

PRESS RELEASE

Saving energy comes naturally

Energy-efficiency is a vital issue at Cincinnati Extrusion GmbH, Vienna, Austria. The extruder specialist is the only machine manufacturer in the industry that not only has all of its single- and twin-screw extruders equipped with AC motors as standard, but has also come up with additional energy-saving strategies which will be demonstrated at the K.

Under the motto “all-round energy optimization” Cincinnati has added several new features that are not being offered as an option, which would mean a surcharge, but as part of each extruder’s standard equipment package. With these features, energy consumption can be cut by 20 to 25% compared to conventional models. For example, the operator of a pipe extrusion line with an output of 600 kg/h can thus save 44,000 Euros in energy costs within five years, calculated on the basis of 7,400 hours of operation per annum and energy costs of 0.07 EUR/kWh.

Not optional, but standard

- AC motors are not only maintenance-free, but above all offer a higher degree of efficiency and better performance under partial load than conventional DC motors. These are good reasons for the Viennese machine manufacturer to equip its single- and twin-screw extruders exclusively with AC motors from now on. This allows customers to benefit directly from the energy-saving potential without any extra charge.
- For more than two years, Cincinnati has already applied barrel insulation as standard to minimize the loss of heat through radiation. At the K, the

machine manufacturer is presenting for the first time its redesigned heat insulation system, which cuts heat loss from radiation by a total of 30 to 35%.

- Another contributing factor in all-round energy optimization is poly-thermal screw geometry. Thanks to a special screw design, the energy input is optimally distributed and utilized inside the extruder, so that 8 to 12 % less drive capacity is needed than for conventional screw geometries.
- A further cut in energy costs can be achieved by active screw root tempering being dispensed with. Here, Cincinnati Extrusion is setting new benchmarks with its Konos series of conical twin-screw extruders: Konos extruders are the first machines to operate entirely without active screw root tempering.
- The energy-saving potential has been further enhanced by optimization of auxiliary equipment and special efficiency packages.

Service written with a capital S

Every extruder model with an EXcPROXP control system can be equipped with an integrated total energy consumption gage as an option. The relevant values are shown in the actual value fields of the EXcPROXP control system, regardless of the screen page currently in view.

Last but not least, the machine manufacturer offers its customers comprehensive energy-related service to increase the efficiency of existing machinery. It is based on a comprehensive data collection from an extrusion line in production carried out by a Cincinnati specialist. A mobile measuring device specially developed for this purpose is able to record and process up to 20 parameters. An individual, all-round energy optimization concept for the extrusion process can then be derived from these data.

Examples of the two above-mentioned options will also be on display in Düsseldorf.

Photos:

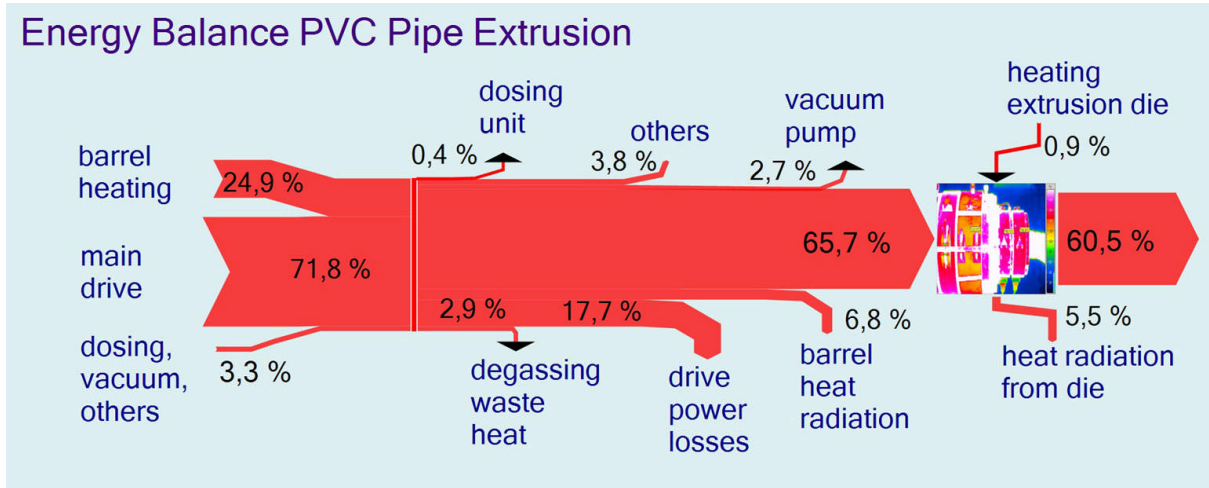


Fig. 1: Cincinnati Extrusion explores all avenues of saving energy with the help of energy balance calculations like the example illustrated above, involving an Argos 93 twin-screw extruder for PVC pipe extrusion,

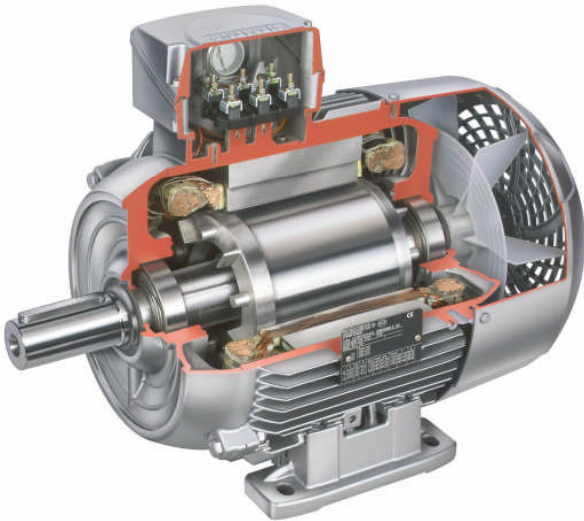


Fig. 2: cross-section of an energy-efficient AC motor

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