STEER

The OMEGA Series extruders are 'Generation Next' Co-rotating Twin-Screw Extruders with deeper flights that have supreme process capability. The latest technology extruders offer the best feeding ability, greatest energy efficiency and the highest speed of operation that is practical { Do/Di = 1.71 and Specific Torque ≥ 11.3 Nm/cm^3 }

omega SERIES
TWIN-SCREW EXTRUDERS

THE BEST value – OPTION –

APPLICATIONS

- Automotive Compounds
- Bio Polymers
- Polymer Blends
- Thermo Set Polymers
- De-Volatilizing
- Nano-particle Compounding
- Reactive Processing
- Solvent extraction
- Specialty Polymers
- Processing of shear sensitive material such as PVC, PSU
- Thermo Plastic Elastomer / Vulcanisers
- Fiber grade Polyester, Polyethylene Masterbatches
- Natural fibers compounding
- WPC
- Engineering TP

THE OMEGA SERIES COME IN PILOT-PLANT AND PRODUCTION MODELS AND IN VARIOUS SIZES, CAPABLE OF OUTPUTS IN EXCESS OF SEVERAL THOUSAND KGS PER HOUR

FEATURES

TRANSMISSION SECTION

Main Drive: Modern available speed range, direct torque control based on digital drive controllers.

Gearbox: The robust gearbox is oil-cooled and the oil lubrication system includes a heat exchanger, oil filter and oil circulation pump.

PROCESSING SECTION

Materials: Special grades of tool-steel with high wear and corrosion resistance.

Treatment: In-house heat-treatment facility for hardening and nitriding.

Manufacturing: Advanced Computer aided design and manufacturing using CNC facility.

Geometry: Pioneers in the development of element geometry that allows the low shear extruder to have high mixing and melting capacity. New elements that improve 'intake' capacity up to 400%.

ALL STEER EXTRUDERS FEATURE
CONTINUA SPLINE PROFILE WITH SHAFTS THAT ARE
PROOF TESTED AT 125% RATED TORQUE.

omega SERIES
TWIN-SCREW EXTRUDERS

SPECIFICATIONS

DESIGNATION	OMEGA 30	OMEGA 40	OMEGA 50	OMEGA 60	OMEGA 70	OMEGA 75	OMEGA 80	OMEGA 95
Screw Diameter (mm)	29.7	39.7	49.7	59.7	73	75.1	80.5	95
Diameter Ratio (Do/Di)	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71
Flight Depth (mm)	6.2	8.2	10.2	12.3	15.0	15.6	17.0	19.5
Barrel to Screw Clearance (mm)	0.15	0.15	0.15	0.15	0.25	0.25	0.25	0.25
Screw to Screw Clearance (mm)	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Max. Drive Power (kW)	37.0	90.0	180.0	377.0	686.0	603.0	854.0	1508.0
Max. Screw Speed (rpm)	1200	1200	1200	1200	1200	1200	1200	1200
Specified Nominal Torque/shaft (Nm)	150	360	720	1500	2730	2400	3400	6000
Specific Torque (Nm/cm^3)	10.8	11.0	11.3	13.6	13.6	11.1	13.0	13.6
Throughput (kg/h)	50-100	150-300	300-700	600-1200	800-2000	800-2000	1000-2500	1500-3500