	3.5			ton	3.9		
MOLD WEIGHT CAPACITY (MOVING/STAT)	kg	1150 (770 / 770)			lbs	2535 (1697 / 1698)		
DRY CYCLE TIME	sec	1.65			sec	1.65		
GENERAL								
ELECTRIC MOTOR	kW	11.5			hp	15		
MAIN CIRCUIT BREAKER	Amps	90			Amps	90		
FLI / FLA (FULL LOAD)	Amps	53			Amps	53		
TOTAL OIL CAPACITY	L	280			gal	74		
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	50			gal/min	13.2		
CONNECTED LOAD	kW	22.8			kW	22.8		
MACHINE DIMENSION (L X W X H)	m	5.56 X 1.78 X 2.1			ft	18.4 x 5.8 x 7.2		
MACHINE WEIGHT	kg	5150			lbs	11354		

* With open nozzle

630mm Frame								
	METRIC	A	B	C	ENGLISH	A	B	C
INJECTION UNIT SPECIFICATIONS								
BACK PRESSURE LIMITS	bar	40			psi	580		
INJECTION CAPACITY MAX. (GPPS)	gms	239	303	374	oz	8.4	10.7	13.2
THEORETICAL DISPLACEMENT	cc	251	318	393	in3	15.3	19.4	24.0
INJECTION PRESSURE MAX.	bar	2492	1969	1595	psi	36100	28500	23100
INJECTION RATE *	cc/sec	107	135	167	in3/sec	6.5	8.2	10.2
INJECTION VELOCITY	mm/sec	85			in/sec	3.3		
INJECTION SCREW STROKE	mm	200	200	200	in	7.9	7.9	7.9
SCREW DIAMETER	mm	40	45	50	in	1.57	1.77	1.97
SCREW L/D RATIO		25	22.2	20	L/D	25	22.2	20
SCREW SPEED	rpm	222	222	222	rpm	222	222	222
SCREW TORQUE @ 172 BAR	Nm	1080	1080	1080	in-lb	9800	9800	9800
PLASTICIZING RATE (GPPS) *	gm/sec	15	20		oz/sec	0.5	0.7	
PLASTICIZING RATE (GPPS BARRIER) *	gm/sec			33	oz/sec			1.2
NO.OF PYROMETERS (BARREL+NOZZLE)	qty	4+1			qty	4+1		
TOTAL HEAT CAPACITY	kW	15.7			kW	15.7		
CLAMP UNIT SPECIFICATIONS								
MOLD PROTECT PRESSURE	bar	68			psi	986		
CLAMP FORCE	ton	110			ton	123		
OPENING FORCE	ton	11			ton	12		
CLAMP STROKE	mm	380			in	15.0		
CLAMP CLOSE VELOCITY	mm/sec	800			in/sec	31.5		
CLAMP OPEN VELOCITY	mm/sec	650			in/sec	26		
MAXIMUM DAYIGHT	mm	900			in	35.4		
MINIMUM MOLD HEIGHT	mm	150			in	5.9		
MAXIMUM MOLD HEIGHT	mm	520			in	20.5		
PLATEN SIZE (H X V)	mm	690 X 645			in	27.16 X 25.4		
DISTANCE BETWEEN TIE ROD	mm	480 X 435			in	18.9 x 17.1		
TIE ROD DIAMETER	mm	75			in	3.0		
EJECTOR FORWARD SPEED	mm/sec	300			in/sec	11.8		
EJECTOR RETRACT SPEED	mm/sec	300			in/sec	11.8		
EJECTOR STROKE	mm	150			in	5.9		
EJECTOR FORCE	ton	3.5			ton	3.9		
MOLD WEIGHT CAPACITY (MOVING/STAT)	kg	1150 (770 /700)			lbs	2535 (1697 / 1698)		
DRY CYCLE TIME	sec	1.65			sec	1.65		
GENERAL								
ELECTRIC MOTOR	kW	11.5			hp	15		
MAIN CIRCUIT BREAKER	Amps	90			Amps	90		
FLI / FLA (FULL LOAD)	Amps	58			Amps	58		
TOTAL OIL CAPACITY	L	280			gal	74		
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	50			gal/min	13.2		
CONNECTED LOAD	kW	27.2			kW	27.2		
MACHINE DIMENSION (L X W X H)	m	5.56 X 1.78 X 2.1			ft	18.4 x 5.8 x 7.2		
MACHINE WEIGHT	kg	5300			lbs	11684		

Notes

1) All machine dimensions and specifications are subject to change. Values are for reference only. These values are for standard machine horsepower and voltage (460v/3ph/60Hz).

THE Q-SERIES

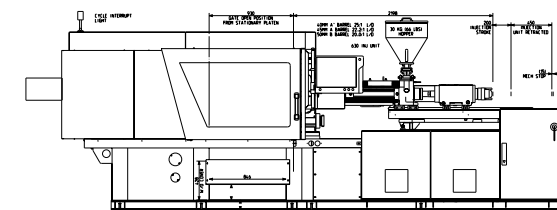
TONNAGE: 170US

Machines available for Quick Delivery

Frame Sizes: 630MM, 970MM
TECHNICAL SPECIFICATIONS



Not actual model, for visual reference only.



	METRIC	630mm Frame						
		A	B	C	ENGLISH	A	B	C
INJECTION UNIT SPECIFICATIONS								
BACK PRESSURE LIMITS	bar	40			psi	580		
INJECTION CAPACITY MAX. (GPPS)	gms	239	303	374	oz	8.4	10.7	13.2
THEORETICAL DISPLACEMENT	cc	251	318	393	in3	15.3	19.4	24.0
INJECTION PRESSURE MAX.	bar	2492	1969	1595	psi	36100	28500	23100
INJECTION RATE *	cc/sec	107	135	167	in3/sec	6.5	8.2	10.2
INJECTION VELOCITY	mm/sec	85			in/sec	3.3		
INJECTION SCREW STROKE	mm	200	200	200	in	7.9	7.9	7.9
SCREW DIAMETER	mm	40	45	50	in	1.57	1.77	1.97
SCREW L/D RATIO		25	22.2	20	L/D	25	22.2	20
SCREW SPEED	rpm	222	222	222	rpm	222	222	222
SCREW TORQUE @ 172 BAR	Nm	1080	1080	1080	in-lb	9800	9800	9800
PLASTICIZING RATE (GPPS) *	gm/sec	15	20		oz/sec	0.5	0.7	
PLASTICIZING RATE (GPPS BARRIER) *	gm/sec			33	oz/sec			1.2
NO.OF PYROMETERS (BARREL+NOZZLE)	qty	4+1			qty	4+1		
TOTAL HEAT CAPACITY	kW	15.7			kW	15.7		
CLAMP UNIT SPECIFICATIONS								
MOLD PROTECT PRESSURE	bar	68			psi	986		
CLAMP FORCE	ton	150			ton	168		
OPENING FORCE	ton	15			ton	16		
CLAMP STROKE	mm	460			in	18.1		
CLAMP CLOSE VELOCITY	mm/sec	900			in/sec	35.4		
CLAMP OPEN VELOCITY	mm/sec	750			in/sec	29.5		
MAXIMUM DAYLIGHT	mm	1060			in	41.7		
MINIMUM MOLD HEIGHT	mm	200			in	7.9		
MAXIMUM MOLD HEIGHT	mm	600			in	23.6		
PLATEN SIZE (H X V)	mm	780 X 740			in	30.7 X 29.1		
DISTANCE BETWEEN TIE ROD	mm	550 X 510			in	21.6 X 20		
TIE ROD DIAMETER	mm	85			in	3.3		
EJECTOR FORWARD SPEED	mm/sec	300			in/sec	12		
EJECTOR RETRACT SPEED	mm/sec	300			in/sec	12		
EJECTOR STROKE	mm	175			in	6.9		
EJECTOR FORCE	ton	5			ton	5.6		
MOLD WEIGHT CAPACITY (MOVING/STAT)	kg	1750 (1200/1100)			lbs	3858 (2645/2425)		
DRY CYCLE TIME	sec	1.70			sec	1.70		
GENERAL								
ELECTRIC MOTOR	kW	11.5			hp	15		
MAIN CIRCUIT BREAKER	Amps	90			Amps	90		
FLI / FLA (FULL LOAD)	Amps	58			Amps	58		
TOTAL OIL CAPACITY	L	365			gal	97		
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	50			gal/min	13.2		
CONNECTED LOAD	kW	27.2			kW	27.2		
MACHINE DIMENSION (L X W X H)	m	6.1 x 1.8 x 2.3			ft	20 x 5.9 x 7.5		
MACHINE WEIGHT	kg	6500			lbs	14330		

* With open nozzle

	METRIC	970mm Frame						
		A	B	C	ENGLISH	A	B	C
INJECTION UNIT SPECIFICATIONS								
BACK PRESSURE LIMITS	bar	40			psi	580		
INJECTION CAPACITY MAX. (GPPS)	gms	363	448	646	oz	12.8	15.8	22.8
THEORETICAL DISPLACEMENT	cc	382	471	679	in3	23.3	28.7	41.4
INJECTION PRESSURE MAX.	bar	2249	2057	1428	psi	32600	29800	20700
INJECTION RATE *	cc/sec	105	129	186	in3/sec	6.4	7.9	11.3
INJECTION VELOCITY	mm/sec	66			in/sec	2.6		
INJECTION SCREW STROKE	mm	240	240	240	in	9.4	9.4	9.4
SCREW DIAMETER	mm	45	50	60	in	1.77	1.97	2.36
SCREW L/D RATIO		26.7	24	20	L/D	26.7	24	20
SCREW SPEED	rpm	188	188	188	rpm	188	188	188
SCREW TORQUE @ 172 BAR	Nm	1305	1305	1305	in-lb	11800	11800	11800
PLASTICIZING RATE (GPPS) *	gm/sec	17			oz/sec	0.6		
PLASTICIZING RATE (GPPS BARRIER) *	gm/sec		28	43	oz/sec		1.0	1.5
NO.OF PYROMETERS (BARREL+NOZZLE)	qty	4+1			qty	4+1		
TOTAL HEAT CAPACITY	kW	16.9			kW	16.9		
CLAMP UNIT SPECIFICATIONS								
MOLD PROTECT PRESSURE	bar	68			psi	986		
CLAMP FORCE	ton	150			ton	168		
OPENING FORCE	ton	15			ton	16		
CLAMP STROKE	mm	460			in	18.1		
CLAMP CLOSE VELOCITY	mm/sec	900			in/sec	35.4		
CLAMP OPEN VELOCITY	mm/sec	750			in/sec	29.5		
MAXIMUM DAYLIGHT	mm	1060			in	41.7		
MINIMUM MOLD HEIGHT	mm	200			in	7.9		
MAXIMUM MOLD HEIGHT	mm	600			in	23.6		
PLATEN SIZE (H X V)	mm	780 X 740			in	30.7 X 29.1		
DISTANCE BETWEEN TIE ROD	mm	550 X 510			in	21.6 X 20		
TIE ROD DIAMETER	mm	85			in	3.3		
EJECTOR FORWARD SPEED	mm/sec	300			in/sec	12		
EJECTOR RETRACT SPEED	mm/sec	300			in/sec	12		
EJECTOR STROKE	mm	175			in	6.9		
EJECTOR FORCE	ton	5			ton	5.6		
MOLD WEIGHT CAPACITY (MOVING/STAT)	kg	1750 (1200/1100)			lbs	3858 (2645/2425)		
DRY CYCLE TIME	sec	1.70			sec	1.70		
GENERAL								
ELECTRIC MOTOR	kW	11.5			hp	15		
MAIN CIRCUIT BREAKER	Amps	90			Amps	90		
FLI / FLA (FULL LOAD)	Amps	60			Amps	60		
TOTAL OIL CAPACITY	L	365			gal	97		
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	50			gal/min	13.2		
CONNECTED LOAD	kW	28.4			kW	28.4		
MACHINE DIMENSION (L X W X H)	m	6.4 x 1.8 x 2.3			ft	20.9 x 5.9 x 7.5		
MACHINE WEIGHT	kg	6850			lbs	15102		

Notes

1) All machine dimensions and specifications are subject to change. Values are for reference only. These values are for standard machine horsepower and voltage (460v/3ph/60Hz).

THE Q-SERIES

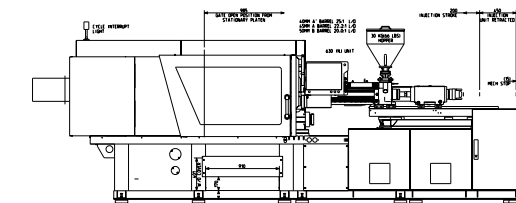
TONNAGE: 200US

Machines available for Quick Delivery

Frame Sizes: 630MM, 970MM
TECHNICAL SPECIFICATIONS



Not actual model, for visual reference only.



		630mm Frame						
	METRIC	A	B	C	ENGLISH	A	B	C
INJECTION UNIT SPECIFICATIONS								
BACK PRESSURE LIMITS	bar	40			psi	580		
INJECTION CAPACITY MAX. (GPPS)	gms	239	303	374	oz	8.4	10.7	13.2
THEORETICAL DISPLACEMENT	cc	251	318	393	in ³	15.3	19.4	24.0
INJECTION PRESSURE MAX.	bar	2492	1969	1595	psi	36100	28500	23100
INJECTION RATE *	cc/sec	107	135	167	in ³ /sec	6.5	8.2	10.2
INJECTION VELOCITY	mm/sec	85			in/sec	3.3		
INJECTION SCREW STROKE	mm	200	200	200	in	7.9	7.9	7.9
SCREW DIAMETER	mm	40	45	50	in	1.57	1.77	1.97
SCREW L/D RATIO		25	22.2	20	L/D	25	22.2	20
SCREW SPEED	rpm	222	222	222	rpm	222	222	222
SCREW TORQUE @ 172 BAR	Nm	1080	1080	1080	in-lb	9800	9800	9800
PLASTICIZING RATE (GPPS) *	gm/sec	15	20		oz/sec	0.5	0.7	
PLASTICIZING RATE (GPPS BARRIER) *	gm/sec			33	oz/sec			1.2
NO.OF PYROMETERS (BARREL+NOZZLE)	qty	4+1			qty	4+1		
TOTAL HEAT CAPACITY	kW	15.7			kW	15.7		
CLAMP UNIT SPECIFICATIONS								
MOLD PROTECT PRESSURE	bar	68			psi	986		
CLAMP FORCE	ton	180			ton	202		
OPENING FORCE	ton	18			ton	20		
CLAMP STROKE	mm	500			in	19.7		
CLAMP CLOSE VELOCITY	mm/sec	750			in/sec	29.5		
CLAMP OPEN VELOCITY	mm/sec	700			in/sec	27.6		
MAXIMUM DAYIGHT	mm	1100			in	43.3		
MINIMUM MOLD HEIGHT	mm	200			in	7.9		
MAXIMUM MOLD HEIGHT	mm	600			in	23.6		
PLATEN SIZE (H X V)	mm	810 x 770			in	31.88 X 30.3		
DISTANCE BETWEEN TIE ROD	mm	575 x 525			in	22.6 x 20.66		
TIE ROD DIAMETER	mm	95			in	3.7		
EJECTOR FORWARD SPEED	mm/sec	300			in/sec	11.8		
EJECTOR RETRACT SPEED	mm/sec	300			in/sec	11.8		
EJECTOR STROKE	mm	175			in	6.9		
EJECTOR FORCE	ton	5			ton	5.6		
MOLD WEIGHT CAPACITY (MOVING/STAT)	kg	1950 (1300 / 1200)			lbs	4298 (2865 / 2645)		
DRY CYCLE TIME	sec	1.85			sec	1.85		
GENERAL								
ELECTRIC MOTOR	kW	11.5			hp	15		
MAIN CIRCUIT BREAKER	Amps	90			Amps	90		
FLI / FLA (FULL LOAD)	Amps	58			Amps	58		
TOTAL OIL CAPACITY	L	365			gal	97		
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	50			gal/min	13.2		
CONNECTED LOAD	kW	27.2			kW	27.2		
MACHINE DIMENSION (L X W X H)	m	6.25 x 1.9 x 2.25			ft	20.5 x 6.07 x 7.38		
MACHINE WEIGHT	kg	7500			lbs	16535		

* With open nozzle

		970mm Frame						
	METRIC	A	B	C	ENGLISH	A	B	C
INJECTION UNIT SPECIFICATIONS								
BACK PRESSURE LIMITS	bar	40			psi	580		
INJECTION CAPACITY MAX. (GPPS)	gms	363	448	646	oz	12.8	15.8	22.8
THEORETICAL DISPLACEMENT	cc	382	471	679	in ³	23.3	28.7	41.4
INJECTION PRESSURE MAX.	bar	2249	2057	1428	psi	32600	29800	20700
INJECTION RATE *	cc/sec	105	129	186	in ³ /sec	6.4	7.9	11.3
INJECTION VELOCITY	mm/sec	66			in/sec	2.6		
INJECTION SCREW STROKE	mm	240	240	240	in	9.4	9.4	9.4
SCREW DIAMETER	mm	45	50	60	in	1.77	1.97	2.36
SCREW L/D RATIO		26.7	24	20	L/D	26.7	24	20
SCREW SPEED	rpm	188	188	188	rpm	188	188	188
SCREW TORQUE @ 172 BAR	Nm	1305	1305	1305	in-lb	11800	11800	11800
PLASTICIZING RATE (GPPS) *	gm/sec	17			oz/sec	0.6		
PLASTICIZING RATE (GPPS BARRIER) *	gm/sec		28	43	oz/sec		1.0	1.5
NO.OF PYROMETERS (BARREL+NOZZLE)	qty	4+1			qty	4+1		
TOTAL HEAT CAPACITY	kW	16.9			kW	16.9		
CLAMP UNIT SPECIFICATIONS								
MOLD PROTECT PRESSURE	bar	68			psi	986		
CLAMP FORCE	ton	180			ton	202		
OPENING FORCE	ton	18			ton	20		
CLAMP STROKE	mm	500			in	19.7		
CLAMP CLOSE VELOCITY	mm/sec	750			in/sec	29.5		
CLAMP OPEN VELOCITY	mm/sec	700			in/sec	27.6		
MAXIMUM DAYIGHT	mm	1100			in	43.3		
MINIMUM MOLD HEIGHT	mm	200			in	7.9		
MAXIMUM MOLD HEIGHT	mm	600			in	23.6		
PLATEN SIZE (H X V)	mm	810 x 770			in	31.88 X 30.3		
DISTANCE BETWEEN TIE ROD	mm	575 x 525			in	22.6 x 20.66		
TIE ROD DIAMETER	mm	95			in	3.7		
EJECTOR FORWARD SPEED	mm/sec	300			in/sec	11.8		
EJECTOR RETRACT SPEED	mm/sec	300			in/sec	11.8		
EJECTOR STROKE	mm	175			in	6.9		
EJECTOR FORCE	ton	5			ton	5.6		
MOLD WEIGHT CAPACITY (MOVING/STAT)	kg	1950 (1300 / 1200)			lbs	4298 (2865 / 2645)		
DRY CYCLE TIME	sec	1.85			sec	1.85		
GENERAL								
ELECTRIC MOTOR	kW	11.5			hp	15		
MAIN CIRCUIT BREAKER	Amps	90			Amps	90		
FLI / FLA (FULL LOAD)	Amps	60			Amps	60		
TOTAL OIL CAPACITY	L	365			gal	97		
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	50			gal/min	13.2		
CONNECTED LOAD	kW	28.4			kW	28.4		
MACHINE DIMENSION (L X W X H)	m	6.52 x 1.9 x 2.25			ft	21.39 x 6.07 x 7.38		
MACHINE WEIGHT	kg	7850			lbs	17306		

Notes

1) All machine dimensions and specifications are subject to change. Values are for reference only. These values are for standard machine horsepower and voltage (460v/3ph/60Hz).

THE Q-SERIES

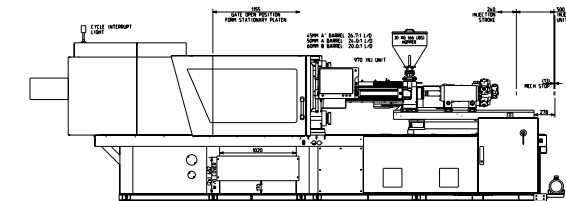
TONNAGE: 260US

Machines available for Quick Delivery

Frame Sizes: 970MM, 1540MM
TECHNICAL SPECIFICATIONS



Not actual model, for visual reference only.



		970mm Frame						
	METRIC	A	B	C	ENGLISH	A	B	C
INJECTION UNIT SPECIFICATIONS								
BACK PRESSURE LIMITS	bar	40			psi	580		
INJECTION CAPACITY MAX. (GPPS)	gms	363	448	646	oz	12.8	15.8	22.8
THEORETICAL DISPLACEMENT	cc	382	471	679	in3	23.3	28.7	41.4
INJECTION PRESSURE MAX.	bar	2249	2057	1428	psi	32600	29800	20700
INJECTION RATE *	cc/sec	164	202	291	in3/sec	10.0	12.3	17.8
INJECTION VELOCITY	mm/sec	103			in/sec	4.1		
INJECTION SCREW STROKE	mm	240	240	240	in	9.4	9.4	9.4
SCREW DIAMETER	mm	45	50	60	in	1.77	1.97	2.36
SCREW L/D RATIO		26.7	24	20	L/D	26.7	24	20
SCREW SPEED	rpm	293	293	293	rpm	293	293	293
SCREW TORQUE @ 172 BAR	Nm	1305	1305	1305	in-lb	11800	11800	11800
PLASTICIZING RATE (GPPS) *	gm/sec	27			oz/sec	1.0		
PLASTICIZING RATE (GPPS BARRIER) *	gm/sec		44	68	oz/sec		1.6	2.4
NO.OF PYROMETERS (BARREL+NOZZLE)	qty	4+1			qty	4+1		
TOTAL HEAT CAPACITY	kW	16.9			kW	16.9		
CLAMP UNIT SPECIFICATIONS								
MOLD PROTECT PRESSURE	bar	68			psi	986		
CLAMP FORCE	ton	230			ton	258		
OPENING FORCE	ton	23			ton	25		
CLAMP STROKE	mm	550			in	21.7		
CLAMP CLOSE VELOCITY	mm/sec	900			in/sec	35.4		
CLAMP OPEN VELOCITY	mm/sec	900			in/sec	35.4		
MAXIMUM DAYLIGHT	mm	1260			in	49.6		
MINIMUM MOLD HEIGHT	mm	200			in	7.9		
MAXIMUM MOLD HEIGHT	mm	710			in	28.0		
PLATEN SIZE (H X V)	mm	920 x 820			in	36.2 X 32.28		
DISTANCE BETWEEN TIE ROD	mm	660 x 560			in	25.98 X 22.0		
TIE ROD DIAMETER	mm	105			in	4.1		
EJECTOR FORWARD SPEED	mm/sec	300			in/sec	11.8		
EJECTOR RETRACT SPEED	mm/sec	300			in/sec	11.8		
EJECTOR STROKE	mm	200			in	7.9		
EJECTOR FORCE	ton	6.5			ton	7.3		
MOLD WEIGHT CAPACITY (MOVING/STAT)	kg	2800 (1700 / 1500)			lbs	6173 (3747 / 6682)		
DRY CYCLE TIME	sec	1.95			sec	1.95		
GENERAL								
ELECTRIC MOTOR	kW	13.6			hp	18		
MAIN CIRCUIT BREAKER	Amps	90			Amps	90		
FLI / FLA (FULL LOAD)	Amps	63			Amps	63		
TOTAL OIL CAPACITY	L	530			gal	140		
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	75			gal/min	19.8		
CONNECTED LOAD	kW	30.5			kW	30.5		
MACHINE DIMENSION (L X W X H)	m	7.1 x 2.1 x 2.4			ft	23.3 x 6.9 x 7.8		
MACHINE WEIGHT	kg	9500			lbs	20944		

* With open nozzle

		1540mm Frame						
	METRIC	A	B	C	ENGLISH	A	B	C
INJECTION UNIT SPECIFICATIONS								
BACK PRESSURE LIMITS	bar	40			psi	580		
INJECTION CAPACITY MAX. (GPPS)	gms	523	753	1025	oz	18.4	26.6	36.2
THEORETICAL DISPLACEMENT	cc	550	792	1078	in3	33.6	48.3	65.8
INJECTION PRESSURE MAX.	bar	2236	1941	1426	psi	32400	28100	20600
INJECTION RATE *	cc/sec	149	214	291	in3/sec	9.1	13.1	17.8
INJECTION VELOCITY	mm/sec	76			in/sec	3.0		
INJECTION SCREW STROKE	mm	280	280	280	in	11.0	11.0	11.0
SCREW DIAMETER	mm	50	60	70	in	1.97	2.36	2.76
SCREW L/D RATIO		28	23.3	20	L/D	28	23.3	20
SCREW SPEED	rpm	180	180	180	rpm	180	180	180
SCREW TORQUE @ 172 BAR	Nm	2126	2126	2126	in-lb	19300	19300	19300
PLASTICIZING RATE (GPPS) *	gm/sec		41	66	oz/sec		1.4	2.3
PLASTICIZING RATE (GPPS BARRIER) *	gm/sec	27			oz/sec	1.0		
NO.OF PYROMETERS (BARREL+NOZZLE)	qty	4+1			qty	4+1		
TOTAL HEAT CAPACITY	kW	24.9			kW	24.9		
CLAMP UNIT SPECIFICATIONS								
MOLD PROTECT PRESSURE	bar	68			psi	986		
CLAMP FORCE	ton	230			ton	258		
OPENING FORCE	ton	23			ton	25		
CLAMP STROKE	mm	550			in	21.7		
CLAMP CLOSE VELOCITY	mm/sec	900			in/sec	35.4		
CLAMP OPEN VELOCITY	mm/sec	900			in/sec	35.4		
MAXIMUM DAYLIGHT	mm	1260			in	49.6		
MINIMUM MOLD HEIGHT	mm	200			in	7.9		
MAXIMUM MOLD HEIGHT	mm	710			in	28.0		
PLATEN SIZE (H X V)	mm	920 x 820			in	36.2 X 32.28		
DISTANCE BETWEEN TIE ROD	mm	660 x 560			in	25.98 X 22.0		
TIE ROD DIAMETER	mm	105			in	4.1		
EJECTOR FORWARD SPEED	mm/sec	300			in/sec	11.8		
EJECTOR RETRACT SPEED	mm/sec	300			in/sec	11.8		
EJECTOR STROKE	mm	200			in	7.9		
EJECTOR FORCE	ton	6.5			ton	7.3		
MOLD WEIGHT CAPACITY (MOVING/STAT)	kg	2800(1700 / 1500)			lbs	6173 (3747 / 6682)		
DRY CYCLE TIME	sec	1.95			sec	1.95		
GENERAL								
ELECTRIC MOTOR	kW	13.6			hp	18		
MAIN CIRCUIT BREAKER	Amps	90			Amps	90		
FLI / FLA (FULL LOAD)	Amps	73			Amps	73		
TOTAL OIL CAPACITY	L	530			gal	140		
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	75			gal/min	19.8		
CONNECTED LOAD	kW	38.5			kW	38.5		
MACHINE DIMENSION (L X W X H)	m	7.50 x 2.1 x 2.4			ft	24.6 x 6.9 x 7.8		
MACHINE WEIGHT	kg	10250			lbs	22597		

Notes

1) All machine dimensions and specifications are subject to change. Values are for reference only. These values are for standard machine horsepower and voltage (460v/3ph/60Hz).

THE Q-SERIES

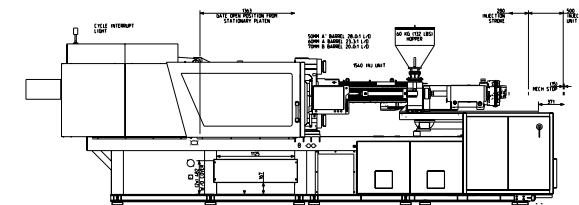
TONNAGE: 315US

Machines available for Quick Delivery

Frame Sizes: 1540MM, 2290MM
TECHNICAL SPECIFICATIONS



Not actual model, for visual reference only.



		1540mm Frame						
	METRIC	A	B	C	ENGLISH	A	B	C
INJECTION UNIT SPECIFICATIONS								
BACK PRESSURE LIMITS	bar	40			psi	580		
INJECTION CAPACITY MAX. (GPPS)	gms	523	753	1025	oz	18.4	26.6	36.2
THEORETICAL DISPLACEMENT	cc	550	792	1078	in3	33.6	48.3	65.8
INJECTION PRESSURE MAX.	bar	2236	1941	1426	psi	32400	28100	20600
INJECTION RATE *	cc/sec	246	351	478	in3/sec	15.0	21.4	29.2
INJECTION VELOCITY	mm/sec	125			in/sec	4.8		
INJECTION SCREW STROKE	mm	280	280	280	in	11.0	11.0	11.0
SCREW DIAMETER	mm	50	60	70	in	1.97	2.36	2.76
SCREW L/D RATIO		28	23.3	20	L/D	28	23.3	20
SCREW SPEED	rpm	295	295	273	rpm	295	295	273
SCREW TORQUE @ 172 BAR	Nm	2126	2126	2126	in-lb	19300	19300	19300
PLASTICIZING RATE (GPPS) *	gm/sec				oz/sec			
PLASTICIZING RATE (GPPS BARRIER) *	gm/sec	44	68	100	oz/sec	1.6	2.4	3.5
NO.OF PYROMETERS (BARREL+NOZZLE)	qty	4+1			qty	4+1		
TOTAL HEAT CAPACITY	kW	24.9			kw	24.9		
CLAMP UNIT SPECIFICATIONS								
MOLD PROTECT PRESSURE	bar	68			psi	986		
CLAMP FORCE	ton	280			ton	314		
OPENING FORCE	ton	28			ton	31		
CLAMP STROKE	mm	650			in	25.6		
CLAMP CLOSE VELOCITY	mm/sec	900			in/sec	35.4		
CLAMP OPEN VELOCITY	mm/sec	800			in/sec	31.5		
MAXIMUM DAYLIGHT	mm	1400			in	55.1		
MINIMUM MOLD HEIGHT	mm	250			in	9.8		
MAXIMUM MOLD HEIGHT	mm	750			in	29.5		
PLATEN SIZE (H X V)	mm	990 x 940			in	38.97 X 37.0		
DISTANCE BETWEEN TIE ROD	mm	710 x 660			in	27.9 X 25.98		
TIE ROD DIAMETER	mm	115			in	4.5		
EJECTOR FORWARD SPEED	mm/sec	300			in/sec	11.8		
EJECTOR RETRACT SPEED	mm/sec	300			in/sec	11.8		
EJECTOR STROKE	mm	200			in	7.9		
EJECTOR FORCE	ton	6.5			ton	7.3		
MOLD WEIGHT CAPACITY (MOVING/STAT)	kg	3700 (2500 / 1900)			lbs	8157 (5512 / 4189)		
DRY CYCLE TIME	sec	2.15			sec	2.15		
GENERAL								
ELECTRIC MOTOR	kW	25.1			hp	34		
MAIN CIRCUIT BREAKER	Amps	150			Amps	150		
FLI / FLA (FULL LOAD)	Amps	108			Amps	108		
TOTAL OIL CAPACITY	L	530			gal	140		
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	75			gal/min	19.8		
CONNECTED LOAD	kW	50			kW	50		
MACHINE DIMENSION (L X W X H)	m	7.75 X 2.2 X 2.57			ft	25.4 x 7.2 x 8.4		
MACHINE WEIGHT	kg	12500			lbs	27558		

* With open nozzle

		2290mm Frame						
	METRIC	A	B	C	ENGLISH	A	B	C
INJECTION UNIT SPECIFICATIONS								
BACK PRESSURE LIMITS	bar	40			psi	580		
INJECTION CAPACITY MAX. (GPPS)	gms	861	1172	1530	oz	30.4	41.3	54.0
THEORETICAL DISPLACEMENT	cc	905	1232	1608	in3	55.2	75.2	98.1
INJECTION PRESSURE MAX.	bar	2238	1856	1421	psi	32400	26900	20600
INJECTION RATE *	cc/sec	270	367	480	in3/sec	16.5	22.4	29.3
INJECTION VELOCITY	mm/sec	96			in/sec	3.7		
INJECTION SCREW STROKE	mm	320	320	320	in	12.6	12.6	12.6
SCREW DIAMETER	mm	60	70	80	in	2.36	2.76	3.15
SCREW L/D RATIO		26.7	22.9	20	L/D	26.7	22.9	20
SCREW SPEED	rpm	187	187	187	rpm	187	187	187
SCREW TORQUE @ 172 BAR	Nm	3347	3347	3347	in-lb	30400	30400	30400
PLASTICIZING RATE (GPPS) *	gm/sec				oz/sec			
PLASTICIZING RATE (GPPS BARRIER) *	gm/sec	43	69	93	oz/sec	1.5	2.4	3.3
NO.OF PYROMETERS (BARREL+NOZZLE)	qty	4+1			qty	4+1		
TOTAL HEAT CAPACITY	kW	39.6			kW	39.6		
CLAMP UNIT SPECIFICATIONS								
MOLD PROTECT PRESSURE	bar	68			psi	986		
CLAMP FORCE	ton	280			ton	314		
OPENING FORCE	ton	28			ton	31		
CLAMP STROKE	mm	650			in	25.6		
CLAMP CLOSE VELOCITY	mm/sec	900			in/sec	35.4		
CLAMP OPEN VELOCITY	mm/sec	800			in/sec	31.5		
MAXIMUM DAYLIGHT	mm	1400			in	55.1		
MINIMUM MOLD HEIGHT	mm	250			in	9.8		
MAXIMUM MOLD HEIGHT	mm	750			in	29.5		
PLATEN SIZE (H X V)	mm	990 x 940			in	38.97 X 37.0		
DISTANCE BETWEEN TIE ROD	mm	710 x 660			in	27.9 X 25.98		
TIE ROD DIAMETER	mm	115			in	4.5		
EJECTOR FORWARD SPEED	mm/sec	300			in/sec	11.8		
EJECTOR RETRACT SPEED	mm/sec	300			in/sec	11.8		
EJECTOR STROKE	mm	200			in	7.9		
EJECTOR FORCE	ton	6.5			ton	7.3		
MOLD WEIGHT CAPACITY (MOVING/STAT)	kg	3700 (2500 / 1900)			lbs	8157 (5512 / 4189)		
DRY CYCLE TIME	sec	2.15			sec	2.15		
GENERAL								
ELECTRIC MOTOR	kW	25.1			hp	34		
MAIN CIRCUIT BREAKER	Amps	175			Amps	175		
FLI / FLA (FULL LOAD)	Amps	126			Amps	126		
TOTAL OIL CAPACITY	L	530			gal	140		
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	75			gal/min	19.8		
CONNECTED LOAD	kW	64.7			kW	64.7		
MACHINE DIMENSION (L X W X H)	m	8.2 X 2.2 X 2.6			ft	26.9 x 7.2 x 8.4		
MACHINE WEIGHT	kg	14600			lbs	32187		

Notes

1) All machine dimensions and specifications are subject to change. Values are for reference only. These values are for standard machine horsepower and voltage (460v/3ph/60Hz).

THE Q-SERIES

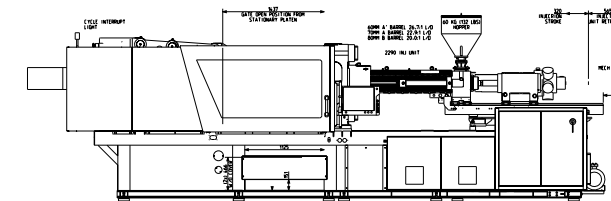
TONNAGE: 400US

Machines available for Quick Delivery

Frame Sizes: 2290MM, 3470MM
TECHNICAL SPECIFICATIONS



Not actual model, for visual reference only.



		2290mm Frame						
	METRIC	A	B	C	ENGLISH	A	B	C
INJECTION UNIT SPECIFICATIONS								
BACK PRESSURE LIMITS	bar	40			psi	580		
INJECTION CAPACITY MAX. (GPPS)	gms	861	1172	1530	oz	30.4	41.3	54.0
THEORETICAL DISPLACEMENT	cc	905	1232	1608	in3	55.2	75.2	98.1
INJECTION PRESSURE MAX.	bar	2238	1856	1421	psi	32400	26900	20600
INJECTION RATE *	cc/sec	270	367	480	in3/sec	16.5	22.4	29.3
INJECTION VELOCITY	mm/sec	96			in/sec	3.8		
INJECTION SCREW STROKE	mm	320	320	320	in	12.6	12.6	12.6
SCREW DIAMETER	mm	60	70	80	in	2.36	2.76	3.15
SCREW L/D RATIO		26.7	22.9	20	L/D	26.7	22.9	20
SCREW SPEED	rpm	187	187	187	rpm	187	187	187
SCREW TORQUE @ 172 BAR	Nm	3347	3347	3347	in-lb	30400	30400	30400
PLASTICIZING RATE (GPPS) *	gm/sec				oz/sec			
PLASTICIZING RATE (GPPS BARRIER) *	gm/sec	43	69	93	oz/sec	1.5	2.4	3.3
NO.OF PYROMETERS (BARREL+NOZZLE)	qty	4+1			qty	4+1		
TOTAL HEAT CAPACITY	kW	39.6			kW	39.6		
CLAMP UNIT SPECIFICATIONS								
MOLD PROTECT PRESSURE	bar	68			psi	986		
CLAMP FORCE	ton	350			ton	393		
OPENING FORCE	ton	35			ton	39		
CLAMP STROKE	mm	720			in	28.3		
CLAMP CLOSE VELOCITY	mm/sec	900			in/sec	35.4		
CLAMP OPEN VELOCITY	mm/sec	850			in/sec	33.5		
MAXIMUM DAYLIGHT	mm	1520			in	59.8		
MINIMUM MOLD HEIGHT	mm	300			in	11.8		
MAXIMUM MOLD HEIGHT	mm	800			in	31.5		
PLATEN SIZE (H X V)	mm	1120 x 1035			in	44.0 X 40.7		
DISTANCE BETWEEN TIE ROD	mm	810 x 725			in	31.88 X 28.5		
TIE ROD DIAMETER	mm	125			in	4.9		
EJECTOR FORWARD SPEED	mm/sec	300			in/sec	11.8		
EJECTOR RETRACT SPEED	mm/sec	300			in/sec	11.8		
EJECTOR STROKE	mm	250			in	9.8		
EJECTOR FORCE	ton	7.5			ton	8.4		
MOLD WEIGHT CAPACITY (MOVING/STAT)	kg	5000 (3300 / 2700)			lbs	11023 (7275 / 5952)		
DRY CYCLE TIME	sec	2.40			sec	2.40		
GENERAL								
ELECTRIC MOTOR	kW	25.1			hp	34		
MAIN CIRCUIT BREAKER	Amps	175			Amps	175		
FLI / FLA (FULL LOAD)	Amps	126			Amps	126		
TOTAL OIL CAPACITY	L	650			gal	172		
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	100			gal/min	26.5		
CONNECTED LOAD	kW	64.7			kW	64.7		
MACHINE DIMENSION (L X W X H)	m	8.5 X 2.3 X 2.6			ft	27.8 x 7.6 x 8.5		
MACHINE WEIGHT	kg	16800			lbs	37037		

* With open nozzle

		3470mm Frame						
	METRIC	A	B	C	ENGLISH	A	B	C
INJECTION UNIT SPECIFICATIONS								
BACK PRESSURE LIMITS	bar	40			psi	580		
INJECTION CAPACITY MAX. (GPPS)	gms	1318	1722	2179	oz	46.5	60.7	76.9
THEORETICAL DISPLACEMENT	cc	1385	1810	2290	in3	84.5	110.4	139.7
INJECTION PRESSURE MAX.	bar	2289	1917	1515	psi	33100	27700	21900
INJECTION RATE *	cc/sec	272	356	450	in3/sec	16.6	21.7	27.5
INJECTION VELOCITY	mm/sec	71			in/sec	2.8		
INJECTION SCREW STROKE	mm	360	360	360	in	14.2	14.2	14.2
SCREW DIAMETER	mm	70	80	90	in	2.76	3.15	3.54
SCREW L/D RATIO		25.7	22.5	20	L/D	25.7	22.5	20
SCREW SPEED	rpm	142	142	142	rpm	142	142	142
SCREW TORQUE @ 172 BAR	Nm	4424	4424	4424	in-lb	40200	40200	40200
PLASTICIZING RATE (GPPS) *	gm/sec				oz/sec			
PLASTICIZING RATE (GPPS BARRIER) *	gm/sec	52	70	94	oz/sec	1.8	2.5	3.3
NO.OF PYROMETERS (BARREL+NOZZLE)	qty	4+1			qty	4+1		
TOTAL HEAT CAPACITY	kW	57.9			kW	57.9		
CLAMP UNIT SPECIFICATIONS								
MOLD PROTECT PRESSURE	bar	68			psi	986		
CLAMP FORCE	ton	350			ton	393		
OPENING FORCE	ton	35			ton	39		
CLAMP STROKE	mm	720			in	28.3		
CLAMP CLOSE VELOCITY	mm/sec	900			in/sec	35.4		
CLAMP OPEN VELOCITY	mm/sec	850			in/sec	33.5		
MAXIMUM DAYLIGHT	mm	1520			in	59.8		
MINIMUM MOLD HEIGHT	mm	300			in	11.8		
MAXIMUM MOLD HEIGHT	mm	800			in	31.5		
PLATEN SIZE (H X V)	mm	1120 x 1035			in	44.0 X 40.7		
DISTANCE BETWEEN TIE ROD	mm	810 x 725			in	31.88 X 28.5		
TIE ROD DIAMETER	mm	125			in	4.9		
EJECTOR FORWARD SPEED	mm/sec	300			in/sec	11.8		
EJECTOR RETRACT SPEED	mm/sec	300			in/sec	11.8		
EJECTOR STROKE	mm	250			in	9.8		
EJECTOR FORCE	ton	7.5			ton	8.4		
MOLD WEIGHT CAPACITY (MOVING/STAT)	kg	5000 (3300 / 2700)			lbs	11023 (7275 / 5952)		
DRY CYCLE TIME	sec	2.40			sec	2.40		
GENERAL								
ELECTRIC MOTOR	kW	25.1			hp	34		
MAIN CIRCUIT BREAKER	Amps	200			Amps	200		
FLI / FLA (FULL LOAD)	Amps	149			Amps	149		
TOTAL OIL CAPACITY	L	650			gal	172		
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	100			gal/min	26.5		
CONNECTED LOAD	kW	83			kW	83		
MACHINE DIMENSION (L X W X H)	m	9.2 X 2.3 X 2.65			ft	30.1 x 7.5 x 8.7		
MACHINE WEIGHT	kg	18290			lbs	40322		

Notes

1) All machine dimensions and specifications are subject to change. Values are for reference only. These values are for standard machine horsepower and voltage (460v/3ph/60Hz).

THE Q-SERIES

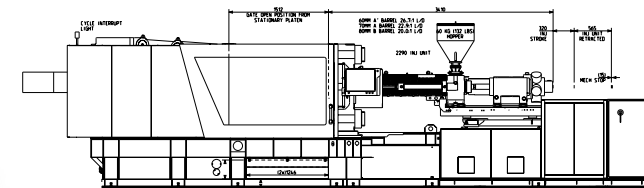
TONNAGE: 500US

Machines available for Quick Delivery

Frame Sizes: 2290MM, 3470MM
TECHNICAL SPECIFICATIONS



Not actual model, for visual reference only.



		2290mm Frame						
	METRIC	A	B	C	ENGLISH	A	B	C
INJECTION UNIT SPECIFICATIONS								
BACK PRESSURE LIMITS	bar	40			psi	580		
INJECTION CAPACITY MAX. (GPPS)	gms	861	1172	1530	oz	30.4	41.3	54.0
THEORETICAL DISPLACEMENT	cc	905	1232	1608	in3	55.2	75.2	98.1
INJECTION PRESSURE MAX.	bar	2238	1856	1421	psi	32400	26900	20600
INJECTION RATE *	cc/sec	367	500	653	in3/sec	22.4	30.5	39.8
INJECTION VELOCITY	mm/sec	130			in/sec	5.1		
INJECTION SCREW STROKE	mm	320	320	320	in	12.6	12.6	12.6
SCREW DIAMETER	mm	60	70	80	in	2.36	2.76	3.15
SCREW L/D RATIO		26.7	22.9	20	L/D	26.7	22.9	20
SCREW SPEED	rpm	255	255	255	rpm	255	255	255
SCREW TORQUE @ 172 BAR	Nm	3347	3347	3347	in-lb	30400	30400	30400
PLASTICIZING RATE (GPPS) *	gm/sec				oz/sec			
PLASTICIZING RATE (GPPS BARRIER) *	gm/sec	59	93	126	qty	2.1	3.3	4.4
NO.OF PYROMETERS (BARREL+NOZZLE)	qty	4+1			qty	4+1		
TOTAL HEAT CAPACITY	kW	39.6			kW	39.6		
CLAMP UNIT SPECIFICATIONS								
MOLD PROTECT PRESSURE	bar	68			psi	986		
CLAMP FORCE	ton	450			ton	505		
OPENING FORCE	ton	45			ton	50		
CLAMP STROKE	mm	850			in	33.5		
CLAMP CLOSE VELOCITY	mm/sec	800			in/sec	31.5		
CLAMP OPEN VELOCITY	mm/sec	750			in/sec	29.5		
MAXIMUM DAYLIGHT	mm	1670			in	65.7		
MINIMUM MOLD HEIGHT	mm	350			in	13.8		
MAXIMUM MOLD HEIGHT	mm	820			in	32.3		
PLATEN SIZE (H X V)	mm	1245 x 1200			in	49.0 X 47.2		
DISTANCE BETWEEN TIE ROD	mm	875 x 830			in	34.4 X 32.67		
TIE ROD DIAMETER	mm	145			in	5.7		
EJECTOR FORWARD SPEED	mm/sec	185			in/sec	7.3		
EJECTOR RETRACT SPEED	mm/sec	210			in/sec	8.3		
EJECTOR STROKE	mm	250			in	9.8		
EJECTOR FORCE	ton	12			ton	13.5		
MOLD WEIGHT CAPACITY (MOVING/STAT)	kg	6000 (4000 / 4000)			lbs	13227 (8818 / 8818)		
DRY CYCLE TIME	sec	2.95			sec	2.95		
GENERAL								
ELECTRIC MOTOR	kW	36.6			hp	49		
MAIN CIRCUIT BREAKER	Amps	200			Amps	200		
FLI / FLA (FULL LOAD)	Amps	161			Amps	161		
TOTAL OIL CAPACITY	L	800			gal	212		
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	100			gal/min	26.5		
CONNECTED LOAD	kW	76.2			kW	76.2		
MACHINE DIMENSION (L X W X H)	m	9.3 X 2.4 X 2.5			ft	30.5 x 7.9 x 8.2		
MACHINE WEIGHT	kg	22000			lbs	48501		

* With open nozzle

		3470mm Frame						
	METRIC	A	B	C	ENGLISH	A	B	C
INJECTION UNIT SPECIFICATIONS								
BACK PRESSURE LIMITS	bar	40			psi	580		
INJECTION CAPACITY MAX. (GPPS)	gms	1318	1722	2179	oz	46.5	60.7	76.9
THEORETICAL DISPLACEMENT	cc	1385	1810	2290	in3	84.5	110.4	139.7
INJECTION PRESSURE MAX.	bar	2289	1917	1515	psi	33100	27700	21900
INJECTION RATE *	cc/sec	371	484	613	in3/sec	22.6	29.5	37.4
INJECTION VELOCITY	mm/sec	96			in/sec	3.8		
INJECTION SCREW STROKE	mm	360	360	360	in	14.2	14.2	14.2
SCREW DIAMETER	mm	70	80	90	in	2.76	3.15	3.54
SCREW L/D RATIO		25.7	22.5	20	L/D	25.7	22.5	20
SCREW SPEED	rpm	199	199	199	rpm	199	199	199
SCREW TORQUE @ 172 BAR	Nm	4291	4291	4291	in-lb	39000	39000	39000
PLASTICIZING RATE (GPPS) *	gm/sec				oz/sec			
PLASTICIZING RATE (GPPS BARRIER) *	gm/sec	73	99	125	qty	2.6	3.5	4.4
NO.OF PYROMETERS (BARREL+NOZZLE)	qty	4+1			qty	4+1		
TOTAL HEAT CAPACITY	kW	57.9			kW	57.9		
CLAMP UNIT SPECIFICATIONS								
MOLD PROTECT PRESSURE	bar	68			psi	986		
CLAMP FORCE	ton	450			ton	505		
OPENING FORCE	ton	45			ton	50		
CLAMP STROKE	mm	850			in	33.5		
CLAMP CLOSE VELOCITY	mm/sec	800			in/sec	31.5		
CLAMP OPEN VELOCITY	mm/sec	750			in/sec	29.5		
MAXIMUM DAYLIGHT	mm	1670			in	65.7		
MINIMUM MOLD HEIGHT	mm	350			in	13.8		
MAXIMUM MOLD HEIGHT	mm	820			in	32.3		
PLATEN SIZE (H X V)	mm	1245 x 1200			in	49.0 X 47.2		
DISTANCE BETWEEN TIE ROD	mm	875 x 830			in	34.4 X 32.67		
TIE ROD DIAMETER	mm	145			in	5.7		
EJECTOR FORWARD SPEED	mm/sec	185			in/sec	7.3		
EJECTOR RETRACT SPEED	mm/sec	210			in/sec	8.3		
EJECTOR STROKE	mm	250			in	9.8		
EJECTOR FORCE	ton	12			ton	13.5		
MOLD WEIGHT CAPACITY (MOVING/STAT)	kg	6000 (4000 / 4000)			lbs	13227 (8818 / 8818)		
DRY CYCLE TIME	sec	2.95			sec	2.95		
GENERAL								
ELECTRIC MOTOR	kW	36.6			hp	49		
MAIN CIRCUIT BREAKER	Amps	250			Amps	250		
FLI / FLA (FULL LOAD)	Amps	184			Amps	184		
TOTAL OIL CAPACITY	L	800			gal	212		
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	100			gal/min	26.5		
CONNECTED LOAD	kW	94.5			kW	7.9		
MACHINE DIMENSION (L X W X H)	m	9.6 X 2.4 X 2.5			ft	31.5 x 7.9 x 8.2		
MACHINE WEIGHT	kg	23150			lbs	51036		

Notes

1) All machine dimensions and specifications are subject to change. Values are for reference only. These values are for standard machine horsepower and voltage (460v/3ph/60Hz).

THE Q-SERIES

TONNAGE: 610US (Differant Power Pack)

Machines available for Quick Delivery

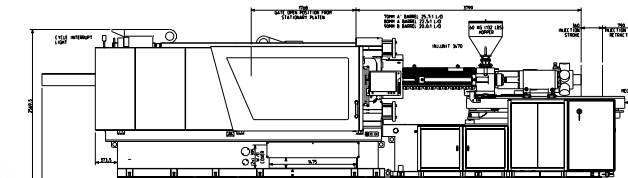
Frame Sizes: 2290MM, 3470MM
TECHNICAL SPECIFICATIONS

3470 (Power pack-13.6+13.6+11.5 kW) - 3 motor								
	METRIC	A'	A	B	ENGLISH	A	B	C
INJECTION UNIT SPECIFICATIONS								
BACK PRESSURE LIMITS	bar	40			psi	580		
INJECTION CAPACITY MAX. (GPPS)	gms	1318	1722	2179	oz	46.5	60.7	76.9
THEORETICAL DISPLACEMENT	cc	1385	1810	2290	in3	84.5	110.4	139.7
INJECTION PRESSURE MAX.	bar	2289	1917	1515	psi	33100	27700	21900
INJECTION RATE *	cc/sec	438	572	724	in3/sec	26.7	34.9	44.2
INJECTION VELOCITY	mm/sec	114			in/sec	4.5		
INJECTION SCREW STROKE	mm	360	360	360	in	14.2	14.2	14.2
SCREW DIAMETER	mm	70	80	90	in	2.76	3.15	3.54
SCREW L/D RATIO		25.7	22.5	20	L/D	25.7	22.5	20
SCREW SPEED	rpm	235	235	214	rpm	235	235	214
SCREW TORQUE @ 172 BAR	Nm	4291	4291	4291	in-lb	39000	39000	39000
PLASTICIZING RATE (GPPS) *	gm/sec				oz/sec			
PLASTICIZING RATE (GPPS BARRIER) *	gm/sec	86	116	134	oz/sec	3.0	4.1	4.7
NO.OF PYROMETERS (BARREL+NOZZLE)	qty	4+1			qty	4+1		
TOTAL HEAT CAPACITY	kW	57.9			kW	57.9		
CLAMP UNIT SPECIFICATIONS								
MOLD PROTECT PRESSURE	bar	68			psi	986		
CLAMP FORCE	ton	550			ton	617		
OPENING FORCE	ton	55			ton	61		
CLAMP STROKE	mm	920			in	36.2		
CLAMP CLOSE VELOCITY	mm/sec	750			in/sec	29.5		
CLAMP OPEN VELOCITY	mm/sec	700			in/sec	27.6		
MAXIMUM DAYIGHT	mm	1820			in	71.7		
MINIMUM MOLD HEIGHT	mm	400			in	15.7		
MAXIMUM MOLD HEIGHT	mm	900			in	35.4		
PLATEN SIZE (H X V)	mm	1330 x 1300			in	52.36 X 51.18		
DISTANCE BETWEEN TIE ROD	mm	1000 x 900			in	39.37 X 35.43		
TIE ROD DIAMETER	mm	170			in	6.7		
EJECTOR FORWARD SPEED	mm/sec	185			in/sec	7.3		
EJECTOR RETRACT SPEED	mm/sec	210			in/sec	8.3		
EJECTOR STROKE	mm	250			in	9.8		
EJECTOR FORCE	ton	12			ton	13.5		
MOLD WEIGHT CAPACITY (MOVING/STAT)	kg	8300 (5530 / 4150)			lbs	18298 (12191 / 9149)		
DRY CYCLE TIME	sec	3.20			sec	3.20		
GENERAL								
ELECTRIC MOTOR	kW	38.7			hp	52		
MAIN CIRCUIT BREAKER	Amps	250			Amps	250		
FLI / FLA (FULL LOAD)	Amps	188			Amps	188		
TOTAL OIL CAPACITY	L	815			gal	216		
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	100			gal/min	26.5		
CONNECTED LOAD	kW	96.6			kW	96.6		
MACHINE DIMENSION (L X W X H)	m	9.2 x 2.6 x 2.9			ft	30.1 x 8.6 x 9.2		
MACHINE WEIGHT	kg	32750			lbs	72201		

* With open nozzle



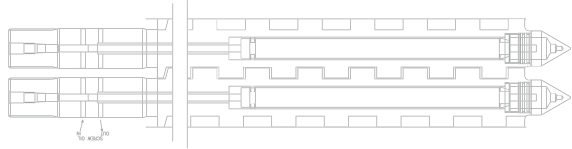
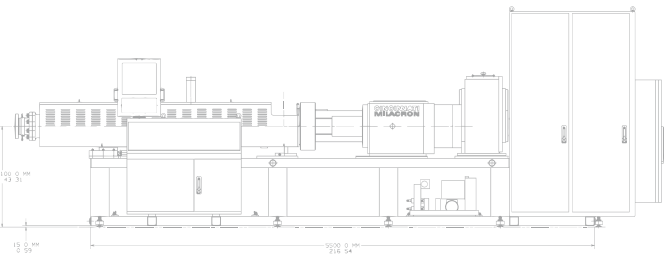
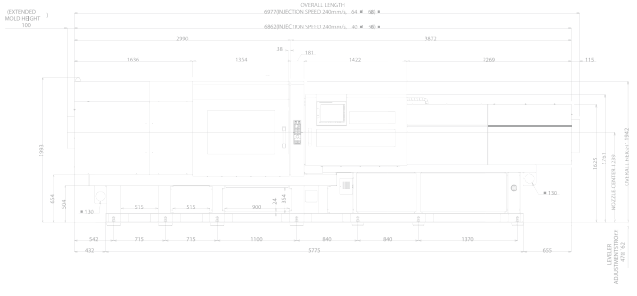
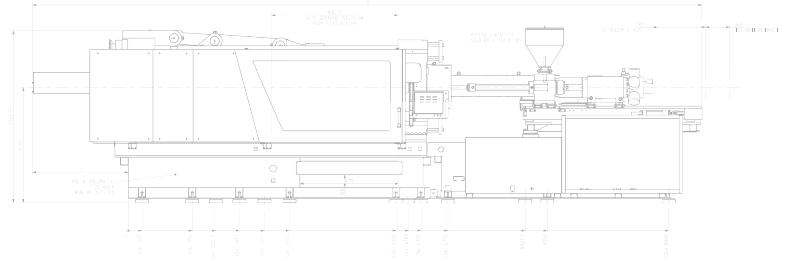
Not actual model, for visual reference only.



4880 (-13.6+13.6+11.5+11.5 kW) - 4 motor						
	METRIC	A	b	ENGLISH	A	B
INJECTION UNIT SPECIFICATIONS						
BACK PRESSURE LIMITS	bar	40		psi	580	
INJECTION CAPACITY MAX. (GPPS)	gms	2421	2989	oz	85.4	105.4
THEORETICAL DISPLACEMENT	cc	2545	3142	in3	155.3	191.7
INJECTION PRESSURE MAX.	bar	1896	1538	psi	27400	22300
INJECTION RATE *	cc/sec	720	889	in3/sec	43.9	54.2
INJECTION VELOCITY	mm/sec	113		in/sec	6.9	
INJECTION SCREW STROKE	mm	400	400	in	15.7	15.7
SCREW DIAMETER	mm	90	100	in	3.54	3.94
SCREW L/D RATIO		22.2	20	L/D	22.2	20
SCREW SPEED	rpm	212	191	rpm	212	191
SCREW TORQUE @ 172 BAR	Nm	5613	5613	in-lb	51000	51000
PLASTICIZING RATE (GPPS) *	gm/sec			oz/sec		
PLASTICIZING RATE (GPPS BARRIER) *	gm/sec	140	160	oz/sec	4.9	5.6
NO.OF PYROMETERS (BARREL+NOZZLE)	qty	4+1		qty	4+1	
TOTAL HEAT CAPACITY	kW	53.8		kW	53.8	
CLAMP UNIT SPECIFICATIONS						
MOLD PROTECT PRESSURE	bar	68		psi	986	
CLAMP FORCE	ton	550		ton	617	
OPENING FORCE	ton	55		ton	61	
CLAMP STROKE	mm	920		in	36.2	
CLAMP CLOSE VELOCITY	mm/sec	750		in/sec	29.5	
CLAMP OPEN VELOCITY	mm/sec	700		in/sec	27.6	
MAXIMUM DAYIGHT	mm	1820		in	71.7	
MINIMUM MOLD HEIGHT	mm	400		in	15.7	
MAXIMUM MOLD HEIGHT	mm	900		in	35.4	
PLATEN SIZE (H X V)	mm	1330 x 1300		in	52.36 X 51.18	
DISTANCE BETWEEN TIE ROD	mm	1000 x 900		in	39.37 X 35.43	
TIE ROD DIAMETER	mm	170		in	6.7	
EJECTOR FORWARD SPEED	mm/sec	185		in/sec	7.3	
EJECTOR RETRACT SPEED	mm/sec	210		in/sec	8.3	
EJECTOR STROKE	mm	250		in	7.9	
EJECTOR FORCE	ton	12		ton	1.3	
MOLD WEIGHT CAPACITY (MOVING/STAT)	kg	8300 (5530 / 4150)		lbs	18298 (12191 / 9149)	
DRY CYCLE TIME	sec	3.20		sec	3.20	
GENERAL						
ELECTRIC MOTOR	kW	50.2		hp	67	
MAIN CIRCUIT BREAKER	Amps	300		Amps	300	
FLI / FLA (FULL LOAD)	Amps	217		Amps	217	
TOTAL OIL CAPACITY	L	815		gal	216	
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	100		gal/min	26.5	
CONNECTED LOAD	kW	104.0		hp	104	
MACHINE DIMENSION (L X W X H)	m	9.25 x 2.6 x 2.9		ft	30.1 x 8.6 x 9.2	
MACHINE WEIGHT	kg	33150		lbs	73,082	

Notes

1) All machine dimensions and specifications are subject to change. Values are for reference only. These values are for standard machine horsepower and voltage (460v/3ph/60Hz).



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