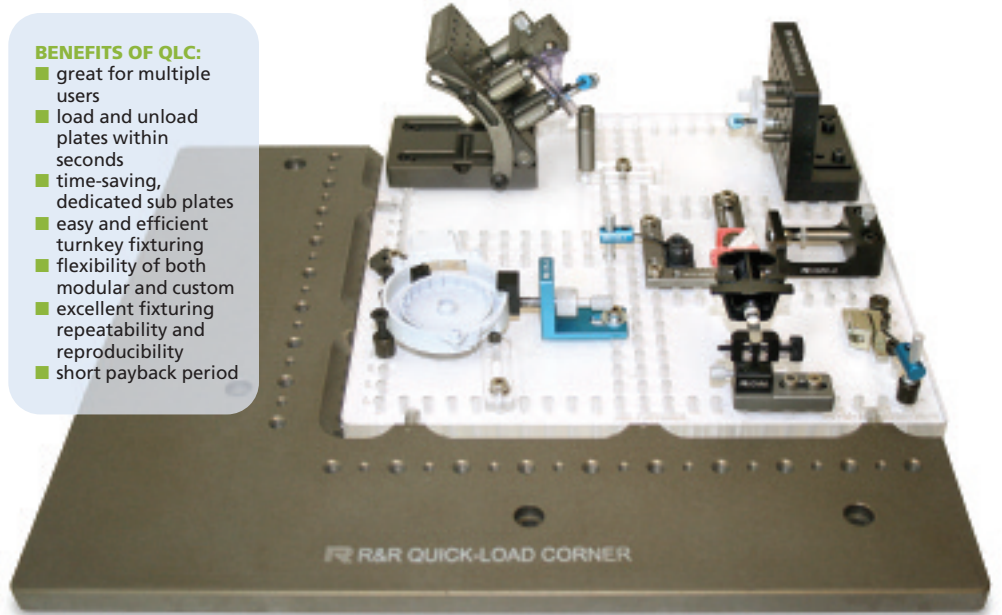


Quick-Load Corner

MODULAR FIXTURING FOR VISION SYSTEMS

BENEFITS OF QLC:

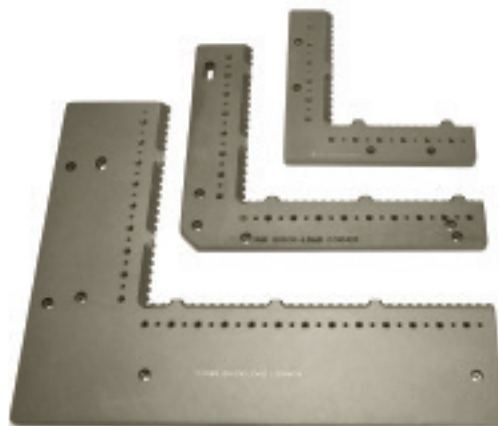
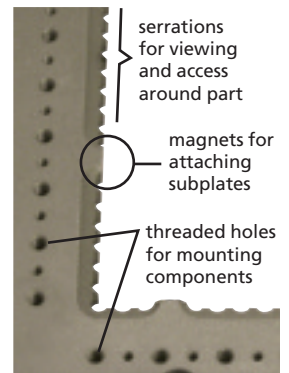
- great for multiple users
- load and unload plates within seconds
- time-saving, dedicated sub plates
- easy and efficient turnkey fixturing
- flexibility of both modular and custom
- excellent fixturing repeatability and reproducibility
- short payback period



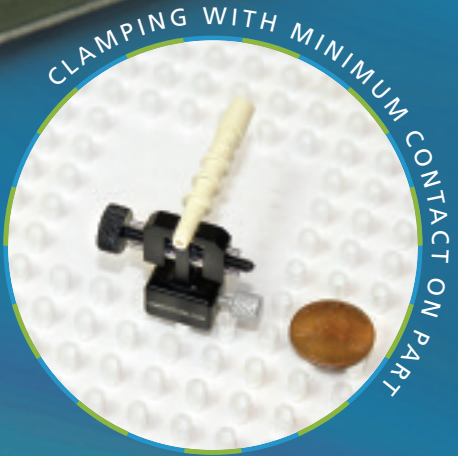
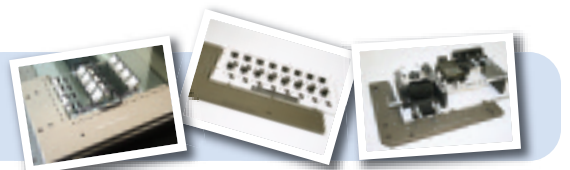
The R&R quick-load corner (QLC) vision fixture is a fast, repeatable way to fixture parts for inspection consistently each and every time increasing productivity and accuracy.

Made to Hold Virtually Anything

With its multiple holes and various components, the QLC vision fixture kit has the versatility to hold anything you may need to inspect while using minimum contact or force on the part. Steel stampings or machined parts can be held using magnets, while other various clamping and fixturing methods are provided for aluminum, plastic, brass, titanium and other non-ferrous materials. Parts can be held vertically or horizontally depending on the orientation needed.



CUSTOMIZE: We can customize your QLC for any specific need. See our web site for more examples.





R&R fixturing components are small and can be arranged within a close circumference to hold and view the smallest of parts. This enables you to view the entire part without covering up any critical features.

Complete Viewing Access

Parts can also be elevated from the surface by using various components or nested directly against the QLC to give you the best edge

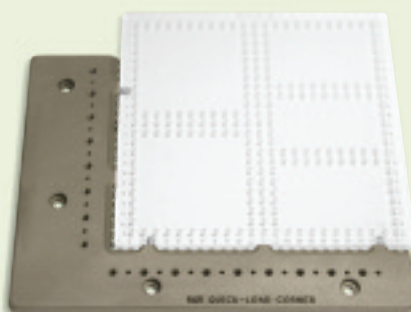


detection viewing. Smaller parts can be positioned and held within the clear area located in the middle of each acrylic fixture plate or window opening giving you complete viewing access to the part.

Multiple Fixture Plates Save Time

Whether you are checking prototype or production parts, the addition of multiple plates makes the inspection of parts quicker by being able to keep your parts setup temporarily on the plates, switching on and off the machine in seconds. Custom vision fixture plates can also be adapted to fit and locate on your QLC.

Choose from our QLC Multi-Window or Multi-Hole Vision Plates



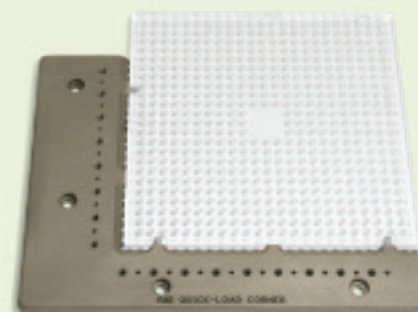
Multi-Window Vision Plates

MORE WINDOWS FOR THE
CLEAREST VIEW OF SMALL PARTS

Our multi-window plates help you view your parts clearly without any obstructions, parts can be secured to the vision fixture base plates using various R&R Fixture components. Multi-window base plates can accommodate numerous parts at one time with different size window options.

Base Plate Size mm (inch)	Window openings
13 x 200 x 200	5
13 x 250 x 150	3
13 x 250 x 250 (.50 x 10 x 10)	5
13 x 400 x 400 (.50 x 16 x 16)	7

- Custom plate sizes available upon request.
- Window size varies depending on size of fixture plate.
- 1/4-20 or M4 thread available.



Multi-Hole Vision Plates

SETUP AND CHECK AS MANY PARTS
AS POSSIBLE AT ONE TIME

Our multi-hole vision plate is ideal for use with all sizes of parts and can be used to fixture an unlimited number of parts on the plate at one time, secure with using our R&R Fixturing components. Ideal for anyone that has a variety of shapes and sizes of parts that need fixturing.

Base Plate Size mm (inch)
13 x 150 x 150 (.50 x 6 x 6)
13 x 200 x 200
13 x 250 x 150
13 x 250 x 250 (.50 x 10 x 10)

- Clear area in center of plate with no holes.
- Custom plate sizes available upon request.
- 1/4-20 or M4 thread available.

Specifically Designed to Fit

The QLC will vary in size depending on your vision machine. Each QLC is made to fit your specific machine and its mounting hole location. Magnets are designed into each QLC to connect to the steel pins pressed into each acrylic fixture plate, giving you the ability to locate your fixture in the exact corner position on the QLC every time.

The alpha-numeric plates and labeled components enable the user to set parts up the same way every time. Acrylic fixture plates are available with either a multi-window or multi-hole threaded hole pattern containing M4 (10mm on center) or 1/4-20 threaded holes (.50" on center). An M4 thread size is recommended for parts that are 75mm x 75mm (3" x 3") or smaller.

M4 QLC vision clamping kits

The M4 QLC vision kit is a comprehensive kit for holding plastic, aluminum, rubber and other nonferrous parts. It is ideal for parts that fit in a 75mm x 75mm cube.

To determine a part number for the desired kit:

- 1 Choose a QLC frame to fit your vision machine.
- 2 Choose a base plate type (multi-hole or multi-window) and size.
- 3 Choose a component set.

- Each QLC is designed to fit your specific machine.
- Specify vision machine make and model number when ordering.
- Each QLC attaches to the lower left hand corner of the vision machine.



multi-hole plate
MORE HOLES for attaching more components



multi-window plate
MORE WINDOWS for optimal viewing of small parts



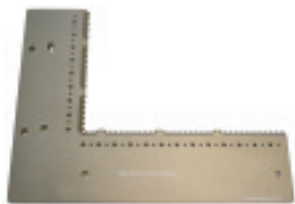
QLC-1 QLC frame
For vision machines SMALLER than 400mm x 400mm

Kits with QLC-1 QLC frame and multi-hole base plate

KIT PART #	BASE PLATE SIZE	SET
QLC1-PV1-A-4	13mm x 150mm x 150mm	A
QLC1-PV1-B-4	13mm x 150mm x 150mm	B
QLC1-PV2-A-4	13mm x 200mm x 200mm	A
QLC1-PV2-B-4	13mm x 200mm x 200mm	B
QLC1-PV3-A-4	13mm x 250mm x 150mm	A
QLC1-PV3-B-4	13mm x 250mm x 150mm	B
QLC1-PV4-A-4	13mm x 250mm x 250mm	A
QLC1-PV4-B-4	13mm x 250mm x 250mm	B

Kits with QLC-1 QLC frame and multi-window base plate

KIT PART #	BASE PLATE SIZE	SET
QLC1-PVW1-A-4	13mm x 200mm x 200mm	A
QLC1-PVW1-B-4	13mm x 200mm x 200mm	B
QLC1-PVW2-A-4	13mm x 250mm x 150mm	A
QLC1-PVW2-B-4	13mm x 250mm x 150mm	B
QLC1-PVW3-A-4	13mm x 250mm x 250mm	A
QLC1-PVW3-B-4	13mm x 250mm x 250mm	B
QLC1-PVW4-A-4	13mm x 400mm x 400mm	A
QLC1-PVW4-B-4	13mm x 400mm x 400mm	B



QLC-2 QLC frame
For vision machines LARGER than 450mm x 450mm

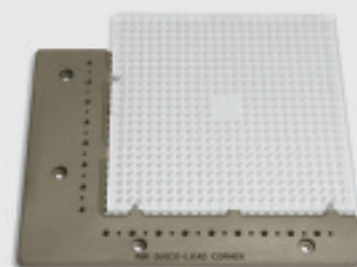
Kits with QLC-2 QLC frame and multi-hole base plate

KIT PART #	BASE PLATE SIZE	SET
QLC2-PV1-A-4	13mm x 150mm x 150mm	A
QLC2-PV1-B-4	13mm x 150mm x 150mm	B
QLC2-PV2-A-4	13mm x 200mm x 200mm	A
QLC2-PV2-B-4	13mm x 200mm x 200mm	B
QLC2-PV3-A-4	13mm x 250mm x 150mm	A
QLC2-PV3-B-4	13mm x 250mm x 150mm	B
QLC2-PV4-A-4	13mm x 250mm x 250mm	A
QLC2-PV4-B-4	13mm x 250mm x 250mm	B

Kits with QLC-2 QLC frame and multi-window base plate

KIT PART #	BASE PLATE SIZE	SET
QLC2-PVW1-A-4	13mm x 200mm x 200mm	A
QLC2-PVW1-B-4	13mm x 200mm x 200mm	B
QLC2-PVW2-A-4	13mm x 250mm x 150mm	A
QLC2-PVW2-B-4	13mm x 250mm x 150mm	B
QLC2-PVW3-A-4	13mm x 250mm x 250mm	A
QLC2-PVW3-B-4	13mm x 250mm x 250mm	B
QLC2-PVW4-A-4	13mm x 400mm x 400mm	A
QLC2-PVW4-B-4	13mm x 400mm x 400mm	B

A kit includes an acrylic base plate with M4 threaded holes 10mm on center, a quick-load corner and one set of components (A or B).



QLC1-PV2-B-4
kit shown

Component Set A (47) M4 components

QTY	PART #	DESCRIPTION
3	S-610-4	6mm dia. x 10mm standoff
3	S-625-4	6mm dia. x 25mm standoff
3	S-95-4	9mm dia. x 5mm standoff
3	S-910-4	9mm dia. x 10mm standoff
3	S-920-4	9mm dia. x 20mm standoff
3	S-925-4	9mm dia. x 25mm standoff
3	S-1210-4	12mm dia. x 10mm standoff
3	S-1225-4	12mm dia. x 25mm standoff
2	SP-610-4	6mm dia. x 10mm pin standoff
2	SP-910-4	9mm dia. x 10mm pin standoff
2	CTT-40-25-4	40mm tension clamp with coated soft tip, 25mm post
2	CWT-25-25-4	25mm wire clamp with coated soft tip, 25mm post
2	CWT-50-50-4	50mm wire clamp with coated soft tip, 50mm post pusher clamp
1	CP-4	micro-clamp vise with base
1	CVM-B-4	spring pusher standoff clamp
4	RPA-4	aluminum resting pin
1	VC-5050-4	50mm x 50mm corner viewer
1	AJ-9-4	9mm dia. adjustable jackstand
1	AS-30-4	30mm long adjustable slide
1	ASA-45-4	45mm long adjustable acrylic slide base
1	TB-1619-4	tower block with base 16mm sq. x 19mm
1	TC-300190-4	300mm x 190mm x 25mm component tray

Component Set B (84) M4 components

QTY	PART #	DESCRIPTION
3	S-65-4 *	6mm dia. x 5mm standoff
6	S-610-4	6mm dia. x 10mm standoff
6	S-625-4	6mm dia. x 25mm standoff
3	S-95-4	9mm dia. x 5mm standoff
6	S-910-4	9mm dia. x 10mm standoff
6	S-920-4	9mm dia. x 20mm standoff
6	S-925-4	9mm dia. x 25mm standoff
6	S-1210-4	12mm dia. x 10mm standoff
6	S-1225-4	12mm dia. x 25mm standoff
4	SP-610-4	6mm dia. x 10mm pin standoff
4	SP-910-4	9mm dia. x 10mm pin standoff
4	CTT-40-25-4	40mm tension clamp with coated soft tip, 25mm post
4	CWT-25-25-4	25mm wire clamp with coated soft tip, 25mm post
4	CWT-50-50-4	50mm wire clamp with coated soft tip, 50mm post pusher clamp
1	CP-4	micro-clamp vise with base
1	CVM-B-4	spring pusher standoff clamp
4	RPA-4	aluminum resting pin
1	VC-5050-4	50mm x 50mm corner viewer
2	AJ-9-4	9mm dia. adjustable jackstand
2	AS-30-4	30mm long adjustable slide
2	ASA-45-4	45mm long adjustable acrylic slide base
1	TB-1619-4	tower block with base 16mm sq. x 19mm
1	TC-300190-4	300mm x 190mm x 25mm component tray

* = does not have a threaded top



1/4-20 QLC vision clamping kits

The 1/4-20 QLC vision kit is a comprehensive kit for holding plastic, aluminum, rubber and other nonferrous parts.

To determine a part number for the desired kit:

- 1 Choose a QLC frame to fit your vision machine.
- 2 Choose a base plate type (multi-hole or multi-window) and size.
- 3 Each kit includes component set A.

- Each QLC is designed to fit your specific machine.
- Specify vision machine make and model number when ordering.
- Each QLC attaches to the lower left hand corner of the vision machine.



multi-hole plate
MORE HOLES for attaching more components



multi-window plate
MORE WINDOWS for optimal viewing of small parts



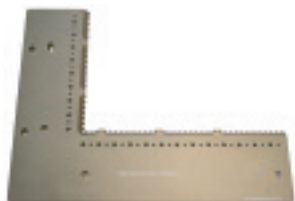
QLC-1 QLC frame
For vision machines SMALLER than 400mm x 400mm

Kits with QLC-1 QLC frame and multi-hole base plate

KIT PART #	BASE PLATE SIZE	SET
QLC1-PV1-A-20	.50" x 6" x 6"	A
QLC1-PV2-A-20	.50" x 10" x 10"	A

Kits with QLC-1 QLC frame and multi-window base plate

KIT PART #	BASE PLATE SIZE	SET
QLC1-PVW1-A-20	.50" x 10" x 10"	A
QLC1-PVW2-A-20	.50" x 16" x 16"	A



QLC-2 QLC frame
For vision machines LARGER than 450mm x 450mm

Kits with QLC-2 QLC frame and multi-hole base plate

KIT PART #	BASE PLATE SIZE	SET
QLC2-PV1-A-20	.50" x 10" x 10"	A

Kits with QLC-2 QLC frame and multi-window base plate

KIT PART #	BASE PLATE SIZE	SET
QLC2-PVW1-A-20	.50" x 10" x 10"	A
QLC2-PVW2-A-29	.50" x 16" x 16"	A

A kit includes an acrylic base plate with 1/4-20 threaded holes .50" on center, a quick-load corner and one set of components (A).



QLC1-PV2-A-20
kit shown

Component Set A (53) 1/4-20 components

QTY	PART #	DESCRIPTION
3	S-2550-20	.25" dia. x .50" standoff *
3	S-251-20	.25" dia. x 1.0" standoff *
3	S-37525-20	.375" dia. x .25" standoff *
3	S-37550-20	.375" dia. x .50" standoff
3	S-37575-20	.375" dia. x .75" standoff
3	S-3751-20	.375" dia. x 1.0" standoff
3	S-5050-20	.50" dia. x .50" standoff
3	S-5075-20	.50" dia. x .75" standoff
2	SP-2550-20	.25" dia. x .50" pin standoff
2	SP-37550-20	.375" dia. x .50" pin standoff
1	CSPS-751-20	.75" dia. x 1" spring pusher standoff clamp
4	CTT-160-125-20	1.6" tension clamp with coated soft tip, 1.25" post
4	CWT-1-1-20	1.0" wire clamp with coated soft tip, 1.0" post
4	CWT-2-2-20	2.0" wire clamp with coated soft tip, 2.0" post
1	CP-20	1/4-20 pusher clamp
4	RPS-20	steel resting pin
1	VC-33-20	3.25" x 3.25" corner viewer
1	CVM-B-20	micro-clamp vise with base
1	AJ-50-20	.50" dia. adjustable jackstand
1	ASA-2-20	2.0" long adjustable acrylic slide
1	AS-1-20	1.0" long adjustable slide
1	TB-751-20	1/4-20 tower block with base .75" sq x 1.0"
1	TC-500200	500mm x 200mm x 25mm component tray

* = does not have a threaded top





Interchangeable Vision Fixture

IDEAL FOR MACHINES 450X450 OR LARGER

The R&R interchangeable vision fixture (IVF) makes holding parts an easy and efficient turnkey fixturing method. Easily switch multiple fixturing plates on and off of the aluminum frame mounted to your vision system. Fixture exchange can be accomplished in a matter of only seconds, eliminating down time and allowing continuous inspection and repeatability on your vision machine.

Designed to Fit

The anodized aluminum frame and acrylic fixture plates are custom made to fit and mount to your specific vision machine taking into account the mounting of your probe rack and calibration artifacts.

Built to Save Time

Fixturing plates can be different sizes, depending on the size of your frame, the size of your parts and how many parts you are inspecting. Fixture plates are designed to use all, 1/2, 1/4, or 1/8 of the frame's total size and are equipped with handles to load on to the frame over a dowel pin in a repeatable position each time. Modular plates come with your choice of multi-hole or multi-window threaded hole pattern.

Hold Parts with Modular or Custom Fixtures

Interchangeable fixture plates can be modular with M4 or 1/4-20 threaded holes (10mm or .50" on center) or R&R can design and build a custom fixture for your parts. A combination of both modular and custom fixture plates can be made to fit the same IVF frame, allowing you the most flexibility. Not all parts are created equal — some are better suited for custom fixturing depending on the orientation, complexity of the part and the frequency of the inspection.

Size Matters

Inspect your parts using minimum contact on the part with R&R's light clamping force components. With multiple hole spacing and smaller fixturing components, parts can be located and positioned in a tight circumference on the fixturing plates making it easy to hold the smallest of parts.

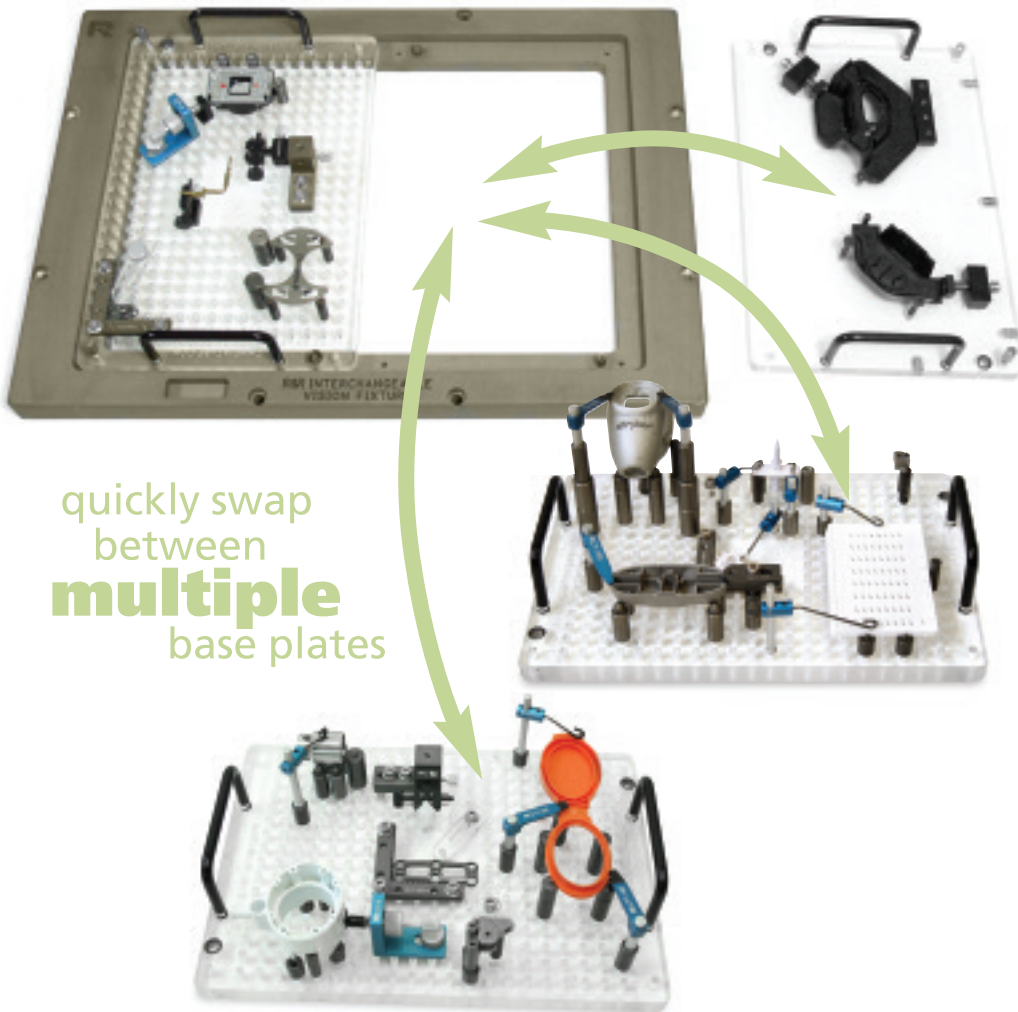
No Downtime Waiting for Fixturing

Increase productivity by adding more fixturing plates. While one fixture is running, another can be loaded with parts or built up, keeping your vision system continuously running.

bottom line improves your gage R&R

CUSTOMIZE: We can customize your IVF for any specific need. See our web site for more examples.





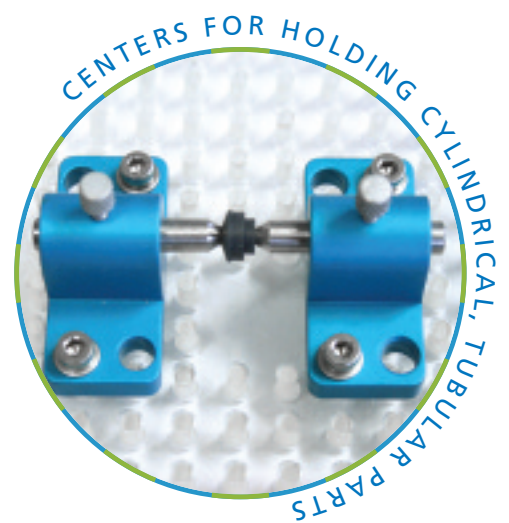
quickly swap
between
multiple
base plates



CLAMPS FOR PLASTIC AND NON-FERROUS PARTS



MAGNETS FOR STEEL AND FERROUS PARTS



CENTERS FOR HOLDING CYLINDRICAL, TUBULAR PARTS

Key Features of the IVF Fixture:

- alpha-numeric plates and labeled components allow operator to record the fixture setup
- smaller components allow you to view the entire part without covering up critical features
- repeatable from one operator or time to another
- multiple parts can be setup on the fixture at one time
- placing parts within a clear area on plate or up off surface of the plate allows for clear view of entire part with no edge detection interference