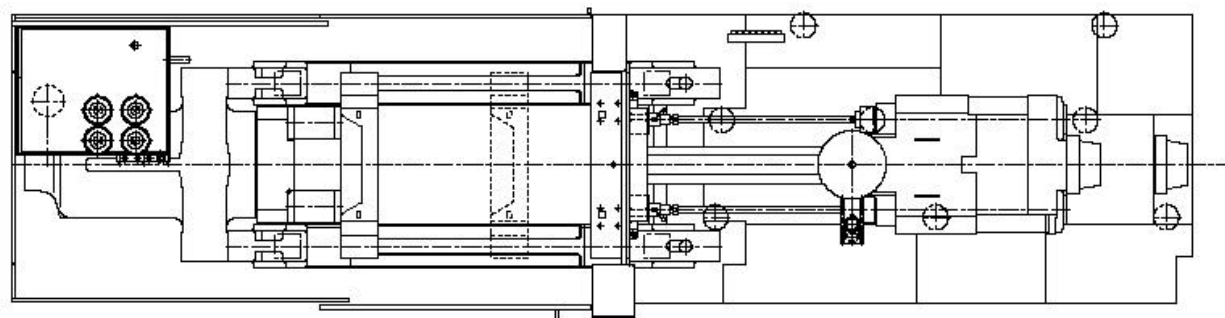
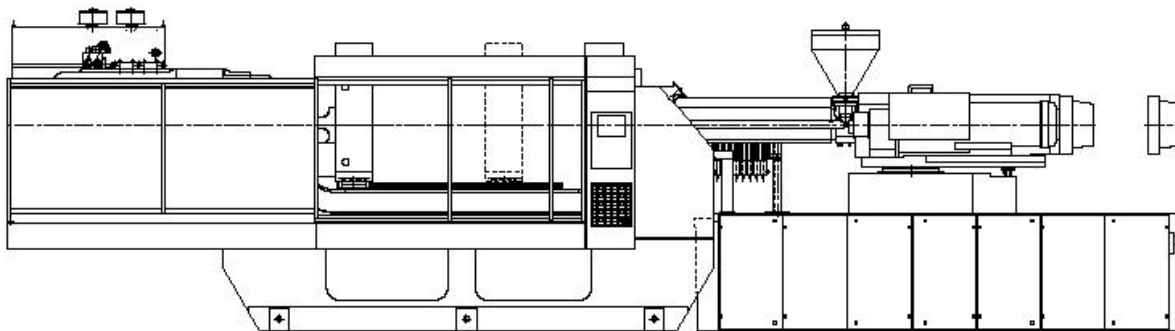


Size designation	3550/...				N execution		
		Standard					
Screw diameter	in /mm	2.75 / 70	3.15 / 80	3.54 / 90	2.75 / 70	3.15 / 80	3.54 / 90
Screw Stroke	in /mm	15.35 / 390	15.35 / 390	15.35 / 390	15.35 / 390	15.35 / 390	15.35 / 390
Max stroke volume	in ³ /cm ³	91.5 / 1500	119.6 / 1960	151.3 / 2480	91.5 / 1500	119.6 / 1960	151.3 / 2480
Screw speed	rpm	150			205		
Screw L/D ratio	L/D	20:1			20:1		
Plasticizing capacity	oz-sec / gram-sec	1.3 / 37	1.8 / 52	2.6 / 74	1.8 / 50	2.5 / 71	3.6 / 101
Screw L/D ratio	L/D	24:1			24:1		
Plasticizing capacity	oz-sec / gram-sec	2.4 / 67	3.3 / 94	4.4 / 126	3.3 / 92	4.5 / 128	6.1 / 172
Injection rate at max. press.	in ³ /sec / cm ³ /sec	21.4 / 350	28.1 / 460	35.4 / 580	26.6 / 435	34.8 / 570	43.9 / 720
Injection rate regenerative	in ³ /sec / cm ³ /sec	18.0 / 295	23.5 / 385	29.6 / 485	22.6 / 370	29.6 / 485	37.5 / 615
Injection pressure at max. press.	psi / bar	32635 / 2250	25090 / 1730	19870 / 1360	32635 / 2250	25090 / 1730	19870 / 1360
Injection pressure regenerative	psi / bar	33360 / 2300	29440 / 2030	23205 / 1600	33360 / 2300	29440 / 2030	23205 / 1600
Nozzle stroke	in /mm	23.6 / 600			23.6 / 600		
Nozzle contact force	ton/kN	16.8 / 150			16.8 / 150		
Heating capacity	kW	42	48	56	42	48	56
Number of heat zones		6			6		
Horsepower	HP/kW	75 / 55			100 / 75		
Hopper volume	lbs	300			300		



Possible combinations of the injection unit

Machine designation	Oil Capacity	HP		Connected Power / Amp	
		Gallons/ liters	Standard	N execution	Standard
ES 3550 / 400 - 450	260 / 980	75 / 55	100 / 75	114 / 191	135 / 232
ES 3550 / 550 - 660	449 / 1850	75 / 55	100 / 75	114 / 191	135 / 232



Injection unit ES 3550 / ... TL

The equipment features are valid for the following Machines

Tie-barless machines:

ES 3550 / 400 TL CC100 A03
ES 3550 / 450 TL CC100 A03
ES 3550 / 550 TL CC100 A03
ES 3550 / 660 TL CC100 A03

Standard Equipment

- 10 – stage injection speed
- 10 – stage holding pressure profile
- 5 – stage screw speed
- 5 – stage back pressure profile
- Display of the screw speed
- Injection time monitoring
- Automatic cushion monitoring
- Transfer from boost to hold by time, stroke or Hydraulic pressure
- Increased injection pressure can be switched over
- Contact pressure relief
- Injection unit swivel
- Wear resistant bimetallic cylinder
- Manual quick change barrel
- MI heater bands
- Direct drive of the screw with hydraulic motor

Control system and electric system

- Microcomputer CC 100 closed loop controlled with integrated diskette drive
- TFT color flat display incl. MICRO-GRAPH PLUS / MICROPLAST
- All functions on the injection unit closed loop controlled
- Patented linearization program
- Graphic-supported set value setting
- Week switch clock for heating on/off motor off
- Monitoring of process-critical functions with alarms
- Automatic barrel heat-up with start up
- Graphic cycle time analysis with part time monitoring
- Self –optimizing temperature control circuits
- Connection for PC keyboard and printer (V24)
- Regulator and emergency service for temperature control circuits
- Info package (help package, 2nd language, storage of data sets on CPU)
- Malfunction message record
- QUICK SETUP with action display
- Access management system via pass-word input

Machine safety

- **Current ANSI B151 regulations**

Additional Options Available

- Electric screw drive
- Increased torque of the screw
- Thermoset equipment
- Elastomer equipment
- PVC equipment
- GASMELT equipment
- Multi-component and multi-color equipment
- Power melt heavy duty screws
- Needle shut off nozzle spring actuated
- Extremely wear resistant and corrosion resistant plasticizing units
- Holding pressure switchover as a function of mold cavity pressure with charge amplifier
- Insulating mats for heaterbands
- Servo valve closed loop control for injection speed. Holding pressure and back pressure

Control System and electric system

- Microcomputer CC 100 closed loop controlled incl. MICROGRAPH PLUS and QDP / CPC
- MICROPLAST / MICROFLOW
- Quality data statistics QDS
- MICROTEMP
- Absolute value input
- Quality documentation package QDP incl. Process data monitoring CPC
- Program package expert control
- Energy measurement + analysis
- Program automatic cylinder cleaning
- Program cycle sequence freely program-mable in 36 program steps
- Interface for handling system
- AUTOPROTECT self-learning precision mold protection
- ENGEL Monitoring System (EMS)
- Control circuits for mold heating
- Week switch clock for peripheral equipment and motor on/off
- Network interface for central computer / tele-service
- Access authorization system with magnetic card
- Printer, PC input keyboard
- Manual control device for machine functions
- Interface for conveyor belt
- Interface for temperature control units, hot runner controller and conveying unit
- Start-up circuit with automatic switchover from start-up to production parameters
- Additional electric connections (2-pole / 3 phase), switchable alternatively
- Acoustic warning signal

Automation modules

- Automatic feed units