Joining Solutions – KUKA Genius
Wide range of type variants to meet every requirement
Depending on your requirements and the spectrum of products to be manufactured, KUKA supplies the friction welding machines of the Genius family in the following type variants:

**KUKA Genius**
The bestseller for a wide range of applications

- **KUKA Genius eco**
The basic entry-level model for simple welding tasks.

- **KUKA Genius plus**
The mid-range model with automatic backstop adjustment for even greater productivity.

- **KUKA Genius power**
The fully equipped variant with a high-performance drive for the most challenging material combinations and angle positioning.

**KUKA Genius V**
The special vertical version for small footprints

- **KUKA Genius V plus**
The special vertical version for customers requiring a small footprint.

**KUKA Genius D**
The versatile double-head machine for one-pass productivity

- **KUKA Genius D power**
The versatile, fully equipped double-head machine for one-pass productivity.
The launch of the KUKA Genius single-head machine in 2015 laid the foundation stone of the KUKA Genius product family. Several versions have been added since then, all based on the same machine platform. Together they form a new modular machine generation for friction welding processes in the force range of 12 – 300 kN. These flexible all-rounders can be configured for both simple and complex friction welding tasks according to customer requirements and are therefore a secure investment for the future in times of rapidly changing markets.

Compact, modular friction welding machine
The KUKA Genius family

Convincing advantages

- Simple & ergonomic operator control
  - Easy access, lightweight operator doors and a large workspace
  - Touch panel with state-of-the-art graphical user interface
  - Intuitive operation

- Utmost accuracy
  - Outstandingly high precision & weld quality
  - Pre-recess bearing technologies, pre-recessed roller guides & a stress-optimized machine bed

- Case of servicing and minimal maintenance
  - Robust components
  - Large, wear-free direct drive and long lubrication intervals
  - Generously dimensioned maintenance doors
  - KUKA RemoteService

- Industry 4.0
  - Extensive sensor equipment for monitoring the machine & the welding process
  - Standardized interfaces for evaluation in the cloud
  - Results: greater productivity and data transparency

- Energy efficient
  - Up to 30 % energy savings due to electronically controlled hydraulic system
  - And drive technology with particularly low noise metrics

- Custom tailored complete solution
  - Sophisticated hydraulic system
  - Various performance classes
  - Very large speed/load range for a wide spectrum of components

Simple installation...

- Plug & play solution
  - Elimination of external control cabinets for quick installation

... in a minimum of space

- Low floor space requirements & compact design
  - Optimal utilization of the available floor space

Intuitive operation and control

Operator control is carried out intuitively via a touch panel with a modern graphical user interface that can be operated while wearing safety gloves. The user interface provides the following functions:

- Welding program management:
  - User-friendly configuration and setting of the welding process, management of up to 1,000 welding programs

- Control & monitoring:
  - All parameters of the welding process controlled and monitored with millisecond accuracy via tolerance limits and envelope curves

- Presentation of values and status:
  - Display of the actual values and parameters as well as the current status in plain text and graphical representation of current and archived parameter profiles

- Documentation:
  - Documentation of the welding results in the form of databases, printed PDF report or database interface

- Quality management:
  - Full traceability via data matrix code. Weld data are assigned to the individual components. Comprehensive quality reports are available directly or via interfaces.

Simple & ergonomic operator control

- Easy access, lightweight operator doors and a large workspace
- Touch panel with state-of-the-art graphical user interface
- Intuitive operation

Optional additional...
We can be found locally all over the world:

Argentina
Australia
Austria
Belgium
Brazil
Canada
Chile
China
Czech Republic
Germany
Hungary
France
Great Britain
India
Italy
Japan
Korea
Malaysia
Mexico
New Zealand
Norway
Poland
Portugal
Russia
Sweden
Switzerland
Singapore
Slovakia
Spain
South Africa
Taiwan, China
Thailand
Turkey
USA

For further information please contact us at frictionwelding.industries.de@kuka.com

KUKA Deutschland GmbH  Zugspitzstrasse 140, 86165 Augsburg / Germany  T +49 821 797-0  F +49 821 797-1991  kontakt@kuka.com
KUKA Systems UK Limited  Hereward Rise, Halesowen, West Midlands, B62 8AN / UK  T +44 121 585 08-88  F +44 121 585 08-10

Specifications regarding the characteristics and usability of the products do not constitute a warranty of properties. They are intended to serve informative purposes only. Solely the respective contract of sale shall be binding in respect of the extent of our services and supplies. Some items of equipment depicted in the illustrations are optional and are not included in the standard scope of supply. Technical Data and illustrations are not binding for the delivery. Subject to change without prior notice.

KUKA Genius Eco®, KUKA Genius Plus® and KUKA Genius Power® are registered trademarks in the European Community.

www.kuka.com