

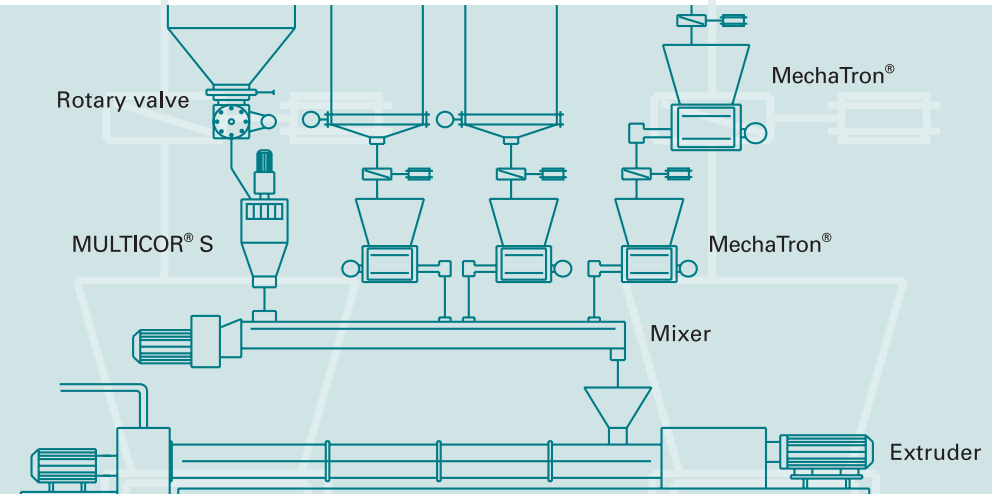
Plastics Granulation

From basic plastic materials to raw materials for successful end products – perfectly fed



With MULTICOR® feeding systems, basic plastic powders (e.g., PE, PP) and additives (carbon black, titanium dioxide, etc.) are fed into the extruder directly or via a continuous mixer by means of the MechaTron® Loss-in-Weight Feeders.

The powder is plasticized in the extruder under high pressure and high temperature and modified in a physical mixing process. The granulator at the extruder discharge cuts the plastic strand into granular form with remarkable performance. Large granular plants operate at a feed rate of up to 40 t/h and higher.



Free to poor flowing additives, perfectly fed

- ☒ Additives are fed with the MechaTron® or the MULTIGRAV® Loss-in-Weight Feeders. Integral part of the MechaTron® system are the weigher configurations for feeding free to extremely poor flowing additives. Free to moderately flowing additives are fed with the MechaTron® Coni-Flex® single-shaft feeder. Poor flowing additives can be fed with MechaTron® Coni-Steel® double-shaft feeders.
- ☒ Liquids are fed with special liquid feeders.
- ☒ Simple, free flowing products can be directly added via slide valves or butterfly valves.
- ☒ Poor flowing additives can be added by means of filling devices, such as filling screws, vibratory trays, or agitators.
- ☒ The proven DISOCONT® measuring and control electronics permit easy integration in the production process.

Our Solutions Package

- ☒ Day bins for the basic plastic material and various additives
- ☒ Fillers and feeders from the storage containers into the weighfeeders
- ☒ Weighfeeders for the various products
- ☒ Transfer device from the weighfeeders into the extruder



The feeders of the Low, Mid, and High Range series are suited for use in ATEX zones 1,2 and 21, 22, depending on variant. Type examination certified to ATEX, the systems may be used for the feeding of flammable dusts (Zone 20 inside the machine).

Whether plastic bags or plastic molding for cars – plastics today vary e.g. with respect to strength and durability. This difference is achieved in plastics granulation plants based on common plastics, such as PE or PP, and supplementing them with additives.

The MULTICOR® S masters the basic components and MechaTron® the additives. Schenck Process equipment has the highest performance >40 t/h [metric] with the highest feeding accuracy.

An end product, such as plastic bags, is thus produced from an intermediate product. Or a product that is modified in additional processing steps for even more specialized plastic materials.

Advantages

- ☒ High feeding accuracy – better than $\pm 0.5\%$
- ☒ High feeding constancy – better than $\pm 0.5\%$
- ☒ Feeding of various additives with a single weighfeeder system
- ☒ Enclosed system – plant operation suitable for inert gas blanket (inert gas N₂)
- ☒ Optional dust-proof or gas-explosion-proof design
- ☒ Virtually maintenance-free
- ☒ Low construction height
- ☒ Reduced investment due to MechaTronic solution
- ☒ Easy integration into the production process
- ☒ Process reliability due to individual tests in our bulk solids lab

More about MULTICOR® S, on pages 32–33

More about MechaTron® feeders on pages 20–29

More about Coni-Steel® double-shaft feeders on pages 22–23

More about Coni-Flex® single-shaft feeders on pages 20–21

More about MULTIGRAV® Loss-in-Weight Feeders on pages 30–31

