1. Introduction

The Plunger Process Control – PPC has become the standard tool to optimize the parison forming in the NNPB and WWPB process. The system displays, and stores detailed information about the condition of the forming process and the machine operation. Whilst all this information is available in the PPC Master Display, requests to display selected information that can be seen around the machine has led to the development of a new large LED Display Unit.
2. Features

The PPC LED display is continuously displaying the most critical process and status information gathered by the PPC system. This is visible in the entire area around the IS machine and can be mounted at a very prominent position. Operators will immediately recognize if the process is running stable or if attention is required.

Once the process operates outside configured level, an alarm message appears on the display, and simultaneously, the font size doubles, to maximize impact for the operator.

Table 1 shows a detailed list of information that is displayed on the LED unit

The LED display will also support the features of the soon coming Blow and Blow software of the PPC. This will include the tracking of the plunger motion in the B&B process as well as a gob weight assistant.

3. Operation Principle

The display is build as a grid of 192x16 red 5mm LED’s housed in a solid aluminum housing. The LED display can visualize both graphic and text, and can be read up to 25m away. When alarms are displayed, the font doubles in size to alert the machine operator. The unit has his own power supply and is of course designed to operate in the harsh environment of the IS Machine. (see Technical Data). The display is connected through a serial port with the PPC Master and can be placed anywhere around the IS Machine for maximum visual impact.
4. Compatibility

The LED Display is compatible with all existing PPC Systems and can be retrofitted. A PPC software upgrade to a version 1.60 or higher is required. For detailed specification and cable length see drawing 59-27341-01. The maximum length of the cable from the Master to the LED Display is 100m.

5. Technical Data

Voltage: 90-264 VAC
Frequency: 47-63Hz
Power Consumption: 30W
Ambient Temperature: max. 55°C
Protection class: IP65
Humidity: 95% not condensing