



MET-KAR PROFICIENCY TESTING PROVIDER

PROGRAM CATALOG

Metaltek MET-KAR provides services as a Proficiency Testing Provider by organizing various rounds each year within the scope of its **ISO 17043** accreditation or, upon participant requests, outside its accreditation scope.





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ABOUT US

MET-KAR is a Proficiency Testing Provider established within Metaltek, accredited under the TS EN ISO 17025 standard, and holding **TS EN ISO 17043** accreditation. In 2024, Metaltek MET-KAR earned the TS EN ISO 17043 certificate and is qualified to organize comparison tests for all participants who hold a TS EN ISO 17025 certificate, are in the process of obtaining this certificate, or wish to evaluate their measurement performance.

With its high-tech testing equipment, years of experience, and expert staff, Metaltek has started its activities in this field to meet a significant need in the industry. In addition to ISO 17043 proficiency testing schemes, Metaltek MET-KAR also organizes **out-of-scope schemes** based on participant requests, serving many laboratories annually as a referee laboratory.



Especially in the fields of Aging and Corrosion Tests, Environmental Resistance Tests, and Mechanical Tests, Metaltek MET-KAR **organizes regular proficiency testing schemes every year** and will continue to support all participants whenever needed. Every testing laboratory requires a quality assurance system to better serve its customers, strengthen its organization, improve working conditions, and ensure the consistency and continuity of its service standards.

Proficiency testing programs are an important tool used to evaluate the effectiveness of an established quality assurance system. In these programs, **the quality assessment of participating laboratories can be conducted objectively.**

Together with the quality system, proficiency testing programs reveal the actual performance of the participating laboratory, enabling the laboratory to **improve its service level.**



OUR OTHER SERVICES



MET-KAR is a proficiency testing provider operating under **EN ISO/IEC 17043** accreditation and carries out its activities within METALTEK, accredited according to the **TS EN ISO/IEC 17025** standard.

METALTEK provides testing services in accordance with national and international standards for a wide range of industries, including automotive, aviation, defense, energy, construction, white goods, and electrical-electronics. In addition, it adds value to the industry through integrated solutions such as the **production of testing equipment**, **development of maintenance chemicals** for the aviation and defense sectors, and training and **consultancy activities** under the METALTEK Academy.

If you would like to learn more about **METALTEK's** services, you can reach us through the contact channels below:

 **Web:** <https://metaltekkimya.com.tr/>

 **E-mail:** info@metaltekkimya.com.tr





MTK-001

RESISTANCE TO SALT SPRAY ENVIRONMENT

Purpose of the Program: The program aims to simulate the effects of chlorinated compounds found in natural environments under laboratory conditions, examine the resulting changes in the sample coatings, and compare these changes with the results obtained by the participating companies.

Sample Type: Coated Metals

Scope: TS EN ISO 9227
ASTM B117
Qualicoat Madde 2.10



MTK-002

RESISTANCE TO HUMIDITY

Purpose of the Program: The program aims to simulate the effects of high humidity found in natural environments under laboratory conditions, examine the resulting changes in the sample coatings, and compare these changes with the results obtained by the participating companies.

Sample Type: Coated Metals

Scope: TS EN ISO 6270-2
ASTM D2247





MTK-003

RESISTANCE TO HUMID SULPHUR DIOXIDE ENVIRONMENTS

Purpose of the Program: The program aims to simulate the effects of high humidity and sulfur dioxide found in natural environments under laboratory conditions, examine the resulting changes in the sample coatings, and compare these changes with the results obtained by the participating companies.

Sample Type: Coated Metals

Scope: TS EN ISO 22479
ASTM G87



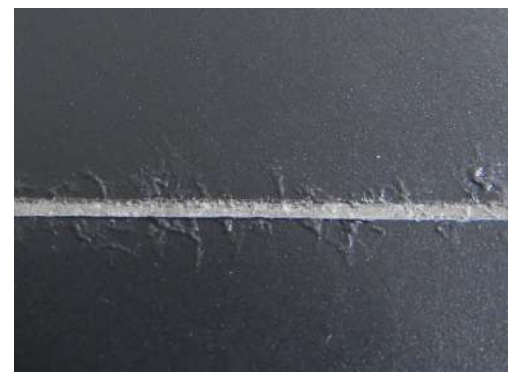
MTK-004

DETERMINATION OF RESISTANCE TO FILIFORM CORROSION

Purpose of the Program: The program aims to simulate the effects of high humidity and temperature found in natural environments under laboratory conditions, examine the formation of filiform (thread-like) corrosion on aluminum substrate materials, and compare these formations with the results obtained by the participating companies.

Sample Type: Coated Metals

Scope: TS EN ISO 4623-2





MTK-005

HIGH TEMPERATURE / LOW TEMPERATURE / SHOCK TEMPERATURE / CYCLICAL TEMPERATURE / RESISTANCE TO HUMIDITY / ICIN/ SOLAR RADIATION

Purpose of the Program: The program aims to compare the results obtained by the participants through the laboratory simulation of environmental effects on electronic samples, including hot-cold conditions, hot-humid environments, cyclic conditions, icy environments, and the thermal and actinic effects of sunlight.

Sample Type: Electronic Products

Scope: MIL STD 810H Method 501.7 TS EN ISO IEC 60068-2-1
MIL STD 810H Method 502.7 IEC 60068-2-2
MIL STD 810H Method 503.7 IEC 60068-2-14
MIL STD 810H Method 507.6 IEC 60068-2-30
MIL-STD-810H Method 521.4 TS EN ISO IEC 60068-2-38
MIL-STD-810H Method 505.7 TS EN ISO IEC 60068-2-61
TS EN ISO IEC 60068-2-78



MTK-006

RESISTANCE TO SALT FOG / HUMID ENVIRONMENTS (ELECTRONIC SAMPLES)

Purpose of the Program: The program aims to simulate the effects of chlorinated compounds found in natural environments under laboratory conditions, examine the resulting changes in the sample functionality, and compare these changes with the results obtained by the participating companies.

Sample Type: Electronic Products

Scope: MIL-STD-810H Method 509.7
IEC 60068-2-52





MTK-007

CHEMICAL RESISTANCE (IMMERSION) / WATER RESISTANCE (IMMERSION) / CHEMICAL RESISTANCE (ABSORBENT METHOD) / CHEMICAL RESISTANCE (SPOT TEST METHOD) / MORTAR RESISTANCE

Purpose of the Program: The program aims to observe the effects of chemicals on the samples and perform visual evaluations, and to compare these changes with the results obtained by the participating companies.



Sample Type: Coated Metals

Scope: TS EN ISO 2812-1
TS EN ISO 2812-2
TS EN ISO 2812-3
TS EN ISO 2812-4
TS EN 12206-1



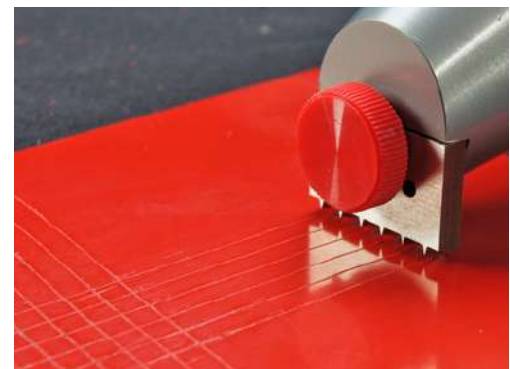
MTK-008

CROSS-CUT (ADHESION)

Purpose of the Program: The program aims to determine the adhesion strength of paint applied on metal using the cross-cut method, evaluate the samples in terms of paint detachment, and compare the results with those obtained by the participating companies.

Sample Type: Coated Metals

Scope: TS EN ISO 2409
ASTM D3359





MTK-009

IMPACT RESISTANCE

Purpose of the Program: The program aims to assess the cracking of paint applied on metal under impact conditions, evaluate the samples for paint cracking, and compare the results with those obtained by the participating companies.

Sample Type: Coated Metals

Scope: TS EN ISO 6272-1
TS EN ISO 6272-2
ASTM D2794



MTK-010

BENDING RESISTANCE

Purpose of the Program: The program aims to assess the cracking of paint applied on metal under bending conditions, evaluate the samples for paint cracking, and compare the results with those obtained by the participating companies.

Sample Type: Coated Metals

Scope: TS EN ISO 1519
ASTM D522
ISO 6860
ASTM D522





MTK-011

INDENTATION RESISTANCE

Purpose of the Program: The program aims to assess the cracking of paint applied on metal under indentation conditions, evaluate the samples for paint cracking, and compare the results with those obtained by the participating companies.

Sample Type: Coated Metals

Scope: TS EN ISO 1520



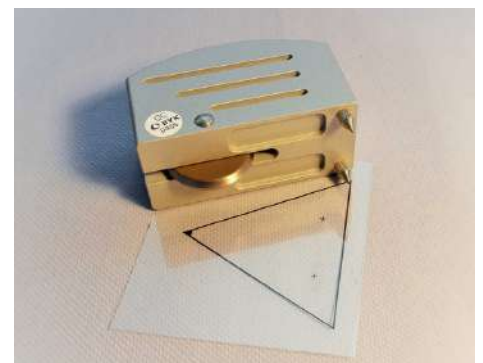
MTK-012

PUNCTURE RESISTANCE

Purpose of the Program: The program aims to determine the indentation length/resistance of paint applied on metal using a fine-tip method and to compare the results with those obtained by the participating companies.

Sample Type: Coated Metals

Scope: ISO 2815





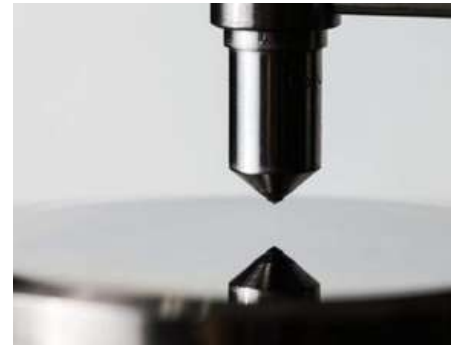
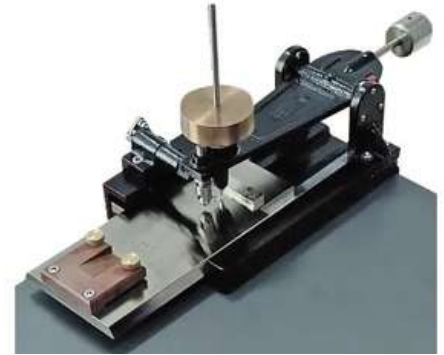
MTK-013

SCRATCH RESISTANCE

Purpose of the Program: The program aims to determine scratches reaching the substrate caused by scratching with a fine tip and weights on paint applied to metal, and to compare the results with those obtained by the participating companies.

Sample Type: Coated Metals

Scope: ISO 1518-1



MTK-014

PENCIL HARDNESS

Purpose of the Program: The program aims to determine the scratching of paint applied on metal using pencils of different hardness and to compare the results with those obtained by the participating companies.

Sample Type: Coated Metals

Scope: ASTM D3363





MTK-015

ABRASION

Purpose of the Program: The program aims to determine the mass loss of paint applied on metal caused by the rotation of abrasion wheels and to compare the results with those obtained by the participating companies.

Sample Type: Coated Metals

Scope: ASTM D4060



MTK-016

PULL-OFF STRENGTH

Purpose of the Program: The program aims to determine the adhesion resistance of paint applied on metal using a pull-off device, assessing the resistance to paint detachment and the number of layers affected, and to compare the results with those obtained by the participating companies.

Sample Type: Coated Metals

Scope: TS EN ISO 4624





MTK-017

RESISTANCE TO GLOSS LOSS FROM SCRATCHING

Purpose of the Program: The program aims to determine the loss of gloss in paint applied on metal after testing with automated scratching arms that draw a fixed pattern on the paint surface, and to compare the results with those obtained by the participating companies.

Sample Type: Coated Metals

Scope: TS EN 16611



MTK-018

FILM THICKNESS

Purpose of the Program: The program aims to determine the film thickness of paint applied on metal using a film thickness gauge and to compare the results with those obtained by the participating companies.

Sample Type: Coated Metals

Scope: TS EN ISO 2178
ASTM B499
TS EN ISO 2360
ASTM B244





MTK-019

COLOR MEASUREMENT

Purpose of the Program: The program aims to determine the color values of paint applied on metal using a color spectrophotometer and to compare the results with those obtained by the participating companies.

Sample Type: Coated Metals

Scope: ISO 11664-4
ASTM D2244



MTK-020

GLOSS MEASUREMENT

Purpose of the Program: The program aims to determine the gloss values of paint applied on metal using a gloss meter and to compare the results with those obtained by the participating companies.

Sample Type: Coated Metals

Scope: TS EN ISO 2813
ASTM D523





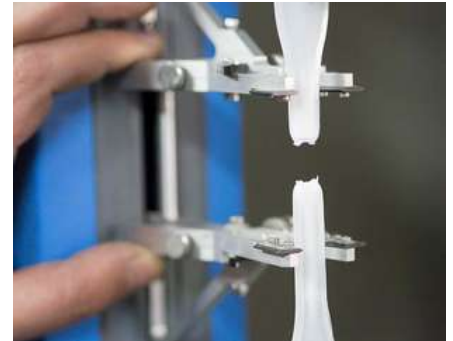
MTK-021

TENSILE STRENGTH

Purpose of the Program: The program aims to determine the tensile/yield/break values of plastic materials using a tensile testing machine and to compare the results with those obtained by the participating companies.

Sample Type: Coated Metals

Scope: TS EN ISO 527-1/2
TS EN ISO 527-1/3



MTK-022

HARDNESS (SHORE A) MEASUREMENT

Purpose of the Program: The program aims to determine the hardness values of plastic/rubber materials using a Shore hardness tester and to compare the results with those obtained by the participating companies.

Sample Type: Coated Metals

Scope: TS EN ISO 868
ASTM D2240





OUT-OF-SCOPE ROUNDS

In addition to the proficiency testing rounds covered by its TS EN ISO/IEC **17043** accreditation, **METALTEK MET-KAR** can also organize **out-of-scope proficiency tests** in line with the specific needs and requests of participating organizations.

These cycles, designed for non-routine analyses, industry-specific test parameters, or measurement areas not yet included in the scope of accreditation, are distinguished by their **flexibility, customization, and practical focus**.

Tailor-made rounds are designed based on the participant's technical capabilities, with the same quality assurance principles applied during the evaluation of results. This service addresses laboratories' needs for performance assessment while fostering the ongoing improvement of technical proficiency.

To request cycles tailored to your organization, please reach out to our team through the **contact information** listed on the following page.





MET-KAR PROFICIENCY TESTING PROVIDER

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