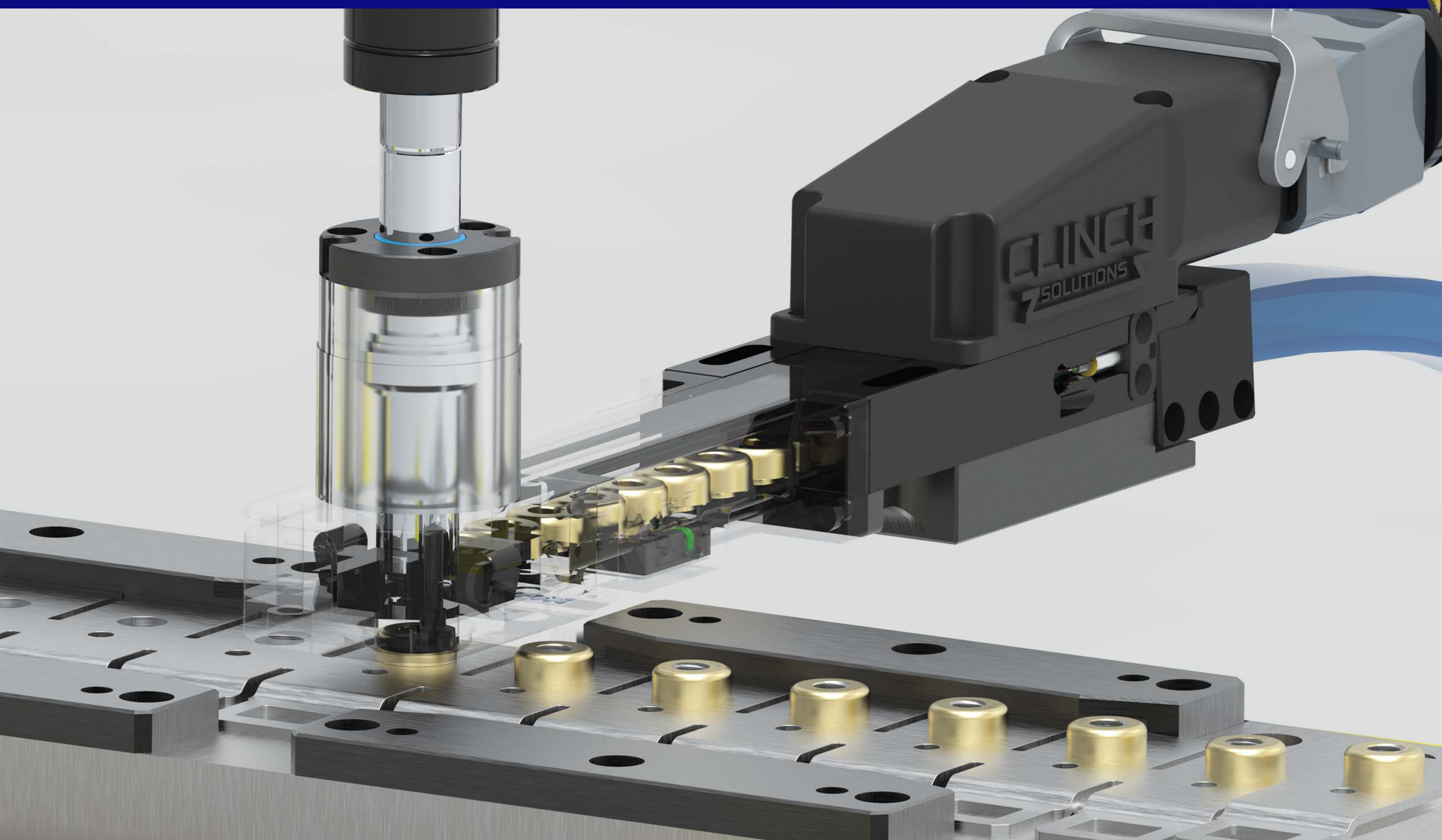




THE COST-EFFECTIVE SOLUTION FOR YOUR IN-DIE FASTENING NEEDS



Save money by eliminating your secondary welding or clinching processes with a solution that is part of your existing stamping die.



SCAN TO VISIT CLINCH WEBSITE

www.clinch.solutions
419-565-0096

IN-DIE INSERTION TOOLING

Installs fasteners up to 60 strokes per minute.

Quick Changeout Feature:

The Clinch Solutions™ quick-change connector combines both pneumatic and electrical fittings into one single connection for a simple plug and play operation.

Laser Etched Part Numbers:

Located on the outside of each part for easy reordering.

Multiple Fastener Types:

Tooling can be designed to fit any type of self-clinching fastener.

Process Monitoring:

Available as an add-on option that is used as online quality control.



FEED SYSTEM

Embedded Hopper:

Every unit comes with an embedded hopper that holds up to twenty times the amount of clinch fasteners compared to a standard unit. This allows your feed bowl to work constantly from the first fastener to your last.

Durable Welded Frame:

The Clinch Solutions™ feed systems are built to last through the ruggedness of your press room. It starts with a 1" thick ground plate that the feed bowl system sits on. It then has a tubular frame that holds the outer shell and components for a durable design.

Compact Design with Large Casters:

This design takes up less floor space around your press and has large casters for quick changout during die changes.

User Friendly Interface:

A large color touch-screen allows you to see the entire clinch process from the dashboard. This gives you process monitoring at your fingertips and allows changes to the process as the press is running. It also has maintenance manuals, start up and troubleshooting guides to aid new operators.

IN-DIE FASTENING GIVES YOUR BUSINESS THE COMPETITIVE ADVANTAGE YOU HAVE BEEN SEEKING

As a decision maker, you often feel pressure to find ways to decrease costs and improve quality of the parts you are producing. You can trust our in-die fastening system to boost your productivity by eliminating secondary operations and combining it into your stamping operation. We will provide you with the productive and reliable solution you are searching for.

**FAST
PAYBACK**

**TIME
SAVINGS**

RELIABLE

Not only will you be able to reduce your overall labor costs by eliminating off-line operations but this also provides you a fast payback. In-die fastening uses less of your valuable floor space additionally saving you more money.

By eliminating secondary welding, you are able to decrease your overall assembly time with fewer steps and parts. This leads to a shorter time to market with improved simplification and reduced overhead.

Our units are built with precision to last through the most rugged press room setting. We also realize that down time of your press is costly, so we carry all standard replacement parts in stock and ready to ship.

Design

We understand that every manufacturing process is different. That's why we help you design a solution that's tailored to the needs of your company. We use our 24-point checklist as a roadmap to walk you through the entire design process.

Build

After the design is approved, we quickly start building your unit with in stock standard components. Every part is made and tested on CNC machines for repeatability and reliability at our technology center.

Install

Once the product is finished, the system can be delivered and easily installed by your toolmakers by fastening it to the predetermined hole pattern in your die.

Support

The support doesn't stop there. We provide you with trouble shooting support from the initial trial run through the production life of your tool. We also offer classes at our technology center that can provide you hands-on solutions.

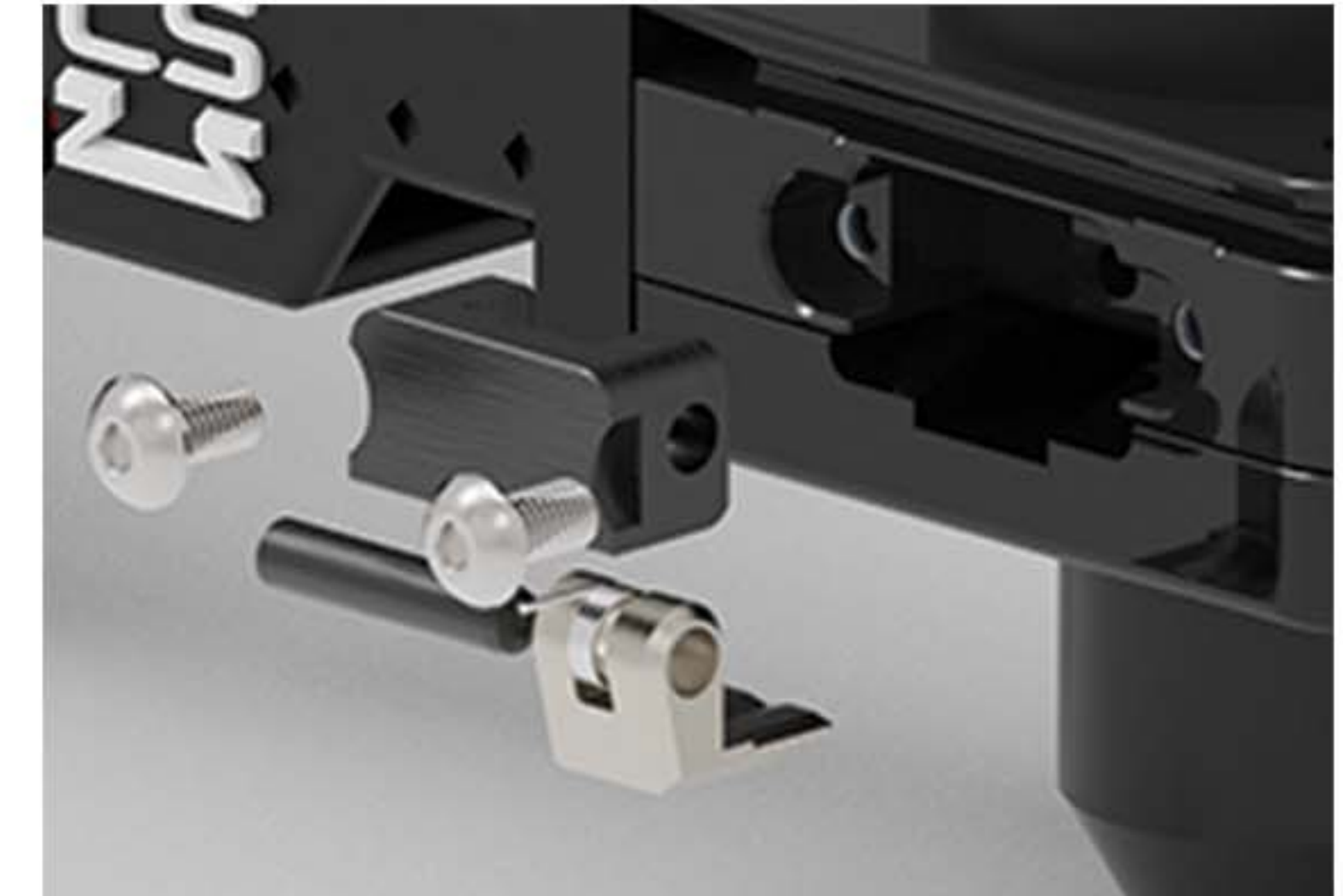
12 Unique Benefits of Clinch Solutions™ Insertion Tooling

*PATENT PENDING

1

Quick Change Wing Assembly:

The Clinch Solutions™ patented design allows the wing details to be removed from the tooling without taking the entire unit apart. This saves valuable press time and can be maintained in the press.



2

No-Clamp Sensor Wire Holders:

This feature is machined into the head to clamp the sensor wire into a protective pocket. It naturally holds the sensor wire without any fasteners or tools needed.



3

Composite Sensor Holder:

The composite sensor holder allows the sensor to be held firmly in place without the sensor being exposed to the elements. This protects the sensor nose from ever being adjusted into the fastener.



4

Carbon Fiber Composite Bridge:

The carbon fiber composite bridge firmly connects the anvil side of the head to the feeder side. This Clinch Solutions patented design combines features like an embedded sensor, wire covers, embedded air lines and vent holes to extinguish excess air.



5

Composite Bridge Cover:

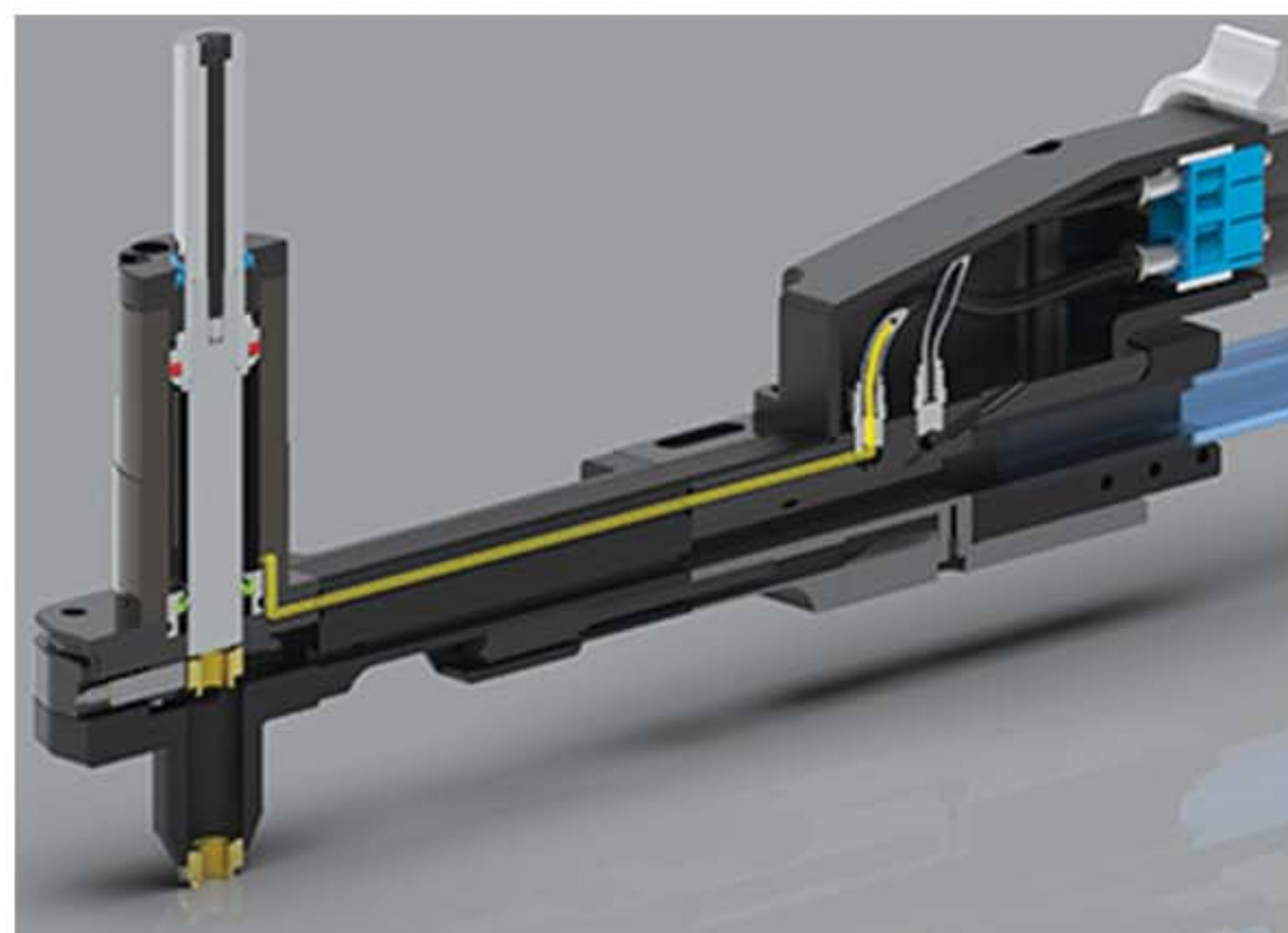
This easy snap-in cover allows the sensor wires to be completely contained within the bridge protecting them from being cut or damaged by the elements.



6

Manifolded No-Snip Airlines:

This benefit allows the air used in this tooling to be manifolded through the internal workings of the entire assembly. This removes the need for external airlines that can be easily cut or broken.





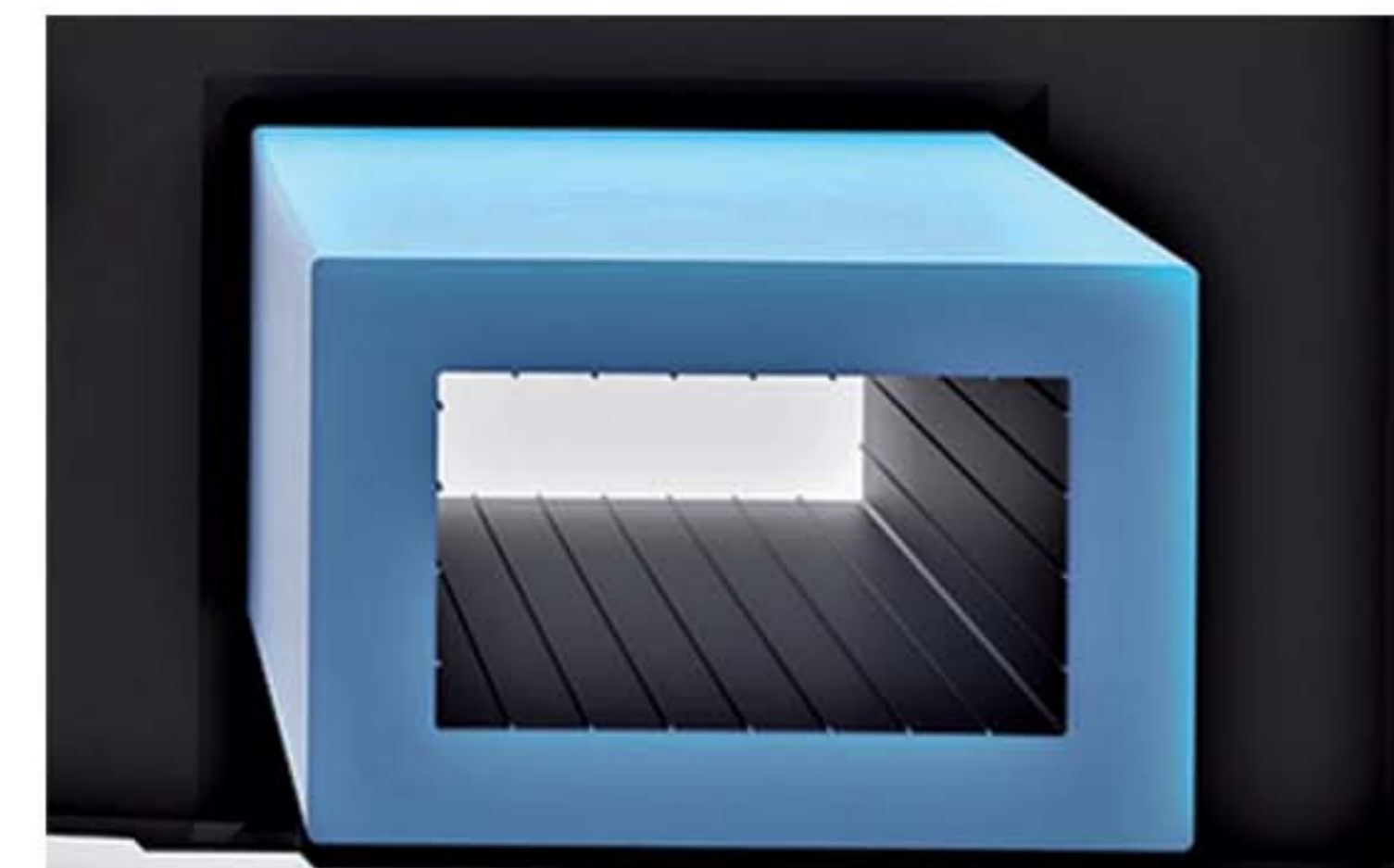
Combined Electrical and Pneumatic Hood:

The Clinch Solutions™ patented design hood allows the end user to quickly change the electric and pneumatic connections in one action.



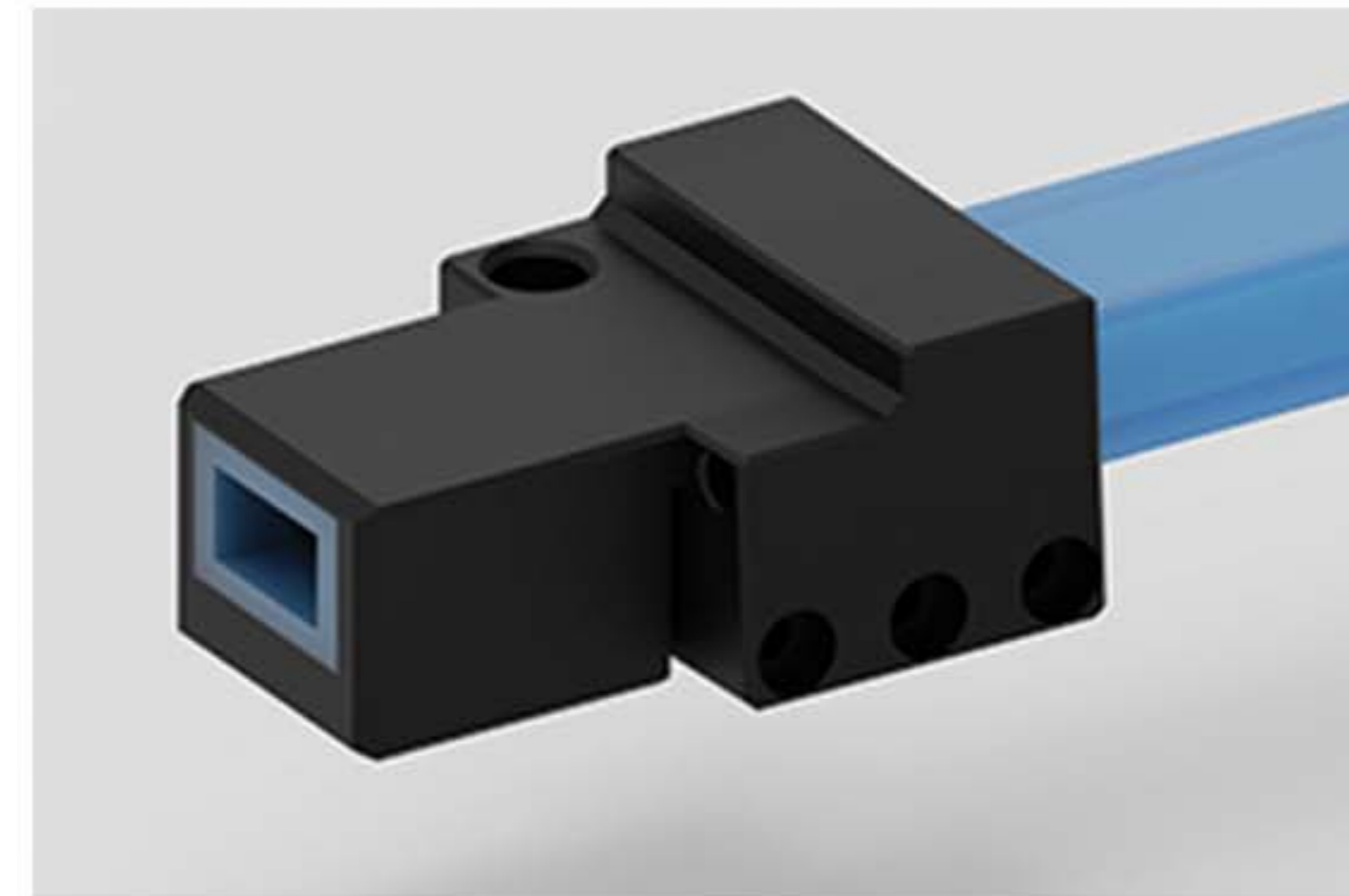
Low Friction Flexible Shot Tubing:

The low friction shot tubing has grooves designed throughout to allow the nuts to glide thru at a very low friction.



Quick Change One Piece Attachment:

This Clinch Solutions feature is a composite 3D printed part which has shark bite teeth that when the screws are tightened into the shot tubing, it will grip the tubing and produce a leak-proof attachment.



Safety Sensor for Quick Change Attachment:

This is a safety feature which ensures that the unit will only shoot a clinch component into the tool if the sensor sees the quick change attachment is correctly installed.



QR Code Bill of Materials:

Every insertion tool has its own unique QR code that allows you to have a full bill of materials and an exploded view of every part of your unit. Use any smart phone to retrieve this information from a private section of our website. This provides you exclusive access to files for your unique unit.



Slide Feeder Technology:

This Clinch Solutions™ slide feeder design is unique to our systems allowing the user to have the fastest and most reliable feed system in the industry. It's also much quieter than our competitors.





BUILT BY TOOLMAKERS FOR TOOLMAKERS

Clinch Solutions™ units are designed and built at Hess Industries Ltd., our Tool and Die Technology Center in Mansfield, Ohio. All of our products are built by our team of toolmakers utilizing our state of the art CNC equipment. With a team that has **120 years of experience** in the metal working industry, we understand progressive and transfer dies and the obstacles that are often found in this industry. Let us use our years of hands-on experience and our in-die insertion systems to provide you a productive solution to your fastening needs.

THE VALUES WE STAND FOR

We at Clinch Solutions have learned that success is measured not only by achieving goals but also by the way in which we conduct business. We have an underlying set of Christ centered beliefs and principles that have guided Hess Industries Ltd. since it was founded in 1999. These beliefs and principles have helped shape us through the years and they will continue to guide us into the future.

INTERESTED IN FINDING OUT MORE?



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