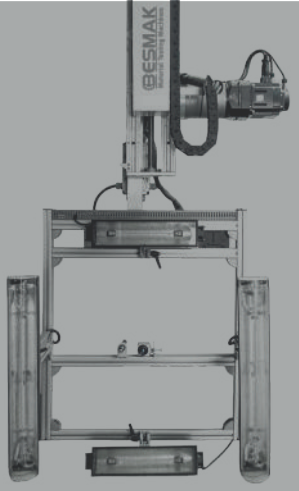
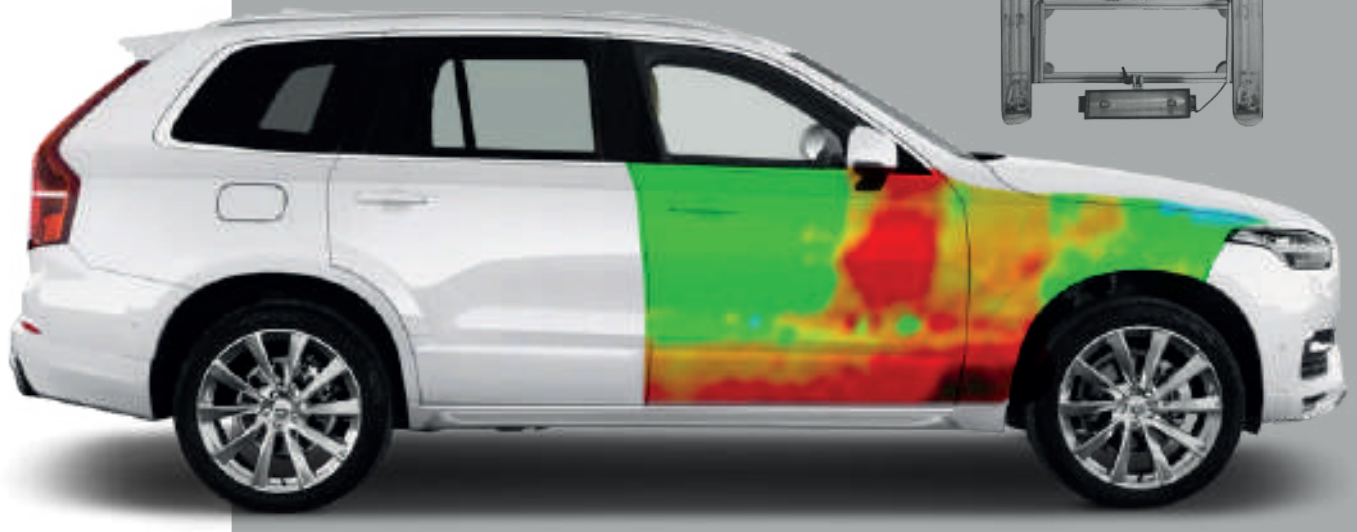
• ROBOTIC SCANNING • CONTACTLESS ANALYSIS • ACTIVE THERMOGRAPHY

CARSCAN

"Next-Generation Vehicle Inspection System"





FLAW LESS

LET ACCIDENTS NOT STAY HIDDEN

The quality control testing device developed by BESMAK, based on Active Thermography, examines coating and paint thickness, part replacement, dents, repairs, and welding defects on the sample using software, image processing, high-impact flash, a special IR lighting system, and an IR camera.

It analyzes these conditions and records the results using 2D graphics and coloring methods, displaying them on a digital screen.

Additionally, the system is not affected by environmental temperature changes or regional temperature differences on the vehicle.

ACTIVE THERMOGRAPHY

The system can perform a non-contact analysis of all the defects listed below on the sample using a mobile robotic system. It provides the user with objective results on changes in the behavior of the samples with micron-level precision.

- Dent
- Welding
- Coating
- Body Filler
- Correction
- Varnishing
- Paint Thickness
- Part Replacement

- There is no need to clean the vehicle beforehand for testing.
- It detects damages that cannot be assessed by hand or eye.
- Provides clear information about the device that is in the commercial phase.

info@besmaklab.com

TECHNICAL SPECIFICATIONS

- LCD Screen
- Not just a single point, but an examination of the entire surface
- Accurate Results in Just 10 Minutes
- The system provides repeatable results, allowing for before/after comparisons
- Contactless Measurement ensures no marks or damage to the device, and no changes occur
- High-Impact Flash for measurements of defects between 0-500µ, and a special infrared lighting system for defects above 500µ
- High-resolution IR camera that captures 25 frames per second

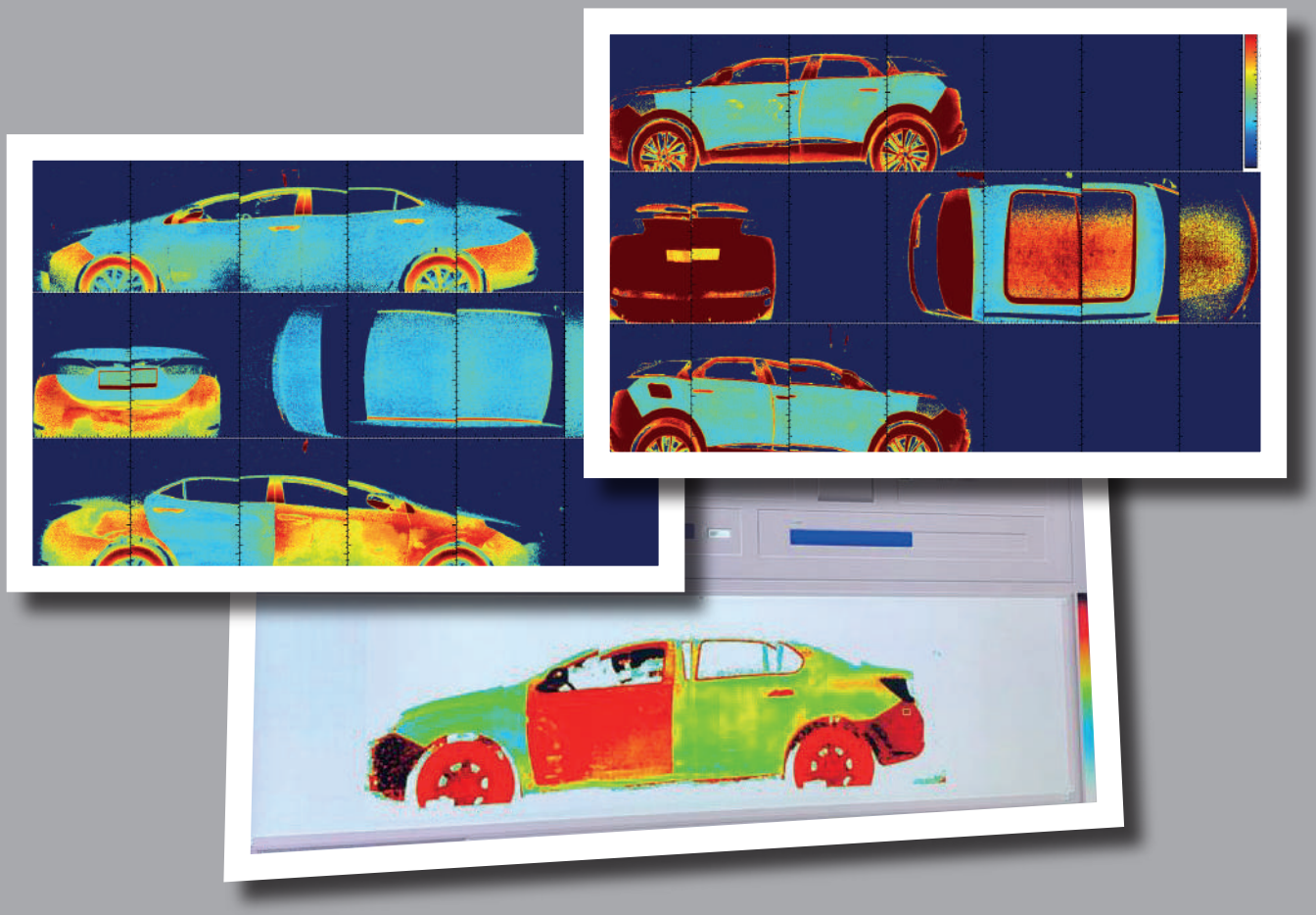
OUR PATENTED PRODUCT

WORKING PRINCIPLE

The vehicle analysis technology system with active thermography is a combination of photo-thermal measurement. It uses a combination of light and thermal stimulation from the surface of the object. The images taken with a high-performance IR thermographic camera are processed individually for each pixel using patented software, amplitude, phase, and Fourier Analysis, and the results are recorded.

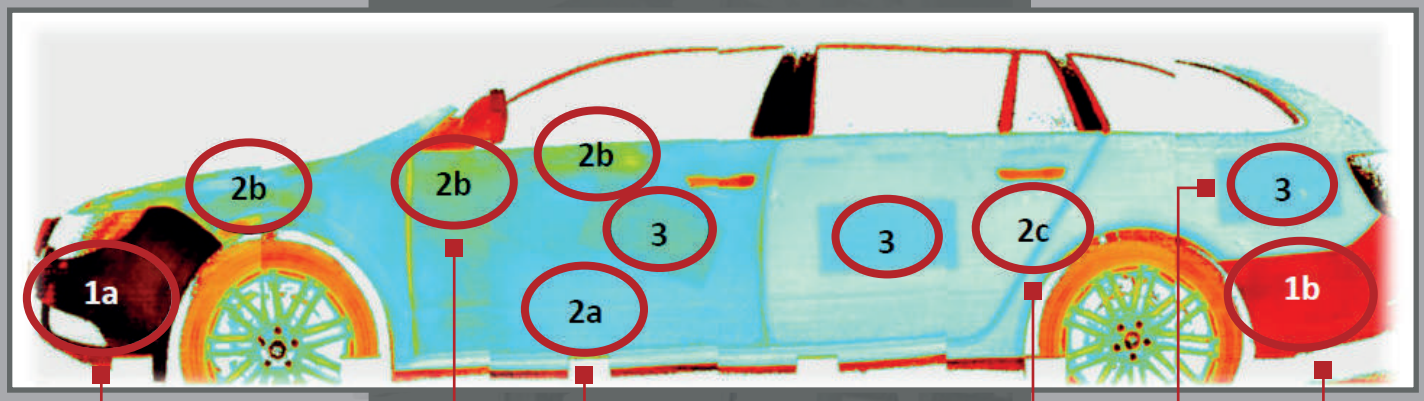
It is a system that detects previously occurred and repaired quality issues in vehicles. Infrared thermography examines the characterization of materials. Infrared thermography is a two-dimensional, non-contact surface temperature mapping technique used for quality control and non-destructive inspection of manufacturing processes.

TEST EXAMPLES



DETECTS DAMAGES WITH MICRON LEVEL PRECISION

DAMAGE ANALYSIS



Repaired Plastic Front Bumper (1a)

Deeper Metal Repair (2b)

Metal Color Coating (2a)

Original Metal Part (2c)

Sound Insulation (3)

Original Plastic Rear Bumper (1b)

WHY CARSCAN ?

- Domestic counterparts do not provide clear results for manual inspection analyses.
- The system offers easy-to-use, understandable, and definitive results.
- Analysis results are objective, unlike domestic counterparts.
- There is a limited number of foreign counterparts, and their costs are quite high.
- The maintenance and repair costs of foreign counterparts are also high.
- Results processed using domestically developed software and image processing technology are displayed in easily understandable colored graphics.

info@besmaklab.com

BESMAK

Material Testing Machines

Scan Please

besmaklab
info@besmaklab.com
+90(312) 815 56 20
Saray Mahallesi Aksoy Cd.
No:53 Kazan-Ankara/Turkey