SECTIONAL CONTROLS FOR PAPER MACHINE DRIVES - SUPERVISOR / Technical Deepening

The main features are:

- **PLC and Drives programming** via machine supervisor:
- **History Trends** up to 45 days - longer times upon demand -. The trend are related to the motors and divided on three different sampling time: 1sec; 5sec; 15sec. Other variables have been implemented within the motor trends, like Drive enabling or Alarm state: these allow to get the related input and the effects. Without added operations the motor trend shows all the motor variables - no research need -; it is possible to get three motors per shot and selectable by a catalogue.
- **Paper brakes from Photocell**: Overall variable motors storage Three minutes before and after the paper brake. This is got by triggering paper and available on file with photocell name, date and time of the paper brake.
- **Paper brakes from Drive**: Overall variable motors storage Three minutes before and after the paper brake. This is got by triggering paper and available on file with photocell name, date and time of the paper brake.
- **POPUP - motor management**: All the set points and variables of the motor can be settled by the supervisor - e.g.: diameter parameters, reduction ratio, cell regulation, load adjustment, and so on -
- **POPUP - motor alignment**: It allows an accurate as much as quicker drive start up stint.
- **POPUP - motor maintenance**: It shows all the Drive variables and settings.
- **Advanced diagnostic**: To an easy operator management an Editing Alarm Helper is available including the main electrical activities description - it allows a quick and easy restart in case of fault by a non skilled operator .
- **Automatic Diagram Opening**: In case of fault or a specific alarm and automatic diagram opening provides all the related diagram to the operator.

The supervisor is totally open to Windows as much as any existing HW available. This gives a full compatibility to everybody else. The OPC Server and DDE Server function is standard within the SCALINK package: it allows a data exchange with other supervisors. Moreover an integration between our application and the existing one is possible without any architecture modification.

This new "Drive Machine Control System" has a double advantage: all in one integration within a single supervisor, and direct production management by the same supervisor unit.

Main Synoptic Page who displays all the motors - if lesser than 16 units -. 
All the drive settings are made through the Popup - motor maintenance and motor alignment - getting a real-time direct interaction. This makes easier and friendly any adjustment or setting operation.

The motor trends function displays three motors by a mouse click only. Each of them encloses all the main data registered. This trend keeps back 45 days before the event showing to the operator all the alarms or drive enables got by the PLC and sent to each drive.

Up to 8 selectable motor variables in one page or track to get a parallel between the data, each single value is available for massive analysis.

However, it is possible to get external tracks too. These are stored by Scalink as well.
The "Alarm Help" allows a quick and easy restart in case of fault by a non skilled operator. Each single alarm can be edited using a catalogue with any added note related to the actions or countermeasure to the alarm itself.

A related electrical diagram is available by clicking the Alarm. Due that it is possible to point out the specific proximity, contact, encoder or anything else occurred. It is also possible to link a movie to the alarm helping the operator on how and what to do. The fault research is faster and easier.

Quick and direct visualisation of each drive within the network and response delay: From the control checkpoints it is possible to see which drive is getting troubles on network computing.

By the automatic electric diagram opening linked to each alarm the operator job is extremely easy at a glance and much as faster in case of electrical maintenance.