



Synergy of world-class technologies.



- Family consortium
- 10 business units for 5 markets
- Main offices Mexico City
- 800 collaborators
- 2 plants one in Toluca and one in Atizapán State of Mexico

- 1 plant Queretaro Mexico
- 1 plant Toronto, Canada
- 2 Distribution Centers in Mexico City and one in San Luis Potosi
- Commercial activity of import and export in North America, South America, Canada and Europe



DIVISIONS

AUTOMOTIVE



Manufacturer of Commutators, slip rings & shafts



Truck body Manufacturer

AUTOMATION



Automation & Access Control



Merik CA



Merik US

INDUSTRIAL



Agitation & Power Transmission



Steel Works



Special Door Manufacturer **IMAGING**



Printing Solutions

EDUCATION



Education solutions



Toluca, Mexico Facilities



Start Year of Operation: Kirkwood 1974

TCS 2006 FD 2020

Address:

Calle 4 Norte 100 Parque Industrial Toluca 2000, C.P 50233. Toluca de Lerdo, Estado de México.

Footprint: : 23,000 m2

Plant Manager: Gerardo Avila

Certifications: ISO IATF16949:2016

Markets Served:

- Kirkwood: Automotive, Home Appliance, Power Tools, Aerospace, AGV, Marine, Life style
- TCS: Automotive, Marine, Water pumps
- Flex Door: Automotive, Industrial, Logistic, Residential

Service Offerings:

- Tooling Design
- · Manufacture, Repair and Maintenance for tooling
- Engineering Changes (ECN)
- Quality Lab (CMM)

Product Experience:
Steel and Mica Commutators for HD Starters,
Molding Commutators for motors
Slip Rings
Tang commutators for Home Applience
Heavy Duty, Light Duty Starter and Alternator
Shafts
Industrial Doors
Residential doors

Sales locations



100% COMPLETE DELIVERIES 100% DELIVERIES ON TIME 0% DAMAGED MATERIAL PER LOGISTIC

CUSTOMER IS OWNER OF ALL THE LOGISTIC PROCESS CUSTOMER PICK UP THE MATERIAL IN OUR FACILITIES

USA

- 1. WISCONSIN
- 2. TRENTON
- 3. CLEVELAND
- 4. NEW YORK

MEXICO

- 1. CDMX
- 2. ESTADO DE MEXICO
- 3. SAN LUIS POTOSI
- 4. QUERETARO
- 5. TORREON
- 6. CIUDAD JUAREZ
- 7. NUEVO LAREDO
- 8. CIUDAD ACUÑA

0



Capabilities



MANUFACTURING COMMUTATORS, SLIP RINGS

> Rolling Mill Copper Stamping Punching Molding Spot Welding Assemblies Cold forging

SHAFT MACHINING

Thread Grinding Knurling Turning



ESP. PROCESS

COMMUTATORS, SLIP RINGS Molding

SHAFT MACHINING Induction Heating



METROLOGY LAB

CMM
Roundness testers
Micrometers
Calipers
Durometer
Micro hardness
Comparator



TOOL ROOM

CNC Vertical machining
center
Wire EDM machine
EDM
Turning
Milling
Drilling
Grinding
Sharpener

Maintenance preventive

CERTIFICATIONS





IATF 16949 Certificate



RA02-0003/2023

IATF: 0465309

AENOR certifies that the organization

KWD INDUSTRIAS S.A. DE C.V.

has a quality management system according to the IATF 16949:2016 Standard

At the following site of production: Calle 4 Norte Int. 100 B Col. Parque Industrial Toluca, - Toluca,

Estado de México (México)

For the following activities: Manufacturing of components for motors, alternators,

starters and electric generators for the automotive industry

Exclusion: Product Design

First Issued on: 2023-01-02 Validity date: 2026-01-01







AENOR INTERNACIONAL, S.A.U. Génova, 6. 28004 Madrid. España Tel. 91 432 60 00. - www.aenor.com

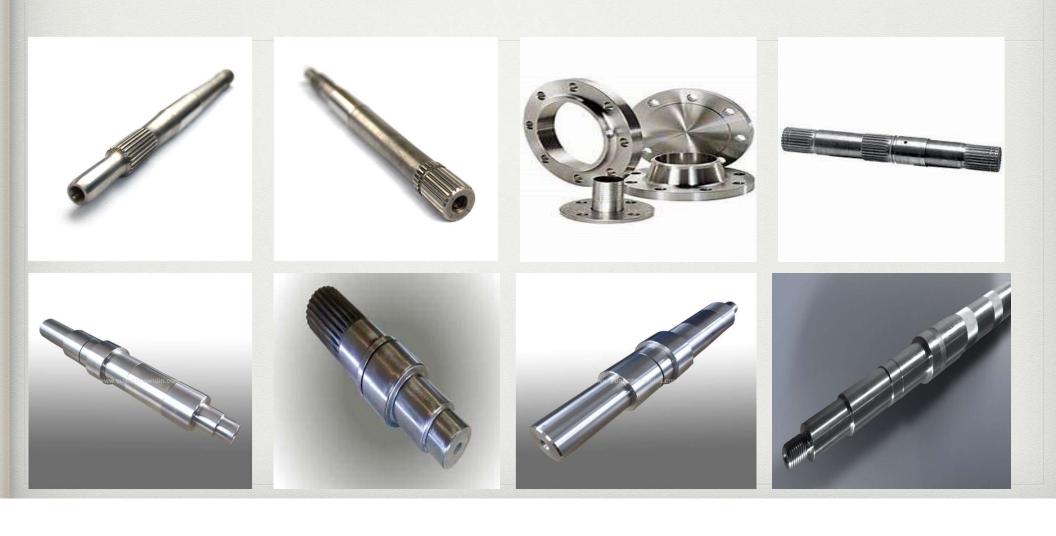
Page 1of1



Products



Machined Parts



Die-cut Parts

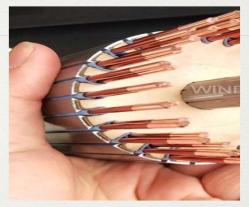




U retainers



Hair pins





Molding parts





Cold Forging Products

- Coldmatic AKP 4-5
- The reliable coldformer for precision parts
- The Coldmatic AKP 4-5 five-station coldformer is the ideal machine for part sizes up to a diameter of 30 mm. Supported by a linear material feed, an extremely precise high-speed s hearing station and the reliable part transfer system, the AKP 4-5 produces high-precision formed parts with a wide variety of geometries and materials.

All of this with an output of up to 160 parts/minute.

- Highlights
- Innovative touch screen machine controls
- Short conversion times, thanks to the Variblock quick-change system
- Very high production output (up to 160 parts/minute)
- Accurate transfer for complex part geometries
- Production in heated area up to 500° available as an option



Our apps



Automotive



Power Tools



Maritime



Home Appliances



Aeronautics



Motor Pumps



Applications



Heavy Duty









Applications



















Commutators line



Steel and Mica Commutators

- •We build a high quality mica and copper commutator. We use the best materials silver bearing copper and mica, that product are used for buses, heavy duty truck and aerospace app.
- •8000 RPM max.
- Comms characteristics:
 - √Brush diameter max. 5.0 in
 - √Bar length max. 3.75 in
 - √Riser diameter 5.50 in
 - ✓Overall Length 4.0 in



Molding Commutators

- We use our molding compound that is strong for high performance applications and quality for motors, pumps and trucks starters.
- 10,000 RPM max.



Slip Rings and Thermoset



Slip Rings

 We manufacture alternator slip rings for the automotive market and aftermarket, both domestic and foreign.



Thermoset Molding

Our customers rely on Kirkwood molding compound as a trusted thermoset molder to
provide thermoset molding expertise for product applications requiring protection
against high operating temperatures, corrosive and electrical environments, and exposure
to chemicals or fluids. Additionally, thermoset pot transfer molding is implemented
within metal-to-thermoset or metal-to-plastic conversion projects, lightweighting efforts,
and cost reduction and part consolidation of broader product assemblies.



Tool Room

Merik Group has the experience and expertise to provide the design and engineering required to ensure that parts and tools are being manufactured to the highest quality and produced at the optimum cost. We use CAD stations with the latest version of SolidWorks™, Inventor™ to provide design capabilities and a troubleshooting process before they become troublesome in production. Our Development Engineers partner with our customers to understand all aspects of the components function within the final application, APQP steps are applied routinely on every product development and PPAP's are issued to comply with our ISO/TS procedures.

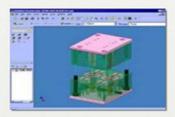












Merik Group has invested on its inhouse tooling facilities, to manufacture
molding and stamping dies, fixtures, etc.
that will be used in new products, as well
as preventative maintenance to every
tool. Among others there are precision
mills, lathes and grinders. We also
count on sophisticated equipment such
as EDM (Electrical Discharge
Machining) and CNC machining center,
mills and lathes.

Provides:

- 1. Dies and tools
- 2. Design
- 3. ECO
- 4. Preventive maintenance
- 5. Corrective maintenance
- 6. Spare parts
- 7. Several machining devices

Metrology lab capabilities

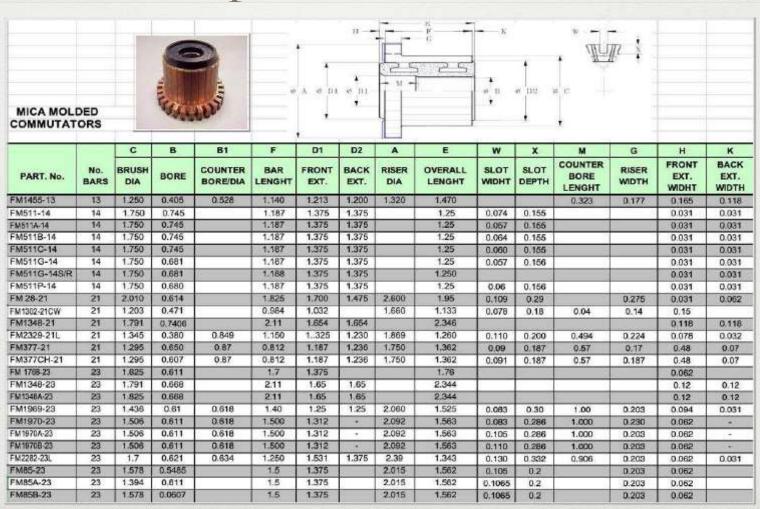
We have a metrology laboratory equipped with accurate measuring devices as well as laboratory technicians with more than 5 years experience in the site



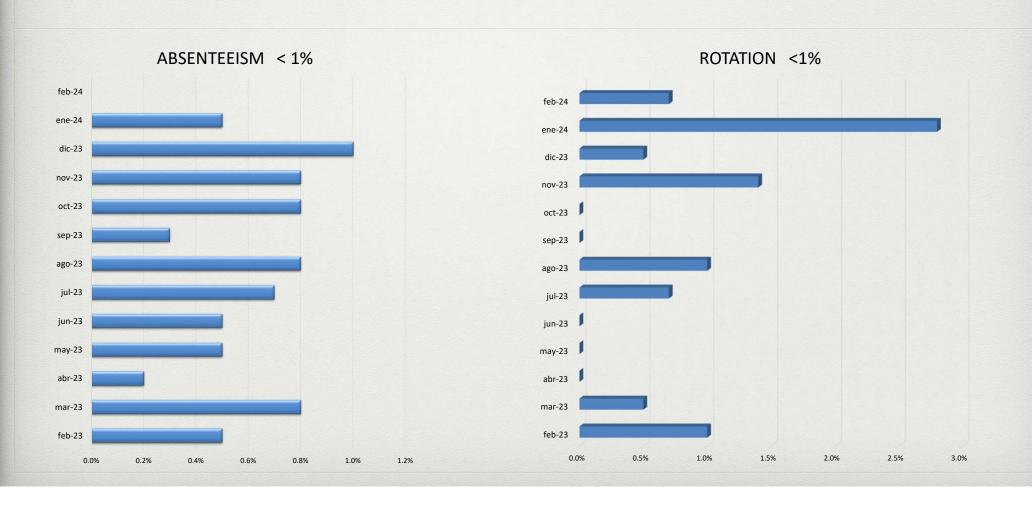




Current product dimensions



STRONG PEOPLE CULTURE





Customers



















CONTACT

<u>Sales.kwd@kirkwood.com.mx</u> <u>customerservices@kirkwood.com.mx</u>

PHONE: +52 (722) 265 75 00 ext. 7951

MOBILE: +52 (722) 571 30 54

