

GRAPHIC APPLICATION

- Configuration of the flexible module according to the project requirements.
- Modules arranged along the train.



DESCRIPTION

Together with the COSMOS system HMI equipment, a **graphic application** is provided which performs the human machine interface function, permitting the user to interact with the control/supervision information displayed on screen.

The main functions of this application are as follows:

- **To inform the user of the corresponding train status at each moment.** To this end, it is provided with various programmed screens to provide the user with **clear and precise information** regarding the train status. Each screen has a different purpose and function. The separation of function on screens permits the user to receive more precise and clear information.
- **Regarding the transmission of user commands to the train,** it is possible to receive specific orders and transmit them to the bus so that they can be considered by the **control unit**. As a result, redundancy is achieved in the inputs of said commands. This results in higher train reliability as even in the event of a button failure, the HMI allows the user to send the command to the train.

This application also includes functions such as fault control, alarms control, communications control and information recording.

As a result, the graphic application obtains useful information for different user profiles:

Driver: displaying driving parameters and also permitting commands to be sent to control equipment connected to the bus.

Builder: the application receives a great deal of information regarding the equipment connected to the bus which facilitates the tasks performed by the train tuning personnel.

Maintainer: there are specific screens for maintenance such as equipment, alarms, log, tests, downloads and versions allowing the maintenance user to centralise a large number of activities on this screen.

TRAIN TIC includes a standard graphical application on each item of equipment or in each project supplied, which is defined in the number of screens and the content of these.

This standard graphical application can become a personalised graphical application according to the specific requirements of a projects and sections such as the number of screens, contents, languages, etc. can be modified.

INTERFACE EXAMPLES

Driving screens:



Maintenance screens:

