



Press release
For immediate publication

STEER LAUNCHES OMEGA PLATFORM TECHNOLOGY FOR PROCESSING MICA SPECIAL EFFECT PIGMENTS.

Eliminates shear peaks, gains control over energy distribution

Bengaluru, India, July 06, 2016 — STEER, creator of materials platform technology that transforms and functionalises materials in the fields of plastics, pharmaceuticals, food & nutraceuticals, biomaterials & biorefining, today announced the availability of **Omega SEP** platform with specially designed screw configuration and technology, process know-how for compounding special effect pigments with minimal damage to the sensitive platelet structure, retaining upto 80% of the particle size in the compound from the pigment.

Mica, a delicate, natural, mineral is an integral part of special effect pigments used across various end user markets such as automotive, electronics, cosmetics, building materials, paints & coatings. **Mr. Atanu Maity, CEO, STEER Engineering, Said** “The demand for performance and special effect pigments is seeing a dramatic rise, driven by developed market and the emerging economies like China and India. The Omega platform is configured to process mica-based pigments with minimum damage to the platelet structure, it not only provides greater product appearance but effectively eliminates issues related to quality of properties, adaptability and damage. Omega platform will change the way industry is processing effect pigment.”

Coated mica crystalline platelets, such as those used in effect pigments in thermoplastics (ex: for pearlescent appearance, colouration, lustre, sheen, glitter, sparkle or multicolour effects), are extremely sensitive. Any alteration or change in size of the structure will hinder effective coloration and alter the appearance of the pigments and plastics. *Unfortunately the technology available today does not account for exposure to shear — the biggest cause for attrition and damage to the structure.*

The Omega SEP Platform along with patented special elements **eliminate shear peaks**. Further, the special mixing elements with fully intermeshing and self-wiping profile **prevent stagnation & degradation** and the resultant char formation. The OMEGA's 'Barrel to Screw Gap and Screw to Screw Gap' is maintained at less than 0.25mm to have fully wiping effect rather than shearing effect **addressing the issue of 'leakage'** and the deeper root depth (1.71) draws more of the resin into the screw root and **away from the shear forces** that occur when the melt contacts the barrel wall.



Rob Roden, AVP and Global Head, Continuous Manufacturing Technology, STEER, said, “The Omega allows manufacturers to create brilliant effect pigment masterbatches. The production trials conducted at our Application Development Center in Bengaluru have given us phenomenal results. The root of all evil is SHEAR. The standard elements used by the industry today is brutal, it virtually reduces pigment particle size by half due to various inefficiencies and therefore quality of the compound is compromised. STEER brings a revolutionary platform for compounders and producers of end use products to be able to capture the full value and elegance of special effect pigments.”

The Omega platform for processing special effect pigment is available in various sizes for defined output.

View white paper: www.steerworld.com

About STEER:

STEER is a creator of materials platform technology that effectively transforms and functionalises materials in the field of plastics, pharmaceuticals, food & nutraceuticals, biomaterials and biorefining. Founded in 1993 by Dr. Babu Padmanabhan with a vision to **steer a new world**, STEER today has 5 global offices and 10 satellite offices, serving over 39 countries and employs over 500 gifted engineers, scientists and technicians across the globe. With 33 patents for breakthrough innovations, STEER is committed to the design, creation and implementation of advanced technologies, components, elements, peripherals and applications that help in the creation of safer, stronger, lighter, more sustainable products.

To learn more about STEER, visit www.steerworld.com

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