



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

GKN SINTER METALS -
EMPORIUM MATERIALS LABORATORY
One Airport Road
P.O. Box 493
Emporium, PA 15834-0493
Wendy Davis Phone: 814 486 9202
wendy.davis2@gknpm.com

MECHANICAL

Valid To: October 31, 2022

Certificate Number: 0525.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on powdered metals and components made from them, such as those used in automotive products, appliances, power tools, and lawn and garden equipment:

TEST TECHNOLOGY

Mechanical

Radial Crush, K-Value

Hardness

Rockwell (Scales A, B, C, & F)

Superficial Rockwell (Scales 15N & 15T)

Micro Hardness

Knoop (100g)

Metallography

Met Prep

Etching

Combined Carbon

Effective Case Depth

Observed Case Depth

Photomicrography

Coating Thickness

TEST METHOD

ASTM B438, B439, B939; MPIF Std. 55;
GKN LB 09340¹

ASTM E18; MPIF Std. 43

ASTM B933; MPIF Std. 51

ASTM E3

ASTM E407

GKN LB 09371¹

ASTM B934

ASTM B931

ASTM E883

ASTM B487

TEST TECHNOLOGY

Metallography (cont.)

Image Analysis (Length Only)

GKN LB 09425¹

Depth of Decarburization (Microscopically)

ASTM E1077

Physical Properties

Standard Test Methods for Density of Compacted or Sintered Powder Metallurgy (PM) Products Using Archimedes' Principle

ASTM B962

Standard Test Methods for Oil Content, Oil-Impregnation Efficiency, and Interconnected Porosity of Sintered Powder Metallurgy (PM) Products Using Archimedes' Principle

ASTM B963

Density (Near Full Dense)

ASTM B311

Miscellaneous

Sediment Testing

GKN LB 09420¹

Fracture Analysis

GKN LB 09432¹

Contamination analysis, automated counting.

ISO 16232 sec. 9.2.3, GKN LB 09430¹

CHEMICAL

Optical Emission Spectroscopy, ICP

Fe Base (Al, B, Cr, Cu, Mg, Mn, Mo, Ni, P, Pb, Si, V, Zn)

GKN LB09350¹

Cu Base (Al, B, Cr, Fe, Mn, Ni, Pb, Sn, V, Zn)

Stainless Steel Base (Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Si)

Al Base (B, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Si, Sn, V, Zn)

Combustion – (C & S)

MPIF Std. 66, Secs. 1-4; GKN LB09350¹

¹ Test methods are internally developed methods



Accredited Laboratory

A2LA has accredited

GKN SINTER METALS – EMPORIUM MATERIALS LABORATORY

Emporium, PA

for technical competence in the field of

Mechanical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 13th day of January 2021.

A blue ink signature of the Vice President of Accreditation Services.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 0525.01
Valid to October 31, 2022

For the tests to which this accreditation applies, please refer to the laboratory's Mechanical Scope of Accreditation.