

Changes In Attitude

RIEKER INC
CAPABILITIES
BROCHURE



*Acceleration and Inclination Measuring Instruments
for Air, Land, and Sea*

Imagine if your every need was not only met but anticipated.



Our Philosophy

Since its founding, two central principles have defined Rieker's core foundation:

Customer Driven and Personnel Quality

Our customers receive responsive, flexible, and efficient support with quality products and services delivered on time and at a fair price.

Our top rated customer care service and support is provided by a competent workforce highly trained and experienced to provide the products and services we offer.

Our concept to problem solving - a small number of highly skilled and motivated personnel are utilized - maximizing innovation, responsibility, and creativity in problem solving. The result is a high quality cost-effective approach to meeting the needs of our customers.

The results speak for themselves: *Industry leading product quality, customer loyalty, and consistent growth.*

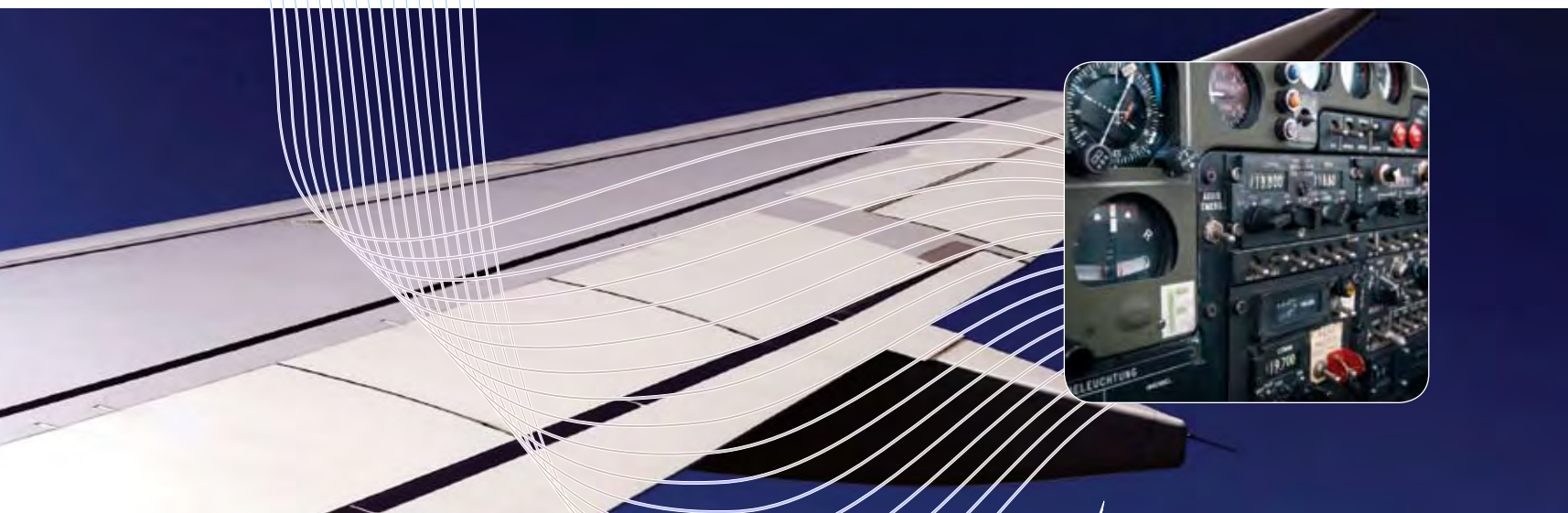


"The inspiration for our quality instruments comes from you, our customer. I welcome the opportunity to speak with you on the challenges at hand. With continued investment in our people and technology, we will provide the solution for your sensor needs."

Edward Denigan

Edward Denigan
President

Always know your angle.



Industries We Impact:

- Aerospace/Defense
- Agriculture
- Automotive
- Aviation
- Civil Engineering
- Construction
- Drilling/Boring
- Fire & Rescue
- Government
- Heavy Industry
- Industrial Automation
- Lift & Access
- Marine & Offshore
- Military
- Mining
- Railroad
- RV & Coach
- Sound Reinforcement
- Sub Sea
- Trailer & Chassis
- Transportation
- Utility & Bucket

CAGE CODE: 50926
 NAICS NUMBER: 3345111
 SIC CODE: 3829

HARMONIZED CODE
 (Schedule B, Tariff Code, HS Code)
 Electronic Products: 903180.8085
 Mechanical Products: 901580.8080

Our Customers

Experience, Longevity, Quality.

What Rieker shares with our customers over our nearly 100 years of business. The companies shown are a small representation of customers we provide tilt and acceleration sensing solutions.



About Us

Rieker Inc, a worldwide leader in the manufacturing of quality electronic and mechanical inclinometers, is committed to customer service, product availability, technical support, and performance. Rieker's technological excellence, supported by continuing substantial investments in research and development, has been the foundation of growth, and helps to ensure quality products for our customers.

- > Decades of Manufacturing Experience
- > Stock & Custom Made-to-Order Instruments
- > International Sales and Distribution
- > Multi-cultural and Bi-lingual Staff

Our Reputation

Our reputation for offering innovative sensing solutions to our customers has helped us continue to grow - from early projects with government agencies to current ongoing large-scale sales and support with Original Equipment Manufacturers.

This same reputation for quality product development and performance has resulted in awards of multiple government-wide contracts (aerospace, defense, and transportation).

Our company growth is supported by the technical capability of our staff as well as defined processes that promote quality and consistency.

We have state-of-the-art equipment for testing, our engineers and technicians stay up to date on the latest developments in precision measurement and testing, often pioneering advanced hardware and software solutions.

We are known for:

- Innovative technical solutions.**
- Outstanding product performance.**
- 100% Quality Testing.**
- Well versed, friendly, skilled and cross-trained workforce of professionals, engineers, technicians, and support personnel.**



Company Milestones and Worthy Accomplishments



Founded in 1917, Rieker Instrument Company Inc began manufacturing high quality inclinometers using hand blown glass tubing to exacting specifications for the medical and aviation fields.



The US Government contracted Rieker to produce pitch and roll indicators for the new aircraft market. In 1927 Charles Lindbergh chose the Rieker P-1057 Inclinometer for climb and descent angle of his "The Spirit of St. Louis".

One of Rieker's original medical instruments was the Dare Hemoglobinometer, a handheld instrument used to detect anemia in patients. Precision hand blown glass makes its mark in manufacturing. The modern version was used around the world until the mid-1980's.



Rieker developed clinometers specifically for racing sailboats, which quickly became the standard for heel angle. The 2056 - with it's dual scales, accuracy, durability and low cost - remains one of the most popular precision instruments of sailboat owners around the world - including the America's Cup challenge.



1960's



During the late 60's/early 70's Rieker found an emerging market in the Construction Industry, which needed a simple way to warn heavy equipment operators of Tip Over Danger due to steep slopes. Rieker introduced bright color zones for an easier quick reference of out of level conditions.

1970's

Early in the 1980's Rieker redeveloped the Boom Angle Indicator that would not freeze, rust, or hang up like the typical pendulum style indicator of its time. By using new sonic weld technology the device ensured smooth operation no matter the environment. Rieker's unique design offers superior All-weather performance, ruggedness, and ease of field installation. A backlit version made the 4120 a 24/7 tilt indicating device - the only one of its kind.



1980's

Era of electronic automation - Rieker put it's efforts into developing less expensive electronics to indicate tilt, inclination, and acceleration. The SlopeAlert Tilt Warning was invented to address the issue of roll over for mobile equipment and false triggering associated with the options at that time. It is in use today on mobile construction equipment and military vehicles for advanced safety.



1990's - Early 2000's

Today, Rieker is constantly improving and developing new products that are user friendly, easier to install, durable, cost effective and provide multi-functionality. We understand that our customers need tilt indicating devices that simply work, and are flexible enough to meet their requirements.



2010 & Beyond





mechanical

Mechanical Inclinometers, Slip Indicators, and Circular Bubble Levels

Precision "Ball in Tube" and Glass Vial style

- » Precision Glass Tubing
- » Custom Sizes
- » Custom color warning zones: one, two, or three color zones available (green, yellow, red)
- » Backlit models available for Low Light or Night Operation
- » Rugged die-cast aluminum or polycarbonate housings
- » Angle ranges: $\pm 5^\circ$, $\pm 10^\circ$, $\pm 20^\circ$, $\pm 45^\circ$, $\pm 60^\circ$, $-10^\circ/+85^\circ$
- » Percent grade ranges: $\pm 13\%$, $\pm 45\%$
- » Degree markings: $\pm 0.5^\circ$, $\pm 1^\circ$, $\pm 2^\circ$, $\pm 5^\circ$, $\pm 10^\circ$
- » ALL-weather performance
- » Rugged Die-Cast Aluminum Housing
- » Customer Specified Color Warning Zones - easy to see quick reference of safe or danger zones - on tube or housing!
- » Operating Temperature: -40°C to $+72^\circ\text{C}$ (-40°F to $+172^\circ\text{F}$)

Circular Bubble "Bulls-Eye" Level

- » Precision Ground Glass for Clear Viewing
- » Machined Aluminum Housing, Anodized Black
- » ALL-weather performance: Salt Fog per ASTM B117
- » Operating Temperature: -40°C to $+80^\circ\text{C}$ (-40°F to $+176^\circ\text{F}$)
- » "Bulls-Eye" Permanently Fused Ceramic Markings
- » Variety of sizes to fit any application
- » Metallic silver finish for best visibility of bubble position



Our mechanical style inclinometers provide a quick and accurate visual reference for equipment leveling, balancing and preventing tip-over.

Also known as a:
Clinometer
SlopeAlert
Gradiometer

Backlit Inclinometers provide Night Visibility - made for:
Aerial Lift Equipment
Bucket and Utility Trucks
Cranes
Fire Trucks
Fork Lift Trucks



electronic

Electronic Sensors: Accelerometers and Inclinometers

Number of Axes:

- » Single (1)
- » Dual (2)
- » Tri-Axis (3)

Angle Ranges:

- » $\pm 1^\circ$ to 360°

Sensor Technology:

- » Liquid Capacitive
- » MEMS
- » Spring Mass

Output Types:

- Temperature Compensated Performance!*
- » Analog Current 4-20mA (2-wire and 4-wire)
 - » Analog Voltage 0-5VDC/0-10VDC
 - » Digital LCD Display
 - » Digital Pulse Width Modulated (PWM)
 - » Digital RS232 (Serial)
 - » Digital RS485

Output Resolution Range:

- » 0.1° through 0.001°

Environmental Protection:

- » IP65 to IP68
- » Nema4/4X

Housing Types:

- » Die-Cast Aluminum
- » Die-Cast Zinc
- » Machined Anodized Aluminum
- » PBC Plastic
- » Noryl Plastic
- » Stainless Steel

Power Supply:

- » 8-30VDC non-regulated
- » 5VDC regulated
- » 110VAC Wall Adaptor
- » 240VAC Wall Adaptor
- » Battery

Operating Temperature Range:

- » -40 to $+85^\circ\text{C}$ (-40 to $+185^\circ\text{F}$)
- » -20 to $+70^\circ\text{C}$ LCD Display Packages

Mounting Positions:

- » Vertical - like a clock on a wall
- » Horizontal - flat on a table top

Vibration and Shock Resistance:

- » 500 G up to 10,000 G's

EMC Protection



Our electronic accelerometers and inclinometers have no moving parts, nothing to break or shown to drift over time - making these sensors highly reliable for rugged applications with long life.

Rieker Manufactures to:
Quality System Conforms to
MIL-I-45208A and MIL-STD-45662



Rieker Certifications:

CE Certification
CSA Certification - Intrinsic Safety





Installed on Equipment Types:

- » Aerial Lift Trucks
- » Aircraft
- » Bucket/Utility Trucks
- » Boom Lifts
- » Bridge and Buildings
- » Bull Dozers
- » Construction Equipment
- » Conveyor Systems
- » Cranes & Derricks
- » Dam & Spillway Gates
- » Drilling & Boring Rigs
- » Dump and Tip Trailers
- » Excavators & Graders
- » Fire Aerial Ladder trucks
- » Forklifts
- » Material Handlers
- » Medical Equipment
- » Military Vehicles
- » Recreational Vehicles (RV)
- » Marine Vessels & Sail Boats
- » Offshore Oil Platforms
- » Rail Transportation
- » Satellite & Radar
- » Scissor Lifts
- » Solar Panel Array
- » Speaker PA Line Array
- » Telehandlers
- » Tractor Trailers
- » Wind Turbines

Applications:

- » Acceleration
- » Angle Indication
- » Ball Banking Road Curves
- » Boom Angle
- » Cross-Slope & Road Crown
- » Load Balancing
- » Machine Alignment
- » Mast Angle
- » Pitch & Roll
- » Percent Grade
- » Platform Leveling
- » Process Motion Control
- » Quick Visual of Angle
- » Roll Over Early Warning
- » Slip or Skid (aviation)
- » Slope Measurement
- » Vibration Indication
- » Wheel Alignment

Compliance for:

- » ASME B56.6 Rough Terrain Forklifts
- » ANSI A92.6 Self-propelled aerial lifts
- » ANSI A92.5 Boom-supported aerial lifts (telescoping boom)
- » ASME B56.7 Industrial Crane Trucks
- » NFPA 901 Standards for Automotive Fire Apparatus: 20.4 Aerial Ladder Operating Position
- » OSHA 1926.550: Cranes, Derricks, Hoists, Elevators, Conveyors
- » OSHA 29 CFR Part 1926 Cranes and Derricks in Construction - Final Rule

How may we help you today?



*Rieker Inc.
has locations
strategically
positioned
around the
world providing
resources close to
our customers.*

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