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 ≤ 10.8 Nm/cm^3 }

omega LAB
TWIN-SCREW EXTRUDERS

THE BEST *value* – OPTION –

APPLICATIONS

- Automotive Compounds
- Nano-particle Compounding
- Polymer Blends
- Processing of shear sensitive material such as PVC, PSU
- De-Volatilizing
- Reactive Processing
- Fiber grade Polyester, Polyethylene Masterbatches
- Research & Development

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.

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SPECIFICATIONS

DESIGNATION	OMEGA 20	OMEGA 30
Screw Diameter (mm)	19.6	29.7
Ratio (Do/Di)	1.71	1.71
Flight Depth (mm)	4.0	6.2
Barrel to Screw Clearance (mm)	0.20	0.15
Screw to Screw Clearance (mm)	0.40	0.50
Max. Drive Power (kW)	7.5	37.0
Max. Screw Speed (rpm)	1200	1200
Specified Nominal Torque/shaft (Nm)	30	150
Specific Torque (Nm/cm^3)	7.3	10.8
Throughput (kg/h)	5 - 10	50-100