

## CONTROL SYSTEM UPGRADE UMA MACHINES

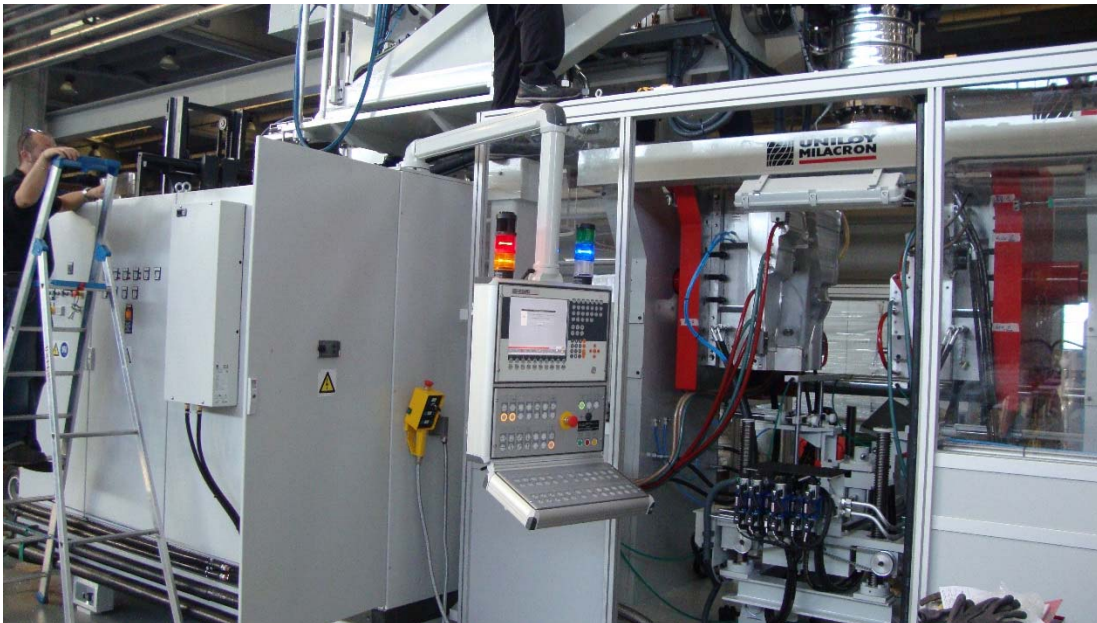
### *Product Description:*

Replacement of present control system with the new B&R controls platform

### Before:



### After:



### **Advantages:**

- Readily available components
- Faster scan rates result in improved process repeatability and subsequent parts quality
- Improved remote troubleshooting support through Teleservice feature

### **Features:**

#### *Operator control panel:*

- The new component B&R will be installed into the main electrical cabinet to the place of the actual electronic cards.
- The operator control panel is located on a swivel arm at the clamp area with an additional keyboard with signal light and pushbuttons to operate on the machine.

### **Hardware structure:**

- Programmable B&R Logic Controller located in the main electric cabinet;
- Operator interface including a B&R Industrial PC with colour monitor (touch screen type) and a membrane keyboard with pushbuttons for manual functions;
- Digital communication through Ethernet Powerlink Fieldbus and remote cards;
- Modem port to connect the control system to the telephone line for teleservice;
- USB port to load/download mould recipes.
- 

### **Main functions:**

- Selective access protection: different access levels with independent log-in and password set by the user with higher access level;
- Parison thickness profile: programmable on 100 points; adjustable base weight; different interpolation functions between master points; visualisation of the actual profile performed; “*purge*” function; simplified tools for profile editing (copy, shift, etc.);
- Temperature control: thermoregulation\_ of the hydraulic oil and of all zones of the extruder and of the head; visualization of the set temperatures, the actual temperatures and the electric power percentage; independent upper/lower tolerance range for each zone, with safety interlock to prevent “*cold start*”; working temperature and stand-by temperature settings; weekly programme for automatic pre-heating; auto-tuning function system;
- Mould opening/closing: five (5) pathmarkers available to modify opening/closing speed or activate mould functions (ejectors mould slots, etc);
- Machine accessories: soft keys to easily enable disable machine accessories or additional functions (such as: mould ejectors, deflashing, etc.);
- Mould profile pathmarker: 16 closing and opening profile pathmarkers to activate mould functions (ejectors, mould slots, etc);
- Soft Manual Test: soft keys to easily run machine test;
- Mould library: all settings can be recorded and saved as a “*mould recipe*” either in the system hard disc or downloaded on a USB memory for external back-up; pages for “*production notes*” are available to record further information (die diameter, head position, etc.) as part of the mould receipt;

