



**For Immediate Release**

## **Addex Inc. to Unveil New Industry-Leading Capabilities For Automatic Gauge Control (AGC) at K 2013**

**STOUGHTON, Mass., August 26, 2013** – Addex Inc., a leading global supplier of blown film equipment and components, will launch several new unique capabilities for its automatic external gauge control (EGC) systems for blown film extrusion lines. These new software-related functionalities deliver greater flexibility for processors, enabling easy retrofits of existing or new systems in order to provide reduced thickness variation, increased yields, and raw material savings. Addex will make the introduction at K 2013 (Hall 17 Booth C54), the 19th International Trade Fair Plastics + Rubber, Oct. 16-23, in Düsseldorf, Germany.

During the last two years, Addex has embarked on a complete overhaul of its automatic gauge control hardware and software, taking advantage of the latest electronic miniaturization and distributed controls. “Addex has added features that customers could only dream about until now,” said Rick von Kraus, president of Addex Inc. “These new functionalities are the culmination of extensive development work and are yet another example of how Addex works continually to devise unique products that help processors increase yield and realize major raw material savings.”

Various functionalities have been placed directly inside each component, enabling easy retrofits to existing or new extrusion systems, with all communication handled via a simple and industry standard Ethernet TCP-IP Modbus connection. Processors can now benefit from Addex’s superior technology which incorporates significantly more control zones than other existing systems. “No matter who manufactures the rest of the extrusion



line, whether a new or old line – we make automatic gauge control (AGC) highly flexible and easy to accomplish,” said von Kraus.

Among the new AGC functionalities are Addex Mapper, a standalone device that directly accepts most thickness profiler system profiles. It then automatically takes into account all the twists, turns, and undulations of the bubble to create a fully “mapped” thickness profile with better than 1 degree accuracy. It even continues to allow profiler information to be properly mapped during oscillating haul-off reversals. This is a unique capability only offered by Addex and the company makes it available to the entire industry in either standalone or in seamless operation with its other functionalities so that other systems can benefit from this enhanced performance, said von Kraus.

Addex has also introduced the ALF (All Layflat) capacitive sensor module which allows for direct collapsing frame measurement of thickness to the Mapper using already available oscillating haul-off motion for highly accurate profiling. Up to two ALFs can be added, one in each side of the collapsing frame for faster response. Other sensor technologies can be used optionally in both positions, such as non-contact capacitive and nuclear.

For the fastest control possible, processors can add another new feature, the Profiler Module. This adds a separate profiling ring which allows for all sensor technologies to be scanned automatically around the bubble. The results automatically feed to the Mapper and then on to the EGC for a total system control solution.

Other new AGC functionalities from Addex include direct control of the very high resolution air flow within the Addex dual-flow cooling ring - a design recognized around the world for its superior cooling performance. A 360-degree profile of desired cooling air flow is registered and the air ring automatically handles direct control. Direct control of even





higher resolution air flow within the Addex IBC cooling system uses the same interface used for the cooling ring.

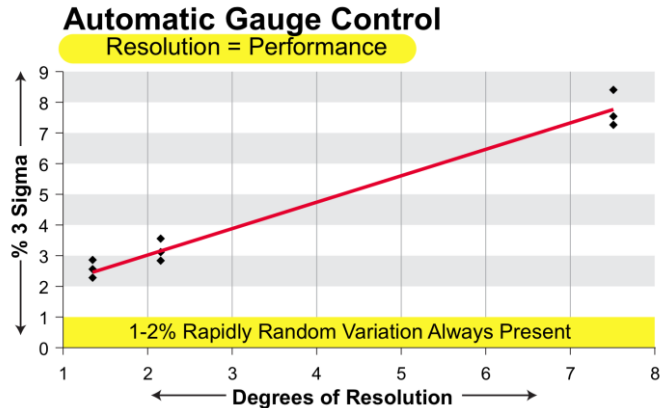
Fully integrated autoprofile control algorithms can also be calculated. A 360-degree already mapped thickness profile is inputted into the Addex system to determine the best control action and seamlessly connects to the air rings' cooling adjustors.

For owners of earlier vintages of Addex Auto Profile systems, these can be fully upgraded with some or all of the above functionalities with the addition of AutoProfiler Convertor Module. This places all previous designs on the latest Ethernet subsystem and eliminates all the wiring except Ethernet and power. Users can implement all of Addex's latest technology enhancements and still utilize most all of their existing mechanical hardware.

Test results on the same extrusion line comparing Addex's AGC systems with a close competitor show how Addex's greater number of control zones result in a significantly reduced film thickness variation.

**REAL LIFE TEST RESULTS PERFORMED ON A 300mm/12" diameter die**

| <b>GAUGE CONTROL SYSTEM</b>   | <b>NUMBER OF CONTROL ZONES</b> | <b>DEGREES OF RESOLUTION<br/>(360° ÷ # of control zones)</b> | <b>RESULTING THICKNESS VARIATION<br/>3Σ</b> | <b>RESULTING THICKNESS VARIATION<br/>2Σ</b> |
|---|--------------------------------|--|---|---|
|  <b>ADDEX IBC based</b>      | <b>275</b>                     | <b>1.3</b>   | <b>± 2.3-2.8%</b>                           | <b>± 1.5-2.1%</b>                           |
|  <b>ADDEX AIR RING based</b> | <b>168</b>                     | <b>2.2</b>   | <b>± 2.8-3.5%</b>                           | <b>± 2.3-2.8%</b>                           |
| <b>Closest Competitor</b> <b>AIR RING based</b>   | <b>48</b>                      | <b>7.5</b>   | <b>± 7.3-8.4%</b>                           | <b>± 4.9-6.6%</b>                           |



At the K show, Addex will exhibit both its air ring-based (EGC) system as well as its IBC-based (IGC) system with described enhancements.

Also on display will be Addex's Digital Internal Bubble Cooling (DIBC) system which delivers the fastest reaction time in the industry to ensure precise bubble control, helping processors to speed product changeovers and significantly reduce scrap. Another key highlight will be Addex's well-established Manual Gauge Control (MGC), based on the company's Dual Lip Air Ring, which permits selective adjustment to correct film gauge deviation caused by extruder, die, or ambient anomalies by as much as 25%.

#### **About Addex Inc.**

Addex Inc., based in Stoughton, Mass., USA, was founded in July 1989 as a supplier of high-performance components for blown film production. Today, Addex has supplied some of the most sophisticated technologies capable of producing very flat film, without camber, with the lowest possible gauge variation and the highest possible output. The company is a leading manufacturer of many patented blown film components and systems including manual and automated gauge controls, dies, air rings, internal bubble cooling systems, oscillating haul-

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