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automatismes industriels

BUCAREST - ROMANIA

SELMEC  
TECNOLOGIE AVANZATE

Last 10 years

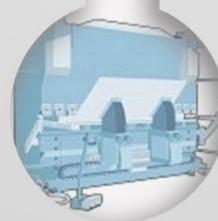
30 productions lines

200 special machines

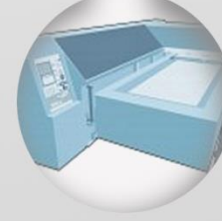
250 retrofit projects



PRODUCTION AND  
ASSEMBLY LINES



PRODUCTION BENCHES



TEST BENCHES



9

ELECTRICAL  
DESIGNER

MECHANICAL  
DESIGNER

8

19

EMPLOYEE

SOFTWARE  
DEVELOPER

20

2

RESEARCHER  
DEVELOPER

special machines assembly

measuring machines

machines for metal products

vision machines

special processes machines  
(induction heating machine,  
ultrasonic scan machine, etc...)

test benches

supervisory systems and process control



Solutions

- 1 Certified LabVIEW Architect
- 2 Certified LabVIEW Developer
- 4 Certified LabVIEW Associate Developer

From products and systems to integration, consulting, and training services, NI Alliance Partners are uniquely equipped and skilled to help solve some of the toughest engineering challenges. An Alliance Partner specialty distinguishes a company as an expert with a specific NI product platform.

National Instruments

National Instruments provides innovative solutions for the design, prototyping and release of test systems, control and embedded design applications.



SOLUTIONS

Protecno

Protecno is part of the NI Alliance Partner Network, synonymous with reliability and quality.





# Ulisse Supervisor



Modular and customizable supervisor for production lines

The dashboard displays production data for 'Final Assembly' (123456-0001) at 'A.C.M.E.'. It includes a bar chart for weekly production (LUN to DOM), a line graph for production rate, and a circular gauge showing a current rate of 118.0. Below these are six station status cards (Station 2 to Station 6) with RTY values and lists of parts. A 'NOT CONFORM' indicator is visible at the bottom right.

A detailed production line flow diagram showing stations: Milling A, Milling B, Milling C, Milling D, Lather A, and Lather B. Each station card displays production status (Automatic/Manual), good parts count, and OEE metrics. A red alert banner at the top indicates 'Emergency button main cabinet pressed'. A sidebar on the right shows 'Shift OEE' performance metrics: Overall (0%), Availability (3.04%), Performance (0%), and Quality (0%).

The 'Hysteresis' configuration screen for 'selmec' (781504-0007) includes a table for hysteresis points, a '2 point Hysteresis' section with pressure and force settings, and a 'Graph' showing a pressure vs. force curve. Buttons for 'Log in', 'Noua', 'Incarcare', 'Salvare', 'Stergere', and 'Iesire' are at the bottom.

The 'Screws' configuration screen for 'selmec' (781504-0007) features a table with columns: Radius, Angle, Z, Min Height, Max Height, Pick bolt?, and Screwing prg. It also includes sections for 'Configuration' (with a checklist of assembly steps), 'Orientation' (with a 3D model of a compressor housing), and 'Sensors settings'. Buttons for 'Log in', 'Noua', 'Incarcare', 'Salvare', 'Stergere', and 'Iesire' are at the bottom.



# ULTRASONIC SCAN MACHINE



Check welding using non-destructive  
test based on ultrasound

**C AXIS**  
CURRENT POSITION: 126,00 \*  
STEP: 0,00 \*  
HOME: ABSOLUTE 0,00 \*  
ROTATE CCW: 0,00 \*  
ROTATE CW: 0,00 \*  
HOME: ABSOLUTE 0,00 \*  
GO ABSOLUTE: 100 %  
STOP: [STOP]READY: [ON]  
ENABLE: [ON]  
IN POSITION: [ON]  
HOME: [ON]  
ALARM: [OFF]PUMP: [ON] [OFF]  
GRIPPER: [CLAMP] [UNCLAMP]ENGRAVING: [UP] [DOWN] [ON] [OFF]GET PRESETS FROM RECIPE  
RESTORE CYCLE

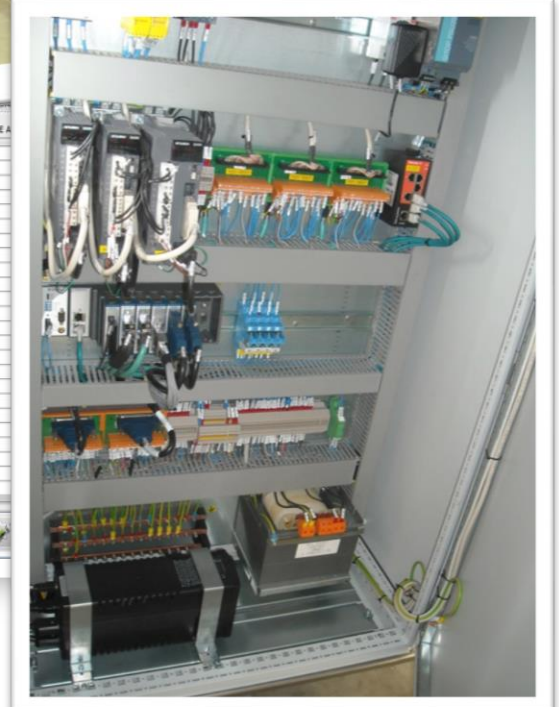


**PIECE CHECK**  
CHECK Z AXIS IN RESTORE POSITION  
REQUIRE CALIBRATION  
PART DATA  
PIECE NUMBER: 159  
DATE: 15/07/2014 19:18  
FILE NAME: 20140715\_191830\_0159\_GOO  
D.csv  
TYPE: 772463-0005  
STATUS  
RECIPE NAME: 772463-0005  
SCAN STEP: 25  
GAIN: 42,00 dB  
INITIAL POSITION: 7,90 mm  
WINDOW WIDTH: 27,00 \*  
FINAL POSITION: 5,20 mm  
RESULT  
TOTAL DEFECTIVE AREA: 3,66 mm<sup>2</sup>  
MAX ELEM. DEFECT: 1,14 mm<sup>2</sup>  
DEFECT IN SLIDING WINDOW: 0,80 mm<sup>2</sup>  
GOOD  
Y Axis: -8,00 to 8,00  
X Axis: -8,00 to 8,00

DIGITAL INPUT  
Aux\_ON  
Barrier  
V\_Axis\_0\_position  
A\_Axis\_0\_position  
Z\_Axis\_0\_position  
Air\_ON  
Reset  
Manual Automatic  
Level\_ok  
Level\_ok  
Engraver\_high\_position  
Engraver\_low\_position  
Clamp\_open  
Clamp\_closed  
Spine\_14  
Spine\_15  
Spine\_16  
Spine\_17  
Spine\_18  
Spine\_19  
Spine\_20  
Spine\_21  
Spine\_22  
Spine\_23  
Spine\_24  
A\_Axis\_alarm  
A\_Axis\_ready  
V\_Axis\_alarm  
V\_Axis\_ready  
Z\_Axis\_alarm  
Z\_Axis\_ready  
Pump\_ok

DIGITAL OUTPUT  
Gripper close  
Gripper open  
Move engraver high  
Move engraver low  
Spine\_4  
Spine\_5  
Start\_engraving  
Spine\_7  
A\_Axis\_enable\_SON  
V\_Axis\_enable\_SON  
Z\_Axis\_enable\_SON  
Axis\_reset  
Spine\_12  
Spine\_13  
Spine\_14  
Spine\_15  
Spine\_16  
Spine\_17  
Spine\_18  
Spine\_19  
Spine\_20  
Spine\_21  
Start\_pumping  
Emergency  
Beacon yellow  
Beacon red  
Beacon green  
Spine\_27  
Spine\_28  
Axis in hold  
Spine\_30  
Spine\_31

ECHOGRAPH SERIAL NUMBER: 21492  
ECHOGRAPH DEVICE VERSION: LV\_interface90.dll V1.0.2.5  
ECHOGRAPH DLL VERSION: Echograph.dll V 1.2.13.5  
ECHOGRAPH CONNECTED

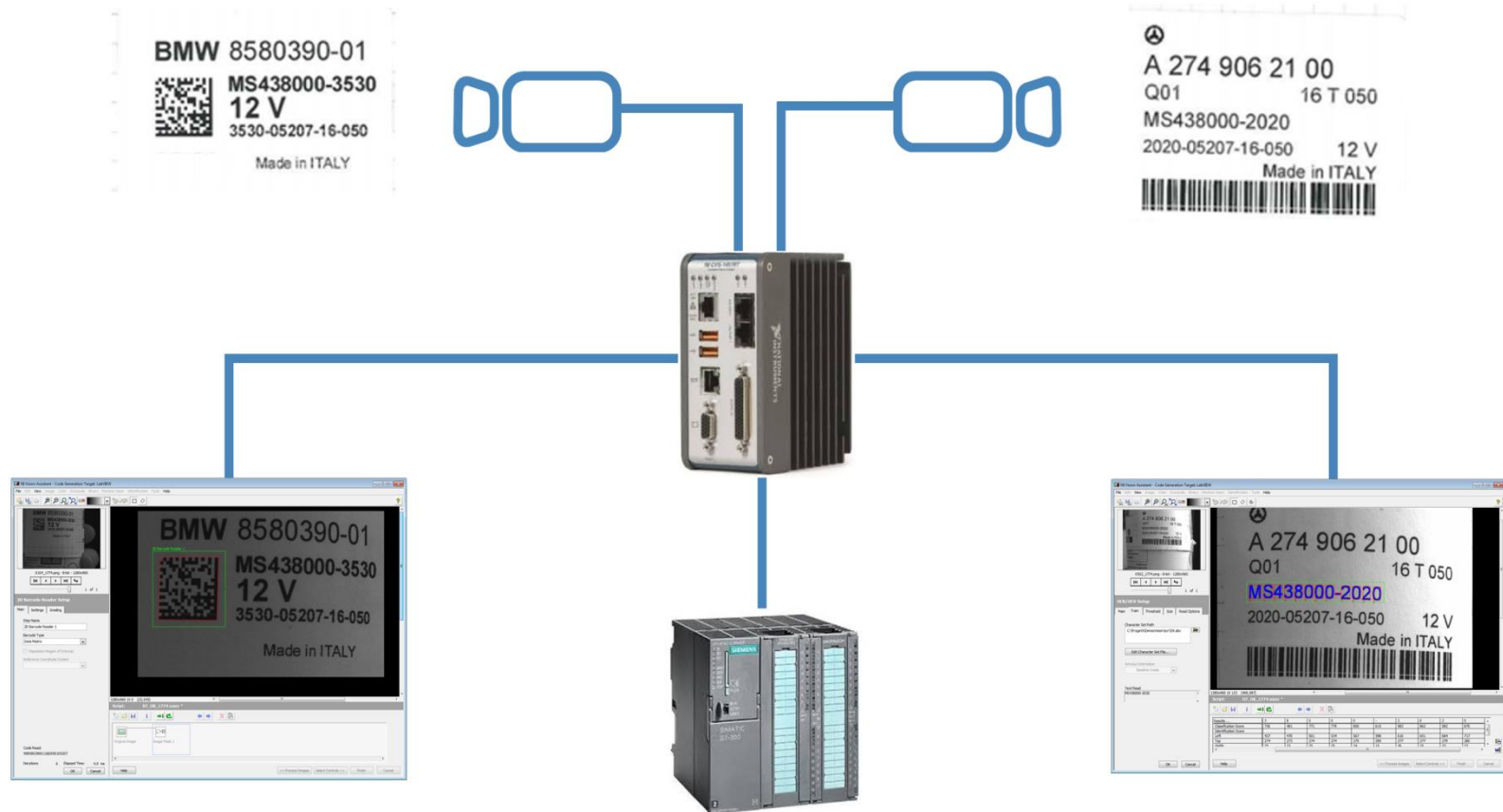




# Tag label check



Vision system for  
Barcode, QRCode and label reading

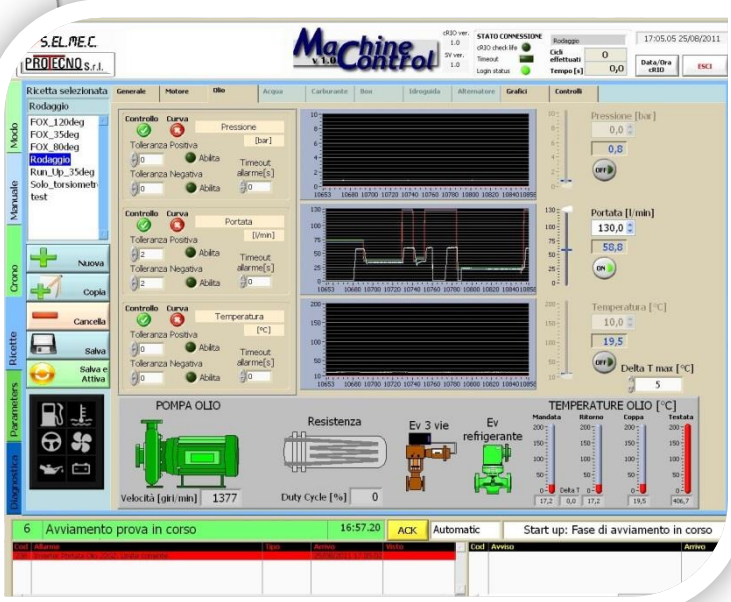
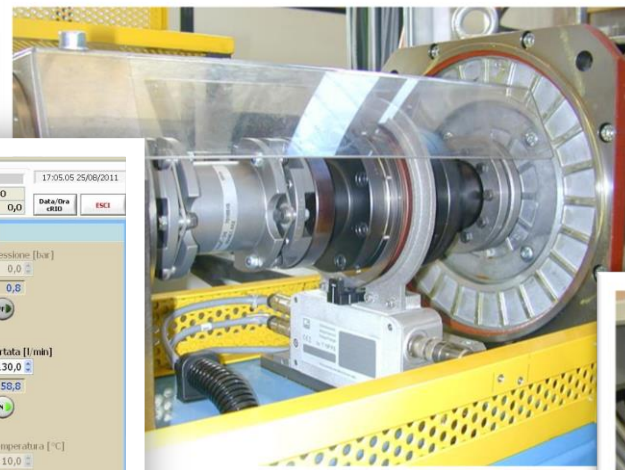
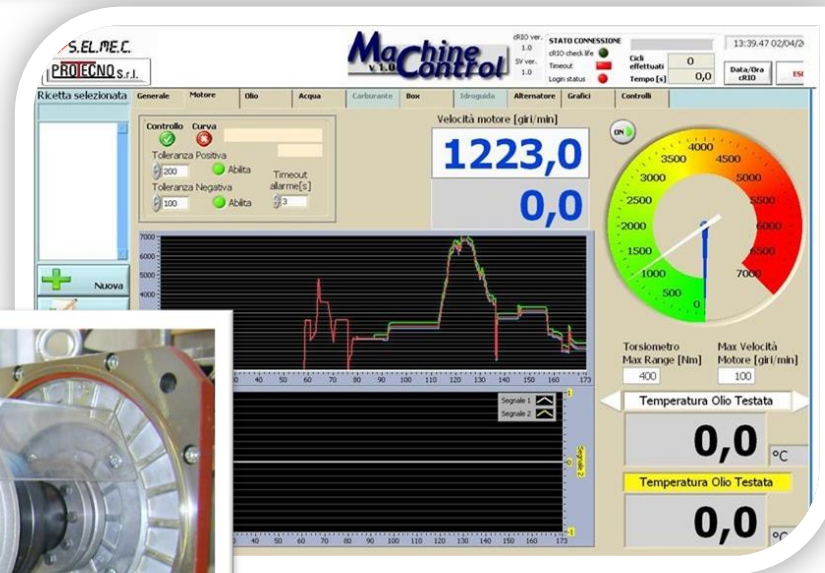




# Efficiency Measuring Bench



## Transmission belts efficiency measuring system



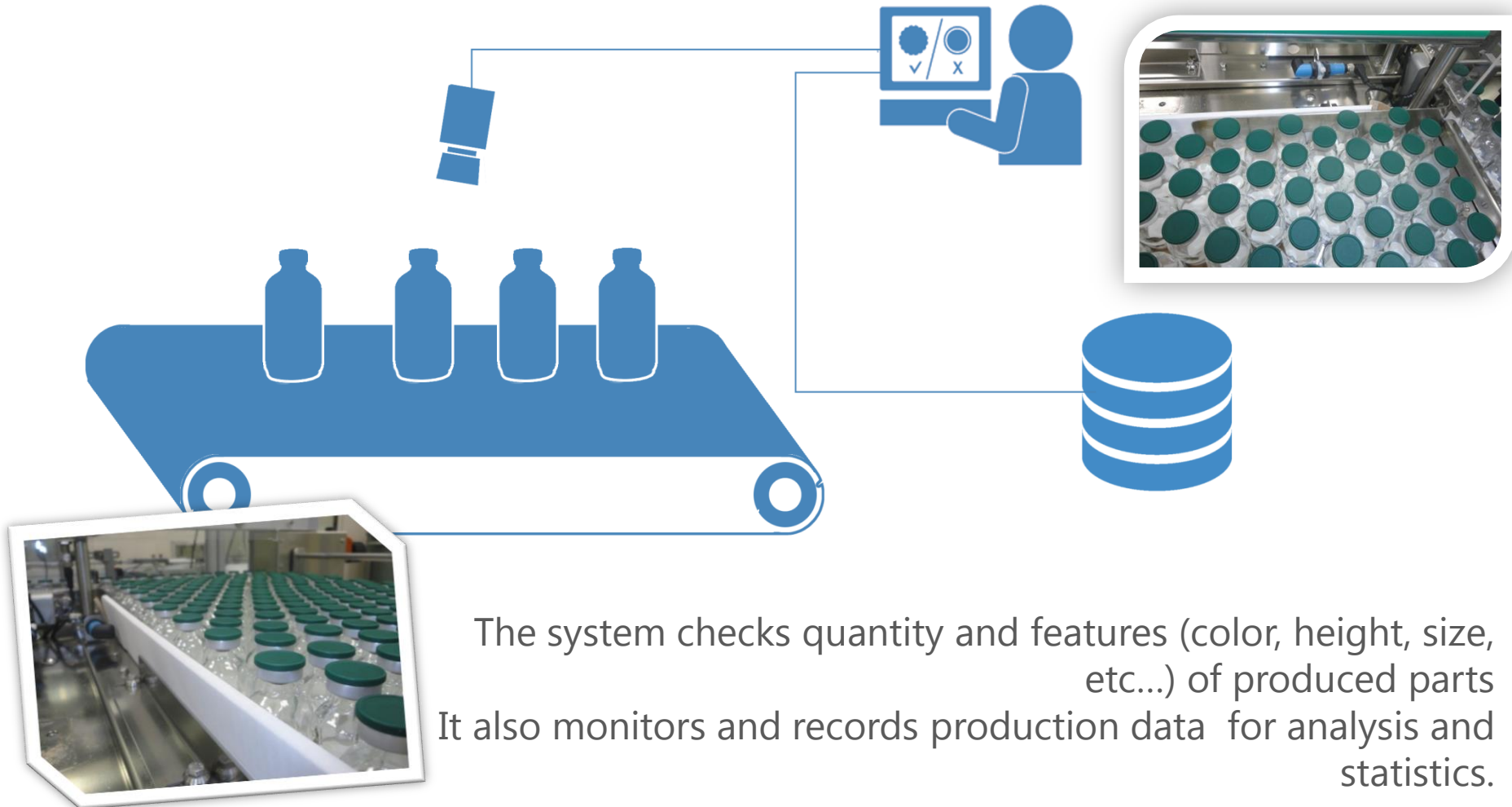




# Pharmaceutical containers check



Vision system for  
measuring and analyzing products



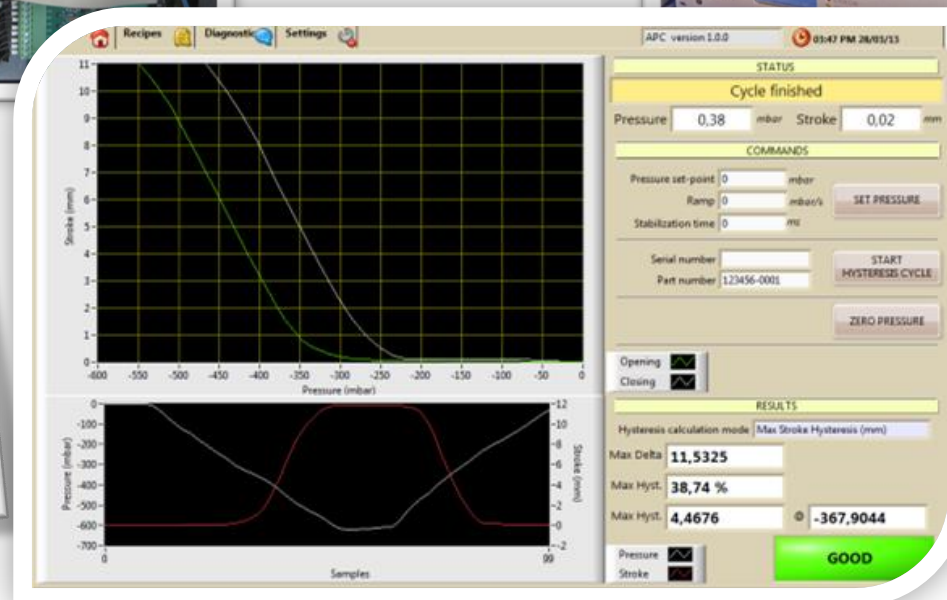
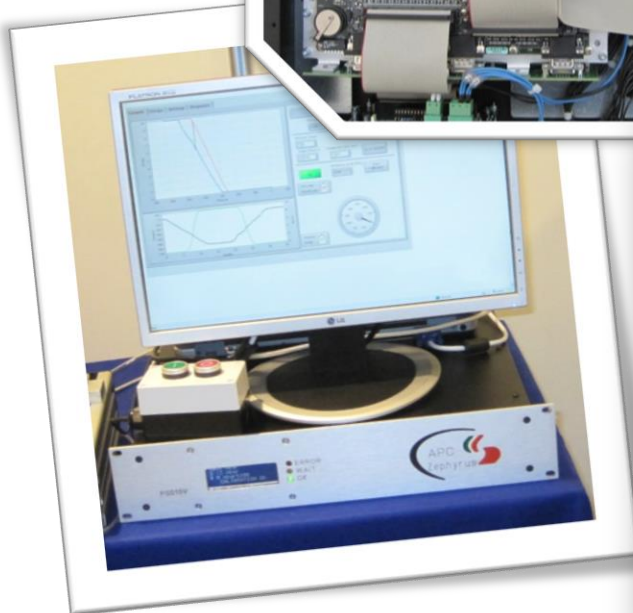
The system checks quantity and features (color, height, size, etc...) of produced parts  
It also monitors and records production data for analysis and statistics.



# APC Actuator Pressure Controller



Programmable  
pressure/vacuum system for  
pneumatic actuators  
calibration checking

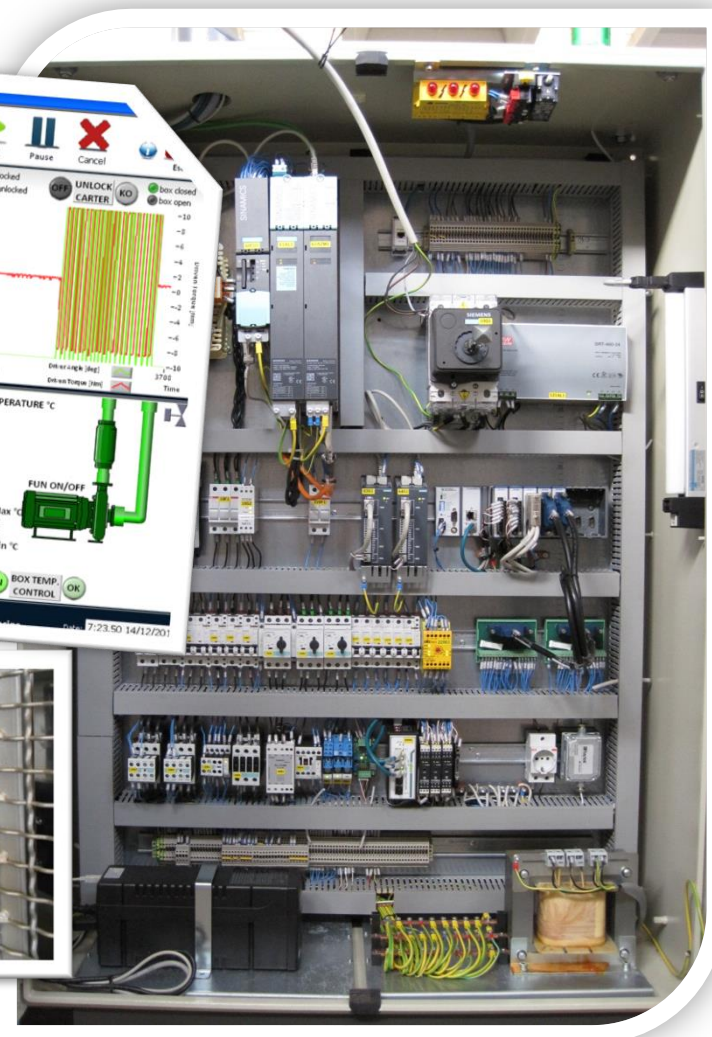




# Bench for endurance tests



Endurance tests bench with or without climatic chamber (-55°C to 150°C)





# ATE



# Automated Test Equipment



**AUTOMATED TEST EQUIPMENT** PROTECNO

Available Tests

- Current generator test
- Pressure Sensor
- Pressure Test - Pace1000
- Read Current Test
- Read Voltage Test
- Stroke
- Template test
- test Read Voltage
- Voltage Generator test

+ ADD

- REMOVE

Test Ref	X min	X max	Y min	Y max	Y unit	Shape	Pressure	Scale on	Stroke on	Scale on
Test Ref: 0	10	V	0	10	V	3	True			

Read Voltage

Reference [V]

Actuator [V]

Voltage

SKIP REPEAT RUN

ABORT

DUT VALUE 0 REF VALUE 10

ACTUATOR VALUE 10

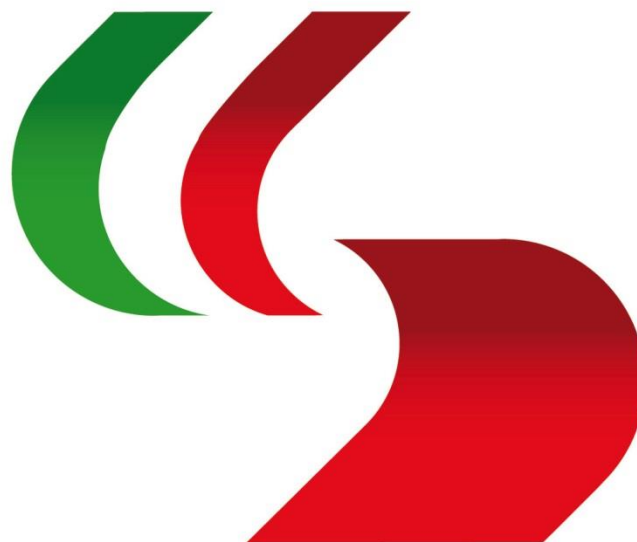
CONFIRM

Actuator [V]	0,000	3,333	6,667	10,000	10,000															
Reference [V]	0,000	3,333	6,667	10,000	10,000															
D.U.T. [V]	0,000	4,000	7,000	11,000	11,000															

05 mar 2015 09:27:35

Insert DUT Value - Press confirm

HOME



**PROTECNO**<sup>®</sup>  
fast forward ideas

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