

# FyrEye-3200 Metal Part Inspection Systems

*The FyrEye-3200 inspects machined, cast, forged, stamped, and other formed metal parts.*

The FyrEye-3200 family provides automatic inspection for:

- Dimensions (including high accuracy)
- Machined surface analysis
- Completeness
- Thickness
- Presence/absence of required holes and cutouts
- Edge irregularities
- Dimensions and position of cutouts
- Holes or pinholes
- Cracks or tears
- Bumps or pits
- Voids
- Flash or other undesired extra material

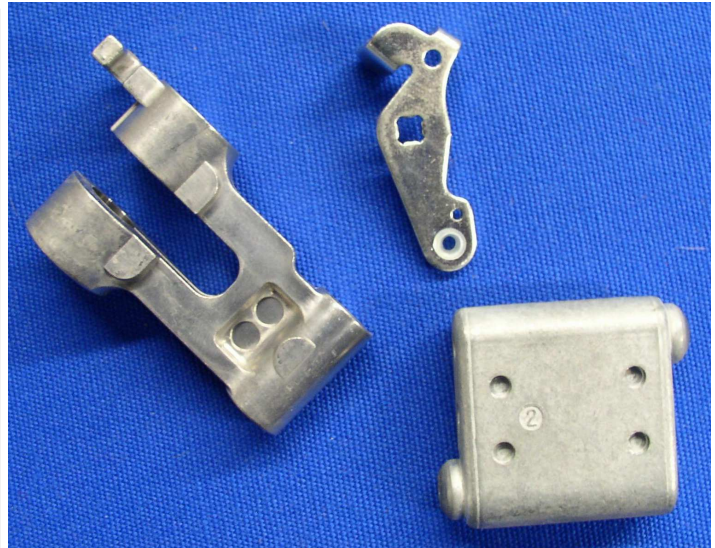
Products include:

- Castings
- Stampings
- Extrusions
- Forgings
- Sheet Metal
- Machined Products

FSI is noted for its 100% success rate in these two metal part inspection application areas where successful use of machine vision is rare:

- High accuracy gauging. Success or failure here is generally determined by factors outside of the vision unit (ask for FSI white paper # SDOC-058-003 "Machine Vision Gauging Accuracy").
- Surface defects on rough castings, where it is difficult to reliably differentiate between normal roughness and defects.

The FyrEye-3200 is a family of systems, customized to your application and requirements. Your particular model will be from the same family, but will have different variations in equipment and capabilities. The FyrEye-3200-02 small roller bearing inspection system is an example and includes:



- Dimensional inspection with .0001" resolution and +/- .0005" total accuracy. Also inspects for chips, gouges, cuts, holes and other geometric defects and deformities.
- Fulfills application and performance specification # VAS-3200-02 (copy available). Each application will have its own VAS (Vision Application Spec Sheet).
- Comprehensive handling of the relevant engineering and physics topics reduces error contributions from all five of the often-ignored areas.
- Engineered lighting specialized for high accuracy gauging performance.
- High resolution imaging, plus sub-pixeling and model geometry tools reduce error contributions induced by even high resolution imaging.
- CLTG series lens which combines high accuracy with telecentricity. FSI offers other solutions using dynamically individually calibrated measurements and an image distortion correction plug-in which allow use of less accurate standard telecentric lenses.



FSI Technologies Inc.

668 Western Ave. Lombard IL 60148-2097 USA

800-468-6009 FAX 630-932-0016 [www.fsinet.com](http://www.fsinet.com)

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Please contact FSI for a system and solution that is confirmed for your application.

FSI has been a trusted factory automation manufacturer for over 50 years. Our Assured Path to Success™

methods and program have a 100% success rate in the field of machine vision. Because our engineers are deeply involved in understanding the application, recommending the products and supporting the software, these systems are uniquely suited for long term supportability and standardization.



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