

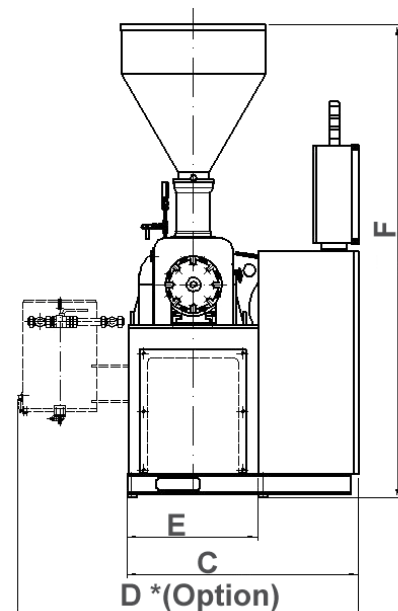
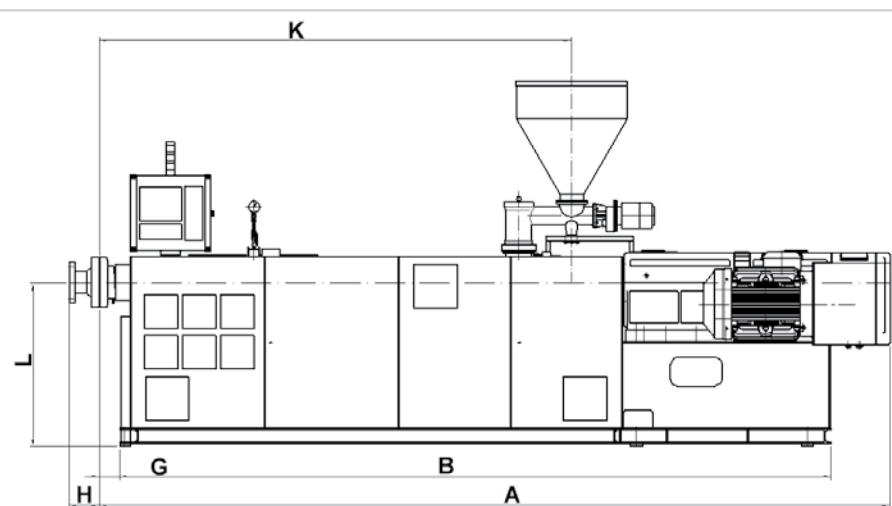
PERFECT COMPONENTS.
PERFECT SYSTEMS.

A MEMBER OF **HTI** GROUP

Theysohn® Twin-Screw Extruder

Parallel Twin-Screw Extruders for PVC-Pipes

The Theysohn TTS HD series represents the newest technology in parallel twin-screw extrusion. The TTS series meets increased customer demands on processing and flexibility for pipe extrusion. Highest melt quality is achieved with proven and reliable 28D long processing units. Due to an improved gearbox design a higher safety factor of more than 1.45 has been achieved. Therefore the lifetime of the gearbox is increased and a trouble-free production over a long time is ensured.



[mm]	A	B	C	D	E	F	G	H	K	L
TTS 78R-26	4117	3738	1145	1710	630	2252	55	170	2330	1100
TTS 88R-24	4364	3945	1195	1760	680	2201	62	100	2459	1100
TTS 88R-26	4557	4065	1195	1760	680	2290	135	180	2647	1100
TTS 108R-24	5080	4245	1295	1860	780	2452	441	203	2996	1100
TTS 108R-26	5305	4775	1295	1860	780	2449	136	203	3167	1100

Technical data

			TTS 78R-26	TTS 88R-24	TTS 88R-26	TTS 108R-24	TTS 108R-26
Output rate (dep. on formulation and tool)	Gelification capacity	kg/h	360	420	460	700	750
	Output guarantee for PVC pipe	kg/h	100-320	100-380	120-420	180-630	190-680
Screws	Diameter	mm	78	88	88	108	108
	L/D ratio/total		26/28	24/26	26/28	24/26	26/28
	Screw speed max.	rpm	45.3	40.0	40.0	32.5	32.5
	Total torque	Nm	7390	10600	10600	20000	20000
	Heating/cooling unit by oil, heating/cooling cap.	kW	10/15	10/15	10/15	10/15	10/15
Drive	Main drive (AC)	kW	37	48	48	73	73
	Drive speed max.	rpm	1775	1770	1770	1900	1900
	Melt pressure (short time/max.)	bar	400/550	400/550	400/550	400/550	400/550
Gearbox	Application factor		1.45	1.45	1.45	1.45	1.45
Barrel	Installed heating capacity	kW	28	34	34	50	50
	No. of heating/cooling zones		5/3	5/3	5/3	5/3	5/3
	Vacuum pump	kW	1.5	1.5	1.5	1.5	3.0
Adapter	Heating zones (no./installed cap.)	kW	1 x 0.9	1 x 1.0	1 x 1.0	1 x 1.2	1 x 1.2
Tool zones (option)	Max. tool zones 230V 1-phase (no./installed cap.)	kW	18 x 3.5	18 x 3.5	18 x 3.5	18 x 3.5	18 x 3.5
	Max. tool zones 400V 3-phase (no./installed cap.)	kW	16 x 10.5	18 x 10.5	18 x 10.5	18 x 10.5	18 x 10.5
Feeding (option)	Starve feeder (AC)	kW	1.1	1.1	1.1	1.1	1.1
Generaldata	Total connection (stand./max. tooling zones), max.	kVA	88/205	100/218	100/218	148/295	148/295
	Water consumption (at 10° C water temperature)	m³/h	1.2	1.4	1.4	1.6	1.6
	Center Line	mm	1100	1100	1100	1100	1100
	Weight (incl. control cabinet) approx.	kg	4700	5200	5300	6700	6800

Standard

- Main drive maintenance-free AC-motor
- TEC 4s control with 19" color TFT display with touchscreen
- Windows XP embedded operating system
- 1 Compact Flash Card, 4 GByte min.
- Saving and calling of formulas and process parameters
- Full recording of all alarms
- On-line shifting between languages
- Production logs (stored or printed)
- Trend graphs
- Voltage loss protection (up to 3 sec)
- Back pressure monitoring in gearbox with emergency cut-off
- Synchronization of up to 12 drives
- Self-tuning temperature controllers
- Timer for barrel and tool heating zones
- Deep nitrided screws, molybdenum coating of screw flights, chromium-plated screw flanks in venting and metering zone
- Passive screw temperature control (water-filled screw)
- Barrel with 5 heating zones, 2 zones air-cooled and metering zone oil-cooled with speed controlled oil-pump, elliptical barrel design in metering zone
- Barrel heating with ceramic heater bands, Zone 1, 2
- Barrel covers
- Vacuum pump and vacuum canister with filter and bypass
- Adapter stainless steel incl. heating zone

- Bore holes incl. plugs for melt pressure and temperature sensors in adapter
- Colour: blue RAL 5015/doors grey RAL 7036
- Voltage: 3 x 400V + 0, 50 Hz
- Electric CE-conform

Options

- 6/12/18 tool zones 230V 1-phase
- 6/12/18 tool zones 400V 3-phase
- Starve feeder with maintenance-free AC-motor and full screw
- Heat current control for tool zones and barrel heating zones
- Melt temperature monitoring and data storage
- Melt pressure monitoring and data storage
- Active screw temperature control by oil incl. oil blocks
- Barrel with 5 heating and 3 air-cooled zones, elliptical barrel design in metering zone
- Customized adapter design
- Gravimetric feeding unit integrated in TEC control
- Saw cut control integrated in TEC control incl. wall thickening programm
- Remote maintenance via LAN and/or Internet

- Interface cards for network links (Ethernet card)
- Acoustic alarm (horn)
- Air conditioning for control cabinet (electrical type)
- Air-water heatexchanger for cooling of control cabinet
- Machine subframe for customized extrusion center height
- Machine subframe on wheels with rails (+ 50 mm)
- Hopper level indicator
- Stainless steel hopper
- Hopper loader systems
- Side-mounted vacuum canister
- Second side-mounted vacuum canister
- Additional 2 single dosing feeders for pigments and additives
- K-Tron twin-screw side dosing feeders
- Screws deep nitrided, without molybdenum-coating, without chromium
- Special voltage and electrical standards
- Customized colour
- Screws deep nitrided, molybdenum-coating, fully 3-layer chromium plating (for C-PVC use)