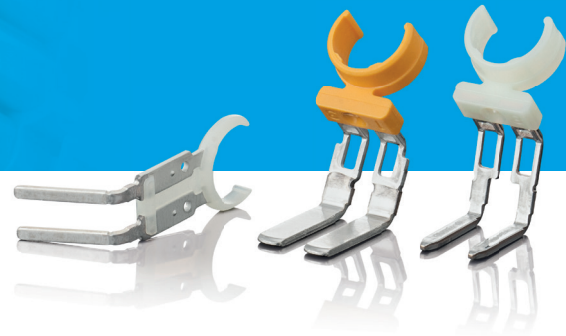


CONNECTING SOLUTIONS



TRENDS & CHALLENGES

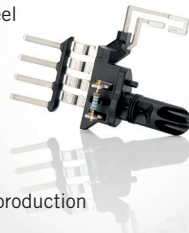
Trends in connectivity, automation and miniaturization are increasing the demands on connection technology. Connectors, the heart of every modern high-end connection, are at the center of a globally networked supply chain ensuring the functionality of electronic applications in consumer electronics, mobility, medical technology and the manufacturing of tomorrow. As the number of applications increases, so do the

demands on materials and price structures. Modern connectors must therefore be durable, reliable and highly efficient. In short: more robust, smaller and more scalable!

As high-performance toolmakers, we are experts in precision and put our own demand for perfection into practice, even in highly complex series production. That is why we are the all-in-one solution partner when it comes to connectors.

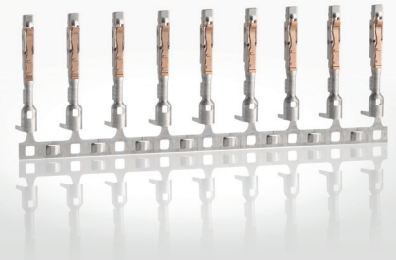
FLAT CONNECTOR ASSEMBLY WITH INTEGRATED RESISTOR

- Strip plated stamped part with reel to reel overmolding
- Fully automated production line up to packaging
- Integration of electronic components
- 100% quality monitoring in-line incl. electrical testing
- Flexible production concept for variant production



MULTI-PART CONNECTOR WITH STAINLESS STEEL SPRING

- 1-stage production
- Selective strip electroplating
- In-die laser welding
- Camera inspection
- Laser marking



ROUND CONTACT

- Selective silver plating
- Dielectric feeding and assembly
- Delivery endless on the strip on environmentally friendly pendulum / reusable packaging

PRESS-FIT PIN (ELOPIN®, KRAMSKI COMPLIANT PIN)

- Stable solderless connection thanks to press-fit technology
- Proven EloPin® standard solution in different sizes
- Customer-specific adaptations possible



MALE / FEMALE CRIMP CONTACT

- Round rolled or folded according to customer specific requirements
- Diameter $\geq 0,400\text{mm}$
- Selective precious metal electroplating
- Endless on strip
- 100% camera tested



HIGH-VOLTAGE PIN WITH MOUNTED CONTACT PROTECTION CAP

- High currents due to high material cross-sections
- Step-milled strip
- Selective precious metal electroplating
- Single-stage manufacturing concept with assembly of the plastic cap in the progressive die
- 100% quality control in-line



KRAMSKI AT A GLANCE

>40

YEARS OF EXPERIENCE &
BEST MANUFACTURING

>3 BN

STAMPING & PLASTIC-METAL
COMPOSITES PER YEAR

4
WORLDWIDE
LOCATIONS

GERMANY, USA, INDIA &
SRI LANKA

CERTIFIED QUALITY

IATF 16949

ISO 9001

ISO 14001

ISO 50001

OUR COMPETENCIES

- SINGLE-STAGE PRODUCTION WITH DIFFERENT MATERIALS AND THICKNESSES
- HIGHEST FLEXIBILITY IN GEOMETRIES AND VARYING CUSTOMER CONNECTIONS
- COMPLEX COMBINATION OF DIFFERENT SURFACES

THE KRAMSKI SOLUTION

STANDARDIZED & CUSTOMER SPECIFIC

The production of highly complex connecting components in large quantities requires advanced machining know-how, targeted process development and the most precise manufacturing quality. Whether round or angular, flat or curved, single or multi-part - together with our customers we realize

projects of the highest complexity. We offer both standardized and completely customized connection solutions. Behind every convenience in daily life there is an electronics application, and for every electronics application there is a KRAMSKI solution.

4 REASONS FOR KRAMSKI

①

MAXIMUM EFFICIENCY

Efficiency-optimized output thanks to long tool-life and high stroke rates

②

GLOBALLY CONNECTED PRODUCTION

Maximum flexibility thanks to globally positioned value creation

③

COMPREHENSIVE DEPTH OF PRODUCTION

Holistic view and processing of projects across all levels

④

100% INSPECTION POSSIBLE

Uncompromising quality management at all stages of the project

Like no other partner, we answer our customers' challenges with our more than 40 years of experience in high-performance toolmaking and series production of the most complex parts. Our extensive technical know-how complements our ability to develop specific solutions and adapt tools and manufacturing

processes to the individual needs of our customers. Our constant striving for perfection makes us the ideal partner for the development and series production of the ideal connecting solution.