



the spirit of improving

STEEL

The steel metal working is a worldwide production. For the Italian OEM machine builders is an export oriented market basically. To get those points Sael develops tough and rough systems, reliable and easy to drive, meeting technical needs with a friendly user management - for any operator skills -. From the very beginning up the present days many automations were done, like Levelling and Cutting sheets; Profiles and Electro welded tube mills A special mention is the Wire Division: a division inside.



CUT AND PROFILE PIPING LINES

Due to many applications made SAEL is an expertise company on piping lines. Actually there are a lot of specific needs within this umbrella as much as different electronic solutions to fulfil the mechanics.

Using its own products and/or the main brands known on the market SAEL approaches the applications offering its DCS (Digital Cutting System) with a PLC. These devices fit to control the speed and tensioning Reels, Digital de-calibration multimotors Profile, flying shearers and so on. By the same structure all the auxiliary devices are controlled as well: AC actuators, proximity switches, photocells and others. Once again the core of the structure is the SAEL SUPERVISOR system - done with standard MMI/scada for each line.

The common part of the supervisors are the Synoptic line - mostly coming from the customer drawings with all the proximities, actuators and other devices required. A quick functional analysis is possible through the information acquired.

Each control encloses all the machine parameters, the intuitive alarm zone display, the historical alarms, the production reports - highlighting the operator, the cycle timing, the production achieved, the alarms as much as the countermeasure helpers for electro-mechanic defects eventually encountered.



CUTTING AND PACKING LINES

The structure of these machines has a power section - AC / DC motors with SAEL Drive "ONE Platform" or other major brands.

The automation and regulation part is made by standard PLC with programmable safety PLC - according to the safety regulations.

CUTTING LINE REGULATION:

- Reels with speed control - handle - by diameter and pull indirect calculation;
- Shearer with knife diameter auto tuning;
- Bridles with % load division;
- Speed reduction auto control based on settled pulls and consumptions;



AUTOMATIC DISCHARGE REGULATION:

- Reels with speed control - handle - by diameter and pull indirect calculation;
- Coils loading and unloading sequences management;
- Separator-unload positioner;
- Coil take over positioning;
- Magnetic stacker positioning;
- Multi-stations exhauster positioning;

THE CONTROL:

- Many PC supervisor stations with standard MMI-SCADA systems;
- Limit switches, drives and devices variable synoptic;
- Full programmable job menu
- Jobs done recalls, modifications and restarting;
- Statistics and historical analysis of the whole job cycle - Working set-points, stored trends, detected pulls, raw materials acknowledgment, and so on;
- Alarms and advances diagnostic systems with links to the electrical diagrams - quick help -;
- IWSA internet remote assistance - for our expert personnel only.



SHEET LINES

CUTTING LINE REGULATION:

- Reels with speed control - handle - by diameter and pull indirect calculation;
- Speed adaptor;
- Rotary sheerer with Digital SAEL control system;
- Sized cutting speed auto tuning.

STACKER REGULATION:

- Sheets unloading sequential zones management;
- Unloading flag positioning and management;
- Multi stations exhauster positioning and management;



LAMINATION PROCESS

REGULATION:

- Hydraulic AGC with brushless drives;
- Thickness regulators;
- Predictive reels pulling regulation by load cell or indirect calculation;
- Speed auto limiter by consumption;



WIRE

Over Twenty years of experience with more than thousand jobs got SAEL awarded as a benchmark for metallic wire machines. Copper and Steel Multiwire drawing and Rod Mill machines, Automatic Spoolers Automatic Respooling Lines, Boucher's machines, Wire Laying machines ,Complete Extrusion Lines Enamelling machinery. These are an example of the main application developed along the way.

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DCS (SUPERVISORS)

The Supervisor in combination with the Engineering Station is a powerful control device. It allows a quick and easy management of each single working process by a direct operator engagement.

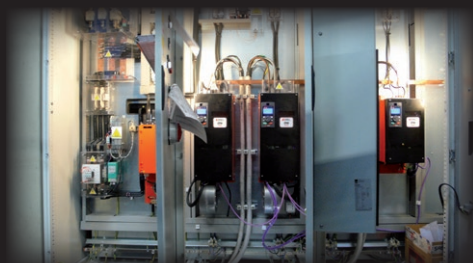
The architecture is based on WINDOWS with driving programs on SCALINK and MMI-SCADA platforms: fully available to whom has the programming key.

The complete package is completed by the remote assistance IWSA - Internet World Sael Assistance - installed on every drive and 6 month free of charge after the take in place.





we improve your life



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