



Product News

## Coperion raised the Specific Torque of the STS 75 Twin Screw Extruder

Edited by on 18. Apr. 2024  
Stuttgart, Germany -

For the STS 75, Coperion has raised the specific torque of the STS twin screw extruder from 11.3 Nm/cm<sup>3</sup> to 13.6 Nm/cm<sup>3</sup>. The new STS 75 compounder thus achieves improved product quality and at the same time up to 20% higher throughput in every application.



The new Coperion STS 75 Mc PLUS twin screw extruder achieves up to 20% greater throughput with improved product quality, at an increased specific torque of 13.6 Nm/cm<sup>3</sup>. (Picture: ©Coperion GmbH)

Critical to this level of performance, along with process-technical modifications, is optimization of the drive's key components. The new STS 75 Mc PLUS extruder is equipped with a high-power motor and a gearbox designed specifically for the high torque. Proven high-performance materials for the screw shafts ensure full

torque transmission from the gearbox to the screw elements.

The higher fill level in the process section is crucial to the improved compound quality that the STS 75 Mc PLUS achieves. It reduces both shear stress and melt temperature and improves mixing behavior. The result is an extremely gentle product handling at high throughputs. The process section of the STS 75 Mc PLUS is equipped with heating cartridges that generate heat very energy-efficiently exactly where it is needed.

STS extruders combine the advantages of substantially standardized and thus more cost-effective machine construction incorporating Coperion's technical expertise. In the continued development of the STS 75 Mc PLUS, Coperion has profited from the comprehensive experience gleaned from its high-end ZSK Mc18 extruders. The new STS 75 Mc PLUS's throughput increase of up to 20% makes it a particularly economical solution. Material costs per kilo drop and return on investment is reached much more quickly. Coperion retained the proven  $Do:Di = 1.55$  ratio of outer to inner screw diameter unchanged, thus ensuring secure scale-up to other STS model sizes.