
SOLUTIONS FOR COOKING APPLIANCES



WE IMPROVE THE QUALITY OF PROCESS AND PRODUCT

Loccioni Industry works side by side to the top players of industrial sector, by doing automated quality test of their products, processes and buildings. Day by day challenging projects are faced with enthusiasm, inspiration and proficiency, collaborating with customers from the initial phase of prototype development to the realization of turnkey solutions.

A bit of Loccioni in every factory, all over the world

SOLUTIONS FOR COOKING APPLIANCES

LABORATORY

- > Noise test
- > Vibration test (automatic detection of the fan activation and detection of its defects)
- > Stand by test
- > Leakage test in air
- > Instantaneous flow-rate test (in air or gas)
- > Volumetric flow-rate
- > Thermocouple current absorption
- > Electric resistance
- > Calculation of the fires efficiency
- > Pressure drop measurement by differential sensors
- > Angular, torque and gas valves flow testing
- > CO, CO₂ and NO_x gas analysis

PRE-FABBRICATION

Aesthetic test for the detection of the perceived quality (scratches, bumps

and print quality) on metal surfaces

Dimensional test through laser profilometry

- > Planarity
- > Deepness
- > Gap
- > Door alignment
- > Ortogonality
- > Cavity

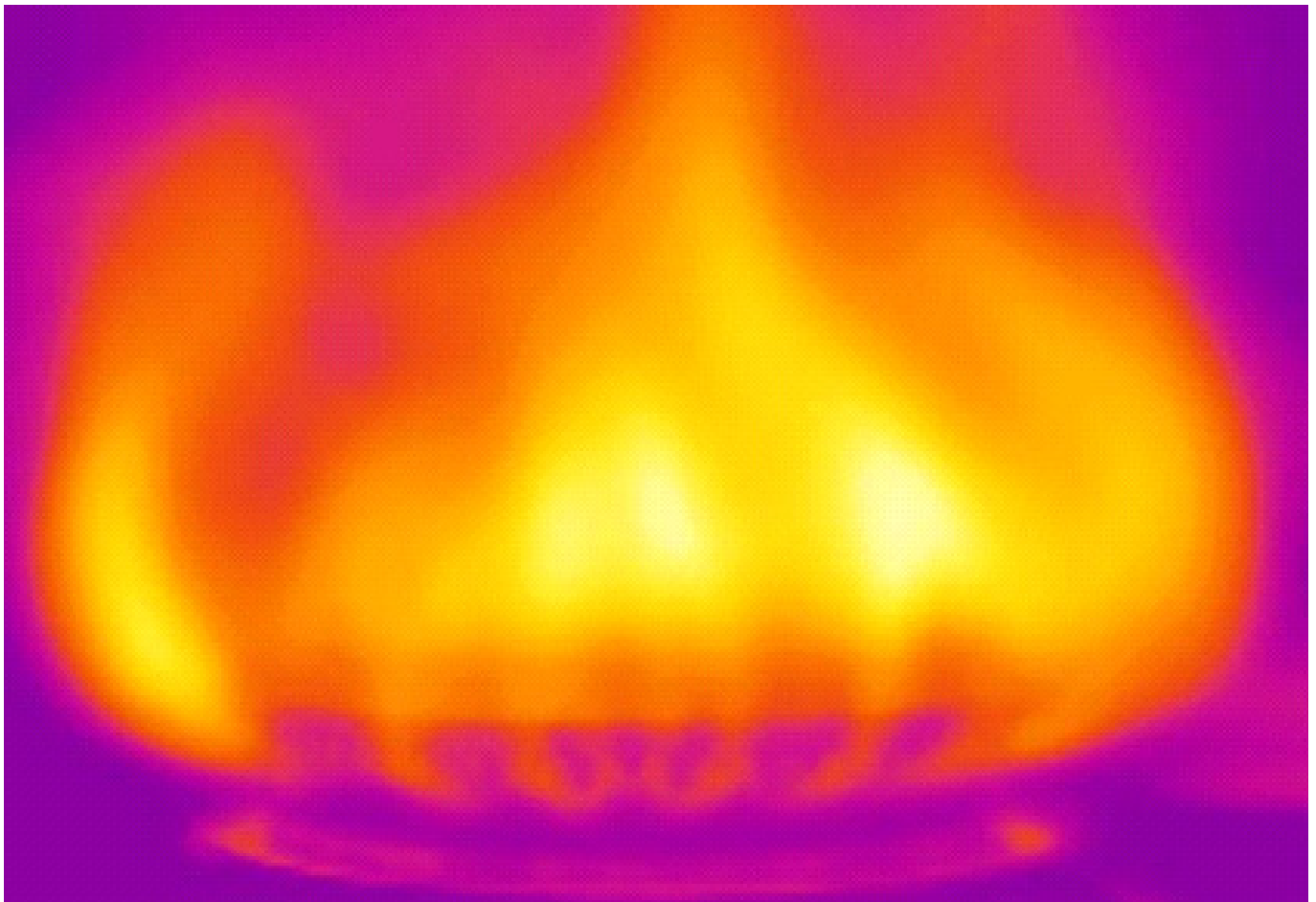
ASSEMBLY & TESTING

Vision test in the assembly line

- Check of the presence of components
- > Check of the correct assembly of the connections (wires, connectors, plastic parts)
 - > Check of the correct execution of the pantography (language, scratch,...)
 - > Check of the correct functioning of the displays and leds

Functional test

- > Electrical safety test (AC dielectric strenght, DC dielectric strenght, earth circuit continuity, insulation, leakage current test, resistance measure among phases, current and power absorption, energy, offset between current and voltage)
- > Leakage and flow test both in air and gas (leakage in air for differential pressure drop, leakage in air for pressure drop, leakage in air for direct measure, flow, drop out)
- > Flame analysis through thermography (status ON or OFF, intensity, uniformity, asymmetry and shape of the flame, correct functioning of the sparks, time needed to turn on the flame since the system supplies gas)
- > Vibration analysis for mechanical defects



Handling

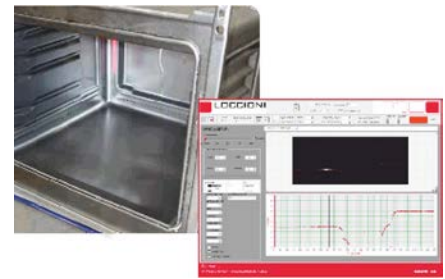
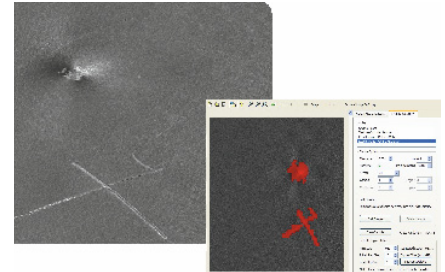
- > Chain or rollers conveyor with structure in aluminum profile
- > Supervision systems

Data tracking and process monitoring

for the recording of information related to the quality tests (i.e. functional tests) and real time localization of the products along the production line.

AUDIT

- > Functional test during a complete functioning cycle
- > Electrical test
- > Mechanical test
- > Data connection to the production database for test results correlation Production/Audit
- > Single/double/multi test station configuration



2. Defects inspection

ADVANTAGES OF LOCCIONI HOME TESTING SYSTEMS

Operations

- > Reduced number of test stations
- > Reduced test area
- > Integrated and completely automated tests
- > Reduced test time
- > Complete database of test results

Cost savings

- > Reduced personnel cost
- > Reduced costs related to: maintenance/clearing electricity

Environment

- > Reduced water consumption
- > Reduced power and energy consumption

Ergonomics workplace design

- > Automatic connection

Occupational safety

- > No manual operations at active dishwasher



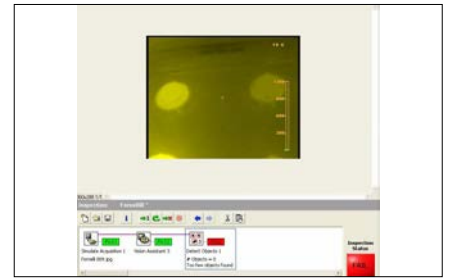
3. Systems for production



4. Robot vision



5. Audit



6. Artificial vision

RESEARCH@INDUSTRY

Research@industry is a laboratory equipped with the most innovative test systems. From the research of functional and aesthetic testing strategies, to the measurement techniques that better suit different needs, up to the most challenging requests for product development, the laboratory is at our clients' disposal to carry on **test campaigns** and feasibility studies.

The research projects carried out by our **research@industry** lab arise from the meeting between our researchers and the direct requests of our clients. Flexibility, free initiative, responsibility, imagination and integration of competences with Universities and research Centers represent the core of Loccioni innovation process.

Solutions for

- > Products
- > Processes
- > Buildings



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