

Situation

The customer: a medium size company with a highly diversified production of home + industrial air conditioning systems.

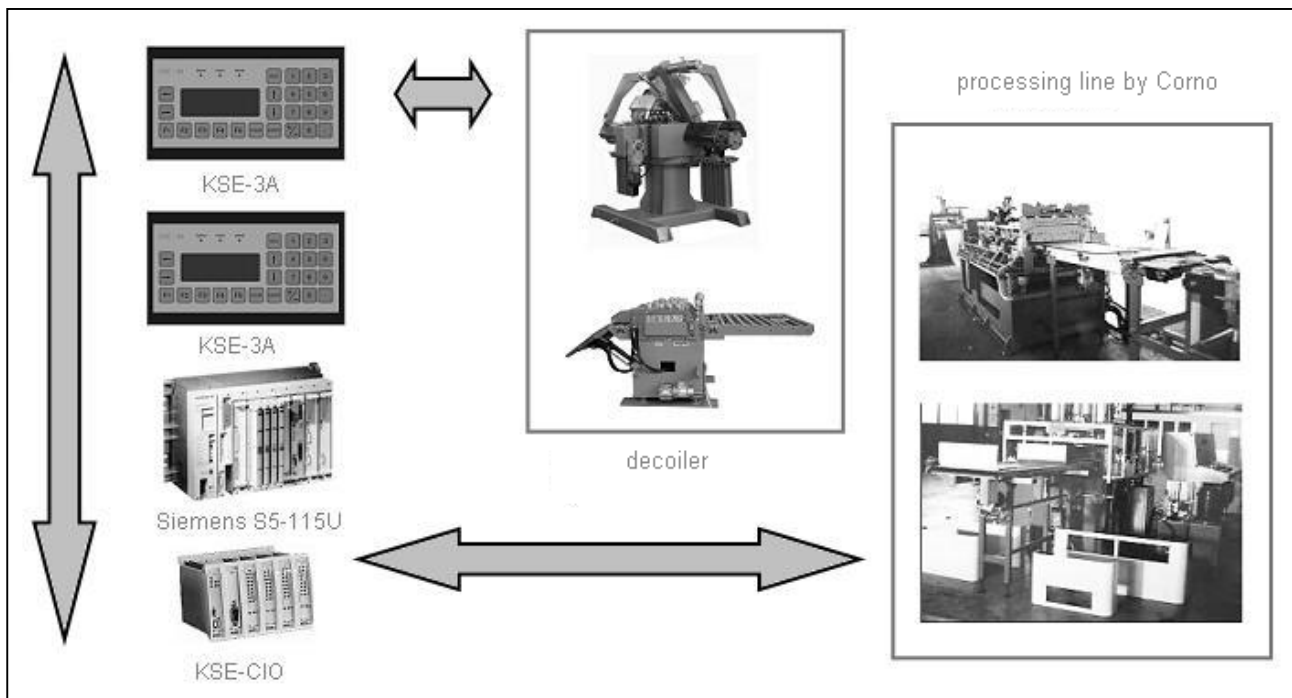
The problem: automation, commissioning and installation of a processing line manufactured by Corno Marco spa (www.cornomarcoitalia.com).

Details: the processing line was designed and manufactured by Corno complete of all mechanical and electric components, while automation was provided by KSE. KSE joined to the project from its inception. The assembly line is spread over a large area and includes the following components:

1. 1 decoiler (by third party manufacturer)
2. 1 straightening unit by (by third party manufacturer)
3. 1 punching station with 8 punchers + cutter
4. 1 conveyor belt
5. 1 magnetic turner
6. 2 pliers + press
7. 1 conveyor belt
8. 1 folding press
9. 1 pre-drilling unit
10. 1 drilling machine

The assembly is designed to create panels from metal coil. The coil is cut to length and punched. The sides of the panel are folded and drilled for wall or ceil mounting.

Solution



The following controls have been used in the processing line:

n. 2 KSE-3A 3-axes control

N.1 KSE-CIO IO-board
N.1 Siemens Simatic S5-115U PLC

Controls were programmed in two steps: A draft version was tested during the assembling of the line at Corno, while the tune up was completed at the customer site. The final step was accomplished in 3 weeks.

Outcome

The line entered production without delay. In the following year the Siemens S5 PLC was replaced with an S7 model. The replacement occurred without suspension of normal activity.

The customer found the outcome satisfactory, and in a short time required the automation of the following factory lines:

- Coating
- Braze-welding
- Chiller units testing