



SEKI Feeder Introduction
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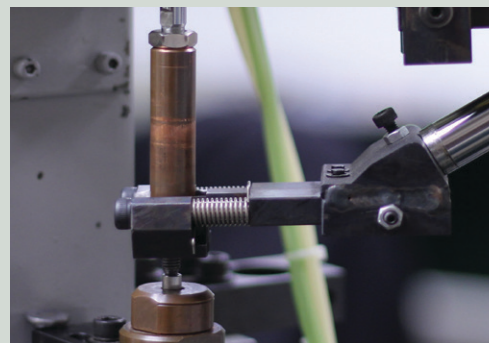
SEKI NUT & BOLT FEEDERS



SELECTOR UNIT



AIR ROD FEEDER



BOLT FEEDER



FEEDERMATE

SEKI **SELECTOR UNIT**

– **ROBUST, SIMPLE OPERATION**

- **Non-vibratory operation** — Rotating magnets (pictured below, left) draw oriented fasteners through selector gate (below, right)
- **Small footprint (10"x19"x42")** vs. vibratory bowls
- Feeds 50 M6 square nuts per minute to tube (6,000 M6 square nut hopper capacity)
- Few moving parts; easy to maintain



SEKI **AIR ROD FEEDER**

– **FAST, ACCURATE PLACEMENT**

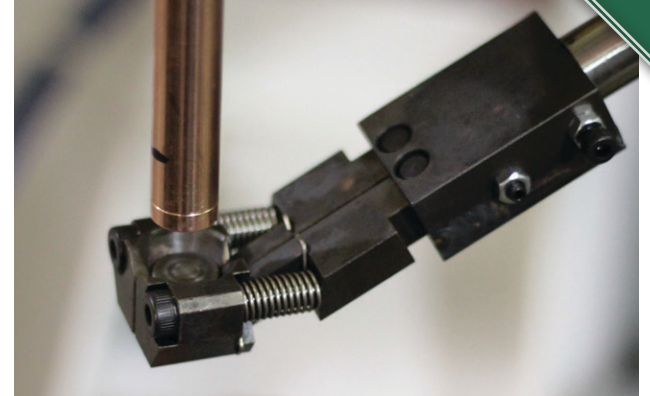
- SEKI's **Jet Pin™ technology** uses a constant air current, not electro-magnetism, to secure the nut to end of the stroke (*pictured right, bottom*)
- The Air Rod Feeder places — does not “throw” — the nut onto the pin
- Can operate on a wider range of angles than other feeders, from nearly 0° to 90°
- Standard 200 & 300 mm strokes (*custom 400–600 mm strokes available*)
- Compatible with the ProLine™ Nut Verification System (*available as discounted package*)



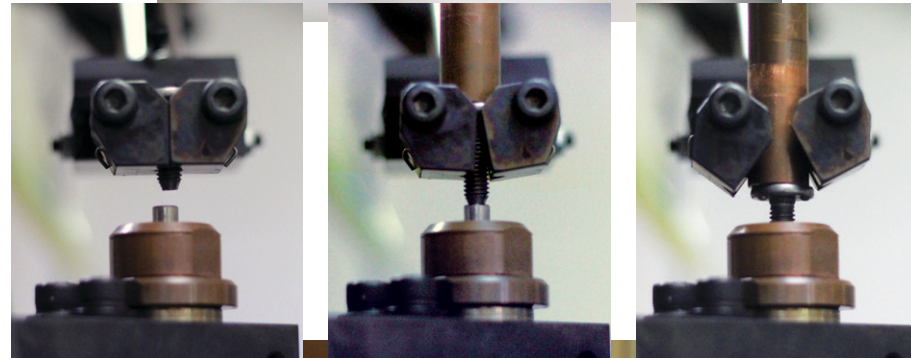
SEKI **BOLT FEEDER**

– **PRECISE, REPEATABLE ACTION**

- **Dual-action jaws** rotate and separate during weld stroke for precise placement (*pictured right, center sequence*)
- Standard bolt sizes: M5–M12; stem 12–50 mm in length
- Compatible with the G.E. Schmidt's ProLine™ Stud Verification System (*available as a discounted package*)
- Custom applications: Reverse Operation Bolt Feeder allows placement to magnetic upper locating pin (*pictured right, bottom*)



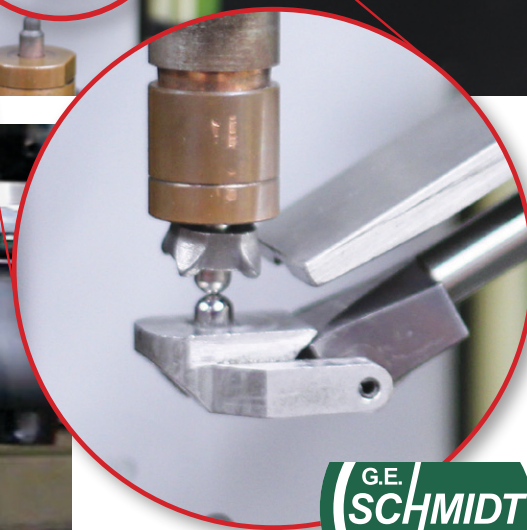
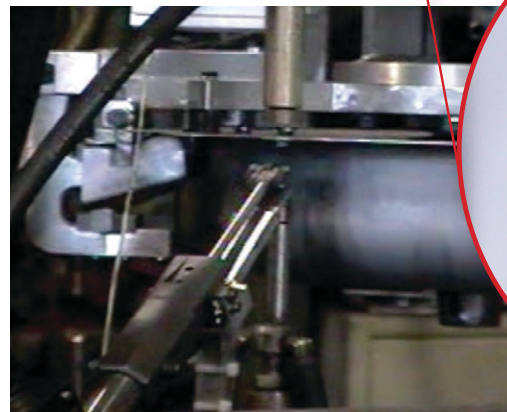
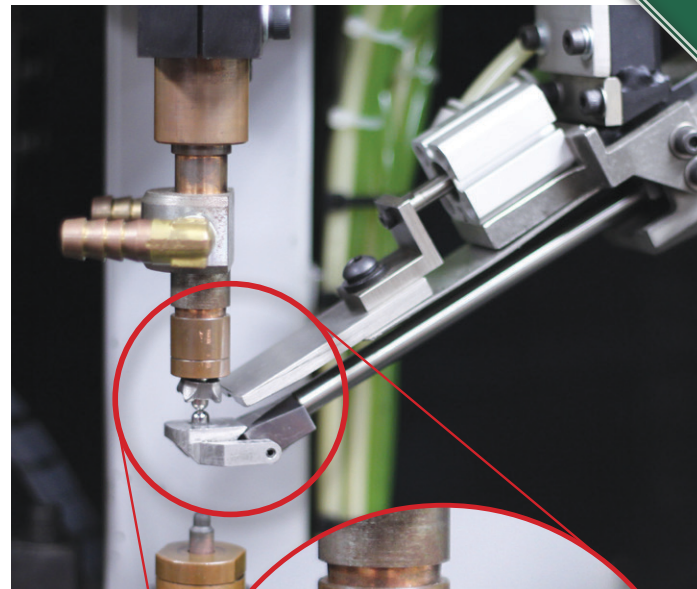
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SEKI FEEDERMATE

– FASTER CYCLE TIME

- **Magnetic pin** in upper electrode
- Feeds during stamping movement, saving cycle time
- Perfect for deep channel and difficult-to-reach applications
- Fasteners up to 1" diameter
- 360° accessibility — Feed any angle (*upside-down feed pictured below*)
- Compatible with the ProLine™ Nut Verification System (*available as a discounted package*)



SEKI CUSTOMER BASE

NORTH AMERICAN AUTOMOTIVE TIER 1 & OEM SEKI USERS

- ◆ Magna/Cosma
- ◆ Gestamp
- ◆ Van-Rob
- ◆ Metalsa
- ◆ Martinrea
- ◆ Yachiyo
- ◆ Unipress
- ◆ Benteler
- ◆ Toyota

■ Over **800 SEKI units** installed
in North America since 2007

G.E. Schmidt, Inc. • Cincinnati, OH • (513) 489-5130 • sales@geschmidt.com



GES & SEKI **TEAM CAPABILITIES**

– **EXPERTS IN PROJECTION WELDING**

G.E. Schmidt (Cincinnati) and **SEKI Feeders** (Hebron, Kentucky) work closely together to provide fast, comprehensive service throughout the United States, Canada and Mexico.

- Understand requirements and challenges of full resistance welding process, not just feeding
- Selection of complementary components, such as the Nut Verification System (NVS), NP2 Nut Presence Probe
- Complete solutions in resistance welding, including welders & weld guns, components and consumables





SEKI



SELECTOR UNIT



AIR ROD FEEDER



BOLT FEEDER



FEEDERMATE

APPENDIX

GES & SEKI BACKGROUNDS



G.E. Schmidt, Inc. has served the resistance welding industry since 1960 as a leading manufacturer and distributor of resistance welding products. We work with a variety of manufacturers and industries, including OEM, Tier 1 and Tier 2 automotive companies throughout North America.



In 2010, G.E. Schmidt acquired U.K.-based R&W Cushways and formed Cushway-Schmidt Ltd. to provide full-service solutions for the European resistance welding market.

We manufacture and distribute high-quality systems and components for various resistance welding applications, including spot welding, seam welding, projection welding, welding consumables, tip dressing and quality control systems to help our clients increase efficiency and eliminate mistakes.

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SEKI

Tsumoru Miura started Shintaku Ironwork in October of 1964. Seki Kogyo, an auto part manufacturer, was established in May of 1970 in Japan. Masaaki Miura took over the company in May, 1986. In December 1994, Seki released the Feeder Mate Nut Supply System; in April 1998, Seki turned its focus to feeders only.

Mr. Masaaki Miura established **Seki Feeder, Inc.** in Lexington, KY as the President in May 2007, in an effort to start expanding its business worldwide.

Seki Feeder, with North American sales and service based in Hebron, KY, produces the Air Rod Feeder, Bolt Feeder and Feeder Mate. Seki manufactures these products in Hiroshima, Japan.

Seki Feeder, Inc.

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NUT VERIFICATION SYSTEM

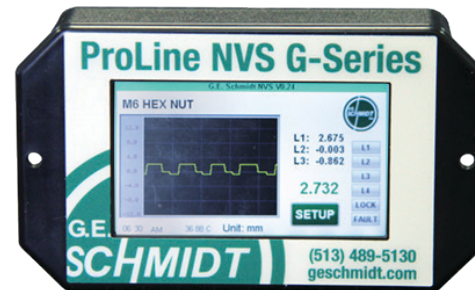
The **Nut Verification System (NVS)** is an **inline quality control system** for projection welding applications.

By monitoring the height of the guide pin in the lower barrel, the NVS catches many common issues, including missing or upside-down nuts and bolts.

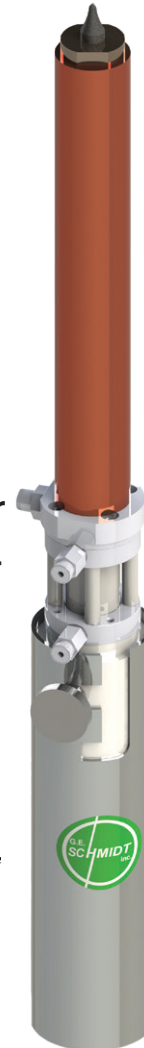
- 4 Relays, or "Limits," close when the sensor measures certain pin positions, giving the weld control or PLC permission to advance
- Easily integrated with SEKI Feeders

Weld Control/
PLC

Meter

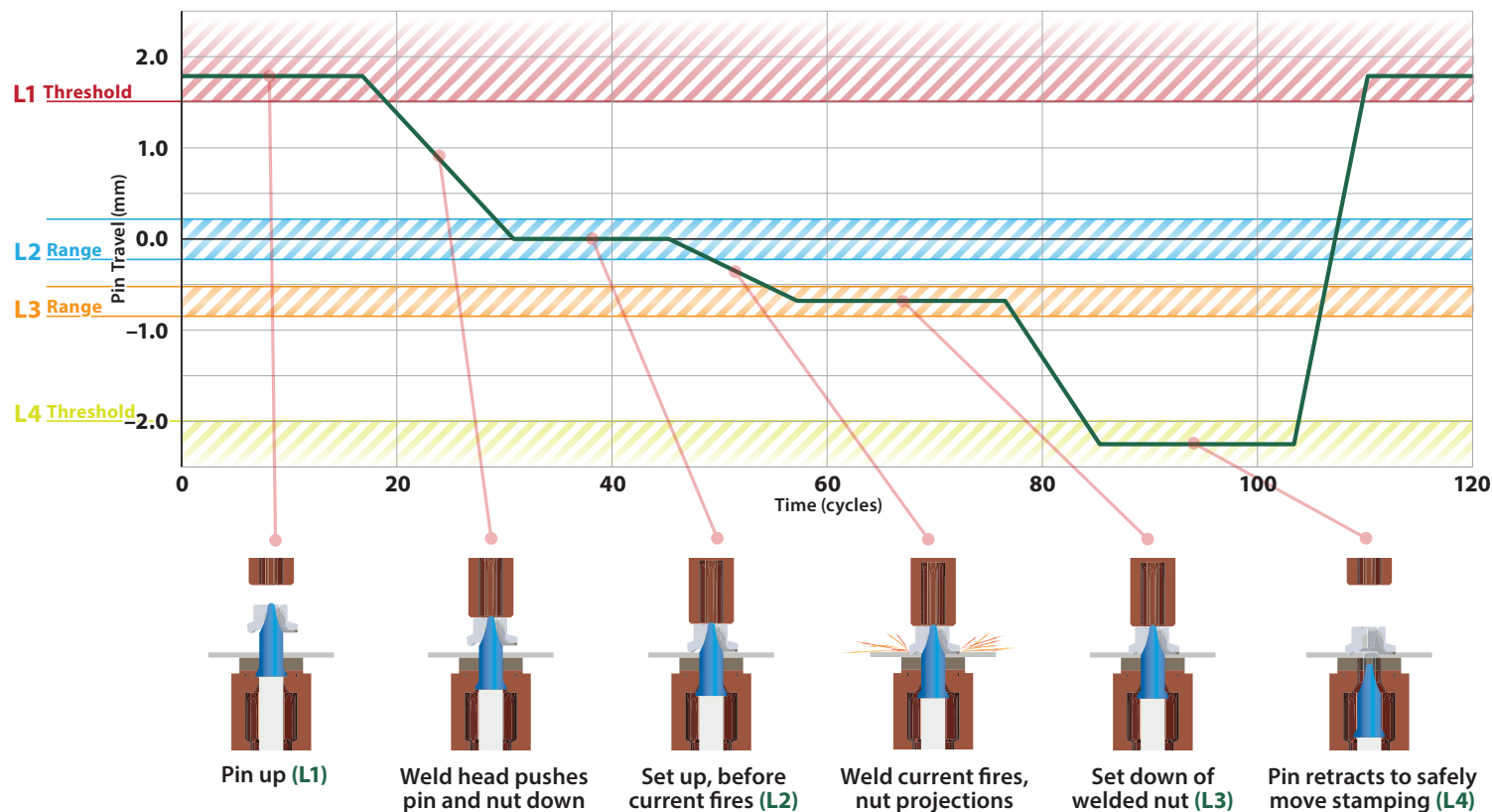


Lower
Barrel
Unit



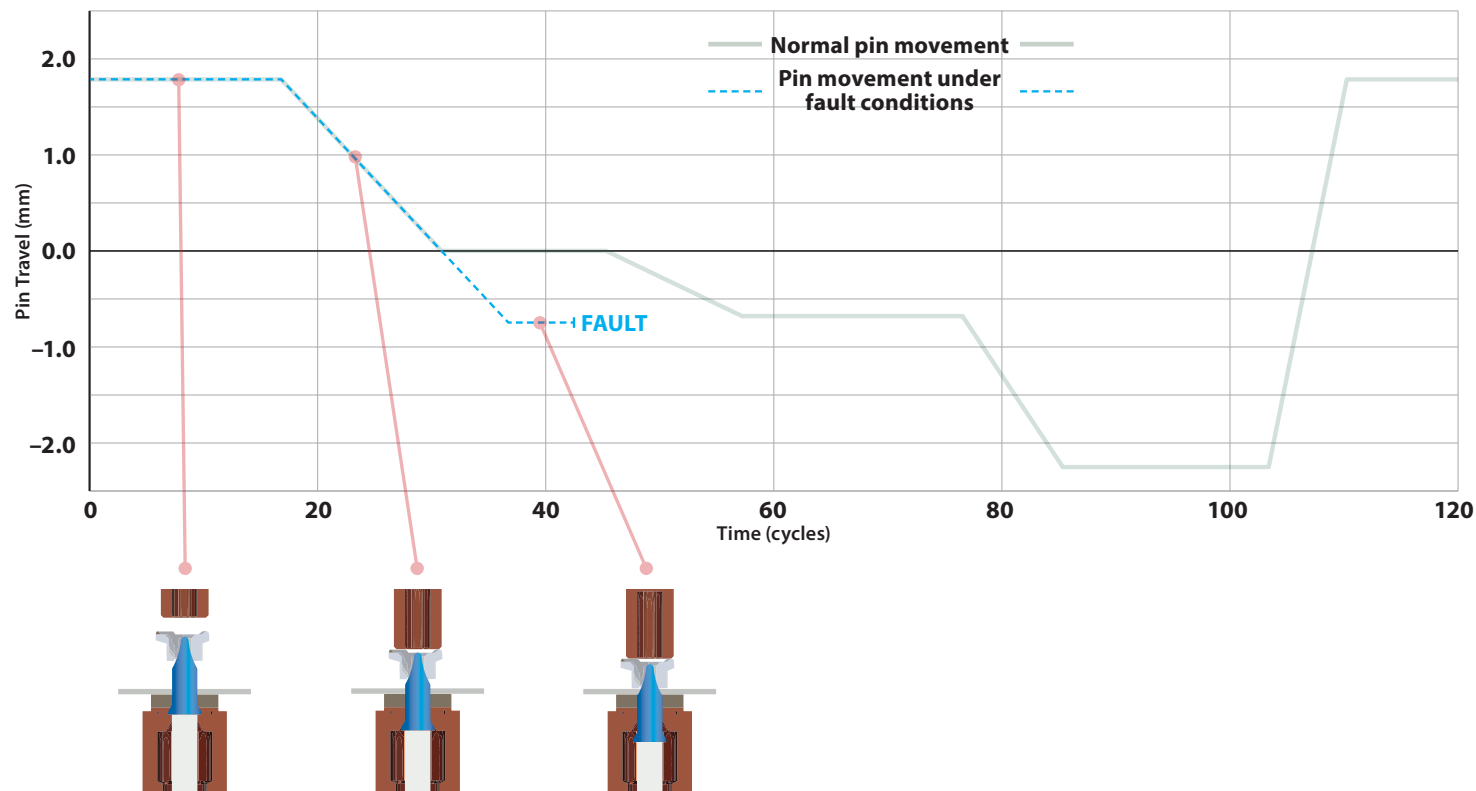
NUT VERIFICATION SYSTEM

Projection Welding Pin Travel vs. Time



NVS EXAMPLE: INVERTED NUTS

Projection Welding Pin Travel vs. Time



NP² NUT PRESENCE PROBE

Built to be **STRONG**

- Precision-ground stainless steel pin guide and pin
- Threaded body for easy, safe placement into fixtures

Built to be **VERSATILE**



- Banner 10–30V DC sensor with complementary solid-state NPN or PNP outputs
- Locating and non-locating options available
- Customizable version (*left*) accepts user-designed attachments with M6-tapped shaft
- Possible applications:
 - ◆ Material thickness detection
 - ◆ Use on robotic end effectors for in-process quality inspections

Built to be **COST-EFFECTIVE**

- Fast, easy integration reduces engineering costs
- Durability reduces maintenance costs

