WORKHOLD BETTER

ALLWORLD

ARROW®

WORKHOLDING FIXTURES

SUPERIOR FIXTURE SOLUTIONS FOR THE FUTURE OF SMART MANUFACTURING

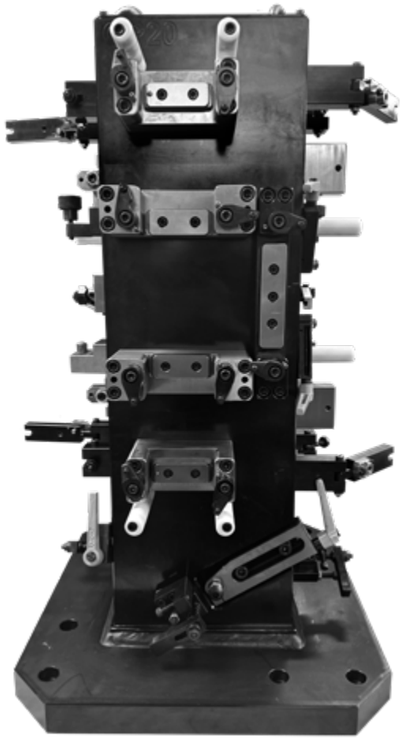
CUSTOM WORKHOLDING

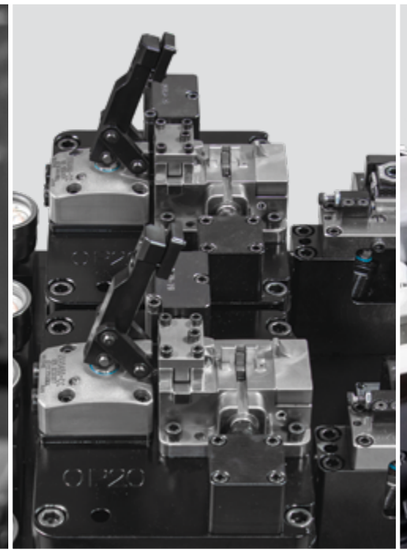
For Hydraulic, Manual, & Pneumatic Workholding

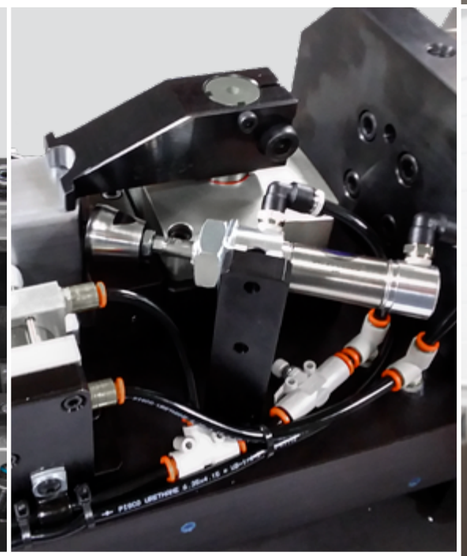
ARROW Workholding Fixtures® feature innovative methods to locate, clamp, and support even the most delicate parts. Our reliable workholding fixtures are made using robust components and superior design techniques. Always created with internal porting, ARROW Workholding Fixtures minimize maintenance, resulting in lower costs and less downtime.

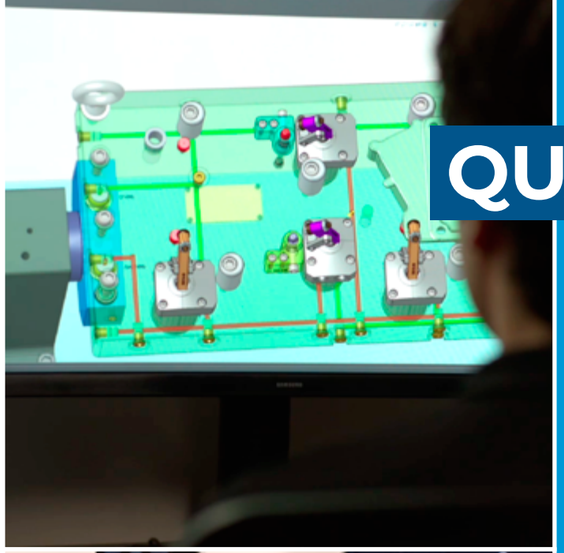
Tombstones become giant manifold blocks with a network of long gun-drilled ports that supply the clamps and work supports from inside. This eliminates the maze of steel tubing that typically surrounds a hydraulic fixture, leaving a clean washable surface for easy chip removal. Fixtures that are internally plumbed, using manifold mounted components, are more reliable and are easier to use and maintain.

If looking for a more cost-effective option utilizing a manual fixture can run lower volume parts or parts with longer cycle times. Manual fixtures can be designed to work on horizontal or vertical machine centers. Another option, pneumatic fixtures, are available upon request.









QUALITY CONTROL

PLANNING

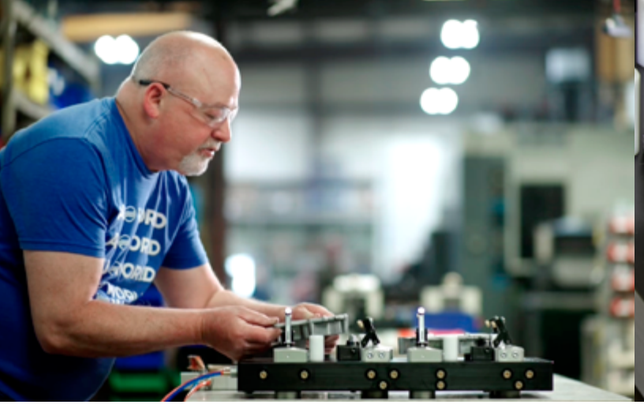
ARROW is a **ISO 9001:2015** registered company. The entire design process follows our established procedures and undergoes scrutiny by design, manufacturing and quality experts.

IN PROCESS INSPECTION

Our inspectors use the latest software and equipment to inspect each fixture component in our climate controlled inspection room as they move through the shop. Three CMMs are programmed using the solid models of the components. This speeds up the process of inspection drastically, allowing much more complete inspections than were traditionally possible due to time constraints. All gauges are properly maintained and subject to regular calibration.

FINAL INSPECTION & TESTING

ARROW follows detailed quality assurance procedures that include dimensional as well as functional testing. This includes overnight hydraulic pressure testing, part presence verification, and ease of loading/unloading. Gage R&R (Repeatability & Reproducibility) and load/reload repeatability testing available on a CMM.



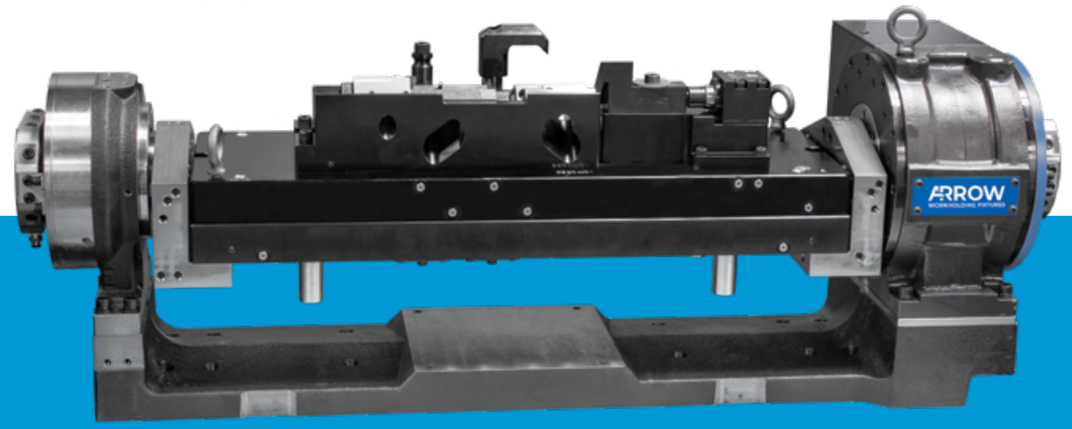
DIVERSE CAPABILITIES

Sized to the needs of the application, from parts that weigh a fraction of an ounce to heavy-duty parts that need to be loaded with a crane.

Easy integration into robotic cells or manual loading on single standalone machines.

Custom-made to hold any material type, including aluminum and magnesium die castings, sand castings, forgings, and bar stock.

Ability to design and build custom gauges. These enable operators to quickly spot manufacturing errors, and promptly halt and correct the process.



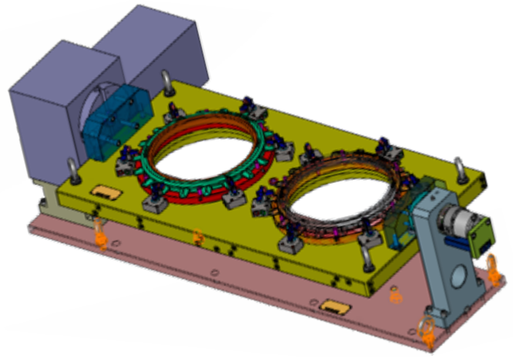
CUSTOMER SUPPORT

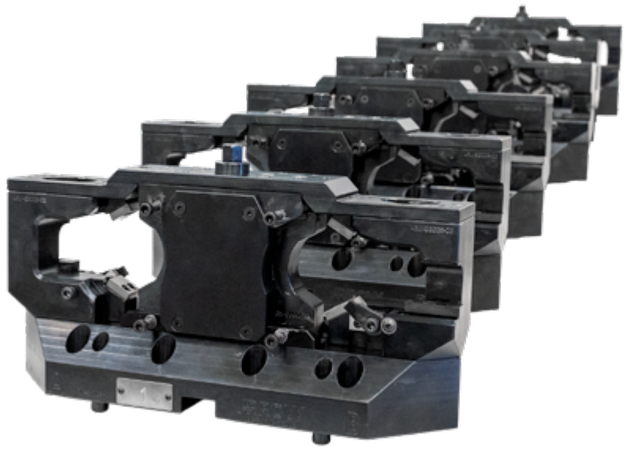
01 Spare parts support for the lifetime of your fixture. Any necessary spares can be provided, whether the fixture is 1 year old or 20.

02 Quotes are typically completed within 1 week, depending on requirements.

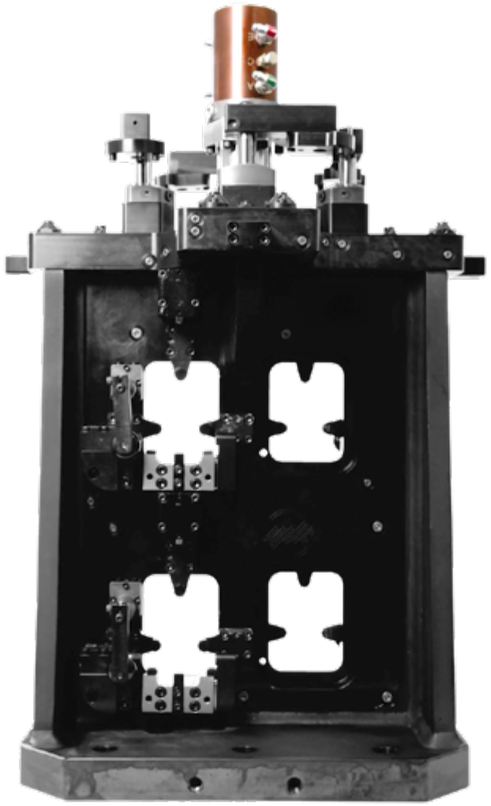
03 All quotes come with optional 3D concept modeling.

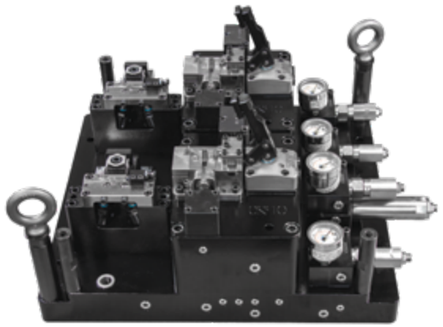
04 In-house fixture production gurantees the best delivery times in the business.

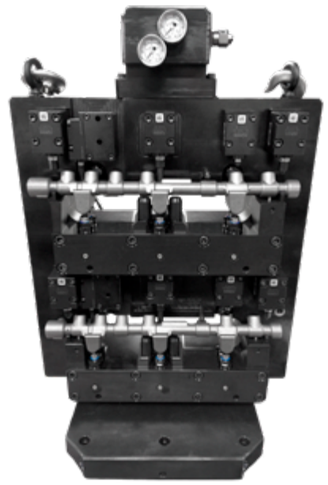




PERFORMANCE







DURABILITY

Secure and clamp parts with exacting precision, each and every time. Components are made from robust hardened tool steel and carbide for enduring performance.

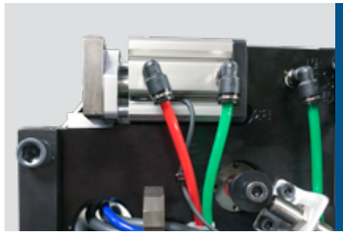
EFFICIENCY

Produce parts more efficiently by minimizing multiple operations to reduce handling and idle spindle time. Simple fixture designs are easy for the operator to use and free of sharp edges and pinch points.

MAINTAINABILITY

Fixtures incorporate easily accessible and replaceable fasteners and parts. With all internal porting, our fixtures require less maintenance, resulting in higher productivity and lower lifetime costs.

OPTIONAL ACCESSORIES

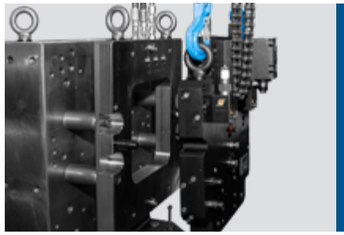


CLAMP CONFIRMATION

Verifies that the clamps are in the proper position prior to machining.

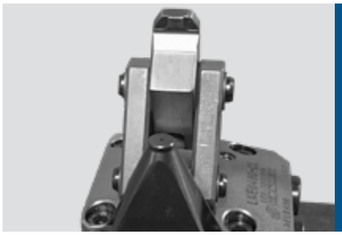
COOLANT FLUSH

Helps to remove chips from datum surfaces prior to loading.



QUICK CHANGEABILITY

Allows exchange of part nests or entire fixtures quickly and easily without loss of precision.

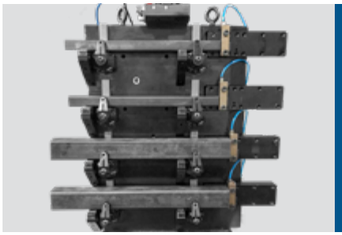


PART SEAT DETECTION

Part presence detection on workholding fixtures for confirmation of proper part location.

REMOTE PRESSURE MONITORING

Ensures proper clamp pressure is maintained when fixture is disconnected from the pump.



PART FAMILY FIXTURE

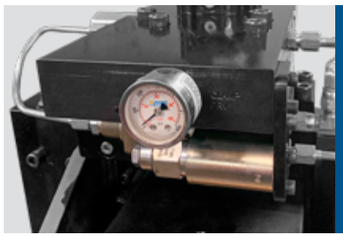
Fixture designed to accommodate a family of similar parts, with or without changeover required.

ROBOT-READY

Fixture is engineered in collaboration with automation vendor to ensure proper clearances for robot entry.

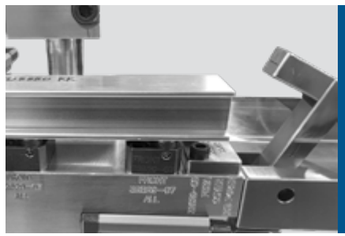
PART ID STAMPS

Allows identification of which fixture a part was machined on.



PRESSURE INTENSIFIER

Fixture-mounted intensifier can be added to increase clamp pressure where needed.



RETRACTABLE LOCATORS

Allow the machining of a surface that is used as a datum by retracting it after the part is clamped.

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