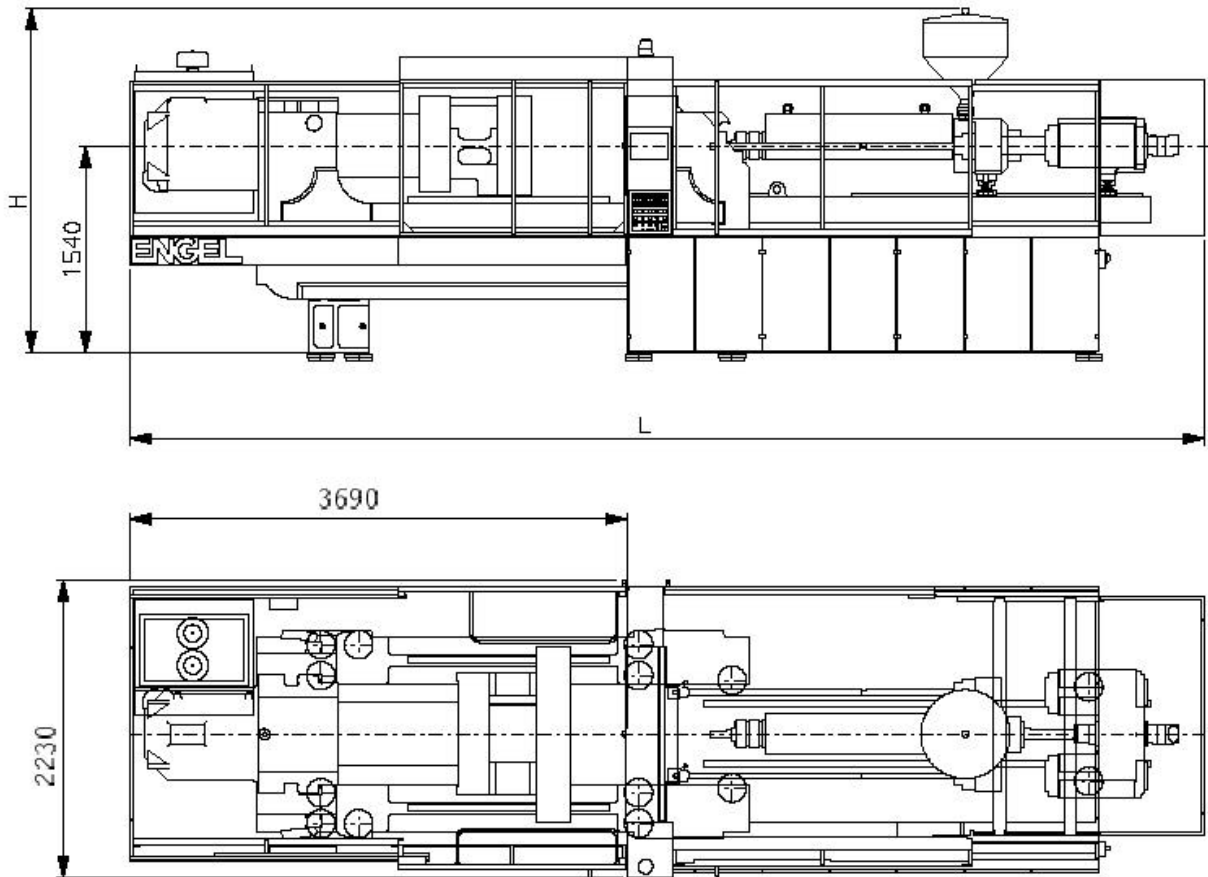


Size designation		ES .../400TL		ES .../450TL	
		Imperial	Metric	Imperial	Metric
Clamping force	US tons/kN	400	3500	450	4000
Opening stroke	Inches /mm	37.40	950	37.40	950
Minimum mold height	Inches /mm	13.78	350	13.78	350
Maximum daylight	Inches /mm	51.81	1300	51.81	1300
Wide platen "C"	Inches /mm	51.81 x 42.52	1300 x 1080	51.81 x 42.52	1300 x 1080
Free drop clearance	Inches /mm	29.53	750	29.53	750
Ejector stroke	Inches /mm	9.84	250	9.84	250
Ejector force	US tons/kN	9.33	83	9.33	83



### Various combinations and measurements of the standard clamping units

Machine designation	Dry Cycle	Weight	L	H
	Seconds at 400mm stroke / in	US /Metric tons	In/mm	In/mm
ES 1350 / 400 – 450	3.5/15.7	27/5	301/7655	100/2535
ES 1800 / 400 – 450	3.5/15.7	27/6	314/7980	100/2535
ES 2050 / 400 – 450	3.5/15.7	27/7	321/8160	101/2565
ES 2550 / 400 – 450	3.5/15.7	27/8	325/8260	101/2565
ES 3550 / 400 - 450	3.5/15.7	27/12	346/8790	101/2565

The equipment features are valid for the following Machines

### Tie-barless machines:

ES 1350 / 400 TL CC100 A03  
 ES 1800 / 400 TL CC100 A03  
 ES 2050 / 400 TL CC100 A03  
 ES 2550 / 400 TL CC100 A03  
 ES 3550 / 400 TL CC100 A03

ES 1350 / 450 TL CC100 A03  
 ES 1800 / 450 TL CC100 A03  
 ES 2050 / 450 TL CC100 A03  
 ES 2550 / 450 TL CC100 A03  
 ES 3550 / 450 TL CC100 A03

### Standard Equipment

- 3 Speeds for opening and closing
- Set-up
- Hydraulic ejector with tip stroke
- Mechanical safety device
- Hydraulic mold safety with monitoring
- Electric and hydraulic closing safety with monitoring
- Proportional valve on the clamping unit
- Platen ejector
- Safety gate

### Hydraulics

- Energy saving electrically controlled variable displacement smart pump hydraulic system
- Hydraulic circuit with oil preheating, temperature control, oil level monitoring
- Pump station with locking mechanism and monitoring
- Permanent, oil sparing bypass filtration and cooling
- Parallel movement for ejector, core-pull and unit

### Additional Options Available

- Extended safety gates
- Electric frequency driven safety gate
- Automatic safety gate
- Core-pull equipment single and multiple, hydraulic or pneumatic
- Solenoid air valves, function freely programmable
- Mold mounting crane
- Unscrewing device
- Preparation of mold shut-off device
- Part drop detection Sensor
- Mold height increase
- Increased horizontal part drop area on WP
- Clean room equipment

### Hydraulics

- Accumulators for faster cycling
- Increased drive power (N execution)
- Increased cooling capacity
- Connections for external filter station

### Automation modules

- High speed mold mounting device
- Mold change systems
- Robot systems

