

CLASSIC ARCH

LITE ARCH

ARCH CONTROLS

EX31 AUTOMATION, LLC

**Arch Inline Quality
Arch-I.Q.**

FALL 2025

EX31 AUTOMATION, LLC
804-829-4088

Arch Inline Quality

Our inline vision inspection system is no exception to the top-quality solutions we create at EX31 Automation. Born out of a need for blending quality mechanical design principles, factory automation systems, and advanced controls; our Arch Inline Quality solution is the perfect fit for most every company that transports products on a conveyor and needs to inspect them.

Our solution is, of course, not suited for every product. However, if you have a need to measure critical dimensions, look for product defects, or want to provide real-time feedback to your controls system, contact us today for a free consultation. If our team determines we may be able to provide value to your production line, we will create a 3D CAD model and supply a budgetary quote to you within 5 business days.



Why The Arch?

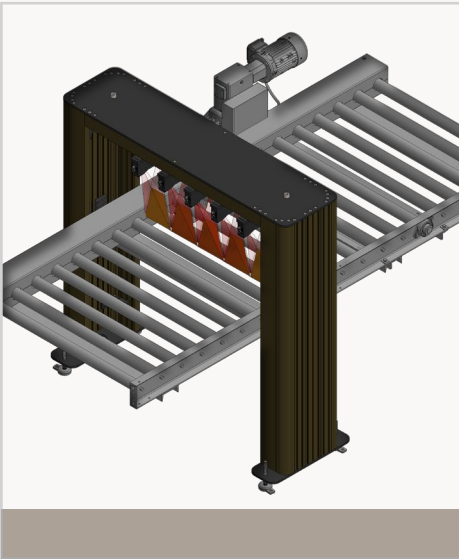
EX31 Automation has its roots in high-speed mechanical machinery design. Our approach has been to utilize the best design principles and take the simple approach first. What better way to do that than having a system that is rapidly configurable, and minimizes the modifications needed to your factory processing line. If you are extruding products or running a dual edge tenor (DET) machine, chances are you have a shape product that, at a minimum, requires dimensional accuracy for quality fitment. Having our Arch-IQ solution, that you can literally roll up to your factory line, will allow you to get started measuring and inspecting your products the first day you receive it.

Arch-I.Q.



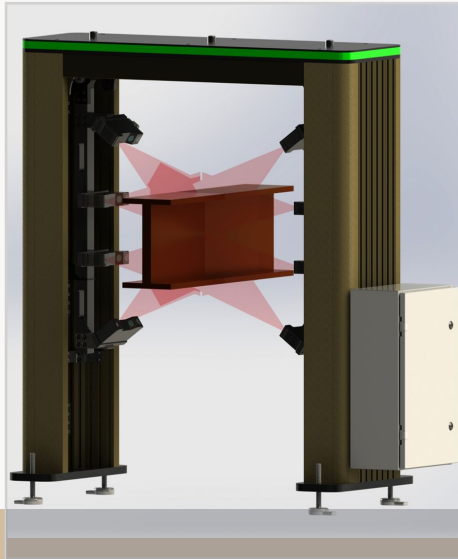
CLASSIC ARCH

The flagship arch for EX31 Automation, our Arch-IQ Classic arch is the most configurable solution in the world for inline inspections. We pair our mechanical and electrical technology with LMI 3D Gocators to create a world-leading, complex geometry, inline inspection solution.



OVER / UNDER ONLY

The over or under configuration of arch design is perfect for your flat stock extruded materials. We can measure surface roughness, defects, and dimensional data.



ALL-AROUND DIMENSIONS

This arch configuration enables measurement of all exterior cross-sectional dimensions of complex shapes.



LARGE FORMAT

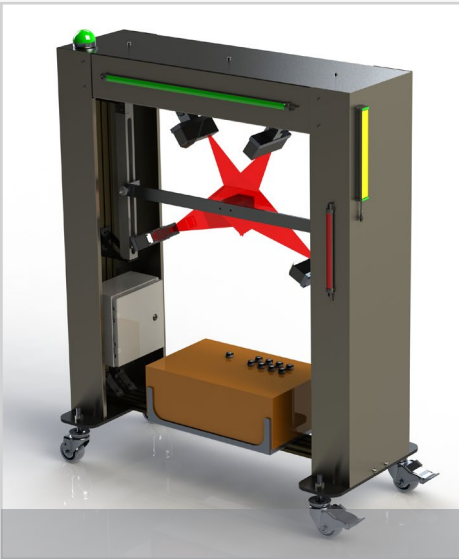
Our system sizing flexibility creates a great balance of performance and deployment. We configure these systems to your product size as part of your initial proposal.

Arch-IQ CLASSIC

The Arch-IQ classic arch utilizes both universal and fixed precision frames. It is built like an old streamlined locomotive; utilizing the best in industry heavy-duty framing components. This system can be configured to measure an object from the size of a drinking straw to a full sheet of plywood using the same core system configuration. We even have options for vibration isolation.

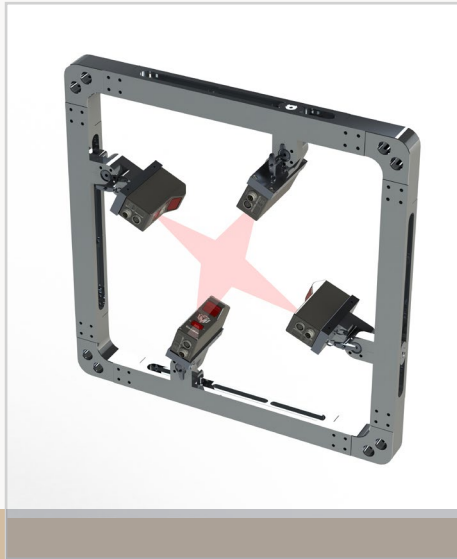
LITE ARCH

The Arch-IQ Lite arch utilizes both universal and fixed precision frames. Its core is a heavy duty extruded frame skinned in your favorite color cover panels. Our standard is a stainless-steel finish, and this system has the nickname St. Louis Lite. This solution is by far the most economical approach when first getting started and allows our clients the most flexibility during development of a closed loop control system.



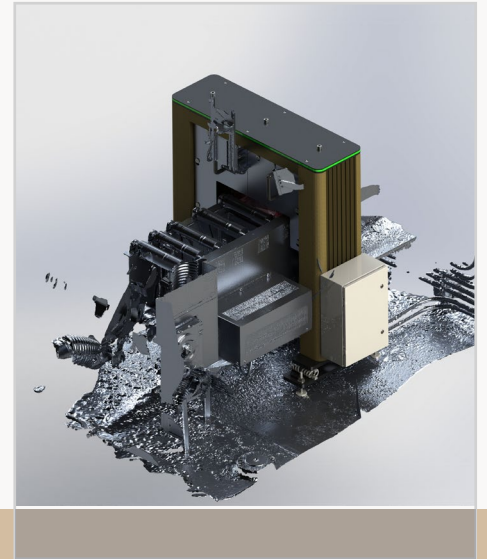
Arch-IQ FLAGSHIP SYSTEM

Fully configurable, the Lite Arch platform is the fastest deployable system in the market for complex shapes. Standard lead time is 4 weeks.



PRECISION FRAME CORE

All EX31 Arch-IQ platforms rock a billet precision machined frame. Ask us about universal and fixed solution platforms today.



FIRST TIME FIT

Concerned about fitment? We offer a first-time fit approach where we create a 3D scan of your production line and fit your system in place with no hassle.

Arch-IQ LITE

The Arch-IQ Lite vision platform is the best balance for an initial entry point and maximizing your return on a hardware investment. Our standard offering with this system pairs with a Go-Box that houses all the controls in a travel case. This enables you to develop your unique measurements offline so you can win inline, all in one system package.

ARCH CONTROLS

The Arch-IQ controls systems are built to last. Our standard panel options are packed full of the latest name brand pro-series hardware. Each solution is hand-built in our shop with the utmost quality. PLC controls needed? No problem! We service most major brands including Allen-Bradley, Siemens, and Horner OCS to name a few. Need the data served up to your in-house SCADA system? We've got you covered there, too. Our team of experts will help you get the visualization of your data quickly and efficiently.



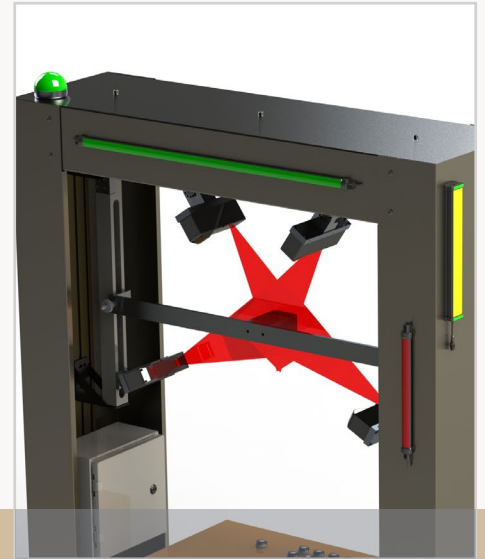
CONTROLS PLATFORM

We service most all major controls brands and PLC platforms. Our goal is to provide you with the data and empower the win!



THE GO-BOX

Simply put, it is for the on-the-go manufacturer who wants maximum flexibility.



LIGHTING

Ask about our unique lighting systems for position indication. Always know that your inspection tools are functional with the perfect solution for operator feedback.

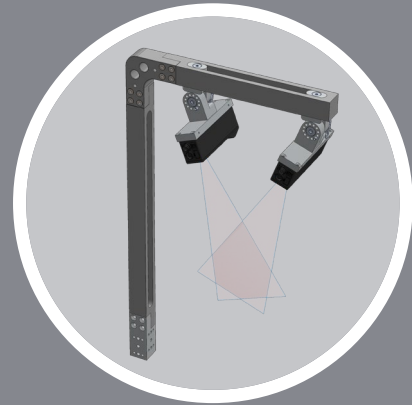
Controls Systems

Need to go mobile? Our Go-Box controller houses an entire multi-sensor control platform. This system is perfect for your factory technicians needing to set up a precision frame on the bench or for your R&D group wanting to explore new capabilities embedded in our Arch-IQ arch solution technology. Whatever the need may be, rest assured that EX31 Automation has the expertise needed to measure your products.



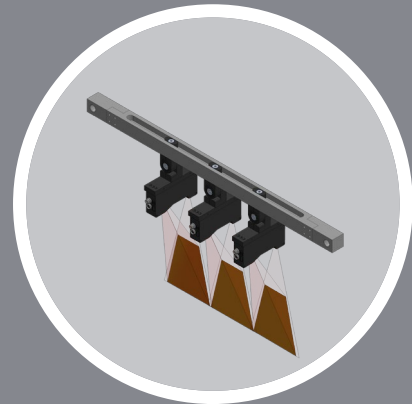
DUAL INSPECTION

This inspection frame layout is perfect for the custom applications where you need a quick mounting solution. The flexibility of this type of configured layout enables both dual overhead verses top & side inspections.



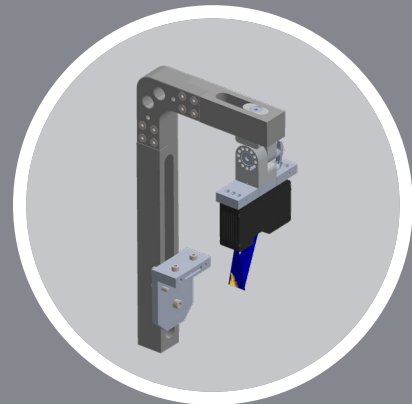
FLAT CONVEYOR INSPECTIONS

This design layout is our flagship mounting configuration for linear inspection systems. Ideal for both inline rotary and flat conveyor designs, it boasts a simple bracket method to mount the cross bar but utilizes billet aluminum components to keep your sensors mounted in-line.



EXTRUSION KEY MOUNT

Our universal extruded aluminum mount allows for easy adaption of the Arch-IQ precision frame to your existing machinery. Configurable in two different attachment methods with the same mount, it enables you to quickly position your vision system to the perfect location.



ARCH-IQ FRAME EXAMPLES

Call us today for a consultation.
We offer a free 3D model and budgetary quote within 5 business days.



CLASSIC U-FRAME

By far our most configured frame, this structure creates the all-around flexibility for inspection of wide flat materials. Typically, we can configure your layout to measure the complete external cross-section of your product.



ULTRA FRAME

Maximum flexibility required? We have you covered there as well. The same precision frames can be configured in a verity of rectangular frame designs for the most flexible system available on the market today.



METAMORPH FRAME

Need something completely unique in shape? Work with our engineers to configure your unique framing system and explore new possibilities. Enable your next vision system win today!

ARCH-IQ MULTI-SENSOR FRAMES

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We offer a free 3D model and budgetary quote within 5 business days.



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