ARG/MAX

CONTROL SYSTEM FOR HEAT-SETTING LINE
ARG/MAX, THE 4TH GENERATION CONTROL SYSTEM FOR TVP LINES

ARG/MAX is the 4th generation CONTROL SYSTEM for SUPERBA heat-setting lines: (TVP, TVP/2, TVP/2S range)

ARG/MAX is driven through a powerful PLC system controlling the whole line and all its accessories.

Basic functions are available for an intuitive and easy operation of the line. Additionally, it provides a high level of advanced functions for the maintenance crew, the quality control service, and the production supervisor.

All these features can be accessed from the centralized control desk equipped with a large 12-inch touch-screen color display.

Icons & graphics based menus ensure an easy & immediate comprehension, independent from operator's language.

As an option, a second touch-screen can be installed at the outlet end to maximize the operator's efficiency and safety by providing an overview of the complete line from entrance or outlet.

All these functions have been designed to provide the very best technology available today in terms of efficiency, full quality control, quick & easy diagnosis of downtime sources and much more...

All the electrical operation in the cabinets can be safely achieved as all elements are programmable directly from the command panel.

ARG/MAX FUNCTIONS:

Main screen:
This page gives a detailed and complete sight of the line. All the parameters and all the defects from the current process are posted as well as each line component status.

Any error is stored in the reports.

Process data and history:
Textile and machine outputs: comparison between estimated and carried out figures. The presentation of the number of alarms for the ongoing shift under the graphic form is a powerful information to isolate the main sources for downtime (i.e. yarn breaks on creel side or on winder side…) and thus, to bring adequate corrections to maximize the line efficiency. It gives access to alarm report, modification report (with identification of the operator), production report and central temperature history for the current shift.

Batch preparation (“lot” concept):
Definition of the batch number, type of yarn, comments and estimated output as well as the number of doffing to be carried out for this batch.

This function permits a complete follow-up of a lot, independent from shift or dates of production.

It should be noted that all data can be transferred from a PLANT-TRACK Supervision software and thus management from the batches is highly simplified.

Maintenance manager:

This functionality reports the operating time of the line wearing parts: belts, counter belts, small bands, rollers, lamellas, plates.

A report provides a detailed history of the lifetime of these parts. (this feature needs the connection to PLANT-TRACK, high level supervision software).

Pre-alarms and alarms indicate when it is time for parts to be changed to minimize downtime and plan maintenance actions.

Recipe page:

Unlimited numbers of process recipes (textile programs) are stored in the system for yarn ever equalled treatment.
ARG/MAX HARDWARE:

Furthermore, the ARG/MAX is NOT ONLY a control system. It also includes a complete electrical re-wiring of the existing circuits which will replace ALL electric cabinets spread all along the line of the heatsetting machine (TVP, HEP, TCC, STV, RTV...) with only TWO electrical cabinets, one of which is at the main inlet, and the other secondary cabinet at the outlet end.

All the inverters are located inside the cabinets, including inverters for pre-feeding, belt & laying and for HEP, TCCs & CBS. They are all driven through PROFIBUS for a high level of diagnosis. All the sensors of the line are connected to the PLC input for quick & easy trouble-shooting with detailed reporting. As an extra bonus, there are no longer hundreds of meters of cable in the cable-tray.

Trends:
All the process values that are regulated are stored in a graphic way in the system; this enables the user to display curves of all temperatures and pressures to ensure a proper follow-up of the process characteristics.

Trouble-shooting, diagnosis & system setup:
The system is equipped with high level trouble-shooting tools such as Inverter control & remote programming, PLC – input & output status page, on-line doc…

Maintenance page:
Sensors testing and adjustments (temperature probes, pressure transmitter)

MHST countdown:
This page shows with big digits the countdown to the maximum time of stay (MHST: maximum heat-set time), thus enabling the operator to keep an eye over the remaining time he has to finish his re-threading.

Operator’s messages:
Validation of the causes of stops; this functionality permits to define the most important external sources of downtime to bring corrections and thus maximize efficiency.

NOTE: This document does not show all the pages & functions of the system. The pages may differ in the actual version, as SUPERBA is constantly improving their software.
We imagine, build and integrate innovative textile systems for flooring qualities, home linen, fashion fabrics and technical textiles. Sharing inspiration and expertise with our customers worldwide, we shape the textile industry of the future. Creating success for them all, from yarn to finished product.