

## Technical Data

Machine Model	BOY 22 S					
International Size	220-52					
<b>Injection unit</b>						
Screw diameter	mm	18	22	24	28	32
Screw L/D-ratio		22	18	17	14,5	12,7
Max. stroke volume (theoretical)	cm <sup>3</sup>	20	30	36	49	64
Max. shot weight in PS	g	18	27	32	44	57
Injection force	kN	66,82				
Max. spec. injection press.	bar	2587	1732	1455	1069	818
Plasticizing capacity	g/sec.	1,5	3,9	4,4	5,3	6,5
Max. screw stroke	mm	80				
Nozzle force	kN	48				
Nozzle retraction stroke	mm	180				
Screw torque	Nm	300				
Screw speed (continuously variable)	rpm	10-225				
Screw pullback force	kN	45,6				
Cylinder heating power	W	1330+1120+280				
Nozzle heating power	W	275				
Hopper capacity	litres	13				
<b>Clamping unit</b>						
Clamping force	kN	220				
Clearance between bars	mm	254				

<b>Clamping unit</b>		
Max. platen daylight	mm	400
Max. opening stroke (adjustable)	mm	200
Min. mould height	mm	200
Mould opening force	kN	40
Mould closing force	kN	17,6
Ejector stroke (max.)	mm	80
Ejector force pushing/pulling	kN	18,1/12

<b>General</b>		
Installed driving power	kW	5,5
Installed total power	kW	8,5
Hydraulic system pressure	bar	160
Oil tank capacity	litres	135
Total weight net (without oil)	kg	760
Total weight gross (without oil)	kg	910
length	mm	2260
width	mm	765
height	mm	1565

1) With vertical injection unit

## Review of Equipment

### Injection Unit

- Hydraulic screw drive, infinitely adjustable
- Hydraulic operated shut off nozzle
- Holding pressure stroke dependent and production monitoring at start holding pressure
- Holding pressure start dependent of inner mould pressure
- Screw decompression
- Equipment for vertical injection (injection into mould parting line)
- Adjustable nozzle pressure
- Heater band insulation
- Coining and mould degassing
- Open nozzle
- Bi-metallic plasticising cylinders or units
- Thermoset unit 24 mm
- Elastomer unit 28 mm with non-return valve
- Elastomer unit 28 mm without non-return valve
- LSR plasticising unit 22/32 mm
- Rigid-PVC-equipment 22/24/28 mm
- Degassing plasticising unit 24/32 mm
- Degassing plasticising unit wear resistant 24 mm
- Automatic material loader

### Clamping unit

- Direct hydraulic clamping unit
- Closing force 220 kN (22Mp)
- Mechanical closing safety device (drop bar)
- Reduced closing force
- Hydraulic ejector with adjustable speed control, multi stroke
- Hydraulic ejector with adjustable stroke limit, adjustable speed control, multi stroke
- Mechanical ejector
- Hydraulic mould closing safety device
- Pneumatic air blast ejector
- Trip chute flap for mould ejection control
- Unscrewing device one direction instead of hydraulic ejector
- Core pull control (1)

- Unscrewing device one direction with intermediate stop (2)
- Unscrewing device two directions with intermediate stop and counter (3)
- Possible combinations:
- (1) 2 pieces = 2 times core pull
- (1) + (2), (1) + (3)

### Hydraulics

- Variable displacement pump
- Suction and pressure filter
- Oil level and temperature monitoring
- Thermostat for oil cooling

### Control

- Electrical stroke counter
- Interval time control
- Digitally time presetting
- Proximity switches
- Cycle time control with automatic machine shut-off at failure
- Stroke counter unit with preselection and machine shut-off
- Energy saving control
- Switch cabinet ventilation
- Power measuring for each heating zone
- Connection for product balance
- Three phase plug-in DIN 49462 380 Volts (only for 380 Volt-grid)
- Standardized interface for robots
- Operating hour counter on control panel
- Safety shut off button

### General

- Water distribution manifold with electrical shut-off valve
- Water distribution manifold 6-fold
- Oil filling
- Vibration mounts

■ = standard    ▣ = option    □ = additional