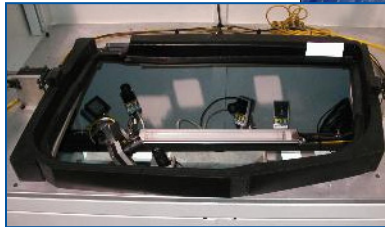


HENSHAW VISION SYSTEM INTEGRATION

High Performing Inspection Systems



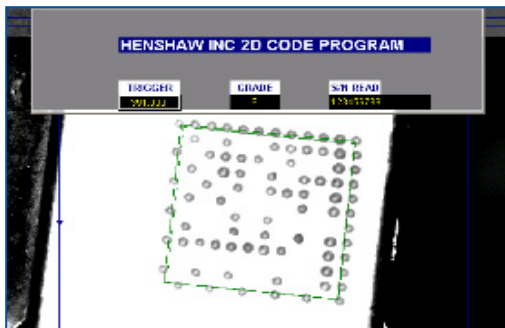
A turnkey control arm inspection system



Door assembly inspection



Turnkey cable drum inspection



This image displays the vision systems ability to decode and grade a 2D Dot Peen mark on steel

- Identify defects before the product reaches the end-user
- Reduce scrap by identifying defects immediately in the manufacturing process
- Lower your warranty and manufacturing costs
- Reduce the potential for product liability

Quality Critical Systems

Henshaw has over ten years of vision integration experience. We design a wide variety of high performance process control and error proofing laser and vision systems for several automotive OEM plants, tier supplier facilities, foundries and injection molding operations.

As a certified independent vision system integrator for top camera manufacturers, such as Banner, Cognex, DVT, IPD, Keyence, National Instruments and Omron, Henshaw will design a system using the camera that best meets your "quality critical" objectives:

- Part present
- Part dimensions
- Part color
- Part traceability
- Data matrix codes, bar codes
- Optical Character Recognition and Optical Character Verification (OCR/OCV)

Our Vision team can provide any level of service – from programming and debugging your existing system to the complete custom design and build of a turnkey inspection system. Each project begins with a comprehensive feasibility study to determine your specific error proofing needs – needs that may include:

- Special machine vision lighting
- Proper lens selection
- Part fixturing requirements

Vision Systems Project Portfolio

Henshaw's machine vision engineers have installed hundreds of cameras. The complexity of Henshaw Vision System integration projects range from single-camera systems to multi-camera systems. Here is a small sample of our system applications:

APPLICATIONS	
2D Matrix Reading on Torque Converter 6R Snap Ring Assembly Inspection Adhesive Bead Inspection Bonus Seal Assembly Inspection Breather Cap Assembly Inspection Cable Drum Inspection Color Mark Identification Inspection Connecting Rod Inspection Control Arm Inspection CV Joint Needle Bearing Assembly Inspection Dial Table Inspection Station Door Assembly Inspection Engine Manifold Inspection Engine Mount Inspection Engine Wire Harness Inspection Fastener Inspection Machine FN Snap Ring Assembly Inspection Front Axle Assembly Inspection	Fuel Filler Tube Assembly Inspection Fuel Line Bead Form Inspection Gasket Presence Inspection Glass Primer Inspection Latch Assembly Inspection Main Control Assembly Inspection Needle Bearing Inspection O-Ring Assembly Inspection Planetary Gear Assembly Inspection Pump Assembly Inspection Pump Model Identification Inspection Seat Track Assembly Inspection Fixture Shipping Cap Assembly Inspection Stamping Press Inspection Steering Column Assembly Inspection TSS Cap Presence Inspection Wave Spring Assembly Inspection

Be sure you have the right system to ensure consistently high quality parts and products, **call us today at 586-752-0700** to schedule an application review.

To learn more about Henshaw's complete portfolio of advanced manufacturing and material handling solutions – custom automation, machine controls and ergonomic lift assist systems – visit our Web site at www.henshawusa.com.