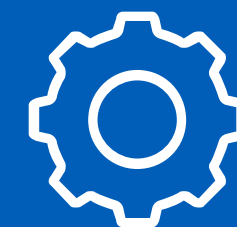


autosplíce[®]

Interconnecting the Future

GLOBAL SNAPSHOT 2018

ABOUT US



Global Overview



World-wide manufacturer
of interconnect products

01

CAPABILITIES



\$20M invested in capital
since 2012

04

INVESTMENTS



2016 global sales \$90M with
776 employees world-wide

02

REVENUE



4 manufacturing sites
worldwide

05

FOOTPRINT



Strong global engineering
resources; over 50 patents

03

ENGINEERING

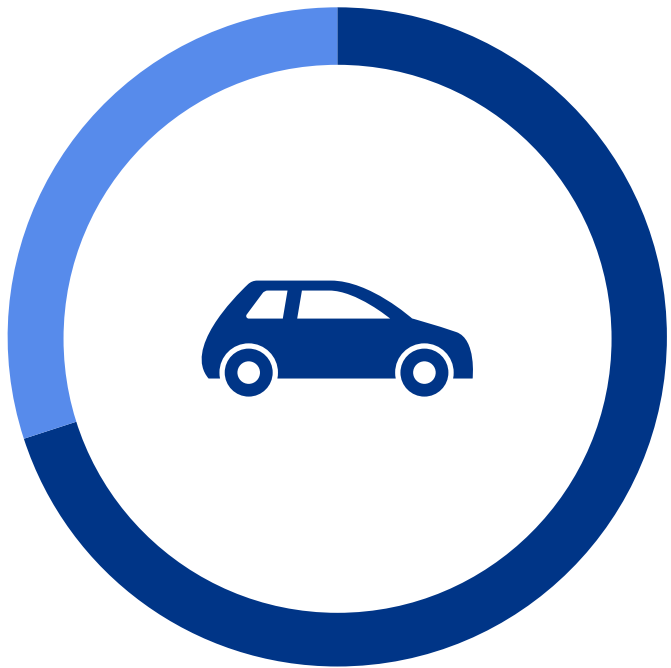


Global acquisitions in 2018

06

GROWTH

Industry Diversification

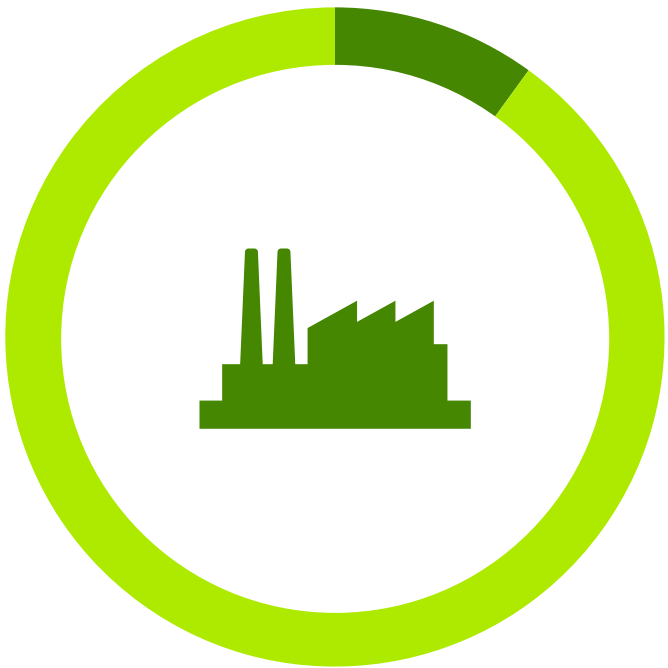


70%

Automotive



• APTIV •



10%

Industrial

flex



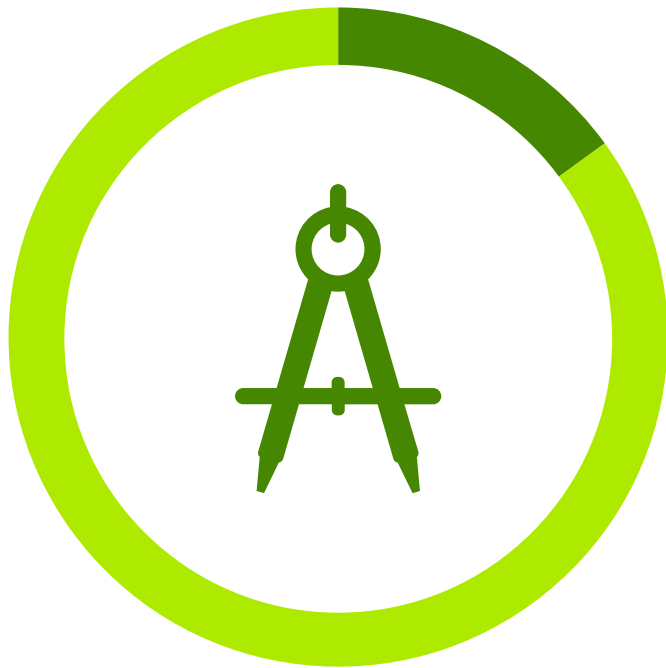
EATON



5%

Medical

Insulet Corporation



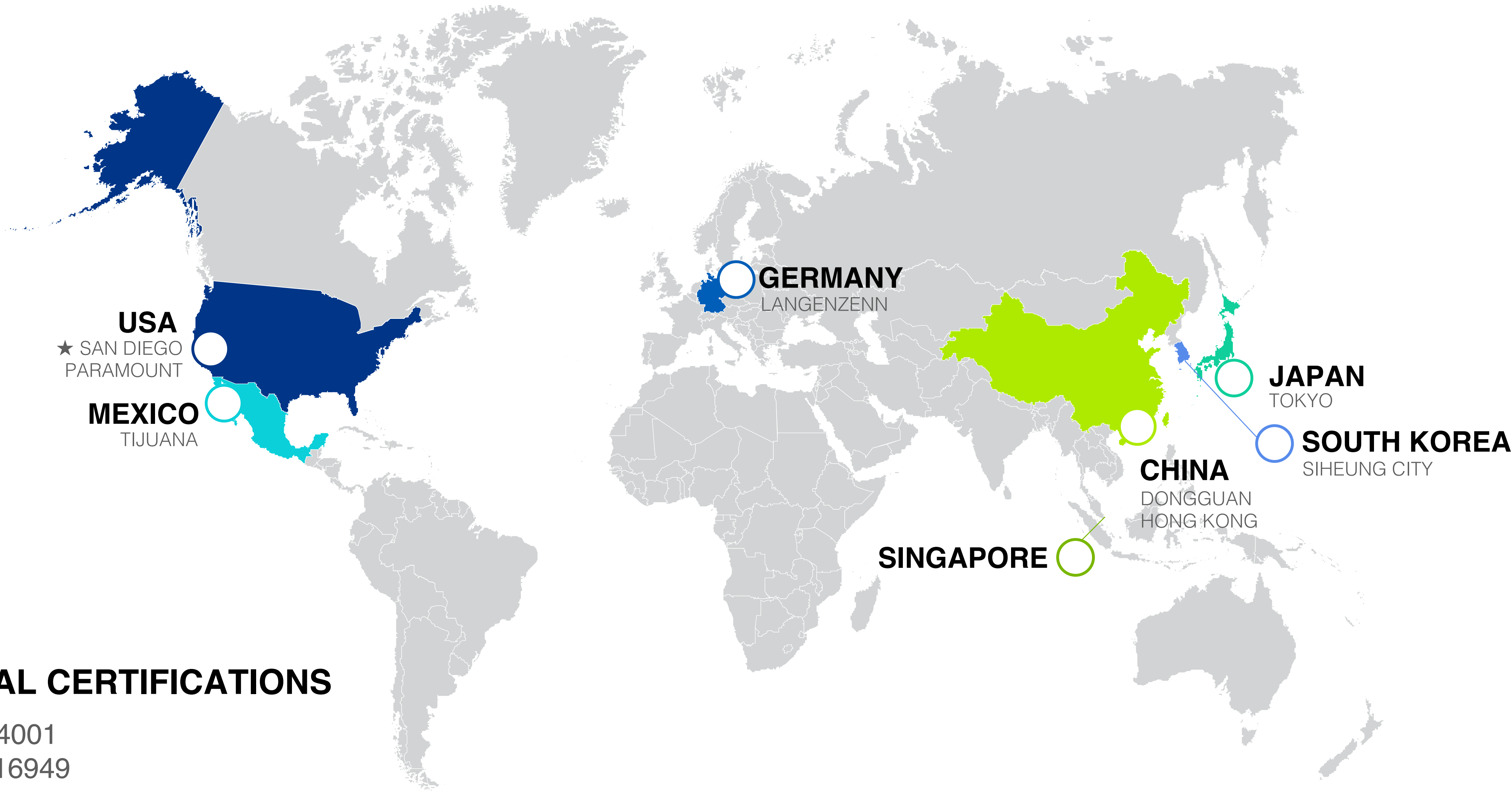
15%

Other

BOSE

Honeywell

plantronics



GLOBAL CERTIFICATIONS

- ISO14001
- IATF16949

Vertical Capability Advantage



Paramount, CA

- Precision Stamping
- Press Fit Technology
- Splice Technology



Tijuana, Mexico

- Pin Production
- Molding
- Connector Manufacturing
- Interconnect Assemblies
- SMA Assemblies



Langenzenn, Germany

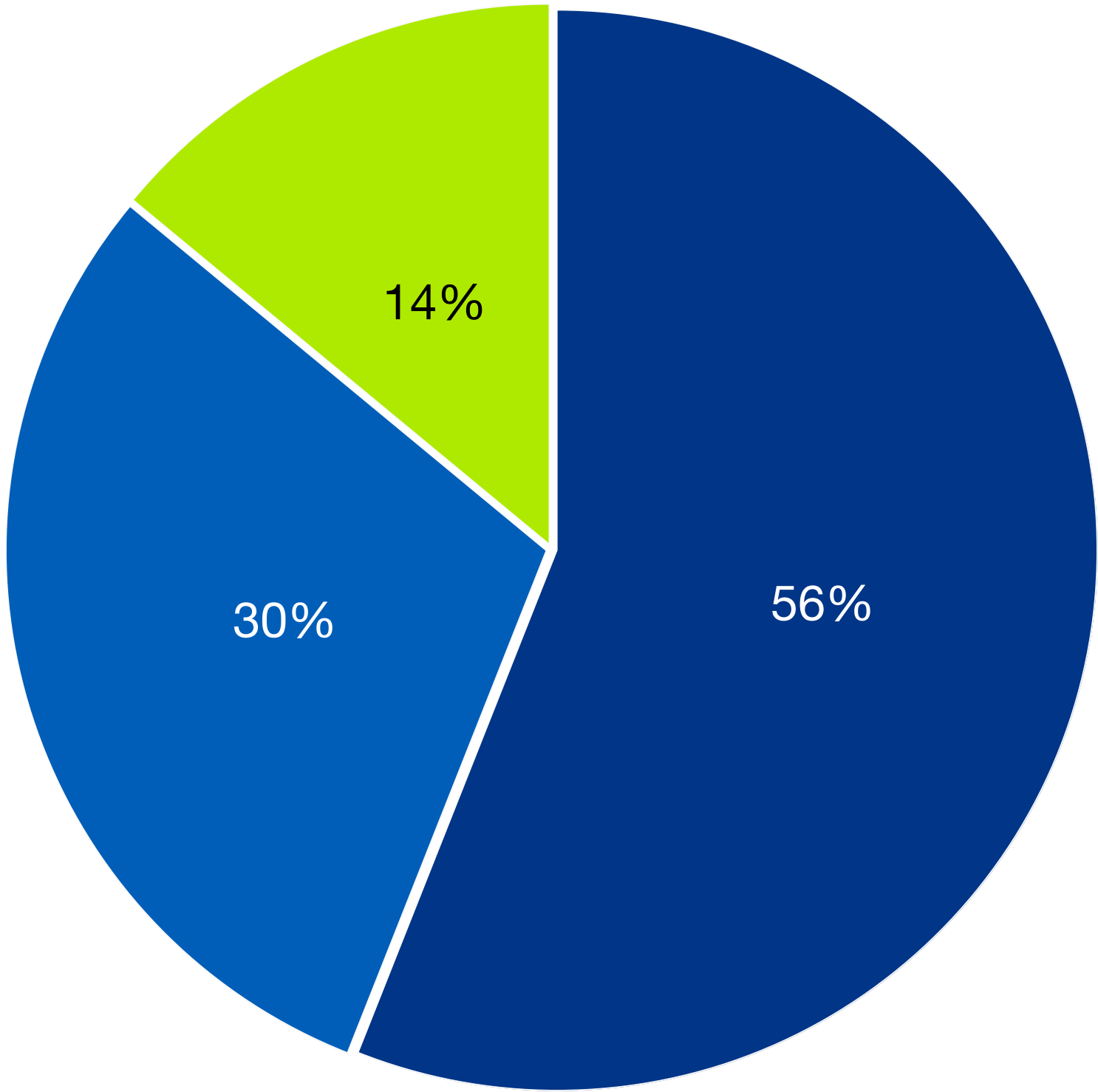
- Precision Stamping
- Pin Production
- Molding
- Connector Manufacturing
- Interconnect Assemblies



Dongguan, China

- Precision Stamping
- Press Fit Technology
- Pin Production
- Molding
- Connector Manufacturing
- Interconnect Assemblies

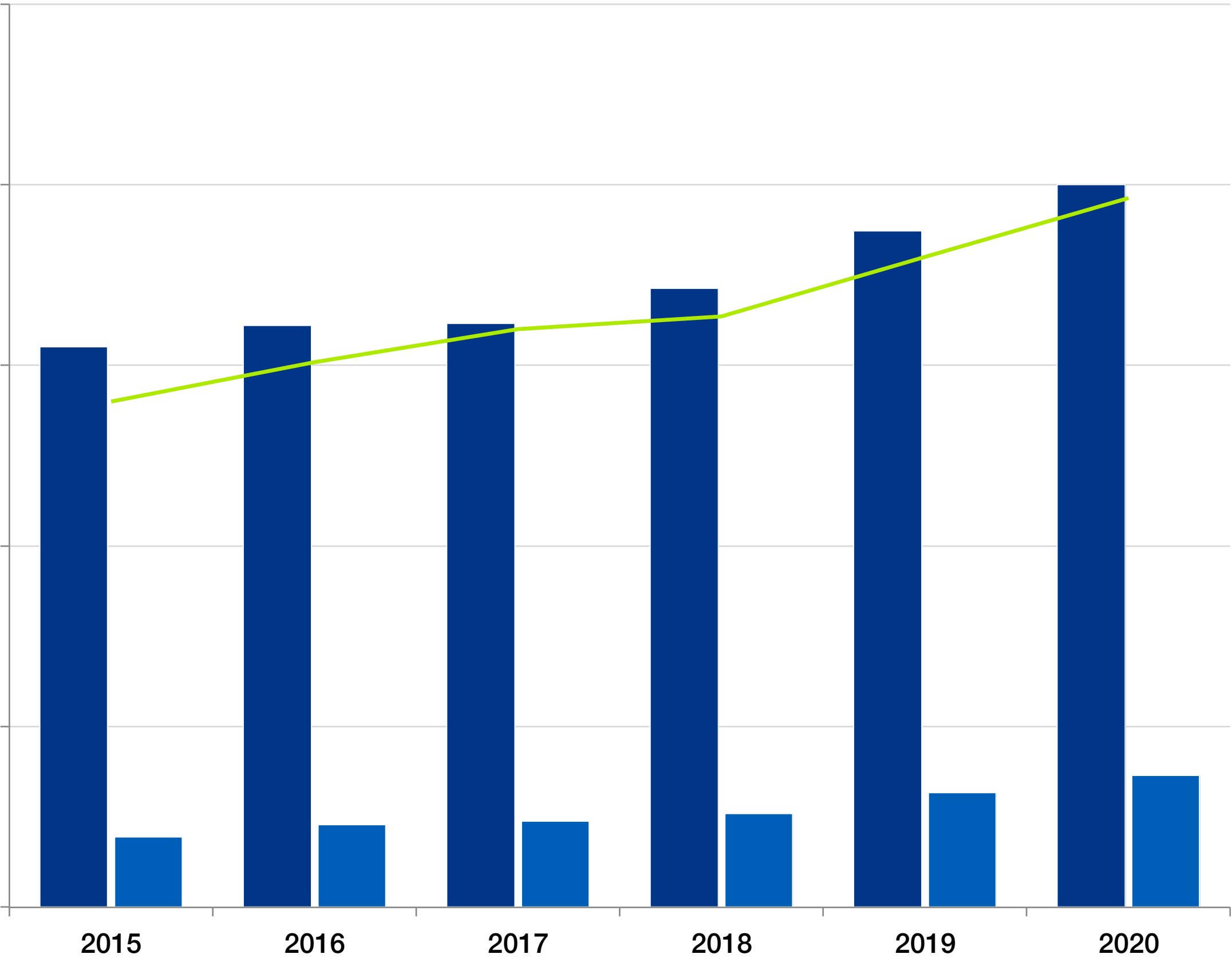
Machines & Components Custom Connectors Integrated Assembly



REVENUE SPLIT BY SEGMENT

2015 - 2020F

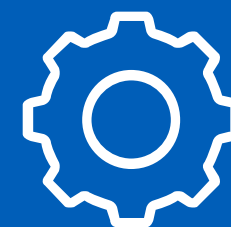
Revenue EBITDA EBITDA margin

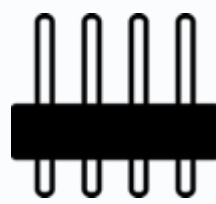


REVENUE & EBITDA

2015 - 2020F

PRODUCT PORTFOLIO





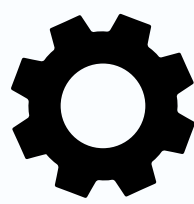
CUSTOM CONNECTORS

Design and manufacturing of customer specific connector assemblies comprised of customized components

Insert moldings, over moldings

END MARKETS

- Automotive
- Industrial
- Other



MACHINES & COMPONENTS

Design and manufacturing of automated wire splicing and interconnect insertion machines

Insertion machines, headers, stamped terminals, splice machines and spliceband

END MARKETS

- Automotive
- Industrial
- Medical
- Other



INTEGRATED ASSEMBLIES

Offering of PCBA and Shape Memory Alloy assemblies

Power distribution modules, custom assemblies

END MARKETS

- Automotive
- Medical



CUSTOM CONNECTORS

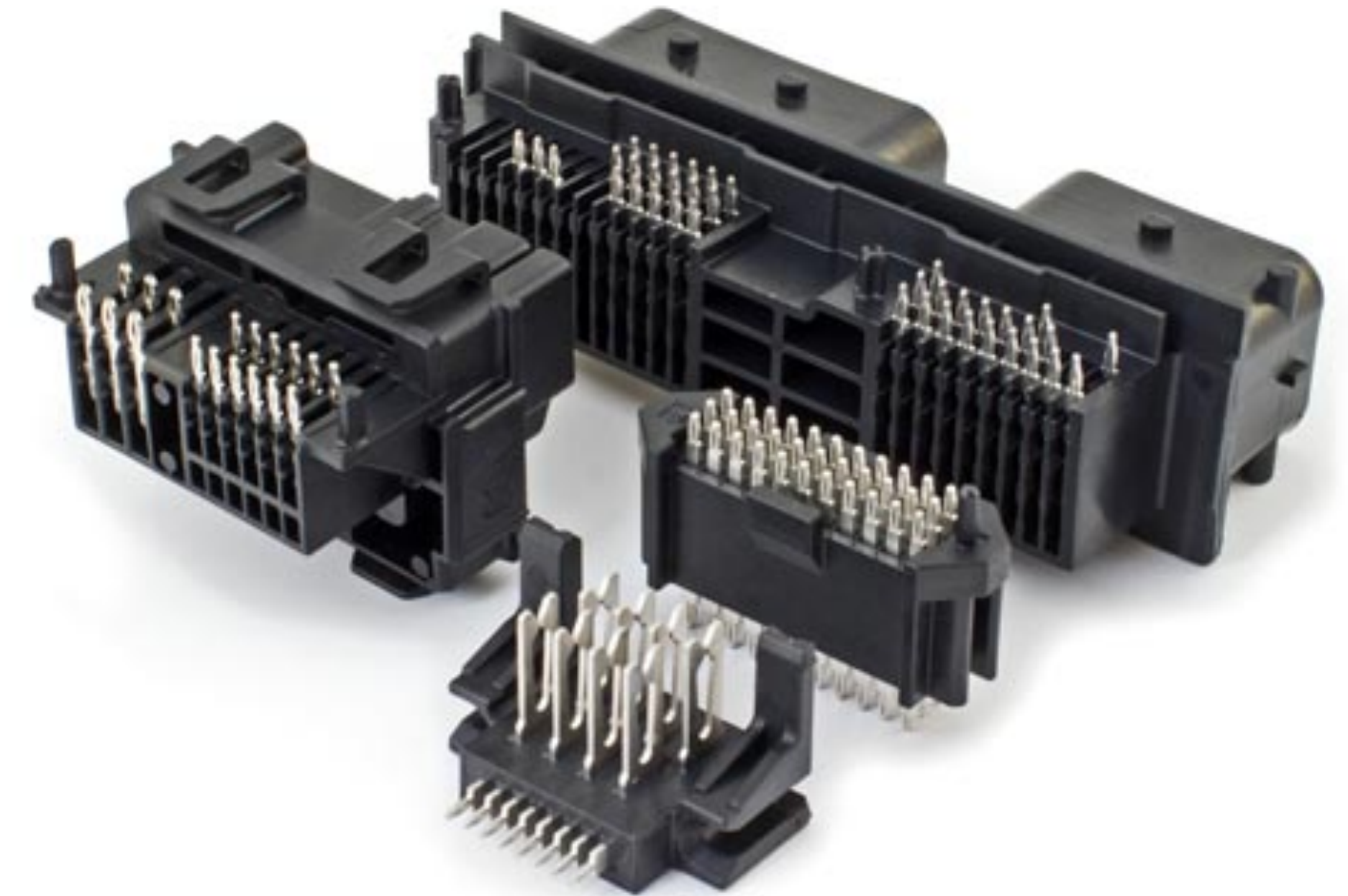
Custom Connectors and Insert molding products incorporate robust press-fit terminals with precision molding and low cost flexible assembly technology.

Insert Molding | Press-Fit Terminals
Complex Lead Frames



VERSATILITY

We focus on innovative, versatile and cost effective solutions tailored specifically to meet your project requirements. From basic molded headers to high-density shrouded connectors where environment and voltage rating are a factor, Autossplice has the experience, resources and expertise to meet your needs.



CAPABILITIES

- Progressive Die Stamping
- Vertical Insert Molding
- Horizontal Continuous Molding
- Press-Fit Terminals
- Complex Lead Frames & Busses
- Robotic Automation Assembly
- Dispensing UV Cured Materials
- 100% AOI, Hi-pot, and Continuity Testing

Infotainment / Instrumentation

Terminals, Auto Header, Custom connectors



Airbag Modules

Integrated connector module

Radar Housing

Integrated connector module





Sensors & Fuel Control Modules

Integrated Connector Assemblies,
Terminals, Custom Header, Busbars



ECU & BCU Control Units

Custom Connector Assemblies, Terminals, Custom
Header, Busbars





MACHINES & COMPONENTS

Design and manufacturing of automated wire splicing and interconnect insertion machines.

Insertion Machines | Headers | Stamped Terminals
Splice Machines | Spliceband





NA

MULTISERT

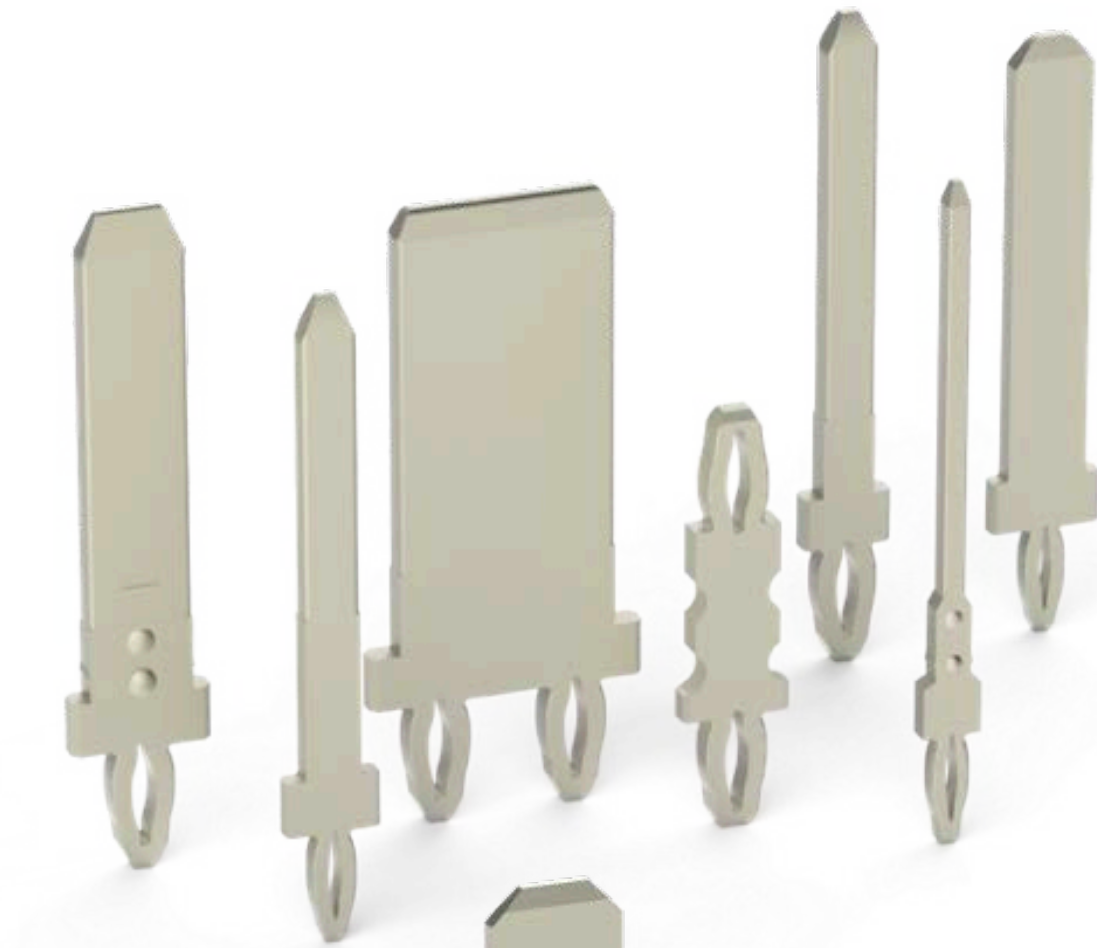
- Insertion Time: 0.35 sec./component on .2" (5.08 mm) pitch
- Insertion Area: 18" x 18" (457 x 457 mm)
- Insertion Heads: Max. 2
- Vision system for PCB error correction



EU

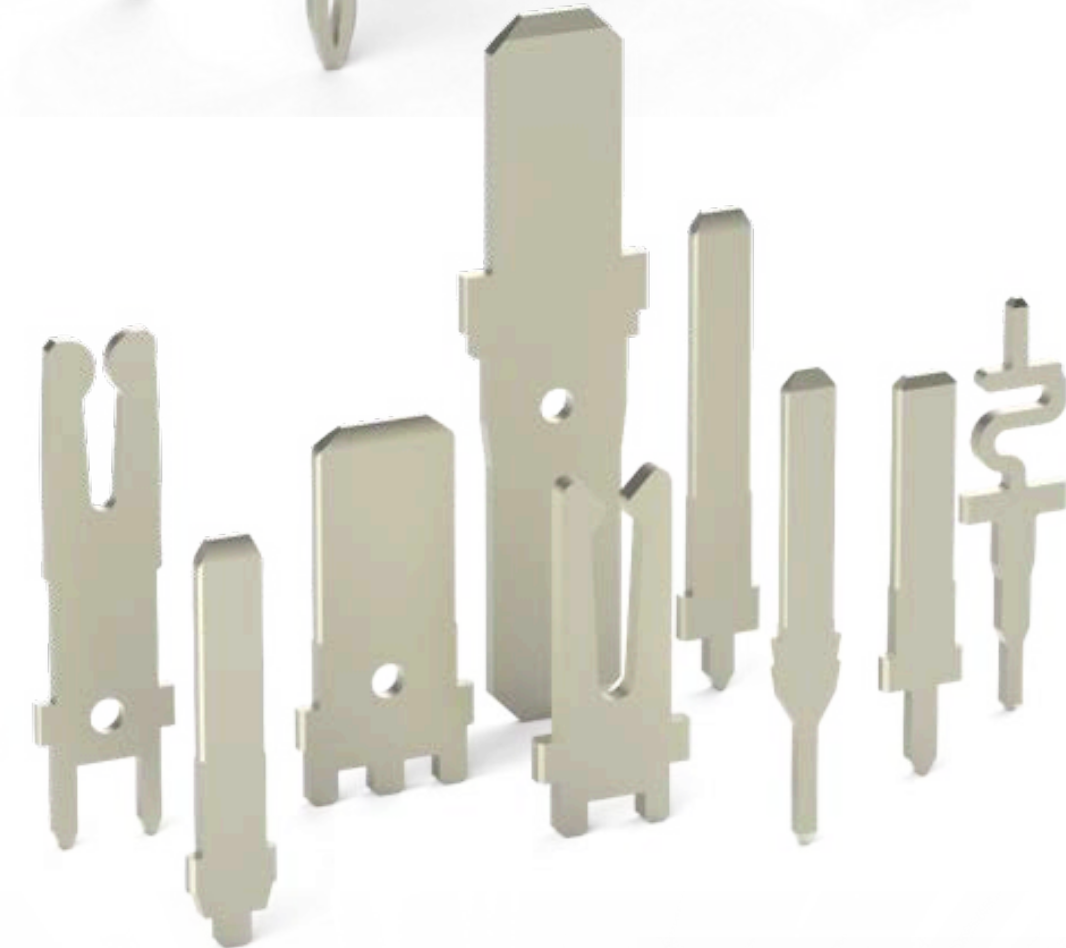
AIS 5000

- Insertion Time: Pin 0.7 sec. | Tab 1.0 sec./component
- Insertion Area: 12" x 12" (300 x 300 mm)
- Insertion Heads: Max. 2
- Autocorrection function (optional)



PRESS-FIT TERMINALS

- 0.4 mm coming soon
- 0.64 mm
- 0.82 mm
- 1.2 mm



SOLDER TAIL TERMINALS

- Blades
- SMT sockets
- Receptacles / Sockets
- Tuning Forks
- Horizontal Blades / Pins



AP/2 DRAWN WIRE PINS

- 0.1 mm – 1.2 mm Pins
- Press-fit coming soon
- Conforming Semi Press-fit
- Star and Knurl pins



ADVANTAGE

The continuous reel packaging method provides convenient, cost effective automation and placement.



Press-fit
Single and Dual Row



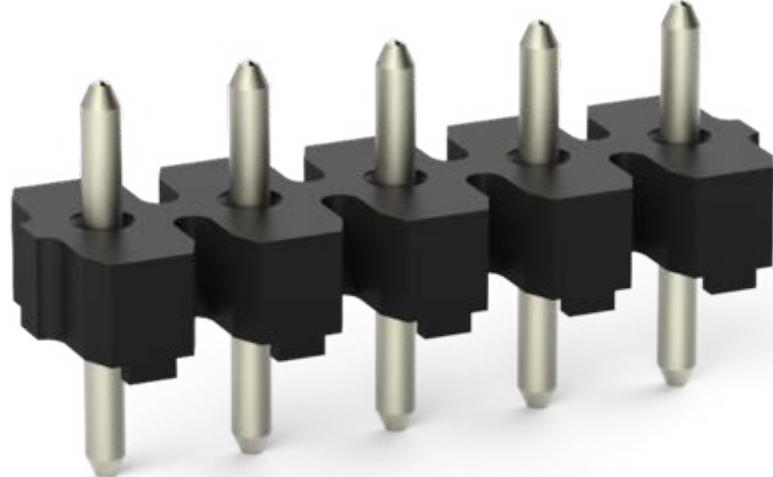
Solder tail
Single and Dual Row



Right angle
Single and Dual Row



Blades
Single and Dual Row

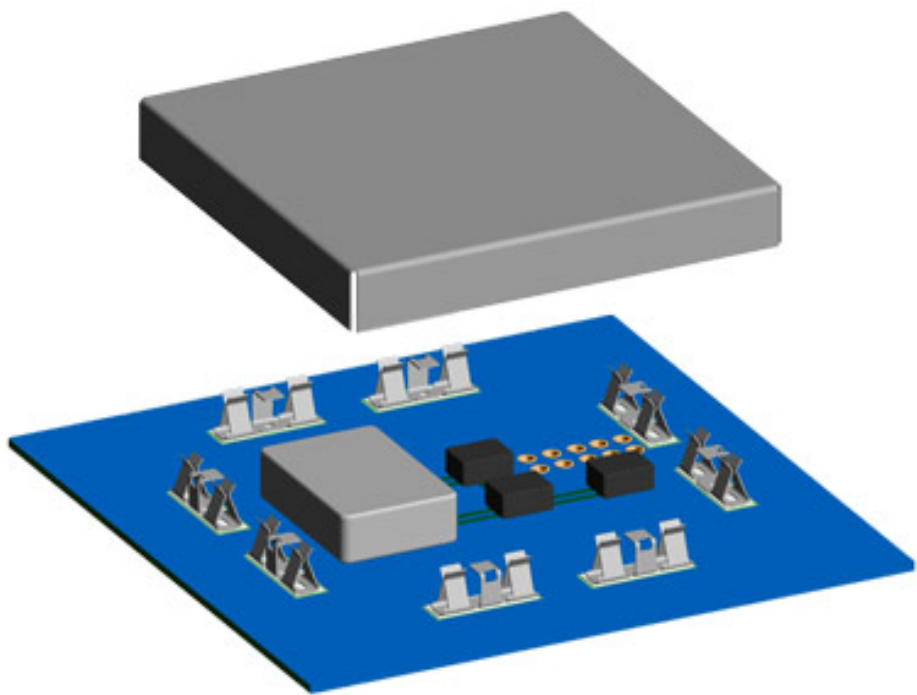


Pins
Single and Dual Row

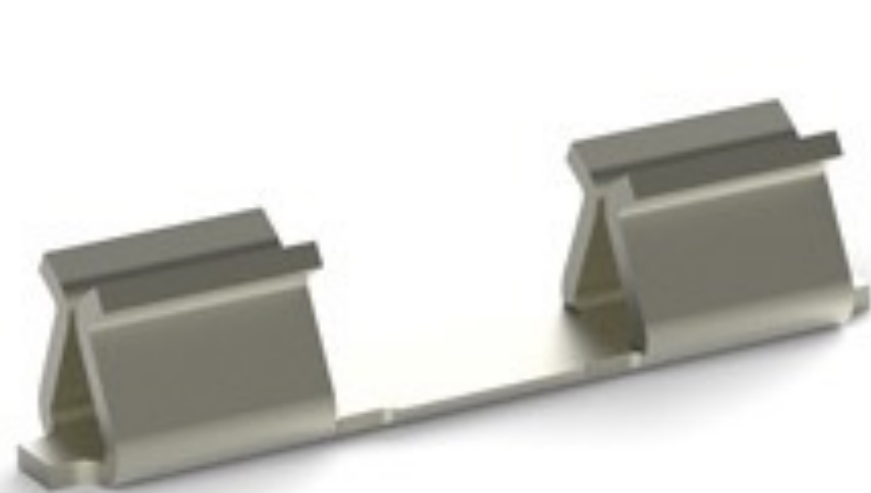


Stacking header

**SHIELD CLIPS
AND SHIELDS**



Autosplice shield clips and covers offer premium RFI and EMR noise suppression with two designs, the standard shield clip uses four independent spring contacts and the corner shield clip to minimize interference on the most sensitive devices.

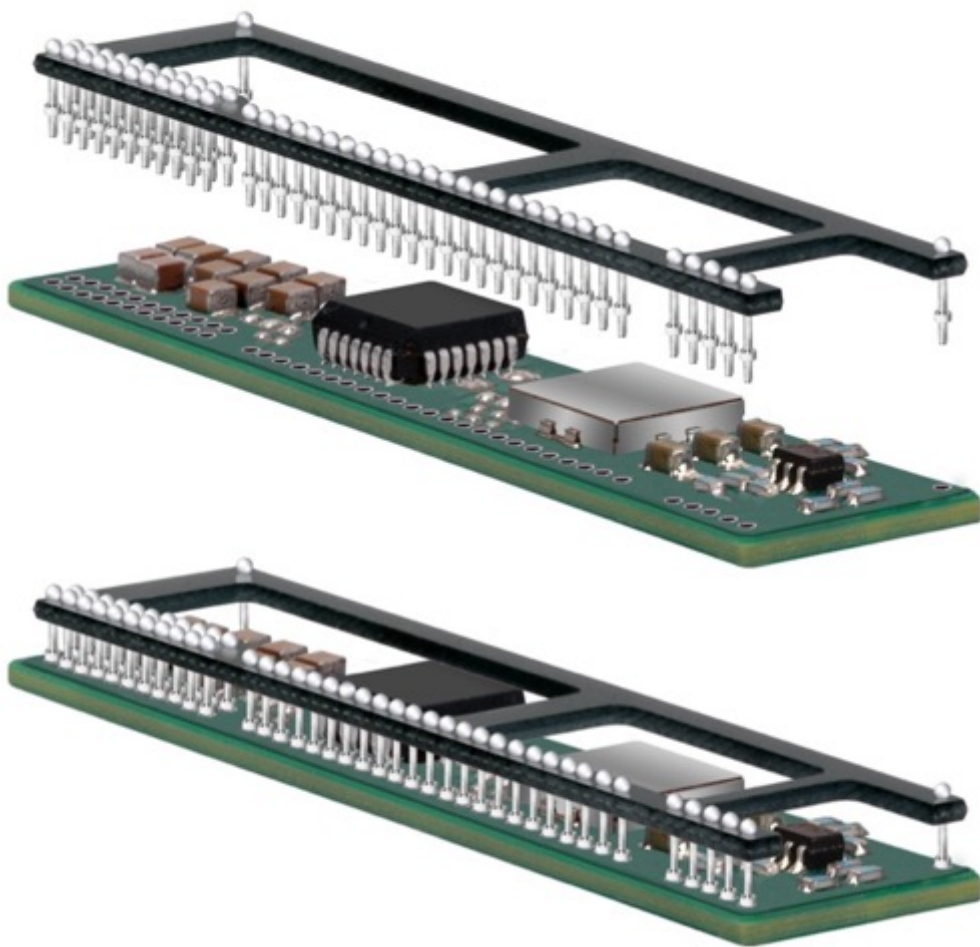


Bottom pick-up



Top pick-up

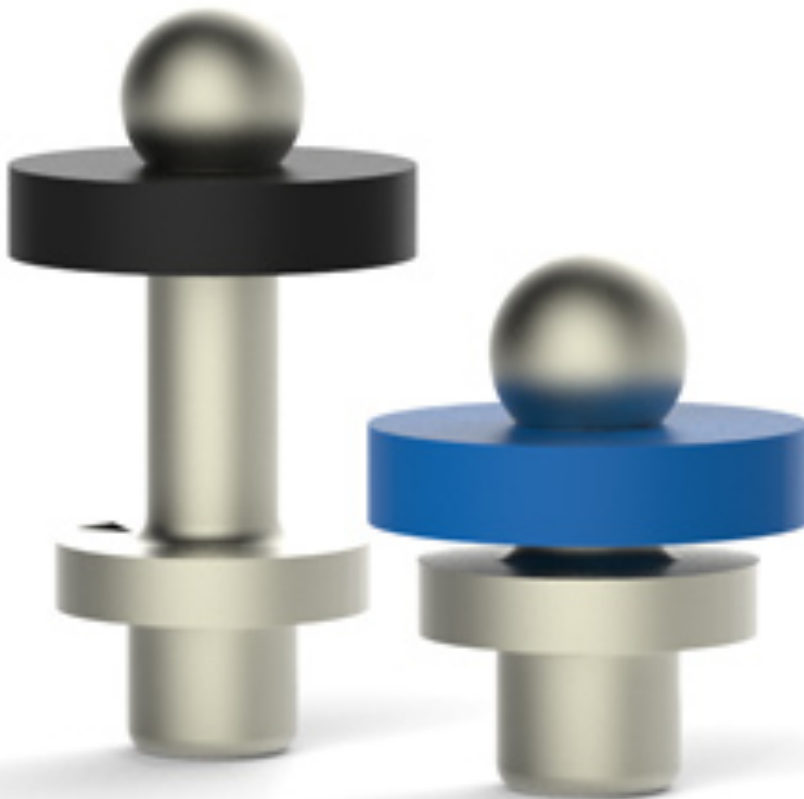
**SOLDERBALL
PINS**



Solderball Pins have been tested to perform current capacities of up to 40 amps.



SMT Pin





SAS/3

- Single shot clutch drive system
- Mechanical driven feed for splice band
- Scrap free
- Vast variations of tooling options



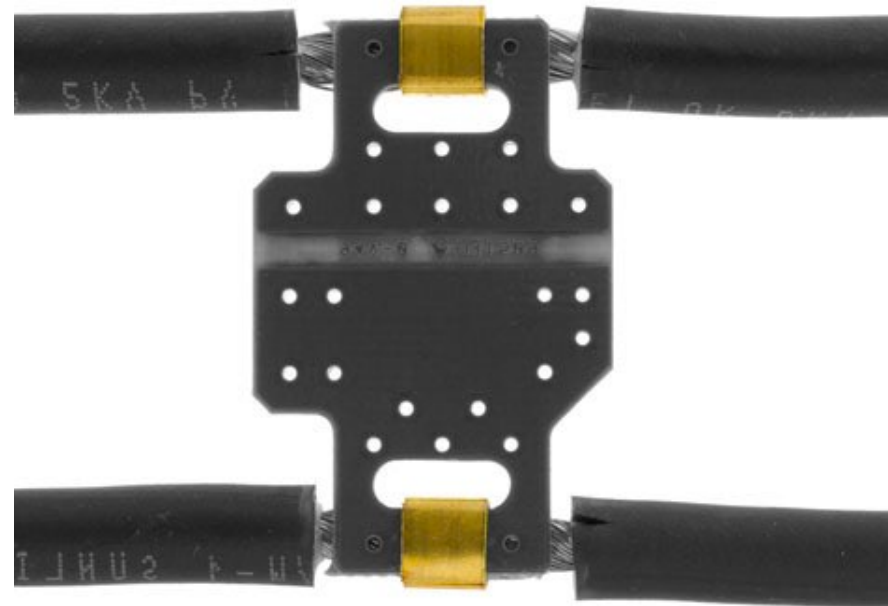
ACS 2000

- Servo Motor Drive system
- Pneumatic grip and feed for splice band
- Scrap free
- Programmable Counter

Wire-to-Wire



Direct-to-Board

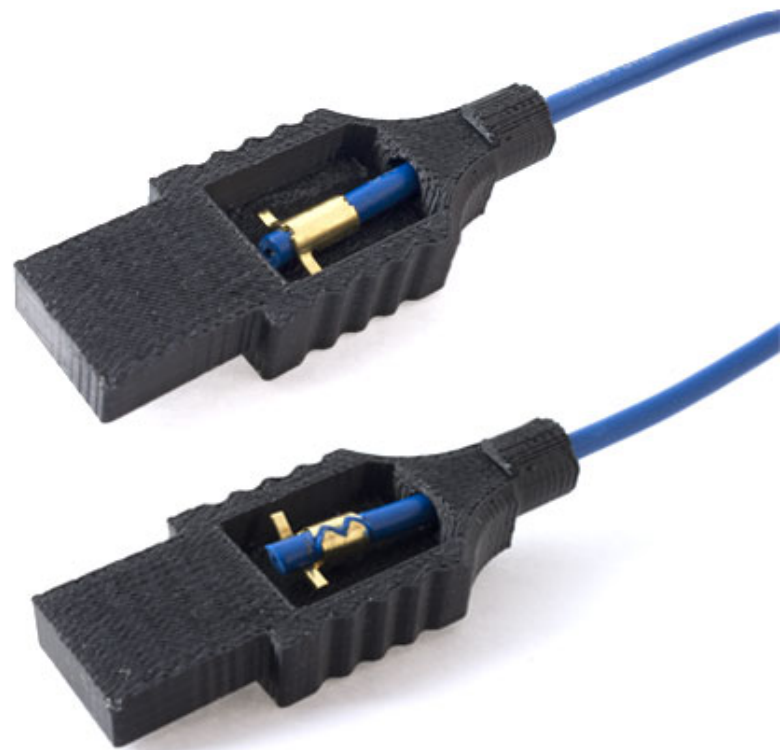


ADVANTAGE

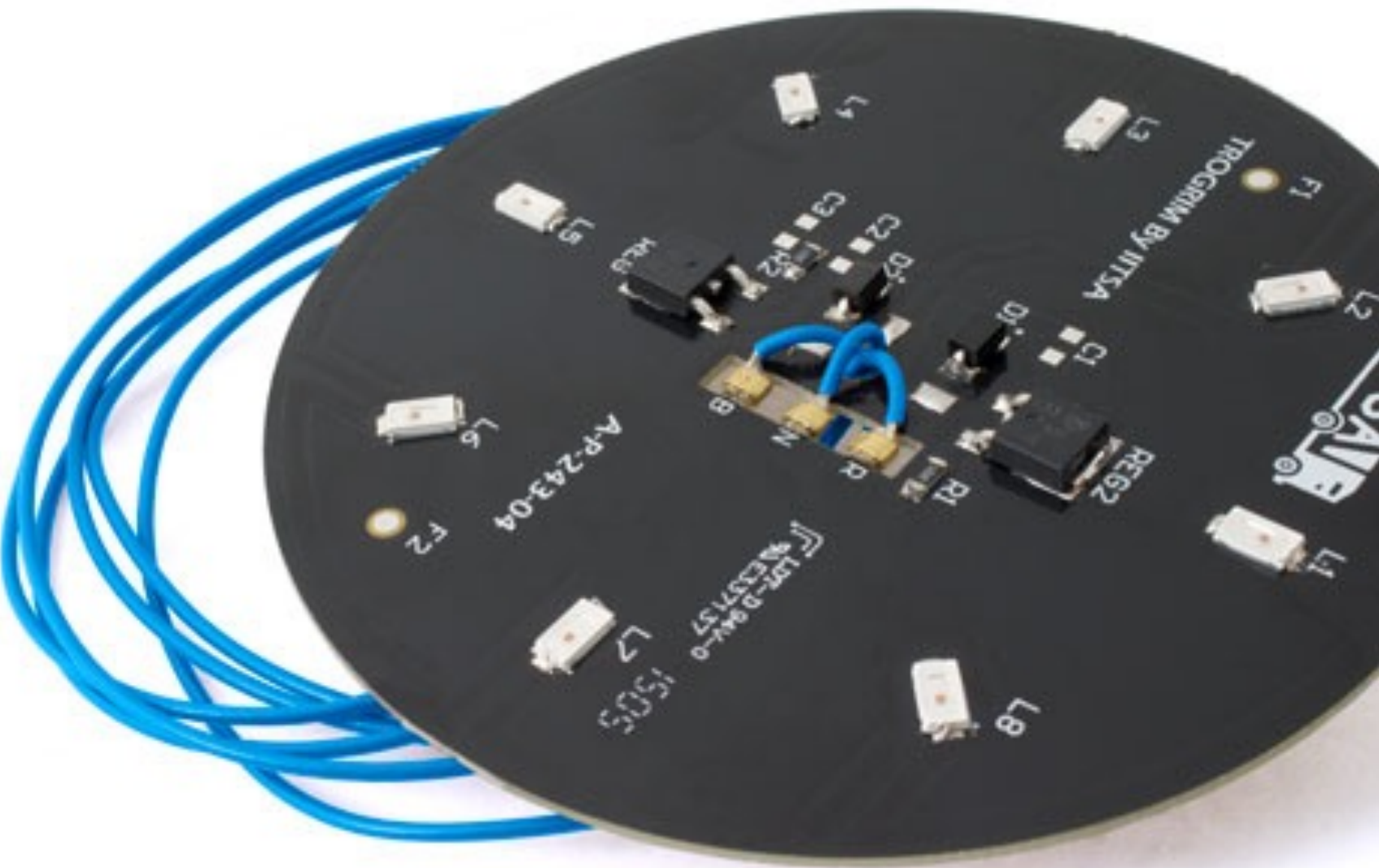
Splice Technology produces gas-tight, repeatable, and waste-free low resistance connections.

Splice Technology feeds, cuts, forms and splices connections quickly, eliminating the need for pre-formed crimps.

Strain Relief



Magnet Wire

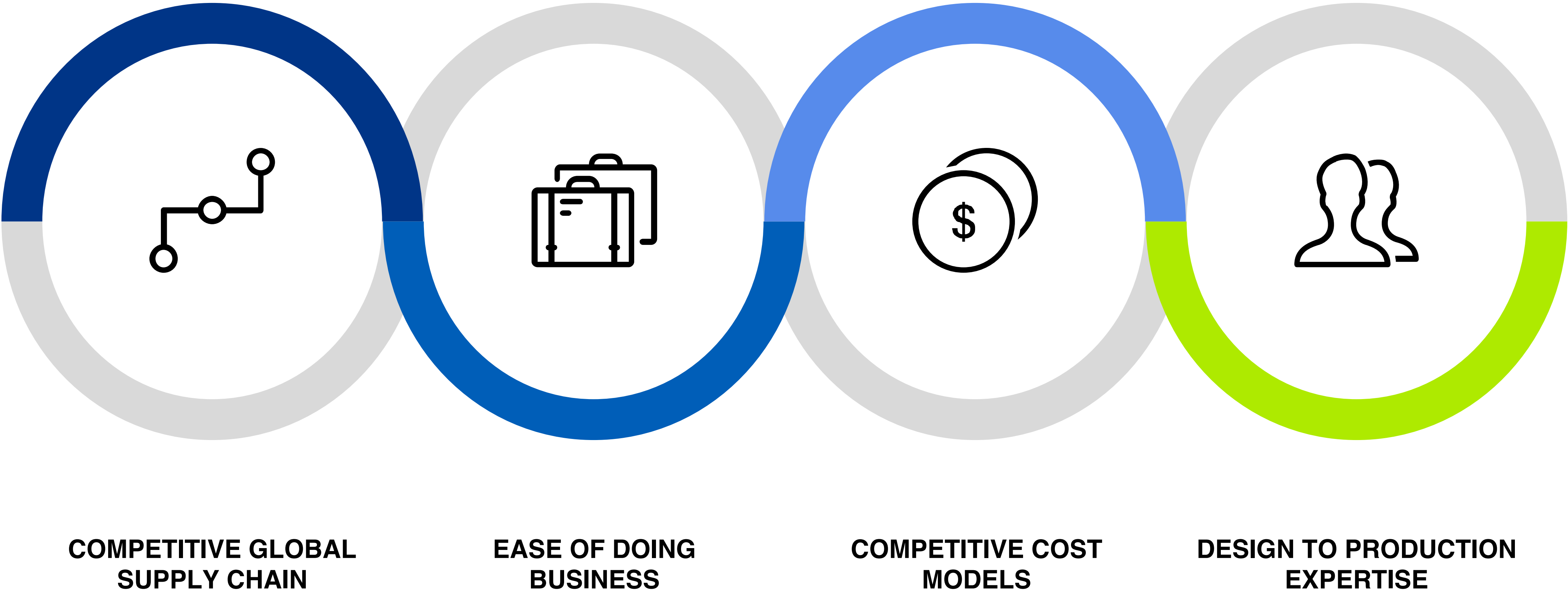




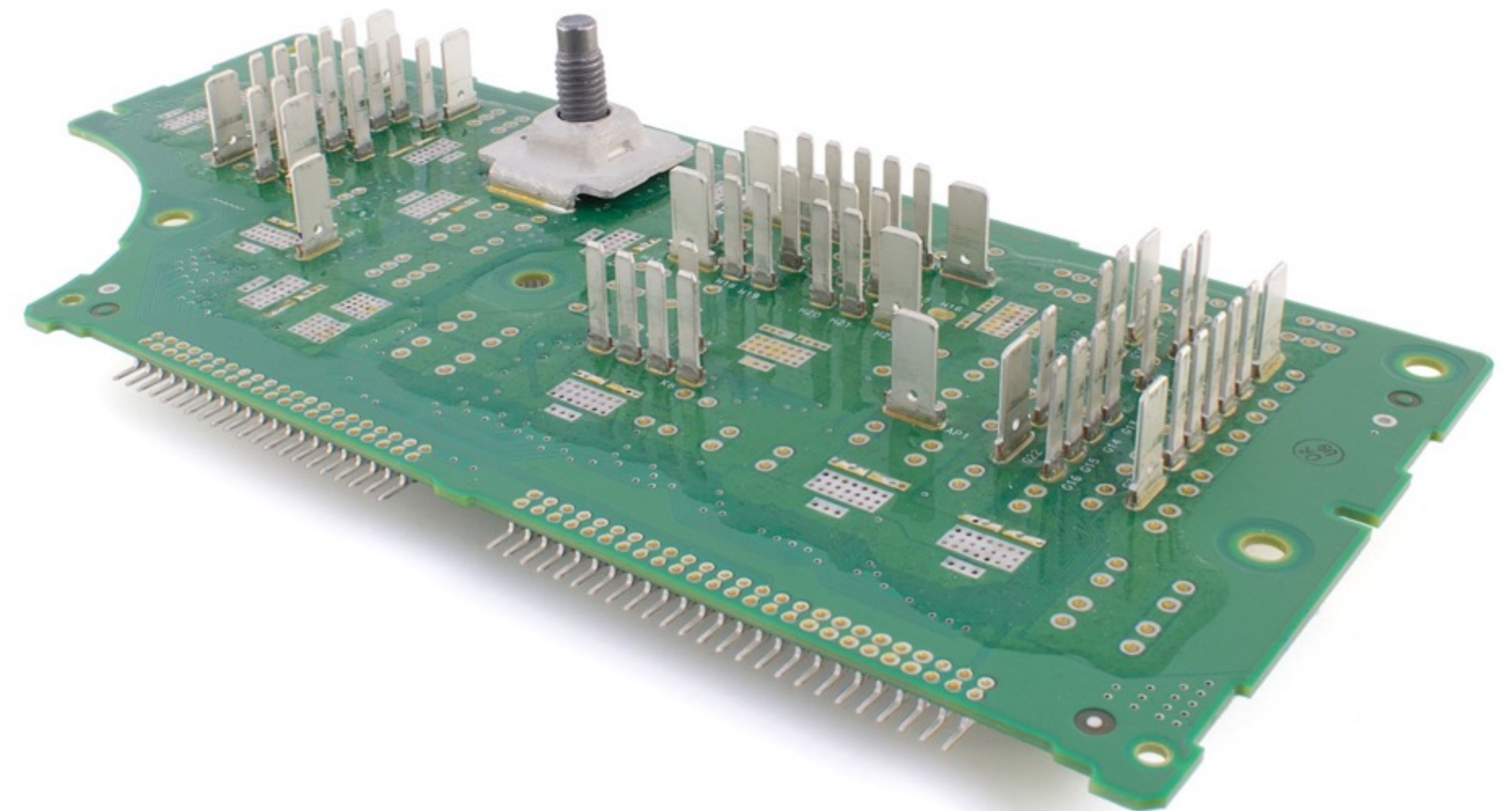
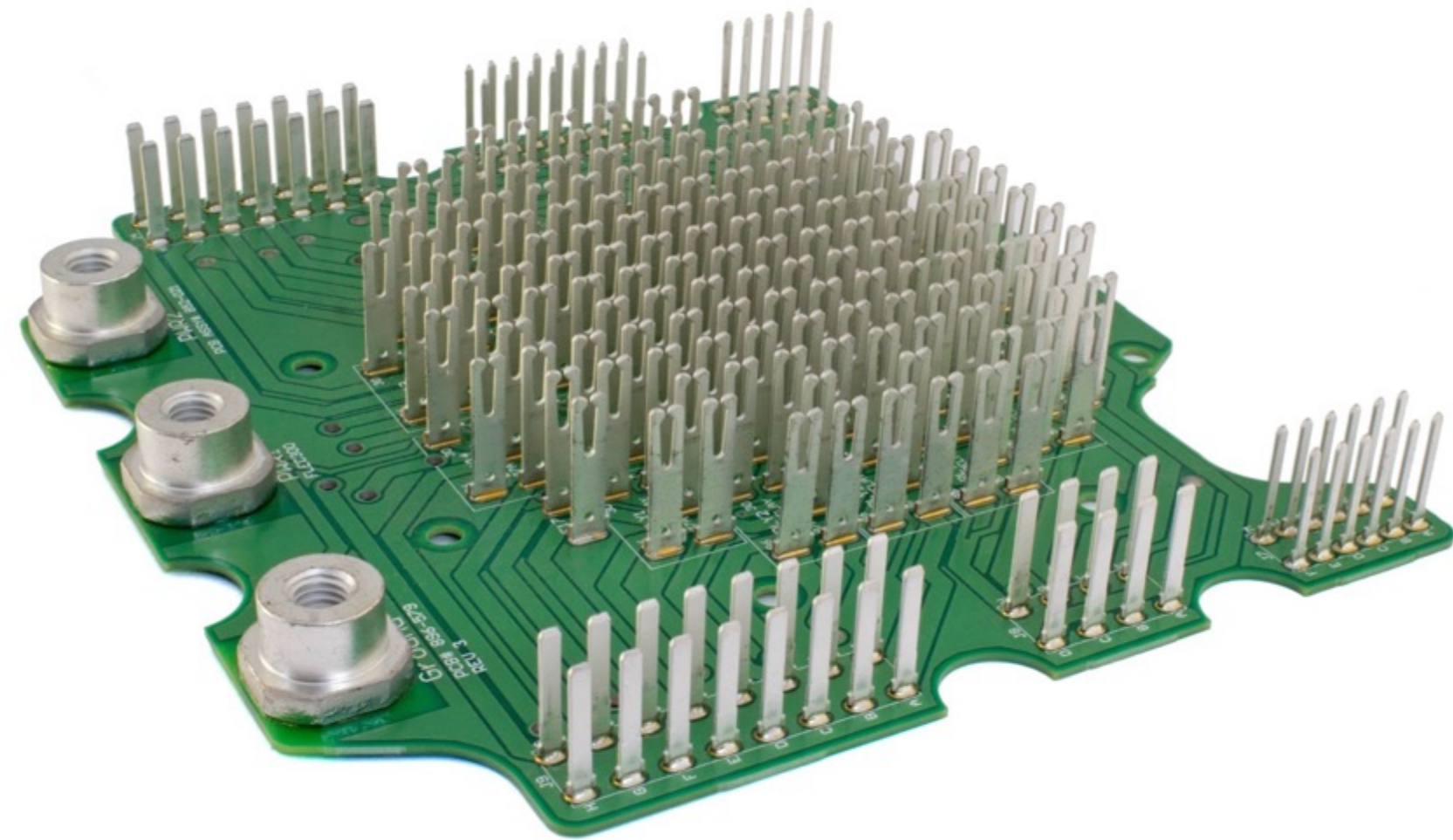
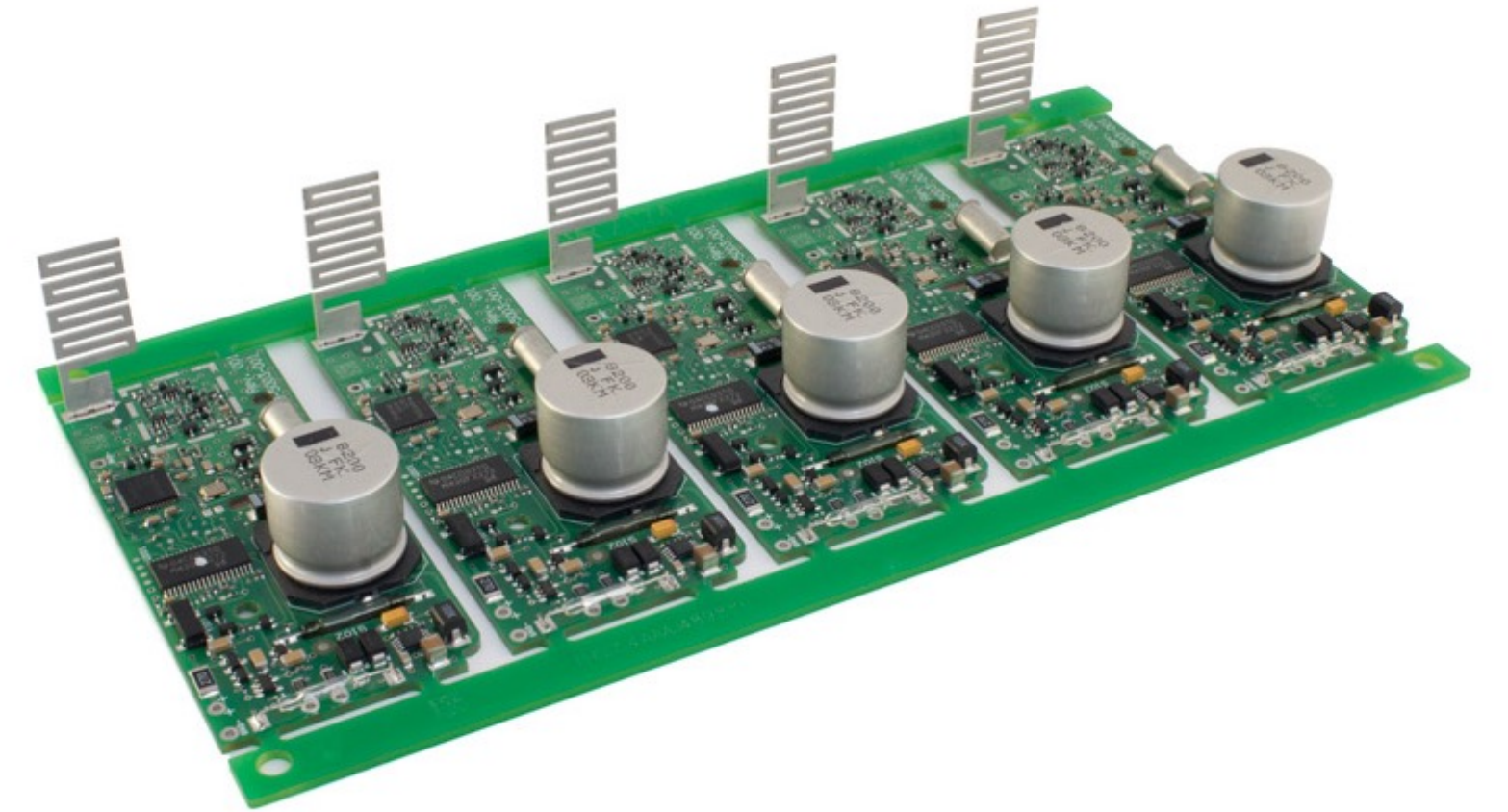
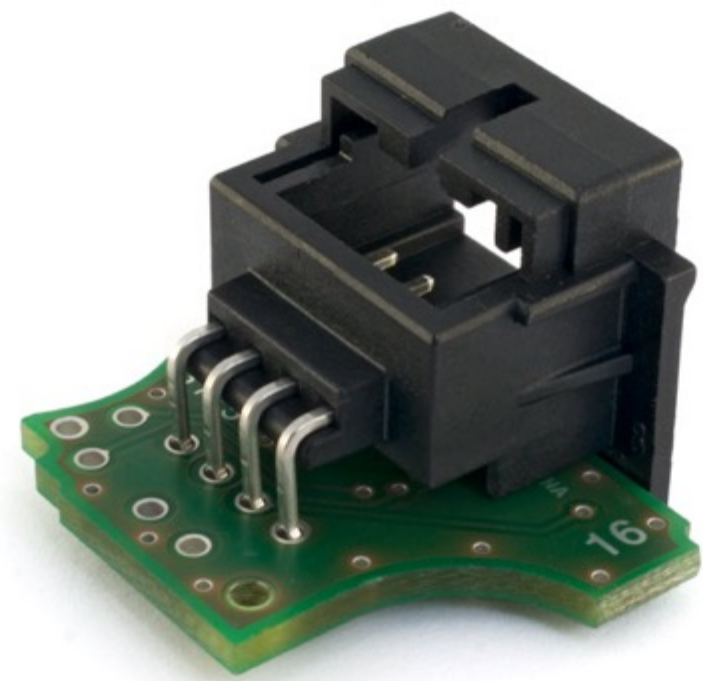
INTEGRATED ASSEMBLY

Autosplice offers sub-assembly services with PCBA, terminals, and molding to support your specific industry through one supplier.





High Mix, Low Volume PCBA



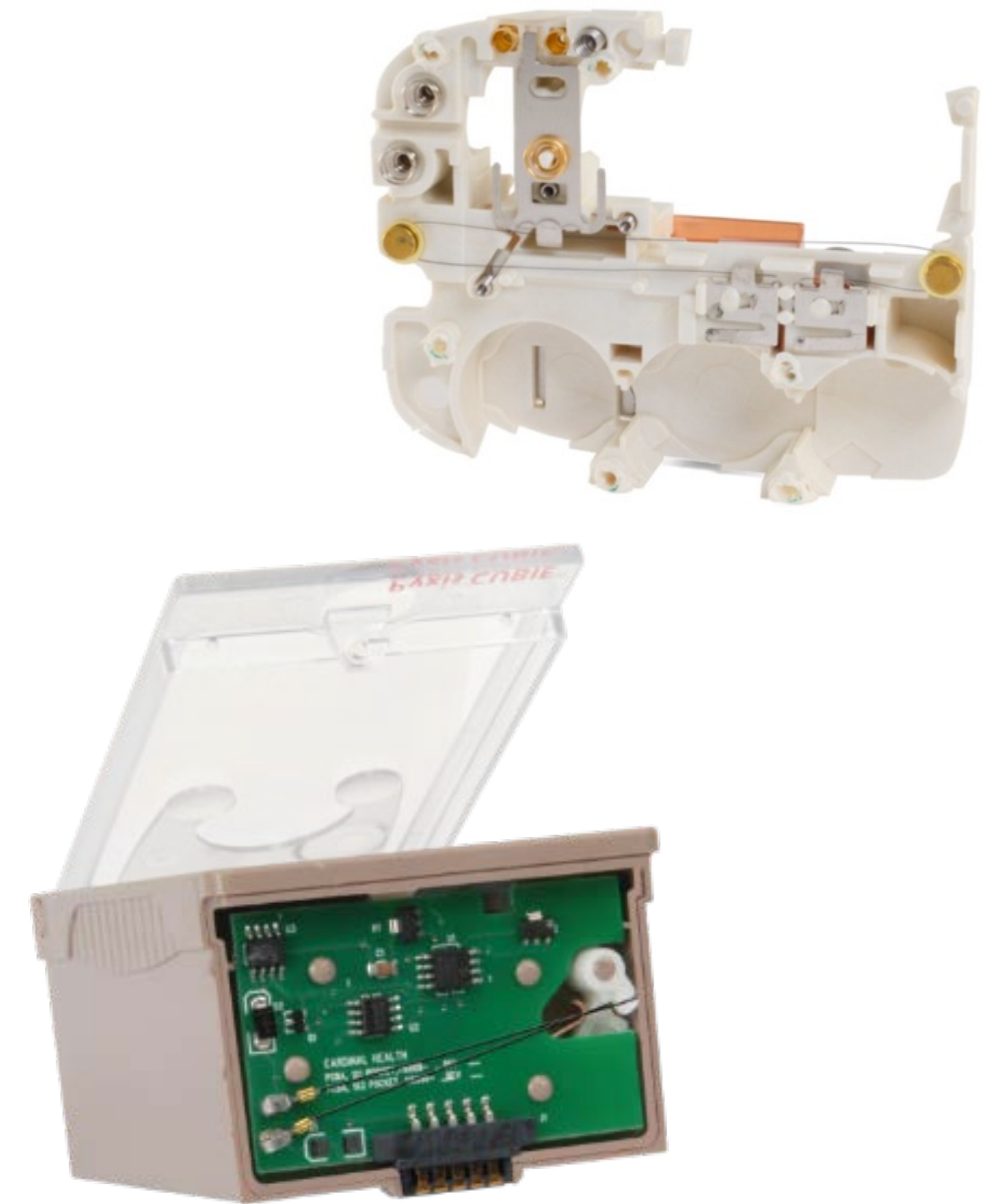
Shape Memory Alloy Applications



Seat Lumbar & Massage

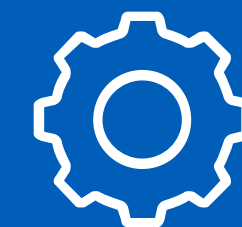


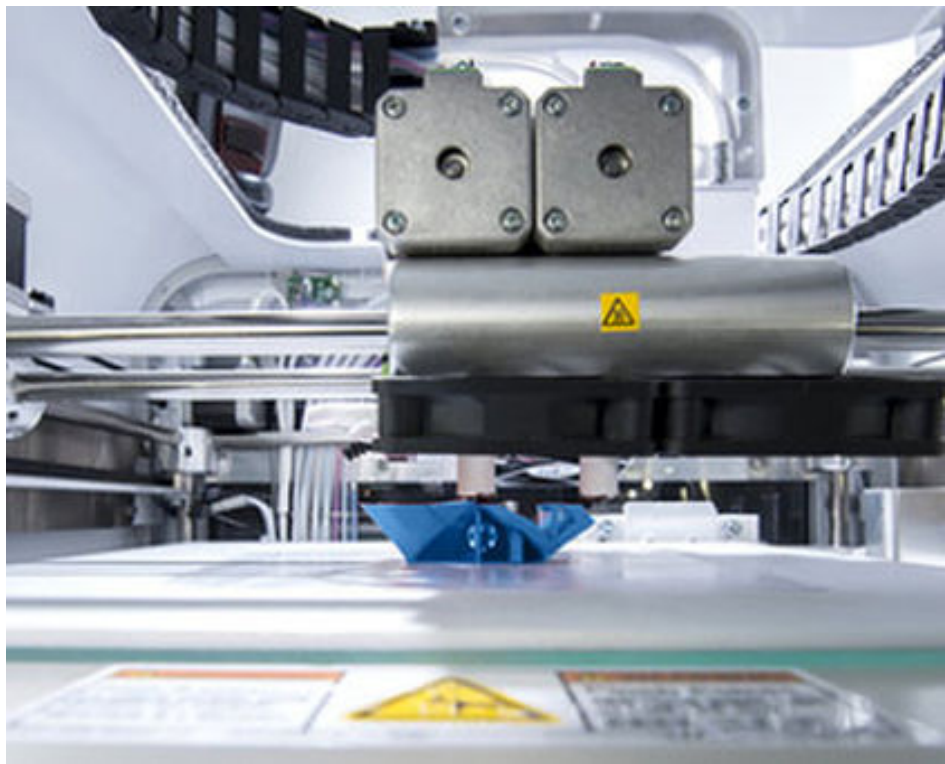
Insulin Pump Actuation



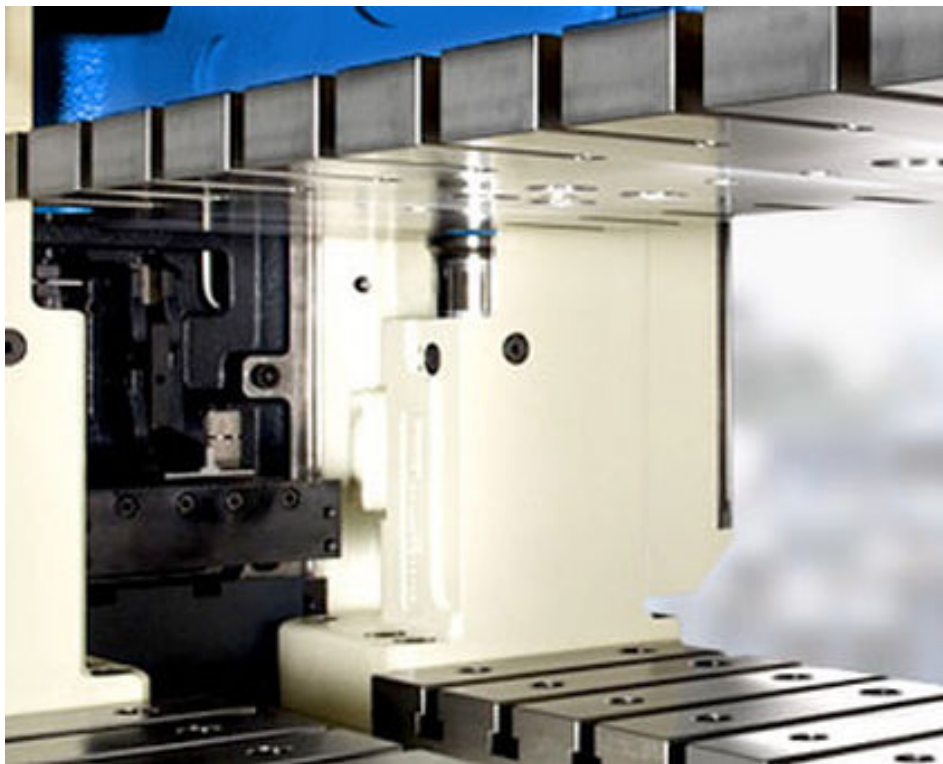
Medical Drug Dispensing

VERTICALLY INTEGRATED CAPABILITIES





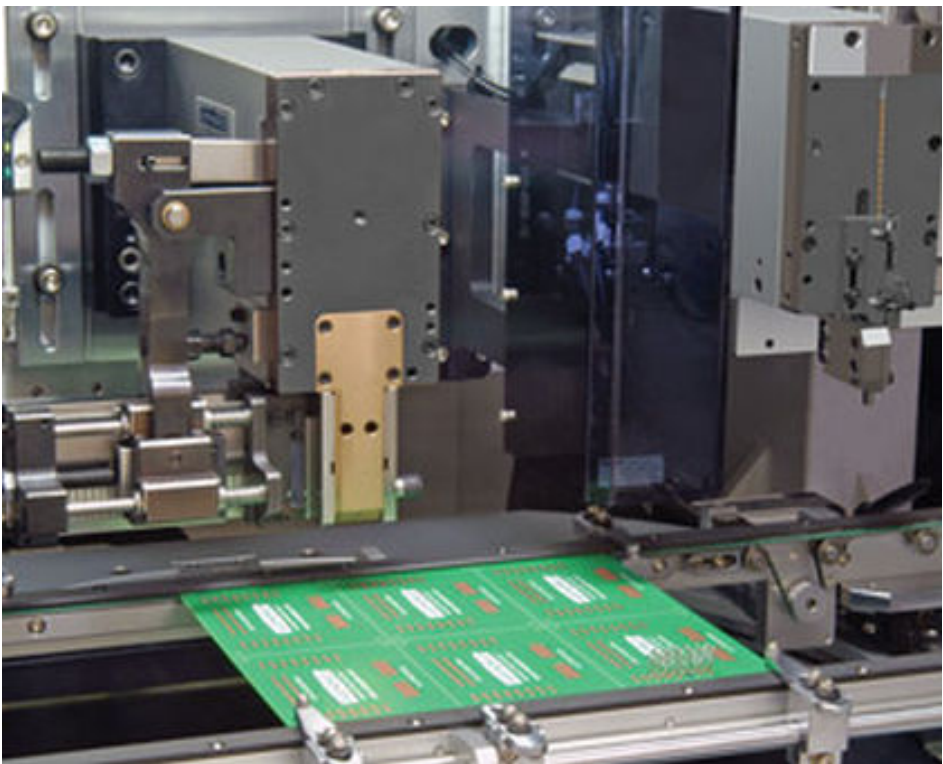
- Extensive design and engineering capabilities
- Innovative products, supported by 50+ patents
- Strong interaction and cooperation with teams



- High precision, tight tolerance metal stamping
- Automotive approved, press-fit designs
- 35 Bruderer presses 22T-60T



- High tolerance, precision insert molding
- Vertically integrated molding assemblies
- 28 Molding presses (25 T – 400 T)



- High speed pins and tabs insertion
- Power distribution SMT assemblies
- SMA wire crimp assemblies



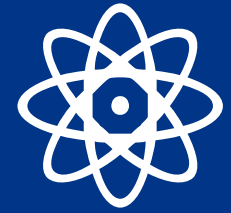
- Assembly specific custom automated solutions
- Precision automated optical inspection
- In-line and off-line solutions for automated insertion



ENGINEERING SERVICES

We have the ability to assist in the design of your products anywhere in the world at our divisions in North America, Europe and Asia.





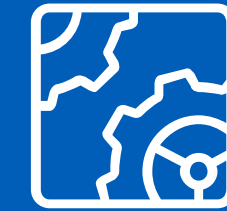
PRODUCT DESIGN & ENGINEERING

- Design & development of custom connectors
- Design for manufacturability & assembly (DFMA)
- Shape memory alloy (SMA) applications



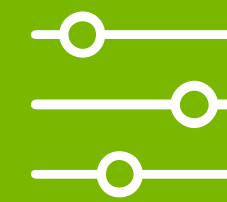
TOOLING

- Injection molding tooling development
- Progressive die stamping design
- Custom pin tooling



AUTOMATION

- Custom automation for connector/contact assemblies
- Autosplice insertion machine platforms
- Insertion heads for Autosplice insertion machines



OTHER SERVICES

- Value engineering for collaborative cost-downs
- Program management of New Product Introduction
- Rapid prototyping

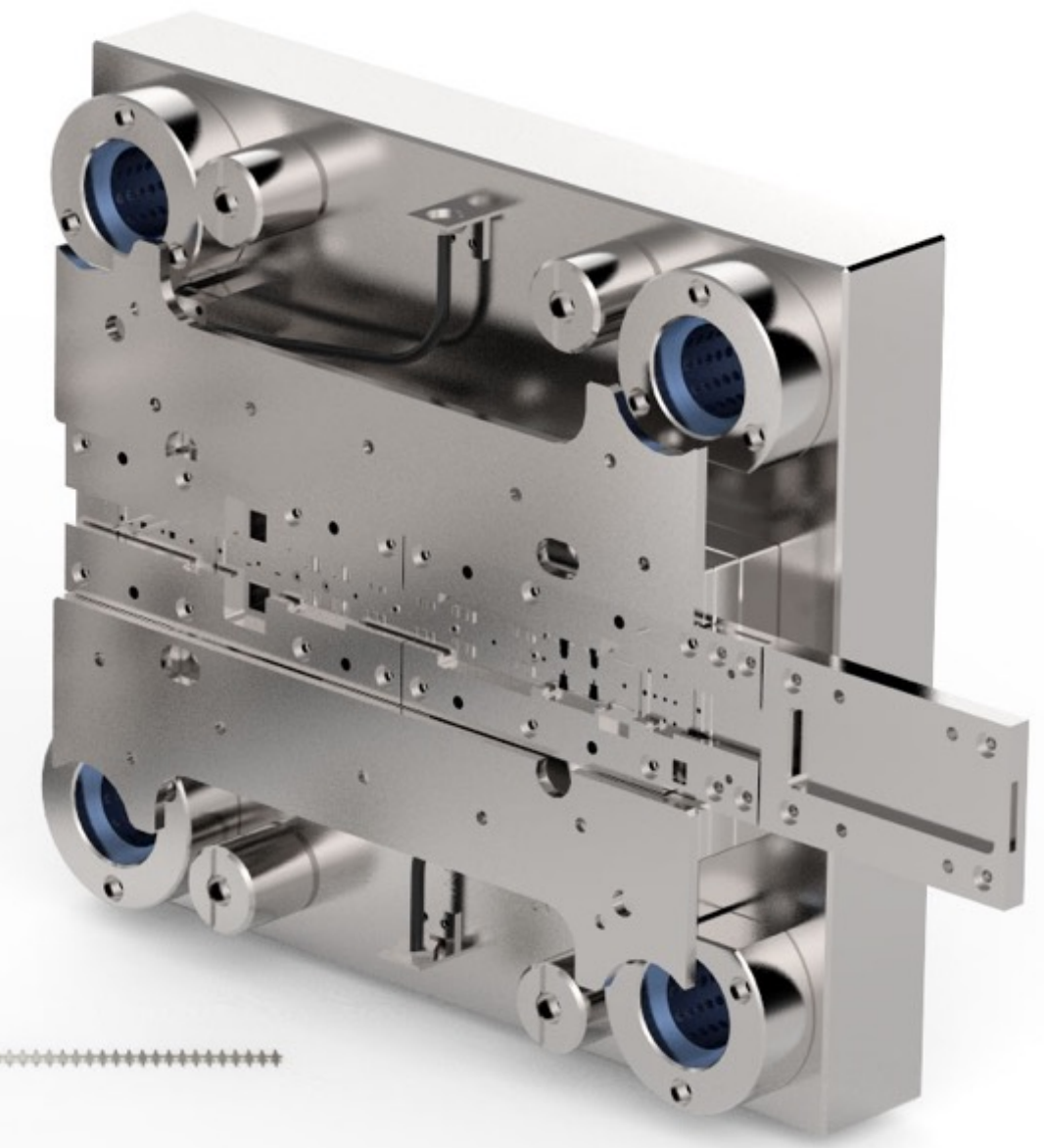
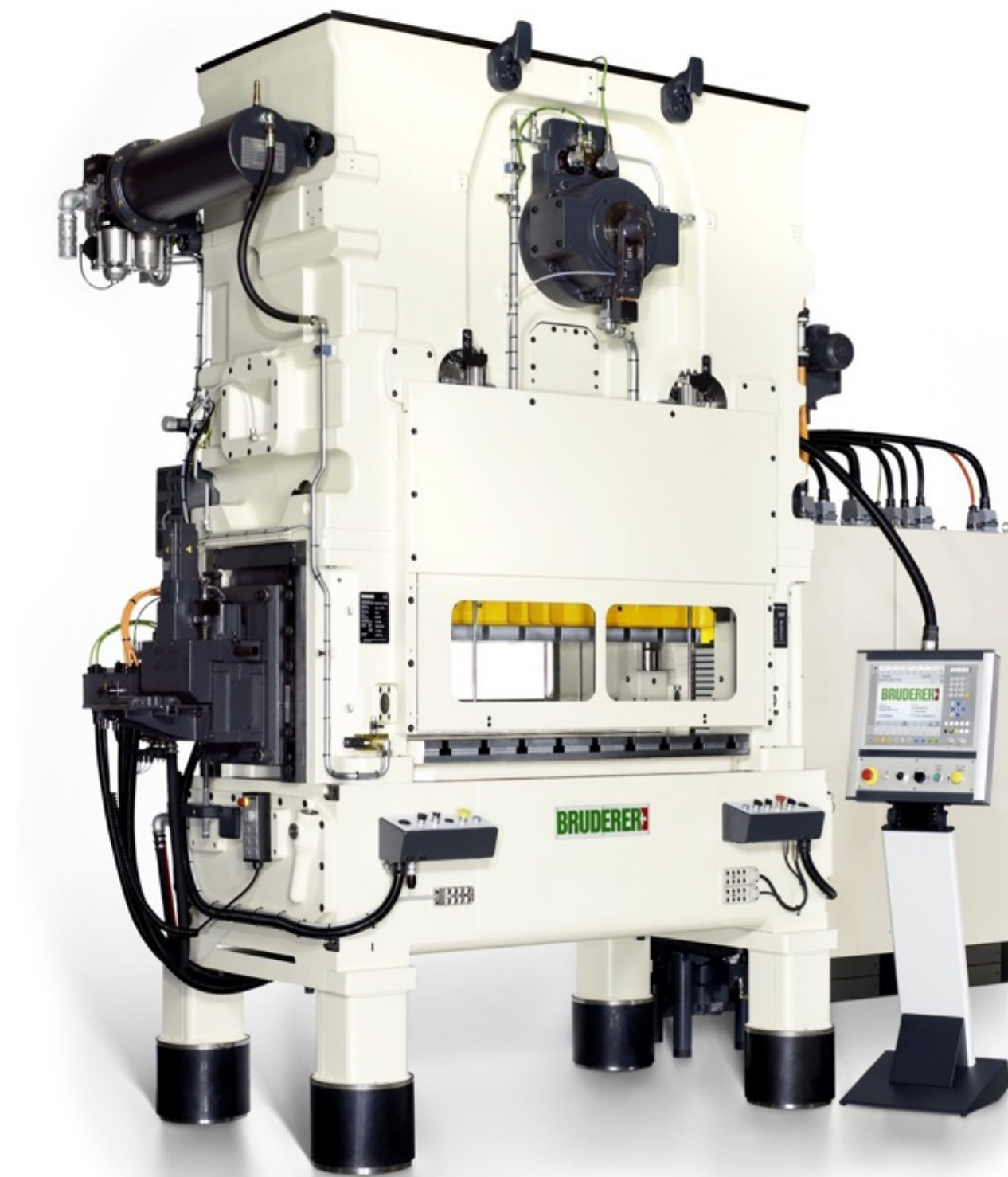


PRECISION STAMPING SERVICES

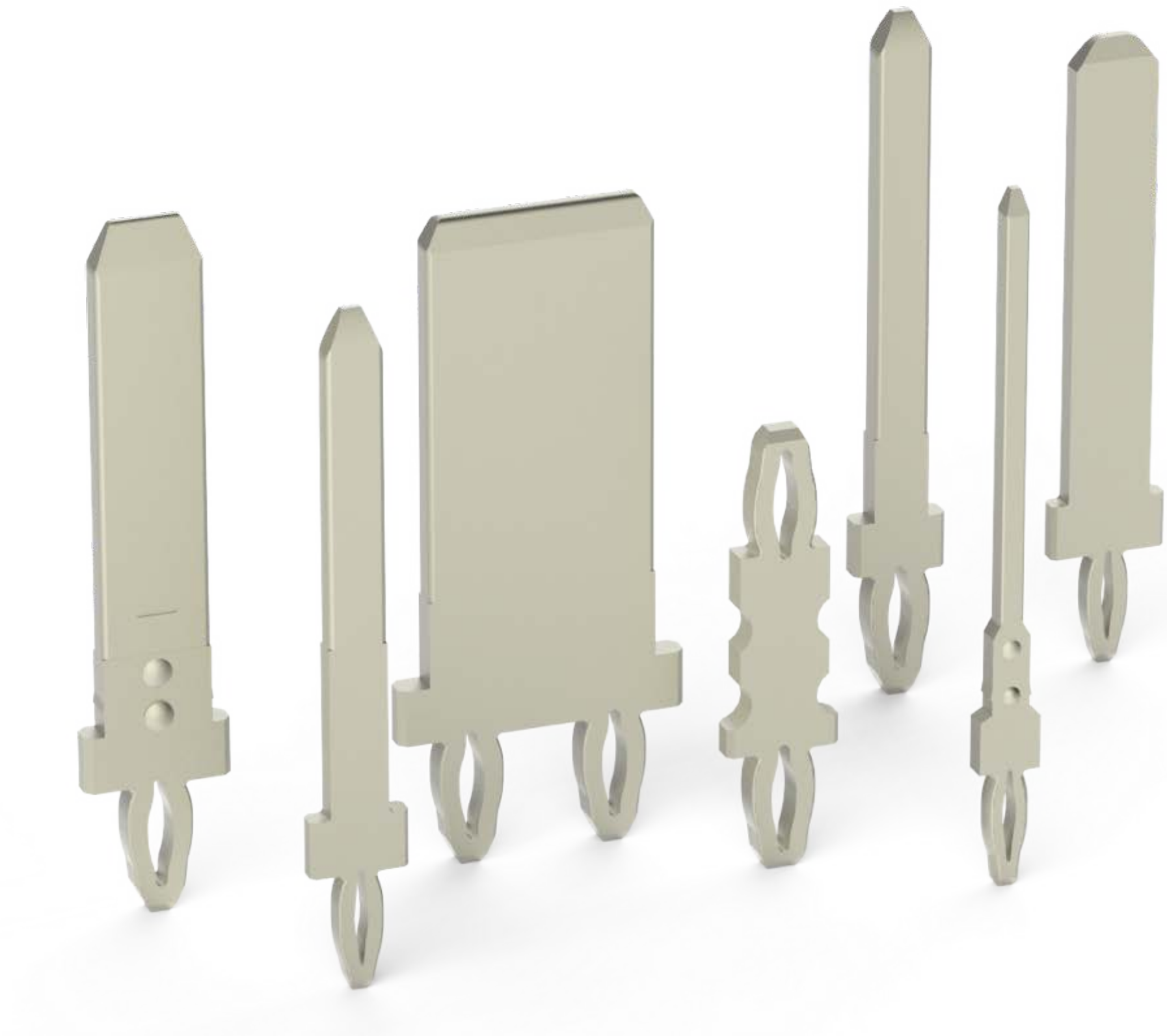
We have the ability to assist in the design of your products anywhere in the world at our divisions in North America, Europe and Asia.



Global Standards

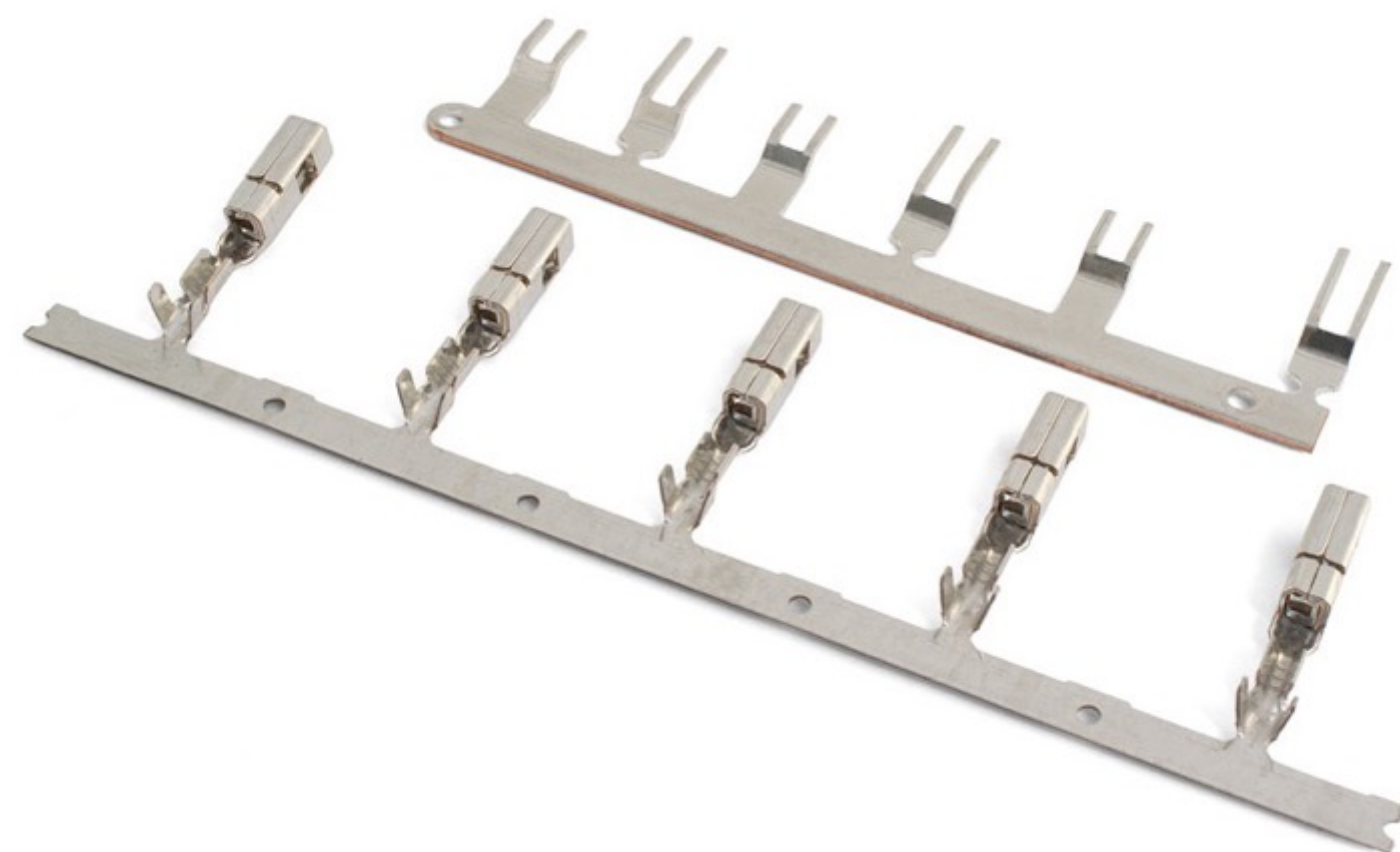
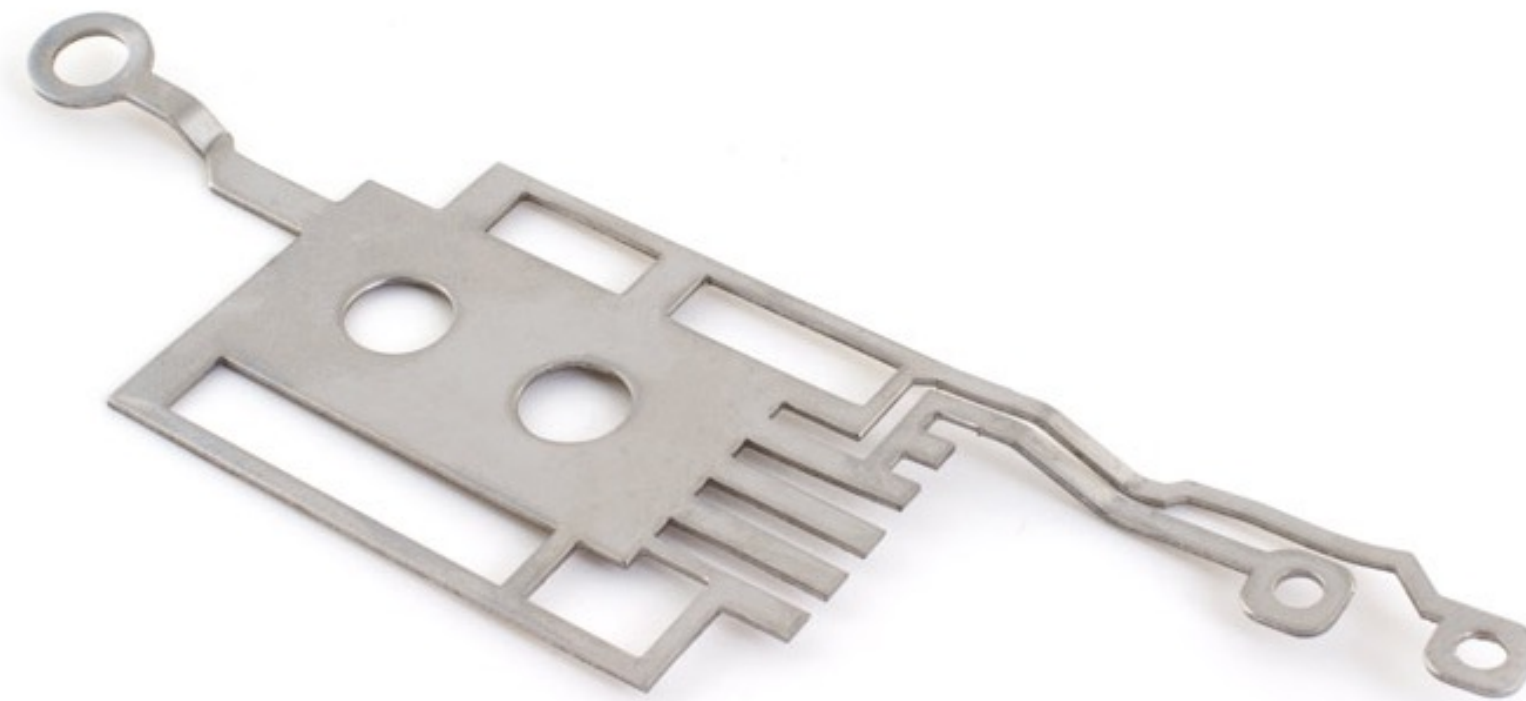


Press-fit Terminals



- 85C to 150C applications
- Interior to Under hood Electronics
- Test Reports Available
- .6mm to 1.2mm (Future state .5mm to 1.2mm)
- Housings to PCB terminals

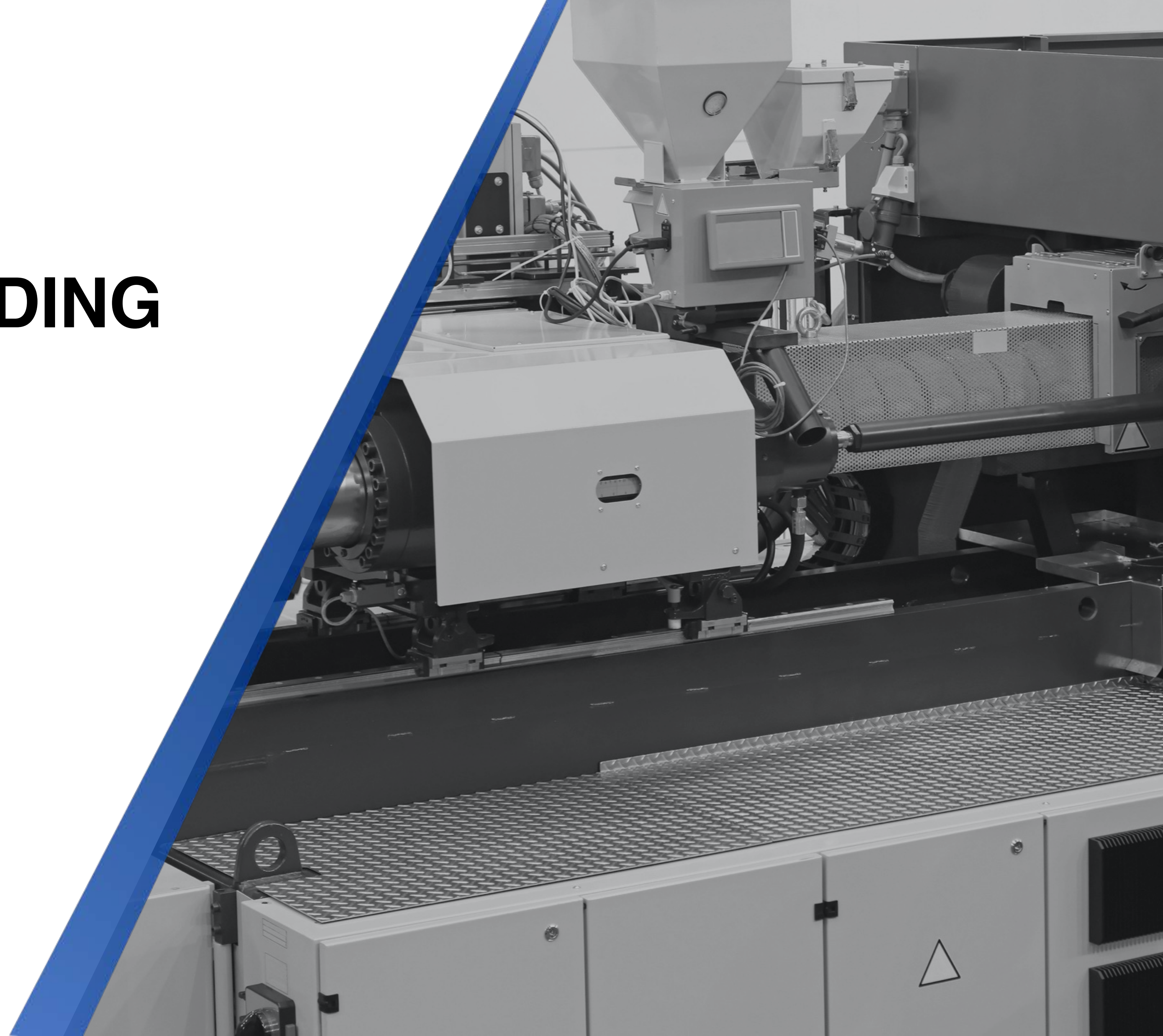
Miscellaneous Precision Stampings



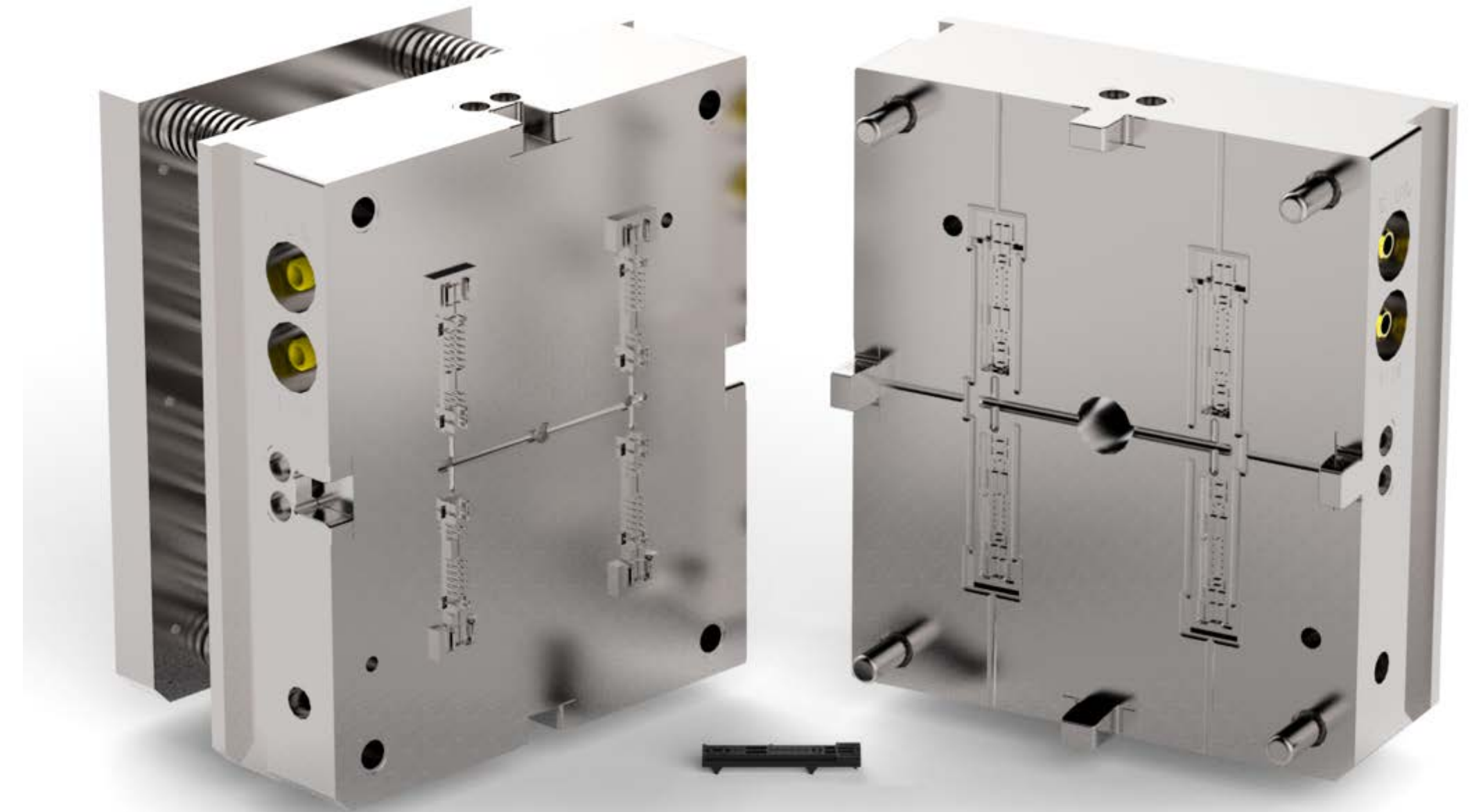


INJECTION MOLDING SERVICES

Interconnect Assembly Module incorporates robust press-fit terminals with precision molding and low cost flexible assembly technology.

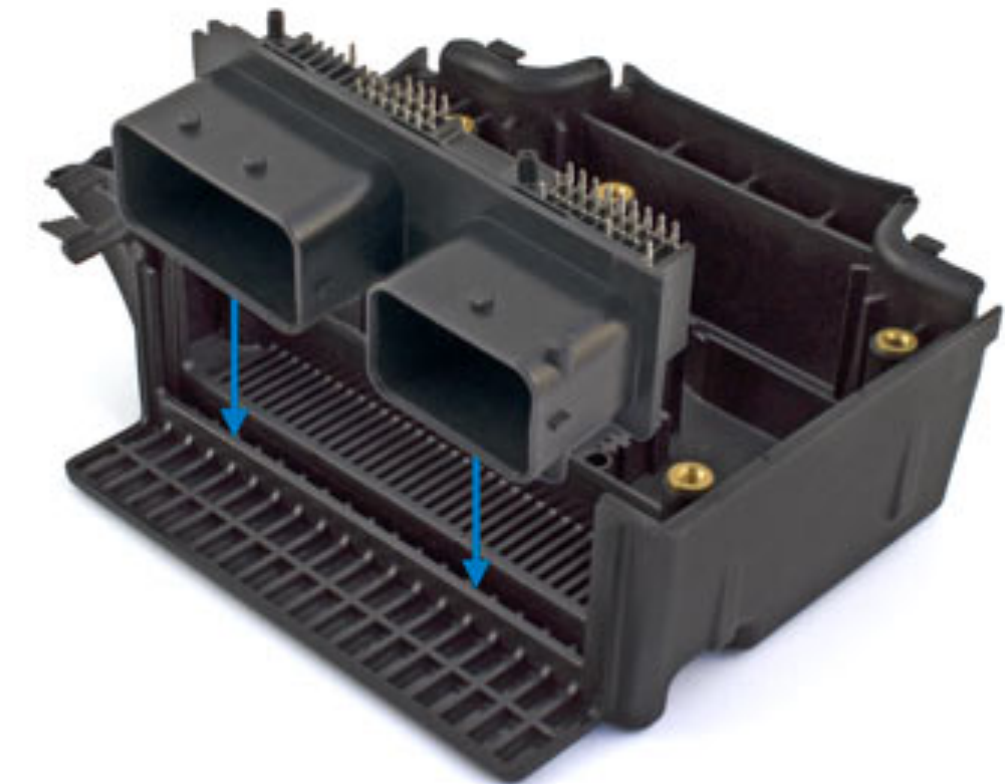
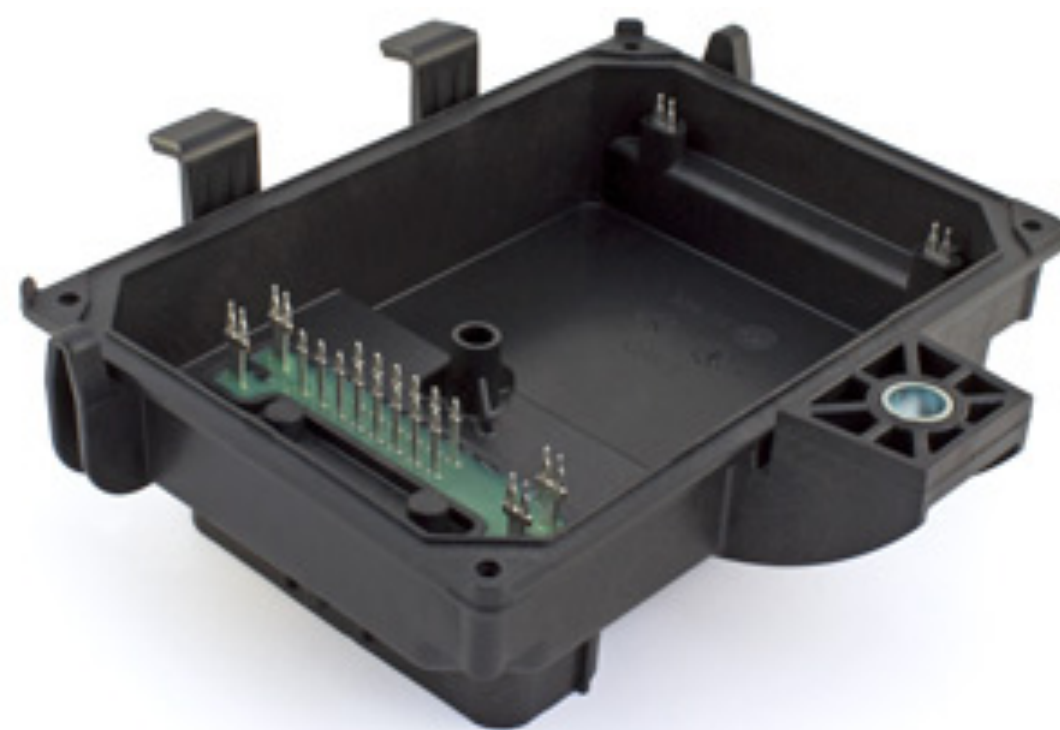


Global Standards



CAPABILITIES

- Horizontal and vertical electric injection molding machines
- Capacities ranging from 35 to 250 tons
- Robot controlled bushing and terminal insertion
- 100% product validation through advanced vision and sensor controlled quality systems.

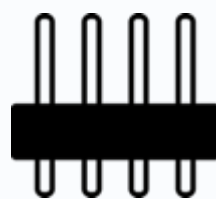




AUTOMATION SERVICES

We offer a full range of automated assembly equipment tailored to meet your manufacturing requirements from fully automated dual head in-line systems to precision bench top machines.





**CONNECTOR AND
CONNECTOR MODULE
ASSEMBLY**

Fully- and semi-automated
post-molded assembly
Fully- and semi-automated
insert molded assembly



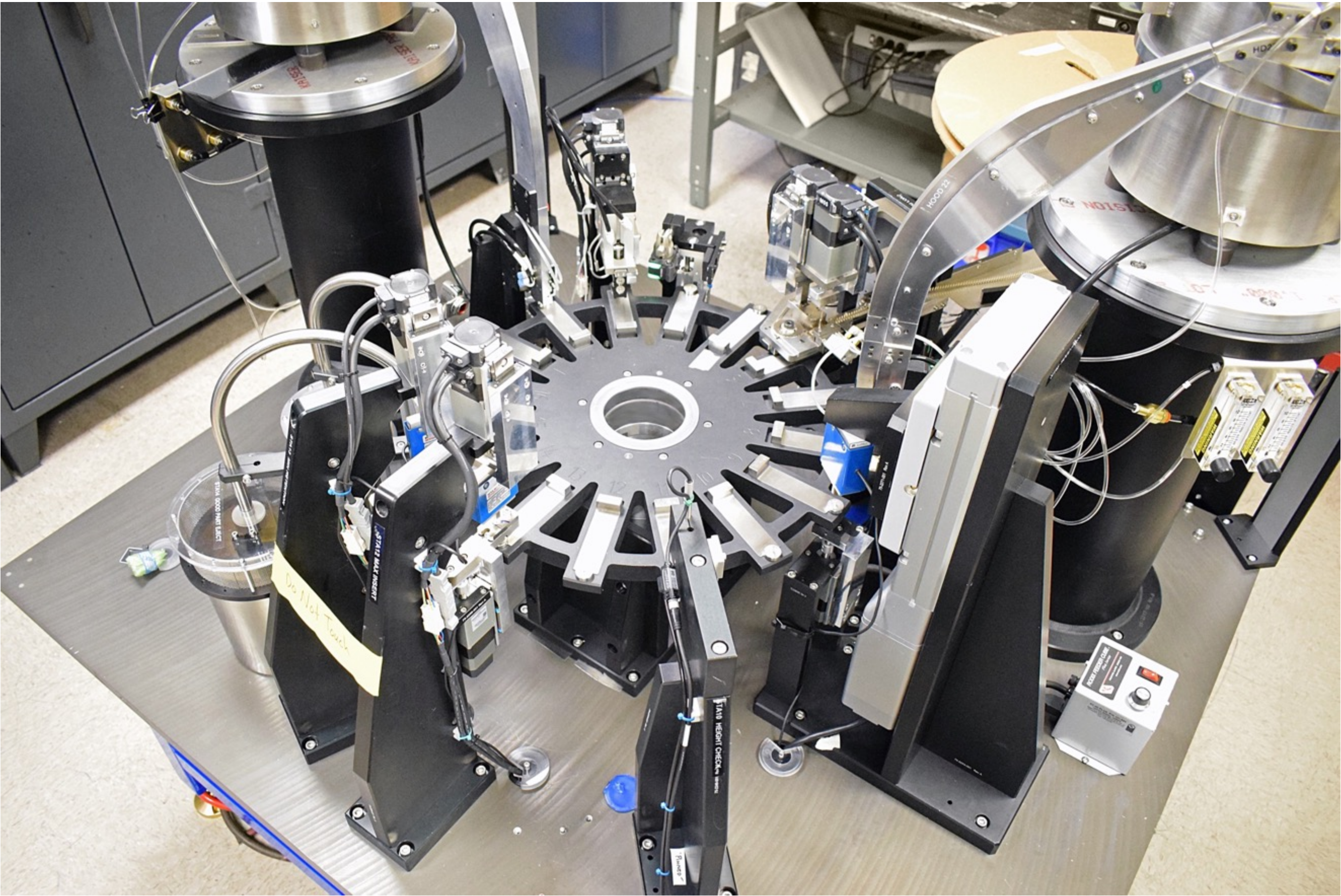
**AUTOMATED INSPECTION
CELLS**

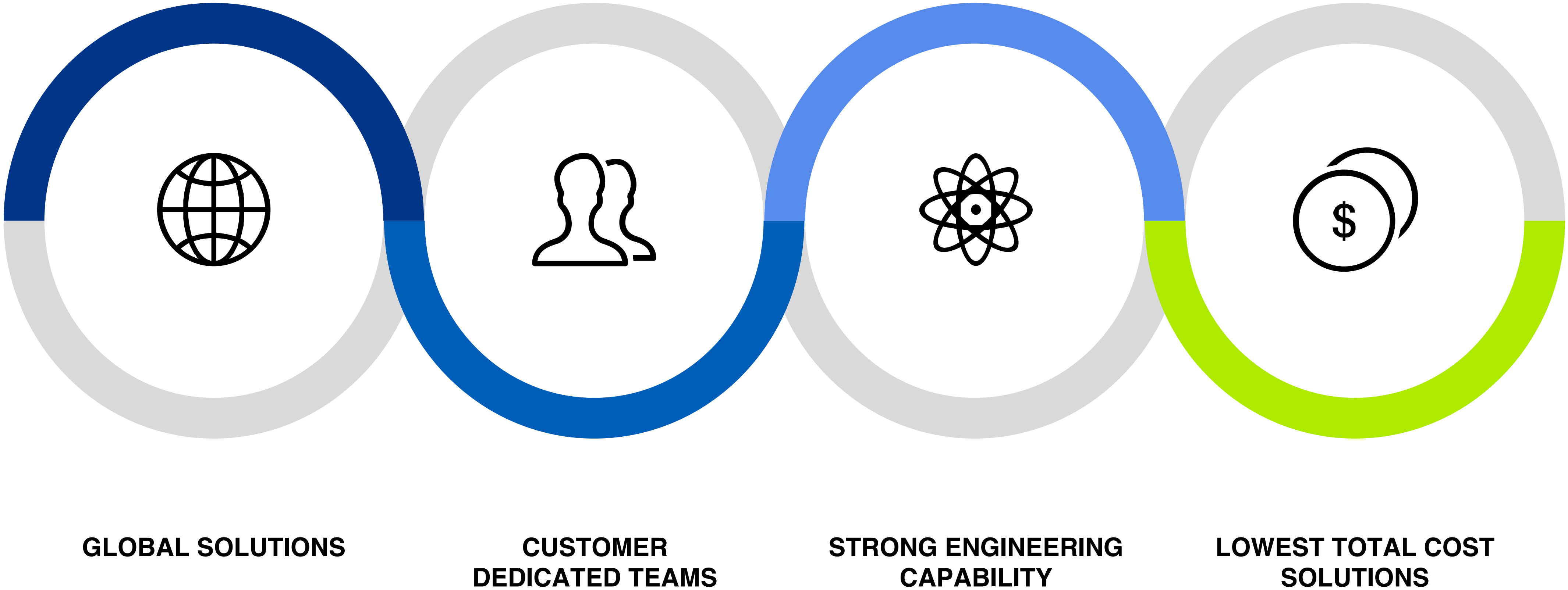
Camera-based inspection
High-pot testing
Continuity testing
Part marking



**CUSTOM AUTOMATION FOR
HANDLING AUTOSPLICE
PRODUCTS**

De-reelers
Tape-and-reel systems
SMA wire assembly machines
Insertion machine heads





autossplice[®]

Interconnecting the Future