FULLY ELECTRIC INJECTION SYSTEM

PRECISE • EFFICIENT • FAST

WALMO

HAVING THE CORE TECHNOLOGY IS THE MOST RELIABLE

SPECIFICATION

- RE50-1100
- RC180-400

WALMO PRECISION MACHINERY Co., Ltd. | www.walmo.co | TEL: 0086-573-82580099 | E-MAIL: Hill.ye@valmo.com.cn

Solution

To provide customers with all electric under 1100 tons of all electric injection solutions.
The small injection volume model was modified to the large injection volume model.
On the basis of the existing monochrome transformation into a two-color.
Convert normal rate of fire to high rate of fire.

Help the customer

To solve problems for customers is our fundamental dedicated to customer service.

ABOUT WALMO

HAVING THE CORE TECHNOLOGY IS THE MOST RELIABLE

WALMO PRECISION MACHINERY Co., Ltd. is a company committed to all-electric injection technology as a platform, research and development production of ultra-high speed injection molding systems, multi-color injection molding process, packaging bottle cap injection system, mould labeling and form a complete set of the high precision mould injection system and the peripheral devices of high-tech company.

All electric injection molding machine compared to previous common with high efficiency and energy saving, clean environmental protection, product precision and other characteristics; on a global scale the technology monopoly by Japanese companies. We gathered people with top talent in automation, software, electrical and mechanic , after several years of hard efforts to research and development success, equipment's precision and stablity is equal to Europe and Japan with world-class level.

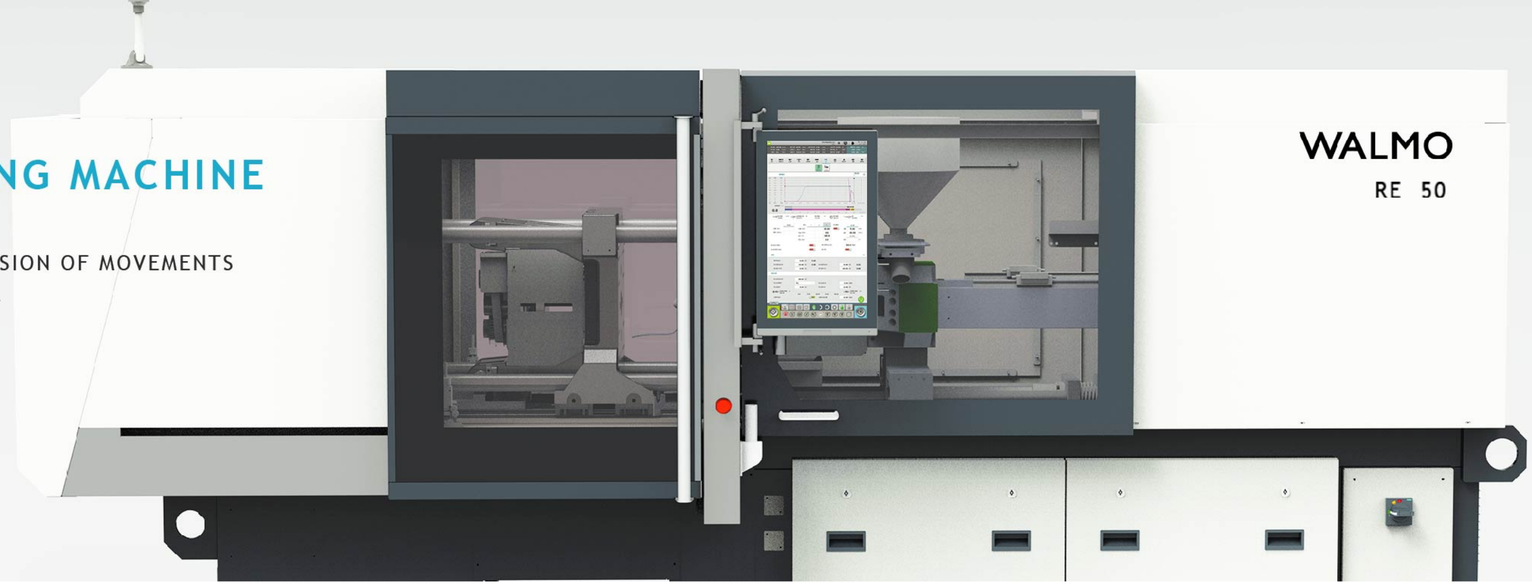
We are all based on the fully electric injection solution platform and we have the incomparable technical advantage and cost advantage .The customer's needs is the goal of our effort .

We have excellent engineer in research and development . We have all the core technology and independent intellectual property rights in the fully electric injection molding machine machine control and system solutions .



FULLY ELECTRIC INJECTION MOLDING MACHINE

REAL SERIES MACHINE HAS SUPER HIGH REPRODUCIBILITY AND PRECISION OF MOVEMENTS THANKS TO THE HIGH-SPEED CPU AND REAL-TIME FIELD BUS SYSTEM.



Stability

The extreme motion control technology and servo system, make injection resolution up to 0.01mm,weight offset less then 0.01g.
Swiss made Loadcell and High dynamic injection unit with optimization pressure close loop algorithm.High grade electric and pneumatic parts, Strengthening mechanical structure, make higher production quality.

Long life time

Intelligent mold protection, reduce the risk of mold crush.
Close loop trajectory of axis movements, reduce mechanical wear.
Close loop torque control, protect mold and reduce loss.
Capacitive touch screen, Ultra long life time.

Economy

Advanced intelligent servo driver system, low loss mechanical structure, optimization barrelheating and designed machine Heat dissipation structure.
Fully servo motor drive directly, without inertia and without oil as medium, power consumption down to 0. 3kwh/ kg.
High dynamic and precision injection movements, less product weight over 6% as conventional hydraulic machine.

Clean

All driven by servo motor, no hydraulic components and oil.
Japan import ball screw and linear guides ensure the long life and clean.
Industry standards LUBE professional lubrication system.

Productivity

Machine equipped compress injection, ejector during mold opening and some other parallel movements. may effectively shorten the cycle time.
Free programmable process sequence representation of any production process.High speed servo motor and optimized system design for extremely short cycle times and maximum productivity duo to the consistent quality of parts.
Large tie-bar space, long ejector range, comply Chinese standard and Europe standard mold plate, save a lot production preparation time.

Innovation

Continue study the latest technology of control and motion, investment in a large number of R&D costs to has a wealth of technical reserves.Searching for the latest industry information and process features, challenge the new molding requirements.
Continue developing information technology and integration technology.

THE PERFECT SOLUTION

Clamp force
50ton - 1100ton

Screw Diameter
20mm - 120mm

Injection Speed
160mm/s - 800mm/s

Electric clamp & ejector drivered
- Greater accuracy at location and speed

Smoothly 5-point clamping unit
- Enlarged tie bar spacing to accommodate larger moulds
- Fast and precise open and closing speeds

Chromed and untouched plated tie bars
- Corrosion resistant
- Optimal spacing for maximum mould flexibility

Bi-metallic barrel and ceramic heater bands
- Longer service life
- Better insulation increases energy efficiency

Precise ejection force control
- multi-step position and speed controled

Grease free linear platen guides
- Total platen support
- Optimal platen guidance
- Energy efficient platen movement
- Clean environment

VICO Controller
- 21.5 inch full touch screen
- sigmatek PLC control

Linear guider support platen
- No friction and lower load for precise speeds

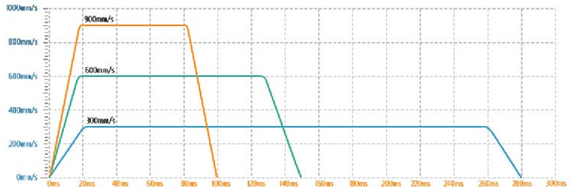
High accuracy sensor
- almost 100% repeated accuracy

STANDARD PRODUCTS AND MULTI-COLOR

Thanks to the excellence of the motion control technology and top grade servo drive system, injection precision reach to 0.01 mm, Injection weight offset less then 0.01g. very suitable for miniaturization of advanced production with high precision and reliability requirements.
Carrying ultra-high dynamic servo system, Injection speed up to 800mm/s. Can satisfy the complex geometric shapes, optical len and thin electronic parts.
VICO control system can programming any special process of complex requirements, greatly reduce the development time of new products and cost.

High dynamic injection unit

Real Series designed for very high dynamic performance injection. The injection speed up to 800mm/s. acc/deacceleration up to 4.5G. Customizable higher injection speed also available.



MEDICAL

Real Medical

Suitable for clean room and medical products, REAL Series design a high performance and energy saving system and carried on the comprehensive optimization of the properties of medical products, water cooling servo system, closed lubrication system, the whole machine without oil, clean and less noise.

Performance + Safety ≠ High Price

In order to increase productivity, the field of medical technology is moving more and more to the use of multi-cativiy moulds with the large clamp tonage and powerful injection unit they require. Valmo Real-E series machine are designed to meet the requirements of high-performance application. Clamp tonage up to 550 Ton, High-dynamic injection unit speed up to 1000mm/s with multi choice screw diameter from 16mm to 90mm. Besides Real-E series injection molding machine presenting a perfect safety protection accordance with CE and UL standard. Safety Locker, Safety PLC, STO servo driver all in option.

More Productivity, Less Space

In the Display at ChinaPlas2015, Valmo Presents a 96 Cavities Syringe Needle Cover Producing. A Real-E series RE220H-630h High speed fully electric moulding machine with clean room design used in this application, cycle time 4.1s, dry cycle time down to 1.5s, it's the world first class result. Thanks to the new design of mold and ejector for fast dry cycle.

THIN-WALLED PACKAGING

Thin wall injection molding problem?

Thin-walled packaging is difficult all the time.However, the demands being placed on it are always increasing: it need thinner, lighter and stable to produce with beautiful shape. and the most important was the parts should cost as little as possible.

We have solution, injection-compression function, a combination of both injection molding and compression molding . The melt plasic injected into mold while mold still open and subsequently distributed evenly throughout the cavity after clamping unit compressed. The injection-compression function benefits included shorten cycle time, decreased warping in the mold part, higher dimensional accuracy of parts, and more important here, we can bring higher efficiency and reduce costs. The advanced Walmo VICO control system make it possible to reduce wall thickness, reduce parts weight with

CLOSURE

Beverage closures production require a long-term stable and high-speed production, and excellent production cost control.

High speed injection molding system and high-performance clamping mechanism design provides a very short cycle time. The mould precision grade template parallelism and compact solid frame structure effectively reduce the mechanical and mold consumption. The special injection structure design and high speed plasticizing screws makes the injection rate faster. Flexible programmable function optimized the production process to achieve the shortest cycle time.

In addition to integrate a number of auxiliary functions, such as automatic feeding, 96 district hot runner controller. etc., more dash forward show excellent cost performance.

Our REAL series machines for packaging applications in the field of rigid demand is optimized, effectively shorten the production cycle, improve plasticizing rate, strengthening the protection of grinding tool, reduce the loss of mould, and labor saving. Can be widely used with high productivity, high consistency and low operation cost.

3.2 s

Real-P 350 -1000h with 2925 72Cavities CAP Mold
It's the first Real-P series machine. The cycle time is 3.2 seconds.

2.4 s

Real-P 220 -1000h with 3025 32Cavities CAP Mold
It's the fastest Real-P series machine. The cycle time is shorter then 2.4seconds.

1.2 s

Real-P 220H -630h with 96Cavities Syringe Cover Mold
It's the fastest dry cycle time machine.

DUO OR MULTI-INJECTION SYSTEM

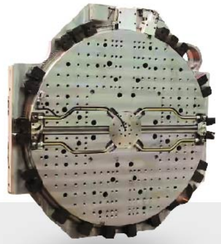
Multi-Injection system can be adapted to existing mold technology and infrastructure.
Through mixes use of different type of second unit can be achieved multi-color injection process.

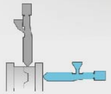
DUO OR MULTI-INJECTION SYSTEM

L-Injection Unit

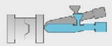
V-Injection Unit

Turn Table





Vertical position



Piggyback position

Non-operator side

Sliding table process

step1
Injection of component1, and move core side to cavity2

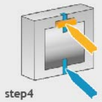
step2
Injection of component2

Index process

step1
Injection of component1

step2
Lifting index platen, turning 180degree

step3
Pull-back of index platen



step4
Injection of component2
Simultaneous injection of the next substrate

Cavity separation process
The mold usually remains closed for this operation, and mold is compact and inexpensive

step1
Injection of component1

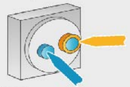
step2
Pull-back the slide

step3
Injection of component2

Turntable process
The number of rotation could up to 4, and this is the most widely used multi-component process

step1
Injection of component1

step2
Rotation the mold



step3
Injection of component2
Simultaneous injection of component1

SPECIFICATION REAL-COLOR180

MODEL		RC180					
Clamp unit		RC180					
Clamp force	ton	180					
Locking force	ton	190					
Clamp stroke	mm	440					
Total daylight max	mm	990					
Min mold height	mm	180					
Max mold height	mm	550					
Distance between tiebars (H x V)	mm	740X450					
Table diameter	mm	830					
Max mold diameter	mm	900					
Ejector force	ton	4X2					
Ejector stroke	mm	180					
Platen size (H x V)	mm	1000X790					
Distance Between Molds Positing Centers	mm	400					
Injection unit		160H			290H		
Screw diameter	mm	18	25	30	30	35	40
Screw L/D ratio		22	20	18	22	20	18
Screw stroke	mm	130	130	130	165	165	165
Injection unit stroke	mm	320	320	320	350	350	350
Shot weight Max. (PS)	gm	28.3	55	78.8	104	141.6	185
Theoretical shot volume	cc	32	61	88	116	158	207
Injection speed	mm/s	300	300	300	300	300	300
Injection rate	cc/sec	76	146	211	211	287	376
Injection pressure	bar	3000	2700	1900	2500	2000	1600
Holding pressure	bar	2400	2160	1520	2000	1600	1280
Screw torque	Nm	160	160	160	240	240	240
Screw speed	rpm	350	350	350	350	350	350
Plasticining rate (PS)	gm/s	3.8	9	13	18	24	31
Nozzle contact pressure	ton	2.5	2.5	2.5	3	3	3
Tolal heat capacity	kW	6	7	7	13	13	13
General							
Total connected power	kw	25.3	25.3	25.3	28	28	28
Machine dimension (L x W x H)	m	5.6X1.65X1.83			5.6X1.65X1.83		
Machine weight	ton	11.5			12		

SPECIFICATION REAL-COLOR230

MODEL		RC230					
Clamp unit		RC230					
Clamp force	ton	230					
Locking force	ton	245					
Clamp stroke	mm	490					
Total daylight max	mm	1190					
Min mold height	mm	200					
Max mold height	mm	700					
Distance between tiebars (H x V)	mm	960X680					
Table diameter	mm	1050					
Max mold diameter	mm	1218					
Ejector force	ton	4X2					
Ejector stroke	mm	200					
Platen size (H x V)	mm	1340X1100					
Distance Between Molds Positing Centers	mm	500					
Injection unit		290H			490H		
Screw diameter	mm	30	35	40	35	40	45
Screw L/D ratio		22	20	18	22	20	18
Screw stroke	mm	165	165	165	190	190	190
Injection unit stroke	mm	350	350	350	450	450	450
Shot weight Max. (PS)	gm	104	141.6	185	158.7	207	262
Theoretical shot volume	cc	116	158	207	177.9	232	294
Injection speed	mm/s	300	300	300	300	300	300
Injection rate	cc/sec	211	287	376	287	376	476
Injection pressure	bar	2500	2000	1600	2500	2000	1650
Holding pressure	bar	2000	1600	1280	2000	1600	1320
Screw torque	Nm	240	240	240	500	500	500
Screw speed	rpm	350	350	350	300	300	300
Plasticining rate (PS)	gm/s	18	24	31	27	40	42.5
Nozzle contact pressure	ton	3	3	3	3.5	3.5	3.5
Tolal heat capacity	kW	13	13	13	17	17	17
General							
Total connected power	kw	45	45	45	53	53	53
Machine dimension (L x W x H)	m	6.0X2.0X2.0			6.25X2.0X2.0		
Machine weight	ton	14.5			15		

SPECIFICATION REAL-COLOR280

MODEL		RC280					
Clamp unit		RC280					
Clamp force	ton	280					
Locking force	ton	300					
Clamp stroke	mm	490					
Total daylight max	mm	1190					
Min mold height	mm	200					
Max mold height	mm	700					
Distance between tiebars (H x V)	mm	960X680					
Table diameter	mm	1050					
Max mold diameter	mm	1218					
Ejector force	ton	4X2					
Ejector stroke	mm	200					
Platen size (H x V)	mm	1340X1100					
Distance Between Molds Positing Centers	mm	500					
Injection unit		290H			490H		
Screw diameter	mm	30	35	40	35	40	45
Screw L/D ratio		22	20	18	22	20	18
Screw stroke	mm	165	165	165	190	190	190
Injection unit stroke	mm	350	350	350	450	450	450
Shot weight Max. (PS)	gm	104	141.6	185	158.7	207	262
Theoretical shot volume	cc	116	158	207	177.9	232	294
Injection speed	mm/s	300	300	300	300	300	300
Injection rate	cc/sec	211	287	376	287	376	476
Injection pressure	bar	2500	2000	1600	2500	2000	1650
Holding pressure	bar	2000	1600	1280	2000	1600	1320
Screw torque	Nm	240	240	240	500	500	500
Screw speed	rpm	350	350	350	300	300	300
Plasticining rate (PS)	gm/s	18	24	31	27	40	42.5
Nozzle contact pressure	ton	3	3	3	3.5	3.5	3.5
Tolal heat capacity	kW	13	13	13	17	17	17
General							
Total connected power	kw	45	45	45	53	53	53
Machine dimension (L x W x H)	m	6.0X2.0X2.0			6.25X2.0X2.0		
Machine weight	ton	14.5			15		

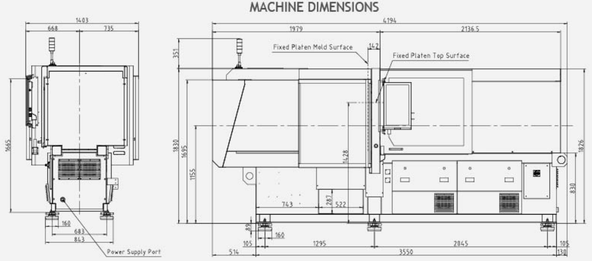
SPECIFICATION EAL-COLOR400

MODEL		RC400					
Clamp unit		RC400					
Clamp force	ton	400					
Locking force	ton	420					
Clamp stroke	mm	610					
Total daylight max	mm	1360					
Min mold height	mm	220					
Max mold height	mm	750					
Distance between tiebars (H x V)	mm	1150X650					
Table diameter	mm	1270					
Max mold diameter	mm	1360					
Ejector force	ton	6.5X2					
Ejector stroke	mm	220					
Platen size (H x V)	mm	1520X1030					
Distance Between Molds Positing Centers	mm	550					
Injection unit		490H			630H		
Screw diameter	mm	35	40	45	40	45	50
Screw L/D ratio		22	20	18	22	20	18
Screw stroke	mm	190	190	190	210	210	210
Injection unit stroke	mm	450	450	450	450	450	450
Shot weight Max. (PS)	gm	158.7	207	262	230	290	359
Theoretical shot volume	cc	177.9	232	294	257	325	402
Injection speed	mm/s	300	300	300	300	300	300
Injection rate	cc/sec	287	376	476	376	476	588
Injection pressure	bar	2500	2000	1650	2450	1950	1600
Holding pressure	bar	2000	1600	1320	1960	1560	1280
Screw torque	Nm	500	500	500	500	500	500
Screw speed	rpm	300	300	300	300	300	300
Plasticining rate (PS)	gm/s	27	40	42.5	40	46	55
Nozzle contact pressure	ton	3.5	3.5	3.5	3.5	3.5	3.5
Tolal heat capacity	kW	17	17	17	17.5	17.5	17.5
General							
Total connected power	kw	68	68	68	69	69	69
Machine dimension (L x W x H)	m	7.7X2.2X2.1			7.7X2.2X2.1		
Machine weight	ton	19.5			19.5		

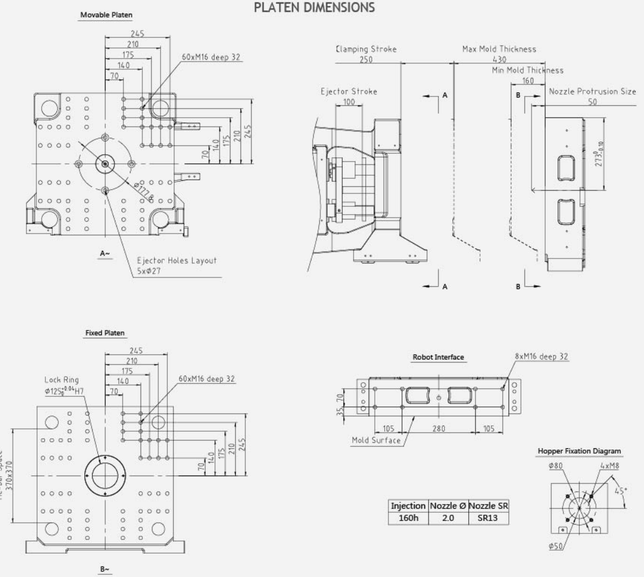
SPECIFICATION REAL-E50

MODEL		RE50		
Clamp unit		**RE50**		
Clamp force	ton	50		
Locking force	ton	55		
Clamp stroke	mm	250		
Total daylight max	mm	680		
Min mold height	mm	160		
Max mold height	mm	430		
Distance between tiebars (H x V)	mm	370x370		
Ejector force	ton	2		
Ejector stroke	mm	100		
Platen size (H x V)	mm	520x535		
Injection unit		**160H**		
Screw diameter	mm	18	25	30
Screw L/D ratio		22	20	18
Screw stroke	mm	130	130	130
Injection unit stroke	mm	320	320	320
Shot weight Max. (PS)	gm	29	55	78.8
Theoretical shot volume	cc	32	61	88
Injection speed	mm/s	300	300	300
Injection rate	cc/sec	76	146	211
Injection pressure	bar	3000	2700	1900
Holding pressure	bar	2400	2160	1520
Screw torque	Nm	160	160	160
Screw speed	rpm	350	350	350
Plasticining rate (PS)	gm/s	3.8	9	13
Nozzle contact pressure	ton	2.5	2.5	2.5
Tolal heat capacity	kW	6	7	7
General				
Total connected power	kw	12	13	13
Machine dimension (L x W x H)	m	4.2X1.4X1.8		
Machine weight	ton	4		

MACHINE DIMENSIONS



PLATEN DIMENSIONS

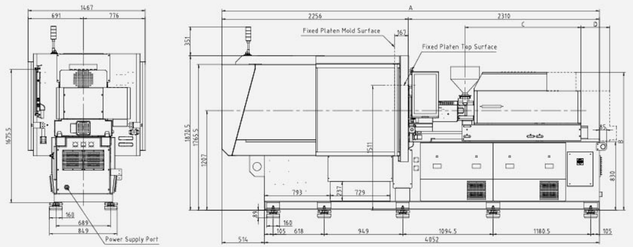


Injection	Nozzle Ø	Nozzle SR
160h	2.0	SR13

SPECIFICATION REAL-E80

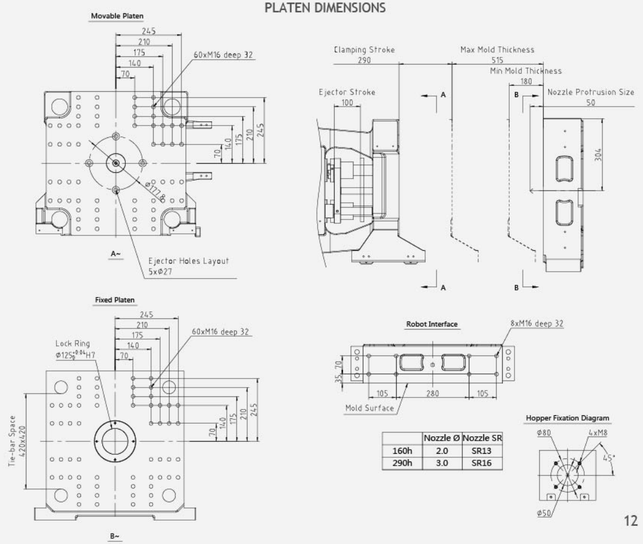
MODEL		RE80					
Clamp unit		**RE80**					
Clamp force	ton	80					
Locking force	ton	85					
Clamp stroke	mm	290					
Total daylight max	mm	805					
Min mold height	mm	180					
Max mold height	mm	515					
Distance between tiebars (H x V)	mm	420X420					
Ejector force	ton	2					
Ejector stroke	mm	100					
Platen size (H x V)	mm	580X595					
Injection unit		**160H**			**290H**		
Screw diameter	mm	18	25	30	30	35	40
Screw L/D ratio		22	20	18	22	20	18
Screw stroke	mm	130	130	130	165	165	165
Injection unit stroke	mm	320	320	320	350	350	350
Shot weight Max. (PS)	gm	28.3	55	78.8	104	141.6	185
Theoretical shot volume	cc	32	61	88	116	158	207
Injection speed	mm/s	300	300	300	300	300	300
Injection rate	cc/sec	76	146	211	211	287	376
Injection pressure	bar	3000	2700	1900	2500	2000	1600
Holding pressure	bar	2400	2160	1520	2000	1600	1280
Screw torque	Nm	160	160	160	240	240	240
Screw speed	rpm	350	350	350	350	350	350
Plasticining rate (PS)	gm/s	3.8	9	13	18	24	31
Nozzle contact pressure	ton	2.5	2.5	2.5	3	3	3
Tolal heat capacity	kW	6	7	7	13	13	13
General							
Total connected power	kw	17	18.3	18	28	28	28
Machine dimension (L x W x H)	m	4.6X1.5X1.9			4.6X1.5X1.9		
Machine weight	ton	4.2			4.4		

MACHINE DIMENSIONS



Injection	Screw Set	A	B	C	D	Max.Length
160h	Ø25 L/D 20	4566	1670	1403	320	4651
290h	Ø35 L/D 20	4566	1670	1403	350	4800

PLATEN DIMENSIONS

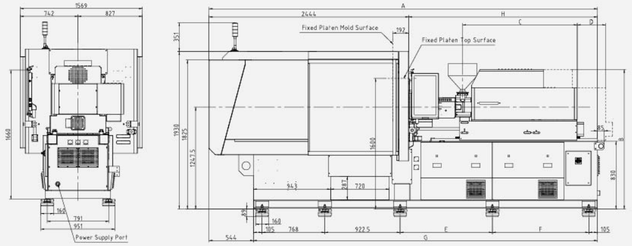


	Nozzle Ø	Nozzle SR
160h	2.0	SR13
290h	3.0	SR16

SPECIFICATION REAL-E120

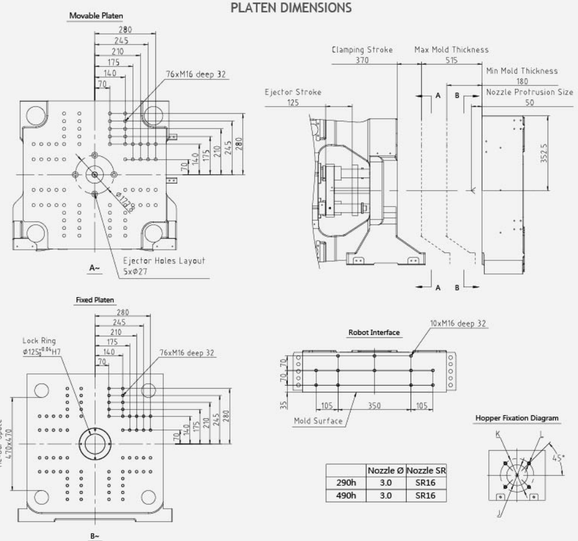
MODEL		RE120					
Clamp unit		**RE120**					
Clamp force	ton	120					
Locking force	ton	125					
Clamp stroke	mm	370					
Total daylight max	mm	885					
Min mold height	mm	180					
Max mold height	mm	515					
Distance between tiebars (H x V)	mm	470X470					
Ejector force	ton	2.5					
Ejector stroke	mm	125					
Platen size (H x V)	mm	655X680					
Injection unit		**290H**			**490H**		
Screw diameter	mm	30	35	40	35	40	45
Screw L/D ratio		22	20	18	22	20	18
Screw stroke	mm	165	165	165	190	190	190
Injection unit stroke	mm	350	350	350	450	450	450
Shot weight Max. (PS)	gm	104	141.6	185	158.7	207	262
Theoretical shot volume	cc	116	158	207	177.9	232	294
Injection speed	mm/s	300	300	300	300	300	300
Injection rate	cc/sec	211	287	376	287	376	476
Injection pressure	bar	2500	2000	1600	2500	2000	1650
Holding pressure	bar	2000	1600	1280	2000	1600	1320
Screw torque	Nm	240	240	240	500	500	500
Screw speed	rpm	350	350	350	300	300	300
Plasticining rate (PS)	gm/s	18	24	31	27	40	42.5
Nozzle contact pressure	ton	3	3	3	3.5	3.5	3.5
Tolal heat capacity	kW	13	13	13	17	17	17
General							
Total connected power	kw	28	28	28	33	33	33
Machine dimension (L x W x H)	m	4.8X1.6X2			5.3X1.6X2		
Machine weight	ton	5.2			5.8		

MACHINE DIMENSIONS



Injection	Screw Set	A	B	C	D	E	F	G	H	J	K	L	Max.Length
290h	Ø35 L/D 20	4754	1710	1403	350	1129	1180.5	4210	2310	Ø50	Ø80	4xM8	4950
490h	Ø40 L/D 20	5287	1788	1732	450	1395.5	1447	4743	2843	Ø70	Ø110	4xM10	5500

PLATEN DIMENSIONS

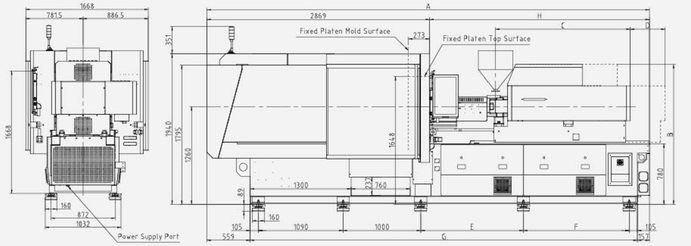


	Nozzle Ø	Nozzle SR
290h	3.0	SR16
490h	3.0	SR16

SPECIFICATION REAL-E150

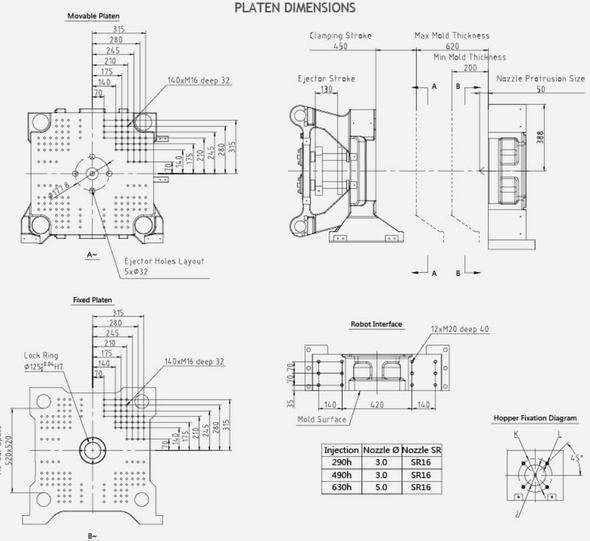
MODEL		RE150					
Clamp unit		**RE150**					
Clamp force	ton	150					
Locking force	ton	155					
Clamp stroke	mm	450					
Total daylight max	mm	1070					
Min mold height	mm	200					
Max mold height	mm	620					
Distance between tiebars (H x V)	mm	520X520					
Ejector force	ton	3					
Ejector stroke	mm	130					
Platen size (H x V)	mm	720X720					
Injection unit		**490H**			**630H**		
Screw diameter	mm	35	40	45	40	45	50
Screw L/D ratio		22	20	18	22	20	18
Screw stroke	mm	190	190	190	210	210	210
Injection unit stroke	mm	450	450	450	450	450	450
Shot weight Max. (PS)	gm	158.7	207	262	230	290	359
Theoretical shot volume	cc	177.9	232	294	257	325	402
Injection speed	mm/s	300	300	300	300	300	300
Injection rate	cc/sec	287	376	476	376	476	588
Injection pressure	bar	2500	2000	1650	2450	1950	1600
Holding pressure	bar	2000	1600	1320	1960	1560	1280
Screw torque	Nm	500	500	500	500	500	500
Screw speed	rpm	300	300	300	300	300	300
Plasticining rate (PS)	gm/s	27	40	42.5	40	46	55
Nozzle contact pressure	ton	3.5	3.5	3.5	3.5	3.5	3.5
Tolal heat capacity	kW	17	17	17	17.5	17.5	17.5
General							
Total connected power	kw	33	33	33	34	34	34
Machine dimension (L x W x H)	m	5.7X1.7X2			5.7X1.7X2		
Machine weight	ton	7.5			8		

MACHINE DIMENSIONS



Injection	Screw Set	A	B	C	D	E	F	G	H	J	K	L	Max.Length
290h	Ø35 L/D 20	5201	1723	1403	350	1072	1113	4485	2332	Ø50	Ø80	4xM8	5450
490h	Ø40 L/D 20	5701	1801	1732	450	1322	1363	4985	2832	Ø70	Ø110	4xM10	5810
630h	Ø45 L/D 20	5701	1801	1732	450	1322	1363	4985	2832	Ø70	Ø110	4xM10	5910

PLATEN DIMENSIONS

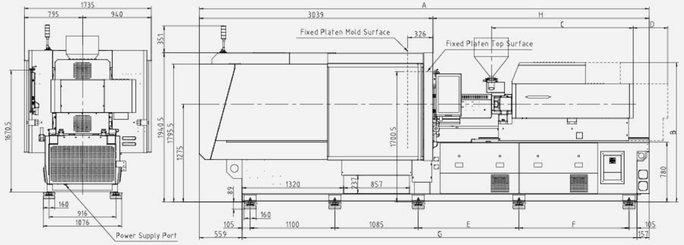


Injection	Nozzle Ø	Nozzle SR
290h	3.0	SR16
490h	3.0	SR16
630h	5.0	SR16

SPECIFICATION REAL-E180

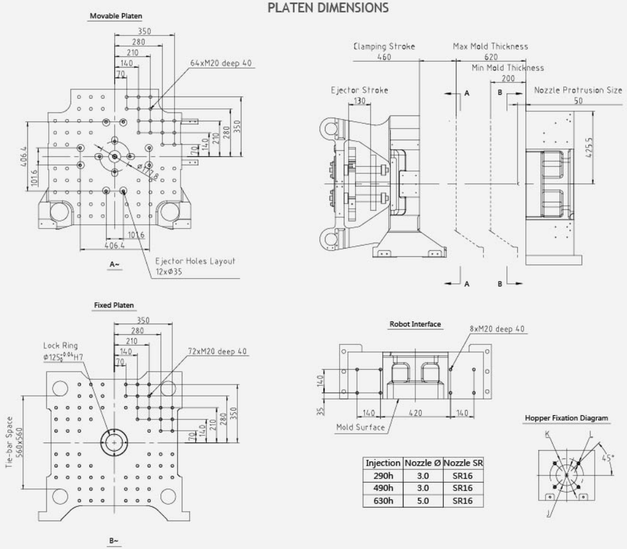
MODEL		RE180					
Clamp unit		**RE180**					
Clamp force	ton	180					
Locking force	ton	190					
Clamp stroke	mm	460					
Total daylight max	mm	1080					
Min mold height	mm	200					
Max mold height	mm	620					
Distance between tiebars (H x V)	mm	560X560					
Ejector force	ton	3					
Ejector stroke	mm	130					
Platen size (H x V)	mm	785X800					
Injection unit		**490H**			**630H**		
Screw diameter	mm	35	40	45	40	45	50
Screw L/D ratio		22	20	18	22	20	18
Screw stroke	mm	190	190	190	210	210	210
Injection unit stroke	mm	450	450	450	450	450	450
Shot weight Max. (PS)	gm	158.7	207	262	230	290	359
Theoretical shot volume	cc	177.9	232	294	257	325	402
Injection speed	mm/s	300	300	300	300	300	300
Injection rate	cc/sec	287	376	476	376	476	588
Injection pressure	bar	2500	2000	1650	2450	1950	1600
Holding pressure	bar	2000	1600	1320	1960	1560	1280
Screw torque	Nm	500	500	500	500	500	500
Screw speed	rpm	300	300	300	300	300	300
Plasticining rate (PS)	gm/s	27	40	42.5	40	46	55
Nozzle contact pressure	ton	3.5	3.5	3.5	3.5	3.5	3.5
Tolal heat capacity	kW	17	17	17	17.5	17.5	17.5
General							
Total connected power	kw	33	33	33	34	34	34
Machine dimension (L x W x H)	m	5.9X1.8X2			5.9X1.8X2		
Machine weight	ton	8.5			8.9		

MACHINE DIMENSIONS



Injection	Screw Set	A	B	C	D	E	F	G	H	J	K	L	Max.Length
290h	Ø35 L/D 20	5351	1738	1403	350	1060	1180	4635	2312	Ø50	Ø80	4xM8	5720
490h	Ø40 L/D 20	5851	1816	1732	450	1310	1430	5135	2812	Ø70	Ø110	4xM10	6000
630h	Ø45 L/D 20	5851	1816	1732	450	1310	1430	5135	2812	Ø70	Ø110	4xM10	6100

PLATEN DIMENSIONS

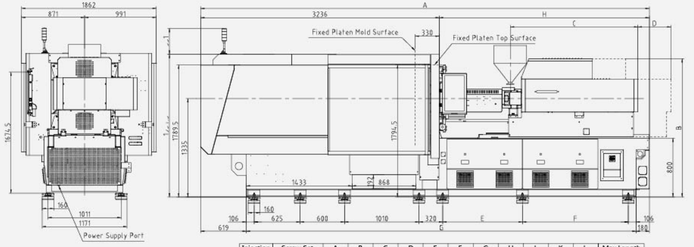


Injection	Nozzle Ø	Nozzle SR
290h	3.0	SR16
490h	5.0	SR16
630h	5.0	SR16

SPECIFICATION REAL-E220

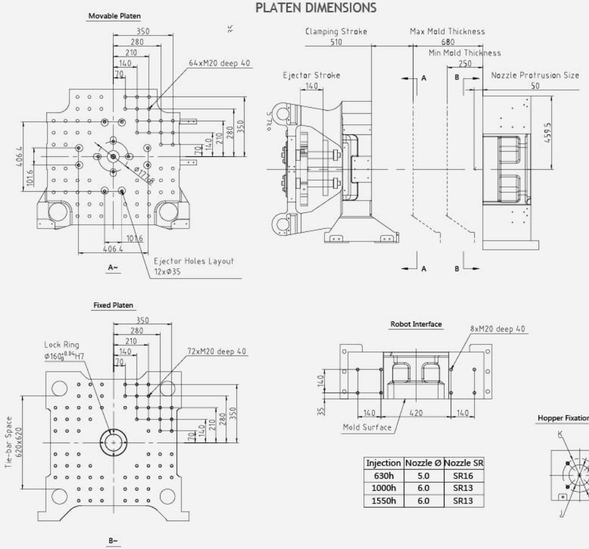
MODEL		RE220								
Clamp unit		**RE220**								
Clamp force	ton	220								
Locking force	ton	240								
Clamp stroke	mm	510								
Total daylight max	mm	1190								
Min mold height	mm	250								
Max mold height	mm	680								
Distance between tiebars (H x V)	mm	620X620								
Ejector force	ton	4								
Ejector stroke	mm	140								
Platen size (H x V)	mm	855X840								
Injection unit		**630H**			**1000H**			**1550H**		
Screw diameter	mm	40	45	50	45	50	60	50	60	70
Screw L/D ratio		22	20	18	22	20	18	22	20	18
Screw stroke	mm	210	210	210	245	245	245	285	285	285
Injection unit stroke	mm	450	450	450	450	450	450	500	500	500
Shot weight Max. (PS)	gm	230	290	359	347	430	618	499	719	978
Theoretical shot volume	cc	257	325	402	389	480	692	559	805	1096
Injection speed	mm/s	300	300	300	300	300	300	300	300	300
Injection rate	cc/sec	376	476	588	476	588	847	588	847	1155
Injection pressure	bar	245	019	501	600	260	021	001	460	245	019	501	450
Holding pressure	bar	196	015	601	280	208	016	801	150	196	015	601	160
Screw torque	Nm	500	500	500	900	900	900	900	900	900
Screw speed	rpm	300	300	300	300	300	300	250	250	250
Plasticining rate (PS)	gm/s	40	46	55	45	56	79	46	71	89
Nozzle contact pressure	ton	3.5	3.5	3.5	4	4	4	4	4	4
Tolal heat capacity	kW	17.5	17.5	17.5	31	31	31	35	35	35
General										
Total connected power	kw	34	34	34	51	51	51	64	64	64
Machine dimension (L x W x H)	m	6.1X1.9X2.1			6.8X1.9X2.1			6.8X1.9X2.1		
Machine weight	ton	10.5			11.2			12.8		

MACHINE DIMENSIONS



Injection	Screw Set	A	B	C	D	E	F	G	H	J	K	L	Max.Length
630h	Ø45 L/D 20	6081	1876	1732	450	1081	1434	5282	2845	Ø70	Ø110	4xM10	6400
1000h	Ø50 L/D 20	6801	1956	2167	450	1430	1805	6002	3565	Ø70	Ø110	4xM10	6880
1550h	Ø60 L/D 20	6801	1956	2167	500	1430	1805	6002	3565	Ø70	Ø110	4xM10	7050

PLATEN DIMENSIONS

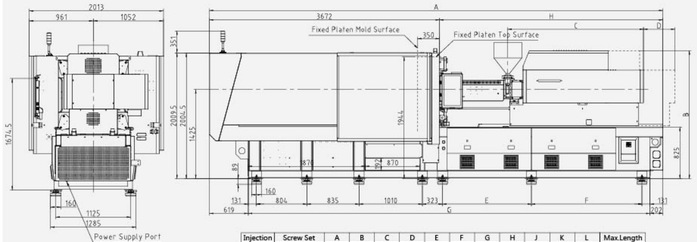


Injection	Nozzle Ø	Nozzle SR
630h	5.0	SR16
1000h	6.0	SR13
1550h	6.0	SR13

SPECIFICATION REAL-E280

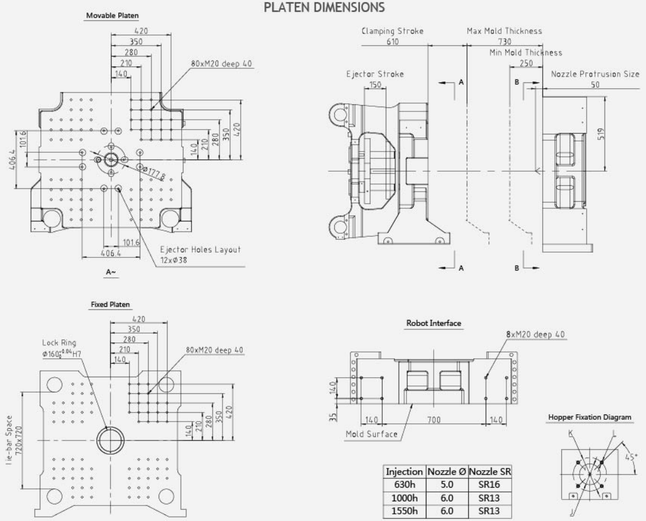
MODEL		RE280					
Clamp unit		RE280					
Clamp force	ton	280					
Locking force	ton	300					
Clamp stroke	mm	610					
Total daylight max	mm	1340					
Min mold height	mm	250					
Max mold height	mm	730					
Distance between tiebars (H x V)	mm	720X720					
Ejector force	ton	5					
Ejector stroke	mm	150					
Platen size (H x V)	mm	985X950					
Injection unit		1000H			1550H		
Screw diameter	mm	45	50	60	50	60	70
Screw L/D ratio		22	20	18	22	20	18
Screw stroke	mm	245	245	245	285	285	285
Injection unit stroke	mm	450	450	450	500	500	500
Shot weight Max. (PS)	gm	347	430	618	499	719	978
Theoretical shot volume	cc	389	480	692	559	805	1096
Injection speed	mm/s	300	300	300	300	300	300
Injection rate	cc/sec	476	588	847	588	847	1155
Injection pressure	bar	2600	2100	1460	2450	1950	1450
Holding pressure	bar	2080	1680	1150	1960	1560	1160
Screw torque	Nm	900	900	900	900	900	900
Screw speed	rpm	300	300	300	250	250	250
Plasticining rate (PS)	gm/s	45	56	79	46	71	89
Nozzle contact pressure	ton	4	4	4	4	4	4
Tolal heat capacity	kW	31	31	31	35	35	35
General							
Total connected power	kw	64	64	64	75	75	75
Machine dimension (L x W x H)	m	7.3X2X2.1			7.3X2X2.1		
Machine weight	ton	15.5			16		

MACHINE DIMENSIONS



Injection	Screw Set	A	B	C	D	E	F	G	H	J	K	L	Max.Length
630h	Ø45 L/D 20	6508	1966	1732	450	1053	1400	5687	2836	Ø70	Ø110	4xM10	6580
1000h	Ø50 L/D 20	7238	2046	2167	450	1418	1765	6417	3566	Ø70	Ø110	4xM10	7280
1550h	Ø60 L/D 20	7238	2046	2167	500	1418	1765	6417	3566	Ø70	Ø110	4xM10	7450

PLATEN DIMENSIONS

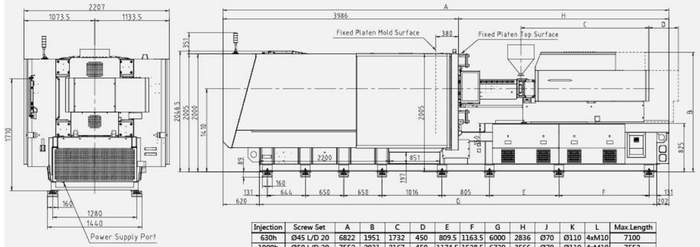


Injection	Nozzle Ø	Nozzle SR
630h	5.0	SR16
1000h	6.0	SR13
1550h	6.0	SR13

SPECIFICATION REAL-E350

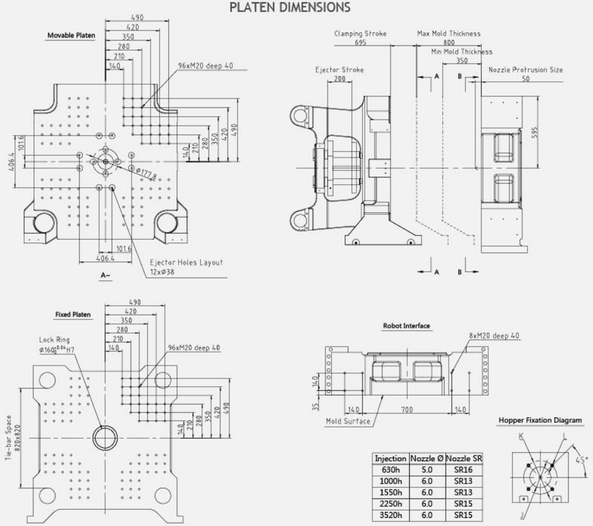
MODEL		RE350								
Clamp unit		RE350								
Clamp force	ton	350								
Locking force	ton	380								
Clamp stroke	mm	695								
Total daylight max	mm	1495								
Min mold height	mm	350								
Max mold height	mm	800								
Distance between tiebars (H x V)	mm	820X820								
Ejector force	ton	7								
Ejector stroke	mm	200								
Platen size (H x V)	mm	1110X1200								
Injection unit		1000H			1550H			2250		
Screw diameter	mm	45	50	60	50	60	70	60	70	80
Screw L/D ratio		22	20	18	22	20	18	22	20	18
Screw stroke	mm	245	245	245	285	285	285	325	325	325
Injection unit stroke	mm	450	450	450	500	500	500	500	500	500
Shot weight Max. (PS)	gm	347	430	618	499	719	978	874	11901	555
Theoretical shot volume	cc	389	480	692	559	805	1096	918	12501	632
Injection speed	mm/s	300	300	300	300	300	300	160	160	160
Injection rate	cc/sec	476	588	847	588	847	1155	452	616	804
Injection pressure	bar	260	021	001	460	245	019	501	450	245	018	001	350
Holding pressure	bar	208	016	801	150	196	015	601	160	196	014	401	080
Screw torque	Nm	900	900	900	900	900	900	900	900	160	016	001	600
Screw speed	rpm	300	300	300	250	250	250	250	250	250
Plasticining rate (PS)	gm/s	45	56	79	46	71	89	56	76	100
Nozzle contact pressure	ton	4	4	4	4	4	4	6	6	6
Tolal heat capacity	kW	31	31	31	35	35	35	44	44	44
General										
Total connected power	kw	65	65	65	76	76	76	99	99	99
Machine dimension (L x W x H)	m	7.6X2.2X2.1			7.6X2.2X2.1			8.4X2.2X2.1		
Machine weight	ton	18			18.5			20.5		

MACHINE DIMENSIONS



Injection	Screw Set	A	B	C	D	E	F	G	H	J	K	L	Max.Length
630h	Ø45 L/D 20	6822	1951	1732	450	809.5	1163.5	6000	2836	Ø70	Ø110	4xM10	7100
1000h	Ø50 L/D 20	7552	2031	2167	450	1174.5	1528.5	6730	3566	Ø70	Ø110	4xM10	7552
1550h	Ø60 L/D 20	7552	2031	2167	500	1174.5	1528.5	6730	3566	Ø70	Ø110	4xM10	7720
2250h	Ø70 L/D 20	8418	2082	2719	500	1607.5	1961.5	7596	4432	Ø70	Ø110	4xM10	8620
3520h	Ø80 L/D 20	8418	2082	2719	550	1607.5	1961.5	7596	4432	Ø70	Ø110	4xM10	8780

PLATEN DIMENSIONS

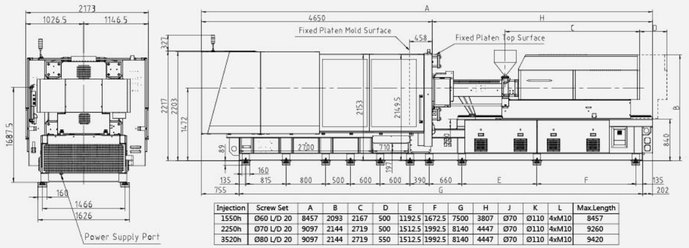


Injection	Nozzle Ø	Nozzle SR
630h	5.0	SR16
1000h	6.0	SR13
1550h	6.0	SR13
2250h	6.0	SR15
3520h	6.0	SR15

SPECIFICATION REAL-E450

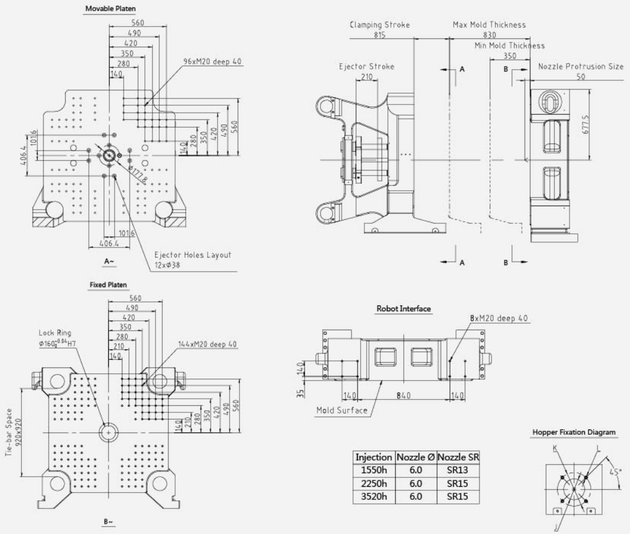
MODEL		RE450								
Clamp unit		RE450								
Clamp force	ton	450								
Locking force	ton	475								
Clamp stroke	mm	815								
Total daylight max	mm	1645								
Min mold height	mm	350								
Max mold height	mm	830								
Distance between tiebars (H x V)	mm	920X920								
Ejector force	ton	8								
Ejector stroke	mm	210								
Platen size (H x V)	mm	1285X1285								
Injection unit		**1550H**			**2250**			**3520**		
Screw diameter	mm	50	60	70	60	70	80	70	80	90
Screw L/D ratio		22	20	18	22	20	18	22	20	18
Screw stroke	mm	285	285	285	325	325	325	370	370	370
Injection unit stroke	mm	500	500	500	500	500	500	550	550	550
Shot weight Max. (PS)	gm	499	719	978	874	11901555		135017662235		
Theoretical shot volume	cc	559	805	1096	918	12501632		142018522353		
Injection speed	mm/s	300	300	300	160	160	160	160	160	160
Injection rate	cc/sec	588	847	1155	452	616	804	616	804	1018
Injection pressure	bar	245019501450			245018001350			240019001500		
Holding pressure	bar	196015601160			196014401080			192015201200		
Screw torque	Nm	900	900	900	160016001600			200020002000		
Screw speed	rpm	250	250	250	250	250	250	250	250	250
Plasticining rate (PS)	gm/s	46	71	89	56	76	100	70	88	100
Nozzle contact pressure	ton	4	4	4	6	6	6	8	8	8
Tolal heat capacity	kW	35	35	35	44	44	44	52	52	52
General										
Total connected power	kw	76	76	76	99	99	99	125	125	125
Machine dimension (L x W x H)	m	8.5X2.2X2.4			9.1X2.2X2.4			9.1X2.2X2.4		
Machine weight	ton	24.5			26			30		

MACHINE DIMENSIONS



Injection	Screw Set	A	B	C	D	E	F	G	H	J	K	L	Max.Length
1550h	Ø60 L/D 20	8457	2093	2167	500	1192.5	1672.5	7500	3807	Ø70	Ø110	4xM10	8457
2250h	Ø70 L/D 20	9097	2144	2719	500	1512.5	1992.5	8140	4447	Ø70	Ø110	4xM10	9260
3520h	Ø80 L/D 20	9097	2144	2719	550	1512.5	1992.5	8140	4447	Ø70	Ø110	4xM10	9420

PLATEN DIMENSIONS

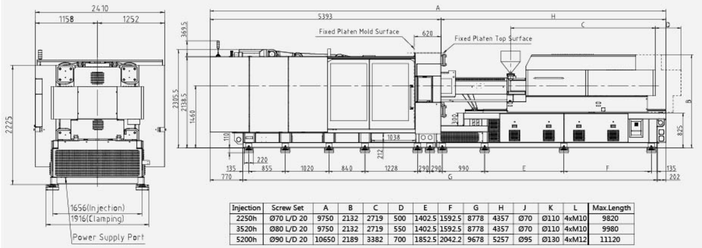


Injection	Nozzle Ø	Nozzle SR
1550h	6.0	SR13
2250h	6.0	SR15
3520h	6.0	SR15

SPECIFICATION REAL-E550

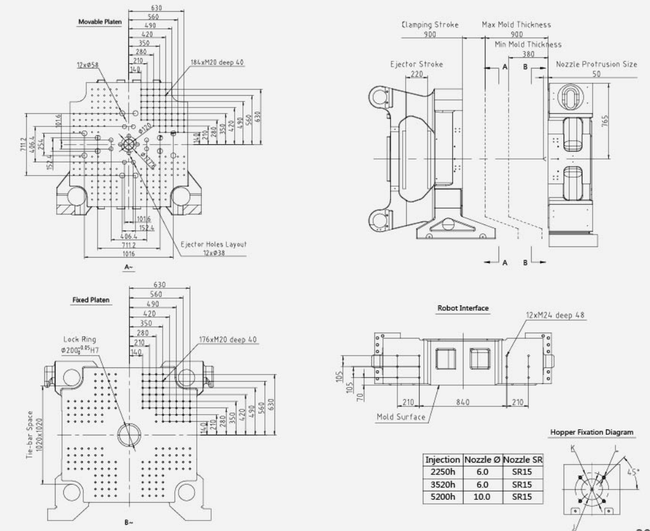
MODEL		RE550					
Clamp unit		RE550					
Clamp force	ton	550					
Locking force	ton	575					
Clamp stroke	mm	900					
Total daylight max	mm	1800					
Min mold height	mm	380					
Max mold height	mm	900					
Distance between tiebars (H x V)	mm	1020X1020					
Ejector force	ton	14					
Ejector stroke	mm	220					
Platen size (H x V)	mm	1350X1420					
Injection unit		**2250**			**3520**		
Screw diameter	mm	60	70	80	70	80	90
Screw L/D ratio		22	20	18	22	20	18
Screw stroke	mm	325	325	325	370	370	370
Injection unit stroke	mm	500	500	500	550	550	550
Shot weight Max. (PS)	gm	874	1190	1555	1350	1766	2235
Theoretical shot volume	cc	918	1250	1632	1420	1852	2353
Injection speed	mm/s	160	160	160	160	160	160
Injection rate	cc/sec	452	616	804	616	804	1018
Injection pressure	bar	2450	1800	1350	2400	1900	1500
Holding pressure	bar	1960	1440	1080	1920	1520	1200
Screw torque	Nm	1600	1600	1600	2000	2000	2000
Screw speed	rpm	250	250	250	250	250	250
Plasticining rate (PS)	gm/s	56	76	100	70	88	100
Nozzle contact pressure	ton	6	6	6	8	8	8
Tolal heat capacity	kW	44	44	44	52	52	52
General							
Total connected power	kw	105	105	105	125	125	125
Machine dimension (L x W x H)	m	9.8X2.4X2.5			9.8X2.4X2.5		
Machine weight	ton	30			31		

MACHINE DIMENSIONS



Injection	Screw Set	A	B	C	D	E	F	G	H	J	K	L	Max.Length
2250h	Ø70 L/D 20	9750	2132	2719	500	1402.5	1592.5	8778	4357	Ø70	Ø110	4xM10	9820
3520h	Ø80 L/D 20	9750	2132	2719	550	1402.5	1592.5	8778	4357	Ø70	Ø110	4xM10	9980
5200h	Ø90 L/D 20	10650	2189	3382	700	1852.5	2042.2	9678	5257	Ø95	Ø130	4xM12	11120

PLATEN DIMENSIONS

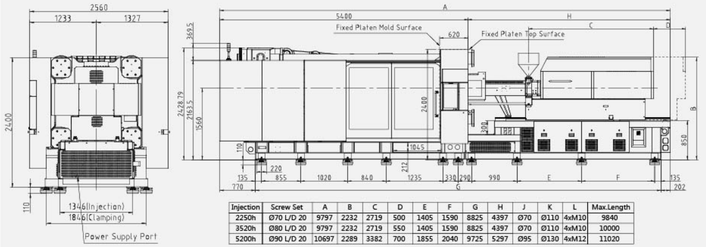


Injection	Nozzle Ø	Nozzle SR
2250h	6.0	SR15
3520h	6.0	SR15
5200h	10.0	SR15

SPECIFICATION REAL-E700

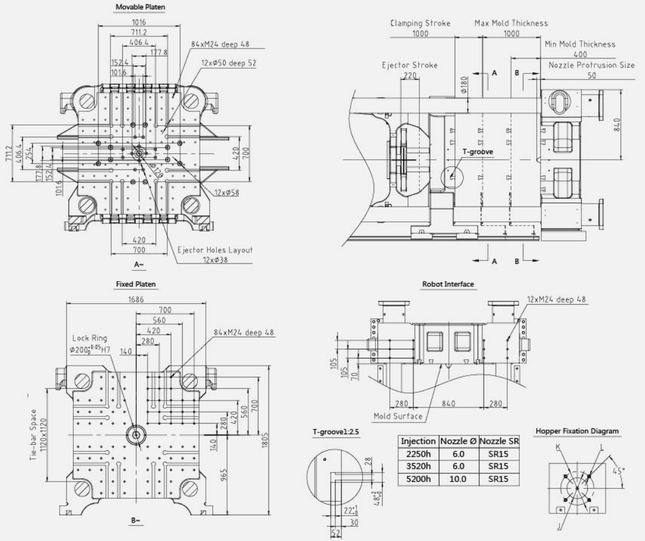
MODEL		RE700					
Clamp unit		**RE700**					
Clamp force	ton	700					
Locking force	ton	730					
Clamp stroke	mm	1000					
Total daylight max	mm	2000					
Min mold height	mm	400					
Max mold height	mm	1000					
Distance between tiebars (H x V)	mm	1120X1120					
Ejector force	ton	20					
Ejector stroke	mm	220					
Platen size (H x V)	mm	1580X1580					
Injection unit		**3520**			**5200**		
Screw diameter	mm	70	80	90	80	90	100
Screw L/D ratio		22	20	18	22	20	18
Screw stroke	mm	370	370	370	450	450	450
Injection unit stroke	mm	550	550	550	700	700	700
Shot weight Max. (PS)	gm	1350	1766	2235	2055	2606	3215
Theoretical shot volume	cc	1420	1852	2353	2262	2863	3534
Injection speed	mm/s	160	160	160	160	160	160
Injection rate	cc/sec	616	804	1018	804	1018	1206
Injection pressure	bar	2400	1900	1500	2270	1792	1450
Holding pressure	bar	1920	1520	1200	1800	1430	1160
Screw torque	Nm	2000	2000	2000	2400	2400	2400
Screw speed	rpm	250	250	250	250	250	250
Plasticining rate (PS)	gm/s	70	88	100	80	100	122
Nozzle contact pressure	ton	8	8	8	8	8	8
Tolal heat capacity	kW	52	52	52	69	69	69
General							
Total connected power	kw	125	125	125	160	160	160
Machine dimension (L x W x H)	m	10.4X2.6X2.7			11X2.6X2.7		
Machine weight	ton	42			44		

MACHINE DIMENSIONS



Injection	Screw Set	A	B	C	D	E	F	G	H	J	K	L	Max.Length
2250h	Ø70 L/D 20	9797	2232	2719	500	1405	1590	8825	4397	Ø70	Ø110	4xM10	9840
3520h	Ø80 L/D 20	9797	2232	2719	550	1405	1590	8825	4397	Ø70	Ø110	4xM10	10000
5200h	Ø90 L/D 20	10697	2289	3382	700	1855	2040	9725	5297	Ø95	Ø130	4xM12	11020

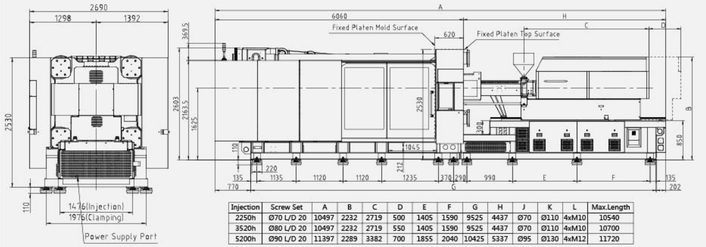
PLATEN DIMENSIONS



SPECIFICATION REAL-E900

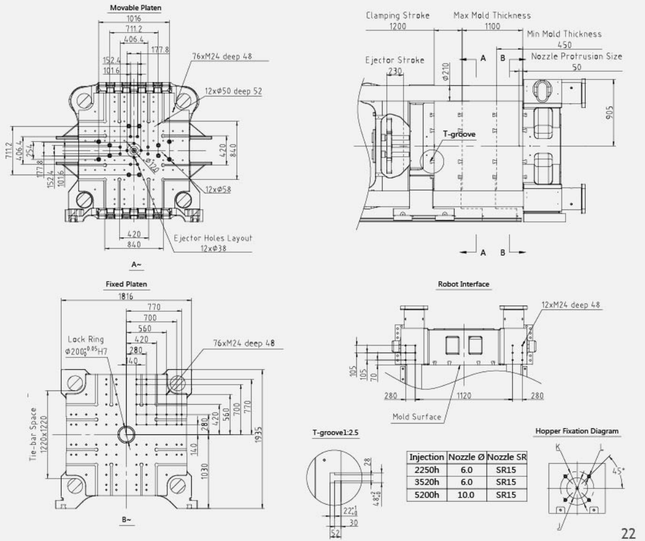
MODEL		RE900					
Clamp unit		**RE900**					
Clamp force	ton	900					
Locking force	ton	930					
Clamp stroke	mm	1200					
Total daylight max	mm	2300					
Min mold height	mm	450					
Max mold height	mm	1100					
Distance between tiebars (H x V)	mm	1220X1220					
Ejector force	ton	24					
Ejector stroke	mm	230					
Platen size (H x V)	mm	1710X1710					
Injection unit		**3520**			**5200**		
Screw diameter	mm	70	80	90	80	90	100
Screw L/D ratio		22	20	18	22	20	18
Screw stroke	mm	370	370	370	450	450	450
Injection unit stroke	mm	550	550	550	700	700	700
Shot weight Max. (PS)	gm	1350	1766	2235	2055	2606	3215
Theoretical shot volume	cc	1420	1852	2353	2262	2863	3534
Injection speed	mm/s	160	160	160	160	160	160
Injection rate	cc/sec	616	804	1018	804	1018	1206
Injection pressure	bar	2400	1900	1500	2270	1792	1450
Holding pressure	bar	1920	1520	1200	1800	1430	1160
Screw torque	Nm	2000	2000	2000	2400	2400	2400
Screw speed	rpm	250	250	250	250	250	250
Plasticining rate (PS)	gm/s	70	88	100	80	100	122
Nozzle contact pressure	ton	8	8	8	8	8	8
Tolal heat capacity	kW	52	52	52	69	69	69
General							
Total connected power	kw	125	125	125	160	160	160
Machine dimension (L x W x H)	m	12X2.9X2.9			12X2.9X2.9		
Machine weight	ton	53			55		

MACHINE DIMENSIONS



Injection	Screw Set	A	B	C	D	E	F	G	H	J	K	L	Max.Length
2250h	Ø70 L/D 20	10497	2232	2719	500	1405	1590	9525	4437	Ø70	Ø110	4xM10	10540
3520h	Ø80 L/D 20	10497	2232	2719	550	1405	1590	9525	4437	Ø70	Ø110	4xM10	10700
5200h	Ø90 L/D 20	11397	2289	3382	700	1855	2040	10425	5337	Ø95	Ø130	4xM12	11720

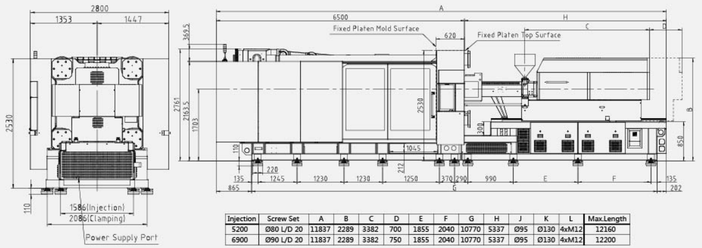
PLATEN DIMENSIONS



SPECIFICATION REAL-E1100

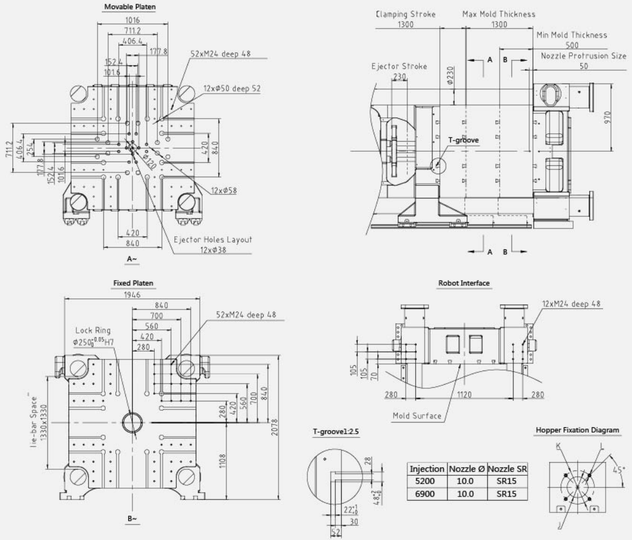
MODEL		RE1100					
Clamp unit		RE1100					
Clamp force	ton	1100					
Locking force	ton	1130					
Clamp stroke	mm	1300					
Total daylight max	mm	2600					
Min mold height	mm	500					
Max mold height	mm	1300					
Distance between tiebars (H x V)	mm	1330X1330					
Ejector force	ton	24					
Ejector stroke	mm	230					
Platen size (H x V)	mm	1920X1920					
Injection unit		5200			6900		
Screw diameter	mm	80	90	100	90	100	110
Screw L/D ratio		22	20	18	22	20	18
Screw stroke	mm	450	450	450	470	470	470
Injection unit stroke	mm	700	700	700	750	750	750
Shot weight Max. (PS)	gm	2055	2606	3215	2720	3360	4065
Theoretical shot volume	cc	2262	2863	3534	2990	3690	4468
Injection speed	mm/s	160	160	160	160	160	160
Injection rate	cc/sec	804	1018	1206	1018	1206	1396
Injection pressure	bar	2270	1792	1450	2400	1980	1638
Holding pressure	bar	1800	1430	1160	1920	1580	1310
Screw torque	Nm	2400	2400	2400	3000	3000	3000
Screw speed	rpm	250	250	250	160	160	160
Plasticining rate (PS)	gm/s	80	100	122	100	122	147
Nozzle contact pressure	ton	8	8	8	10	10	10
Tolal heat capacity	kW	69	69	69	85	85	85
General							
Total connected power	kw	160	160	160	175	175	175
Machine dimension (L x W x H)	m	12.8X3.2X2.9			12.8X3.2X2.9		
Machine weight	ton	70			72		

MACHINE DIMENSIONS



Injection	Screw Set	A	B	C	D	E	F	G	H	J	K	L	Max.Length
5200	Ø80 L/D 20	11837	2289	3382	700	1855	2040	10770	5337	Ø95	Ø130	4xM12	12160
6900	Ø90 L/D 20	11837	2289	3382	750	1855	2040	10770	5337	Ø95	Ø130	4xM12	12200

PLATEN DIMENSIONS



Injection	Nozzle Ø	Nozzle SR
5200	10.0	SR15
6900	10.0	SR15

CONFIGURATION TABLE

Standard ●
Option ○

Clamping Unit	
5-Points toggle lever system	●
Clamp movement via screw and belt drive	●
6 adjustable open and close speeds	●
Clamping force adjustable	●
Precise positioning, speed and force control	●
High sensitivity mold protection with two stages	●
Automatic lubrication	●
Actual tonnage display on HMI	●
Linear guide for moving platen	●
Hydraulic or pneumatic core pull	○
3 Air valve (2 in moving platen, 1 in fixed platen)	●
High speed air valves	○
Close-loop clamp tonnage control	○
Duo color or multi color turntable	○
Duo color index	○
Open mold during cooling	●
Open mold during charging	●
Products drop check	○
Oil drip pan	●
Mold safety device	●
Ejector	
Ejector movement via screw and belt drive	
3 Stage ejector movement speed adjustable	●
Ejector vibration 1-99 times adjustable	●
Ejector back end sensor	●
Ejector torque protection	○
Ejector back end position adjustable	●
Ejector forward delay	●
Ejector holding	●
Mold setting mode available	●
Ejector during mold opening	●
Ejector when mold closed (cut cold runner)	●
Injection unit	●
3 different screw diameters available for each injection unit type	●
Bimetallic barrel and hardened screw	●
Barrel cover with perforated metal	●
Injection movement via ball screw and bell drive	○
Ultra-high speed injection	○
10 Stages injection movement speed adjustable	●
6 Stages pressure holding adjustable	●
3 Stages rotate speed and backpressure adjustable in plasticizing	●
Stronger holding for more holding pressure and longer holding time	○
Screw rotate speed display	●
Screw suckback and pre- suckback	●

Injection unit	
Screw cold start protection	●
Auto purge	●
Compress injection	○
Two-stages plunger system	○
Shut-off nozzle	○
Hopper with temperature control	●
Material hopper	○
Adapter plate for coloring unit and hopper loader	○
Slide hopper loader	●
Coloring control unit	○
Long nozzle	○
Injection safety protection	●
Injection delay	●
Charge delay	●
4 VP transfer mode selection	●
Nozzle contact force adjustable	○
Ceramic barrel heater	●
Automatic heating start and shutdown	●
Actual current and energy display of every heating zone	○
Heating zone and thermocouple failure detection	●
Heating standby	●
Zones heating up synchronous	●
Nozzle contact force monitor	○
Controller	
High performance PLC system	●
21.5inch full color LCD with capacitive touch	●
Various interface for external devices, like Ethernet, USB, HDMI, CAN	●
USB storage	●
Keypad with limitation, and tips	●
10000 lines of alarms and operation log	●
10000 groups product data records	●
10000 process data files saved	●
Full free programmable process sequence	●
Use ID and Password to login the system	●
Multi-language	●
SPC products data analyzer	●
SCADA machine status data records	●
Remote diagnostics, software upgrade, technical supports	●
Print screen and save	●
Centralized control	○
Breakdown analyzer	●
Multi unit	●
Energy meter	●
Hot runner controller	○
I/O check and status	●
Quality criteria and statistics, the quality curve	●
Quality exception handing	●
Production management	●
Printer, support share print function	○

Controller	
Clamp force curve monitor	●
Molding timer	●
Hopper actual temperature display	●
Mouse support	●
Pop-up window	●
Servo drive	
High performance servo driver	●
Close-loop speed, position and force	●
High speed Ethernet field bus link system	●
DC link power support	●
Energy feedback system	○
Injection unit driven by servo motor	○
Ultra-low inertia injection motor for higher dynamic performance	○
Others	
Euromap 12 interface	○
Euromap 67 interface	●
Mounting patterns for robot on fixed platen	●
Cooling water fence	○
Hosting from cooling water connector to stationary or moving platen	○
Part remove from rear safety door	○
2 Electric panel for aux. equipment	○
Wi-fi module	○
Interface for safety fence lock	○
4 programmable I/O	○
3 colors alarm lamp	●
Custom paint color	○
Euromap 78 interface	○
Euromap 70 interface	○
Euromap 77 interface	○
OPC UA	○