

ZSK 18 MEGAlab. The standard for highest quality demands in the extrusion of pharmaceutical compounds.



>> Highest performance even for smallest batch sizes. Modular construction. GMP design. Maximum speed. Highest power density. Safe scale-up. Tailor-made controls. The ZSK 18 MEGAlab laboratory extruder is the smallest member of the ZSK family. This targeted and further development of proven ZSK technology extends the performance range of the series for R&D and production of pharmaceutical materials in a minimum quantity range.



Small size - large impact. The ZSK 18 MEGAlab applies the successful ZSK principles and offers in addition to its compact overall size many other advantages:

- >Throughput rates between 1 and 10 kg/h
- >Small batches of 200 g
- >Quick plug & play commissioning
- > Reliable, low noise drive concept
- >Modular construction with exchangeable 4D barrels and all standard screw elements
- >Flight depth of 3.2 mm enables pellet feeding
- >Simple to operate via PLC control and touch screen
- > Simple handling and quick product changes using quick release connections
- >Online support through built in modem (optional)
- > Compact size mobile base frame with integrated controls, water cooling system and vacuum unit
- >Perfect scale-up due to ZSK features

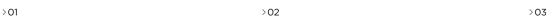
Special features of Coperion extruders according GMP regulations:

- >Proven materials with certificates
- > All parts coming in contact with the product made of stainless steel with minimized surface roughness
- >Base frame and covers for main drive and process section made of stainless steel
- > Qualification and validation based on user requirement specification (URS) and functional design specification (FDS)
- > Factory acceptance test (FAT) with calibration of all process parameters including documentation
- >Site acceptance test (SAT) based on SAT test logs

Typical applications:

- > Pressure-sensitive adhesives with drugs for transdermal applications
- > Compounding, compacting, pelletizing and wetting of powder premixes with and without additional liquids (substrates and drugs)
- >Melt extrusion with face cutting, strand pelletizer or calendering

- 01 | LEAKAGE-FREE QUICK COUPLING FOR WATER COOLING CIRCUIT
- 02 | DIE HEAD FOR STRAND PELLETIZING
- 03 | GRAVIMETRIC FEEDER WITH TRI-CLAMP CONNECTIONS











PROCESS SECTION IN MODULAR DESIGN

Technical Data

		ZSK 18 MEGAlab	ZSK 26 Mc ¹⁸	ZSK 32 Mc ¹⁸	ZSK 45 Mc ¹⁸	ZSK 58 Mc ¹⁸	ZSK 70 Mc18	
D _o /D _i	[mm]	1.55	1.55	1.55	1.55	1.55	1.55	
Screw diameter	[mm]	18	25	32	40	58	70	
Max. torque per shaft	[Nm]	38	140	315	930	2,000	3,500	
Spec. torque Md/a³	[Nm/a³]	11.3	15	18	18	18	18	
Max. screw speed	[min ⁻¹]	1,200	1,200	1,200	1,200	1,200	1,200	
Max. drive power N	[kW]	10	37	83	246	529	926	

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