Press Release

Fast color control saves the compounding time and money
Direct on-line scanning of pellets

Stuttgart, July 2009. – A color control system equipped with a high-precision spectral line camera permits – for the first time ever – the on-line color control directly at the plastic pellets. With this innovative technology, color measurement takes only a few minutes and the results are available for color correction and/or quality documentation virtually in real time. Designated ROC ColorControl, this on-line color control system is now offered by Coperion GmbH, Stuttgart/Germany, as optional ancillary equipment for its compounding extruders. Coperion has signed a distributor agreement with the developer of this ROC ColorControl system, the company of ROC Rapid Optical Control GmbH, Münster near Dieburg/Germany. Thus Coperion has further augmented its position in the market as a supplier of complete customized systems.

The ROC ColorControl system offers the compounder numerous advantages:

- It decisively shortens the time needed for initial color adjustment and correction, as the time-consuming injection moulding of test pieces can now be waived.

- It ensures virtually immediate compliance with compound color specifications when changing over production from one product and/or color to another.

- The fast scanning time and negligible costs permit – for the first time ever – virtually continual color monitoring and documentation.

- It extends the productivity of the extruder and considerably reduces manufacturing times and costs, especially when processing relatively small batches.
For color measurement, the ROC ColorControl system requires a sample quantity of pellets of approximately 35 ml, which are then spread out evenly on a temperature controlled vibrating table. The results of the measurement, which is performed by the spectral line camera in less than 3 minutes, are evaluated by means of software specially developed by ROC for this application. The special feature of the system lies in its ability to make allowance for any shadows, contaminants and/or stress-whitened zones along chopped edges.

The ROC ColorControl system works particularly economically with the fully automatic ROC ContiSampling system, which conveys the sample pellets from the downstream side of the pelletizer to the measuring system in a self-filling and self-emptying transport container. Using a logistic conveying system, it is possible to link as many as six compounding lines with an ROC ColorControl system. As standard, the compounding lines are sampled one after the other. If required, several samples can be taken from the same line in succession, e.g. during start-up.

The optional color correcting unit ROC ColorDosage permits particularly fast and easy color adaptation during the compounding process. This unit consists of four to six weigh feeders per extrusion line for different monopigment masterbatches. The smallest metered amounts suffice for color correction. The color changes obtained can already be measured after only a few minutes and are displayed graphically.

Coperion (www.coperion.com) is the international market and technology leader in compounding systems, bulk materials handling systems and services. Coperion designs, develops, manufactures and maintains systems, machines and components for the plastics, chemicals, food and aluminium industries. With its three Competence Centers – Compounding & Extrusion, Materials Handling, Service – and over 30 sales and service companies, Coperion achieves annual sales of over 600 million euros worldwide and has a total work force of 2,100 employees.

ROC Rapid Optical Control GmbH (www.roc-gmbh.com) develops and markets systems for color measurement on plastic pellets.
Dear Colleagues,

an MS-WORD file of this press release in English and German and
a printable-grade copy of the enclosed image are available for download at
http://www.coperion.com/technicalpress

Editorial contact and voucher copies:

Dr. Diether Burkhardt, KONSENS Public Relations GmbH & Co. KG,
Hans-Kudlich-Straße 25, D-64823 Groß-Umstadt
Phone: +49 (0)60 78/93 63-0, Fax: +49 (0)60 78/93 63-20
E-Mail: mail@konsens.de, Internet: www.konsens.de
At the Coperion Open House, which took place at the end of January 2009, the ROC ColorControl system showed, in conjunction with a small compounding line (in the background), how fast, easy and reliable color measurement can be and how quickly color correction is carried out.

Photo: Coperion, Stuttgart/Germany