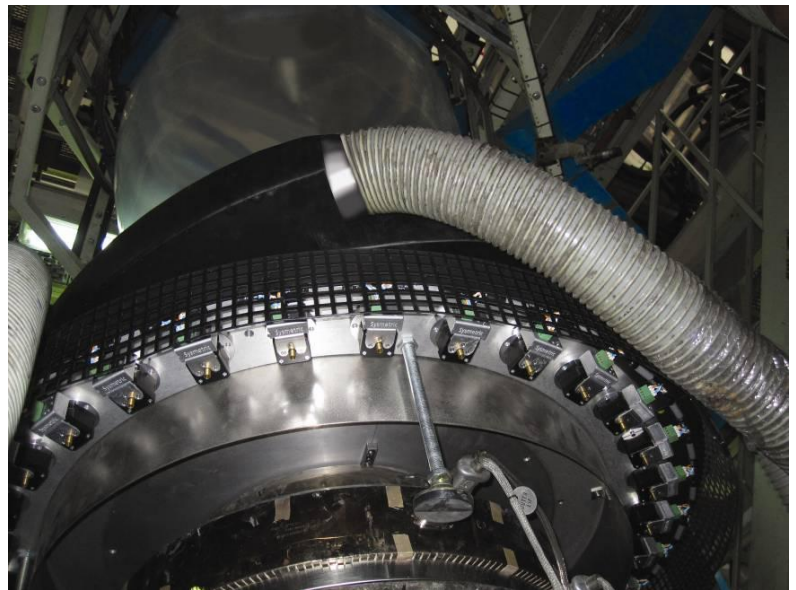


Profile Control by Air Regulation

Optimizing thickness uniformity in blown film production

Sysmetric Air Flow Regulation Profile Control in Cooling Rings

The Sysmetric Air Flow Regulation Profile Control uses linear step motor actuators for positioning valves that regulate the air flow in profile control systems for Blown Film Production Lines. These actuators have a dedicated Sysmetric designed motor driver electronic circuit that positions actuators within the air ring system increasing or decreasing the air flow in each segment of the bubble both quickly and precisely. Used in combination with our high technology control software, accurate and consistent adjustment is achieved irrespective of product dimensions and consistent results are guaranteed. These unique units, connected in series via a twin bus connector, greatly simplify the installation and operation of the profile control rings.



Motor Features:

- Step motor actuators with 0.003mm linear resolution
- Operation and control over RS485 communication
- Installation in series minimizes and eases wiring (*Twin Bus* connector)
- Plug connector simplifies motor replacement
- Single 4 wire cable for power and communication
- Dedicated Air driver electronic circuit
- Status indicator LED
- Galvanic isolation
- Up to 255 motors on one ring
- Temperature measurement
- Low power standby mode prevents heating the air ring

System Features:

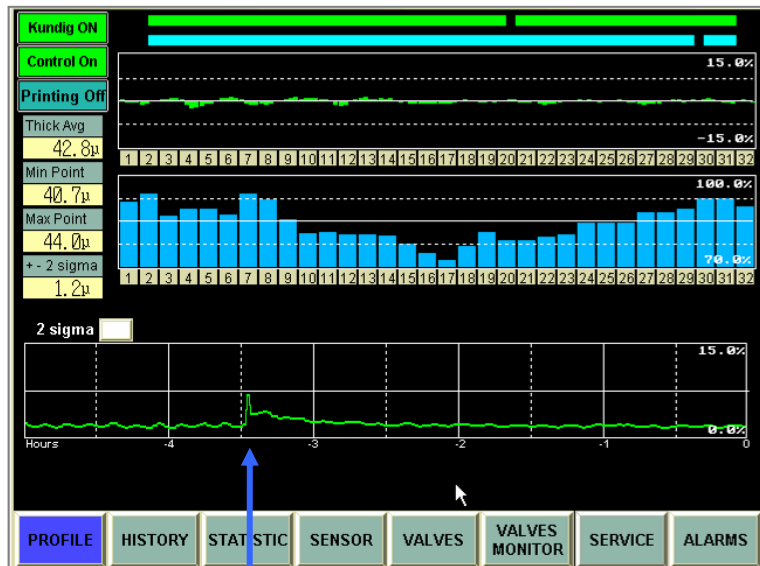
- Reduces 2 sigma value by at least half
- Improves downstream quality production
- Removes eccentricity improving all post-processing:
- Converting, printing, slitting, lamination, automatic packaging systems etc.



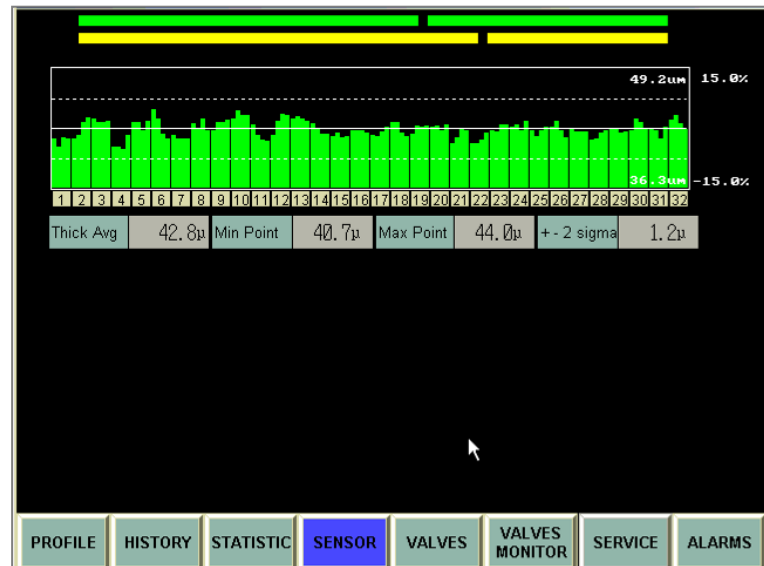
The Profile Control Screens

The **Profile Control System** allows programming and continuous monitoring of the bubble profile. The dedicated software enables easy set up of the cooling ring air motors including motor ID programming and homing procedure.

The following screens show the profile of the lay-flat as the system regulates the airing levels to improve the uniformity of the thickness and adjust to both product changes and deviations in bubble width:



Product change



The screens show the high degree of accuracy achieved along with fast stabilization times after product changes.

