

Laboratory machines for the processing of polymers

# Laboratory Extruder E 25 E – E 30 E

Compact - Mobile - Versatile - Cost-efficient Modern concept for easy operation - Line control via interface





## **Application**

The E 25 E and E 30 E extruders are designed for testing, development and production. Operated in conjunction with Collin's extensive range of downstream equipment, these lines can be used to study polymer processing methods on a small scale. Due to their versatility, they are also suitable for processing polymer material at research and development applications.

## Design

Both the electric drive components and the control system are integrated into the machine's substructure. An ergonomically inclined operator panel with a logical design provides easy access to operating buttons and displays.

The drive and processing unit is

mounted on the machine substructure. The thrust bearing assembly and the barrel are installed on the A.C. gear motor

### Screws and barrel

The barrel and the screw are made from nitrided steel. Collin supplies a wide range of screws for processing all established thermoplastics and elastomers.

The barrel is heated by four heating zones, three of which operate with air cooling. A quick-release hopper facilitates material changes and cleaning. The unit is equipped with a water-cooled feed section.

#### Control system

The new generation of SCD microprocessor control systems allow quick and intuitive parameter setting. Set values can be adjusted individually or in groups.



All data is acquired and registered via the integrated RS 485 interface.

#### Safety

The following features ensure a high level of operational safety:

- The drive is switched off if the maximum permissible torque is reached
- The drive is switched off if the maximum permissible melt pressure is exceeded
- Safe start-up due to temperature controllers with tolerance bands
- The entire barrel is covered

Technical Data				
Туре		 E 25 E	 E 30 E	
Screw diameter	(mm)	25	30	
Screw length	L/D	25	25	
Drive power	kW	3,1	6,0	
Screw speed	1/min.	10 – 120	10 – 120	
Screw torque	Nm	227	426	
Output rate (PE-LD)	kg/h	1 – 5,5	1 – 10	
Barrel heating zones		4	4	
Die heating zones		5	5	
Hopper volume	ltr.	19	19	
Central height of extruder screw	mm	1100	1100	
Connected load	kw	15	20	
Power supply	3 x 400/230V, 50/60 Hz			
Dimensions (I x w x h)	mm	1060 x 630 x 1600	1250 x 630 x 1600	
Weight (net)	kg	260	290	
Subject to technical changes				Version: 10E2000

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