CPM Extrusion Groups' new twin screw series

CPM Extrusion Group's newly developed CXE 45 sHO will be introduced at the NPE 2018 in Orlando/FL.

The 45mm OD machine fits perfectly in between the existing machine sizes with 26mm and 50mm OD and targets with its design the Compounding and Masterbatch industry. For our customers a broad variety of optional smart features is offered as an extension to our existing HO (High Output) machine series.

For the challenging processes of our customers we have implemented and developed our smart performance technology like our High Performance Elements as they are the segment and barrier screws for the gentle incorporation of glass fibers and/or thermosensitive flame retardants and additives, the full-set of our T-Profile Technology elements which boost mixing and degassing efficiency up to an unmatched product quality level. Furthermore, the tie-rod design enabled us to implement an extraordinary efficient cooling water system for a maximum of temperature control and in combination with the high duty and high power cartridge heater, even the processing of the future high temperature nylons for automotive applications are processed with an unmatched process control.

Additionally, our smart monitoring technology is applied all-over the extruder. For the motor, safety clutch and gearbox optional temperature and vibration sensors can be applied to provide a comprehensive condition monitoring which enables the operator to plan a preventive maintenance program. A gearbox oil-sensor evaluates constantly impurities, water content, soot formation, air content, oil ageing, acidification, oil and ambient temperature, relative humidity, transmission, electrical conductivity and the relative permittivity of the oil. For each screw shaft a sensor telemetry assesses the load (torque) and provides valuable information of shaft performance corresponding to specific energy input to the product and in parallel can give an indication of wear progress of shafts and barrel. Lastly our smart monitoring technology is completed with energy monitoring features for drive, heaters and cooling water to summarize the energy efficiency of the extruder.

The Extrusion Group supplied already more than 4500 machines in 55 countries and is looking forward to implementing its smart performance and monitoring technology in the upcoming 4500 machines for the competitive advantage of our customers.