



Toyo Seiki Seisaku-sho, Ltd. 5-15-4, Takinogawa, Kita-ku, Tokyo 114-8557, Japan

No. 675 Single-screw Extruder

Model **ER-1**

Stand-alone laboratory extruder



■ APPLICATION

The **Extruder ER-1** is stand-alone type single-screw (Ø30mm) laboratory extruder. Various kinds of die heads and film take-off devices are available as optional.



■ SPECIFICATIONS

Model	ER-1
Screw diameter	30mm
Screw L/D	28
Screw type	Full flight (CR:3.0)
Throughput	8kg/h
Max. torque	700N.m
Drive power	3.7kW
Speed	10 to 100rpm
Max. temperature	350°C
Temperature control	6 channels (9 channels: Optional)
Heating	C1, C2, C3, C4, CH
Cooling	<ul style="list-style-type: none"> ■ C1, C2, C3, C4 (Air cooling) ■ Under the hopper (Water cooling)
Hopper	10L
Pressure sensor port	1
Vent port	N/A (Non-vent type)
Operation panel	<ul style="list-style-type: none"> ■ Screw rotation control knob ■ Resin pressure display ■ Motor torque display ■ Resin temperature display ■ Emergency stop switch ■ Emergency buzzer
Power requirement	Three-phase, AC200V, 50Hz or 60Hz, 34.6kVA
Compressed air requirement	
Water requirement	Approx. 10L/min.
Dimensions	W940 x D1400 x H1490mm
Weight	Approx. 520kg

■ Options (Die Heads)

Name	Model	Main spec.	Remarks	Power requirement	Photo
Strand die	ST1	1 string type, ϕ 1.5, 2, 3, 4, 5, 6, 2.095mm	For extruding rod, filament	Single-phase, AC100V, 4A	
	ST3S	3 string type, ϕ 3mm			
T die	T25F	W=25, t=0.5~1.5 (Fish tail type)	For extruding sheet & film	Single-phase, AC100V, 4A	----- 
	T60F	W=60, t=0.5~1.5 (Fish tail type)		Single-phase, AC100V, 7A	
	T120C	W=120, t=0~1.5 (Coat hanger type)		Single-phase, AC200V, 8A	
	T150C	W=150, t=0~1.5 (Coat hanger type)			
Inflation die	I25C	ϕ 25mm, slit 0.7 (Cross type)...for PVC	For extruding blown film	Single-phase, AC100V, 4A	
	I25S	ϕ 25mm, slit 0.7 (spiral type)		Single-phase, AC200V, 6A	
Tube die	TU10	ϕ 8x10mm (spider type)	For extruding tube	Single-phase, AC100V, 5A	-----
	TU20	ϕ 8x20mm (spider type)			
Wire coating die	WD	ϕ 2mm, wire diameter= ϕ 1mm (cross)	For electric wire	Single-phase, AC100V, 8A	-----
Slit die	CAPF2	W=20, L=100 t=0.5, 0.8, 1, 1.5mm (set)	For viscosity measurement	Single-phase, AC100V, 9A	
Capillary die	CAPR	Orifice ϕ 1x5mm, 1x10mm, 1x20mm	For die swell measurement	Single-phase, AC100V, 8A	-----
Garvey die	GD		For testing conforms to ASTM D2230 (elastomers)	Single-phase, AC100V, 4A	

■ Options (Film Take-off Devices)

Name	Model	Power requirement	Dimensions	Weight	Photo
Film Take-off Device	FT2W20	Single-phase, AC100V, 3A	Approx. W1200 x D720 x H1200mm		
Film & Sheet Take-off Device	FT3W20	Single-phase, AC100V, 3A	Approx. W1200 x D720 x H1200mm	Approx. 150kg	
Inflation Take-off Device	INT	Single-phase, AC100V, 2A	Approx. W800 x D800 x H2400mm	Approx. 250kg	

■ OPTIONS (Other than Die Heads and Film take-off devices)

	Name	Model
1	Temperature control 9 channels option	----

Specifications are subject to change without notice.

TOYOSEIKI
TOYO SEIKI SEISAKU-SHO, LTD.
 5-15-4, Takinogawa, Kita-ku, Tokyo 114-8557, Japan
 Tel:+81-3-3916-8183 Fax:+81-3-3916-8173
 www.toyoseiki.co.jp

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