



# FABRIVISION 3Di LASER

## 3-Dimensional Laser Inspection System

Offering all of the advantages of FabriVISION Laser – plus 3D intelligence technology – FabriVISION 3Di Laser is the optimal inspection solution for the sheet metal industry.

In addition, reliance on calipers, height gages and digital protractors is greatly reduced.



**Height Measurement**  
3Di can measure heights up to 8”.

**Form Feature Measurement**  
Form features such as emboss and bridge lance are easily measured using 3Di.

**Edge-to-Edge Measurement**  
Edge-to-edge measurement at variable heights is supported.

**Hole-to-Hole Measurement**  
Critical hole-to-hole measurement is a simple mouse-click away.

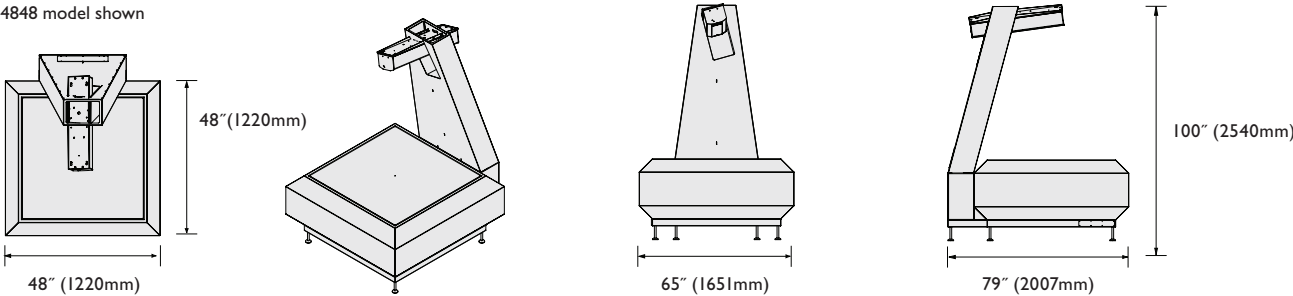
**Virtual Warpage Correction**  
Using the latest interpolation algorithm and height scan technology, 3Di can account for and correct “warpage” caused by processing – producing improved flat inspection.

**Angle Measurement**  
Angle measurement relative to the scanning surface is achieved through the 3Di plane recognition feature.



### DIMENSIONS

FVL-HD-4848 model shown



### SPECIFICATIONS

Model	FabriVISION Laser FVL-HD-3030	FabriVISION Laser FVL-HD-4848
Scanning Accuracy	± 0.002: (0.05mm)	
Maximum Part Thickness	8.0: (200mm)	
Maximum Part Weight	200lbs (90kg)	
Calibration	Automated	
Maximum Scan Zone	30" x 30" (760mm x 760mm)	48" x 48" (1220mm x 1220mm)
Oversized Part	Oversized part capacity with auto alignment allows parts of unlimited length to be scanned	
Overall Dimensions (LxWxH) inch	62" x 48" x 100"	79" x 65" x 100"
Overall Dimensions (LxWxH) metric	1575mm x 1220mm x 2540mm	2007mm x 1651mm x 2540mm
Operating Environment 10	50 - 100°F (38¼C)	
Power Requirements	240V/50 Hz r 110V/60 Hz (UPS supplied)	
Laser Device & Output	Laser diode device with maximum 4.5 mW output	
Model	FabriVISION 3Di Laser	
Scanning Accuracy*	± 0.002" (0.05mm)* in the flat and ± 0.010" (0.25mm)* for formed inspection	
Maximum Part Thickness	8.0" (200mm)	
Maximum Part Weight	200lbs (90kg)	
Calibration	Automated	
Maximum Part Size (Single Scan)	48" x 48" (1220mm x 1220mm)	
Oversize Parts	Oversized part capacity with auto alignment allows parts of unlimited length to be scanned	
Overall Dimensions (LxWxH)	79" x 65" x 96" (2007mm x 1651mm x 2440mm)	
Operating Environment	50°F - 100°F (10°C - 38°C)	
Power Requirements	110V/60Hz or 240V/50Hz	
Laser Device and Output	Laser diode device with maximum 4.5mW output	
Laser Class	Class IIIa, meeting the 21 CFR 1040 standard for CDRH certification in North America Class 2M, meeting the 60825-1:1993+A1:1997+A2:2001 standard for CE certification in Europe	
Software	FabriVISION Laser®. Includes inspection, SPC and reverse engineering	
Computer System	Current model PC with monitor, color printer, keyboard and mouse, Surge Protector & Network Cable	
Operating System	Windows® XP	
Warranty	One year on hardware and software	
Extended Warranty (AMP)	Optional	
Part Stabilizer	Optional	

Due to continuous product improvement, specifications are subject to change without notice. (\*) Accuracy results are based on tests conducted on standard production machines using a laser-cut part. Results may vary.

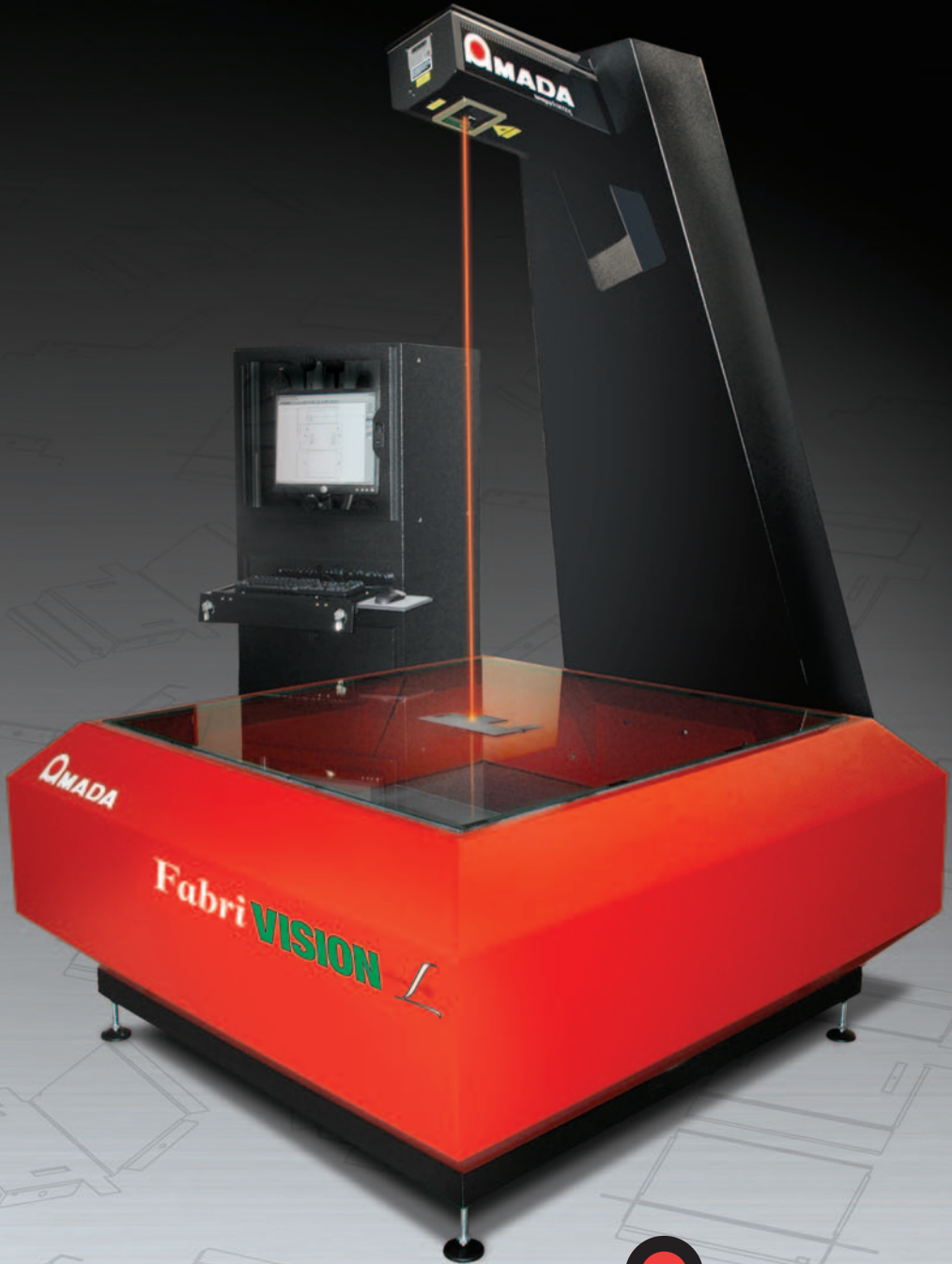
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INTEGRATED SHEET METAL INSPECTION SYSTEMS

# FabriVISION Series

FVL-HD-3030, FVL-HD-4848,  
**Plus FabriVISION 3Di Laser**  
with 3D intelligence technology





# FabriVISION maximizes the throughput of your turret and laser by eliminating delays in the inspection process.

The KEY to quality fabrication is building quality control into the production process. FabriVISION provides a consistent, reliable inspection process while increasing your shop's productivity.

## INTEGRATED SHEET METAL INSPECTION SYSTEM

Now you can quickly inspect every laser-cut and punched part with unparalleled accuracy and precision. FabriVISION is a non-contact, laser inspection system that allows you to examine any opaque flat part including plexi-glass, gasket materials, and other

rigid parts. If you're a quality-conscious sheet metal fabricator who strives to stay ahead of your competition, FabriVISION can increase the performance, productivity, and profitability of your fabrication operations – not someday, but right now!

## HD LASER

### Cutting-Edge Laser Technology

Our latest generation High-Definition Laser projector scans parts in as little as 12 seconds. The special HD Laser projector is designed to be virtually maintenance free.

### Self-Calibration

FabriVISION automatically self-calibrates before scanning – ensuring precise scans every time.

### Shop-Ready Machine

Unlike other inspection devices, FabriVISION has been engineered to work alongside your turret punch presses and laser cutting systems. For high-resonance shop environments with vibration control issues, optional stabilizer boots can isolate FabriVISION from impact tremors – while precise part inspection continues like clockwork.

### Industrial Computer Casing

FabriVISION comes with our custom-designed shop-ready enclosure, complete with air flow & filtration management, and a power-filter unit to protect your investment.

### Heavy Duty Glass Top

FabriVISION's glass top is engineered to handle parts weighing up to 200 lbs. Additional glass tops increase convenience and flexibility.



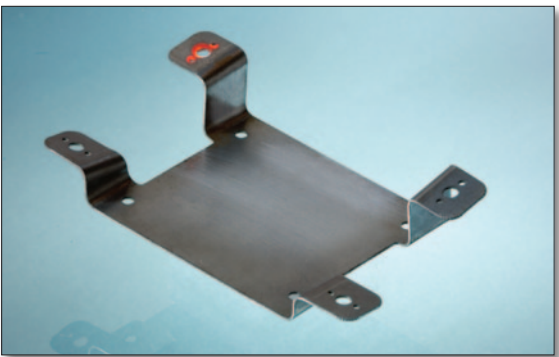
# FabriVISION offers an array of features that can increase your shop's reach and service to clients.

## FIRST ARTICLE INSPECTION



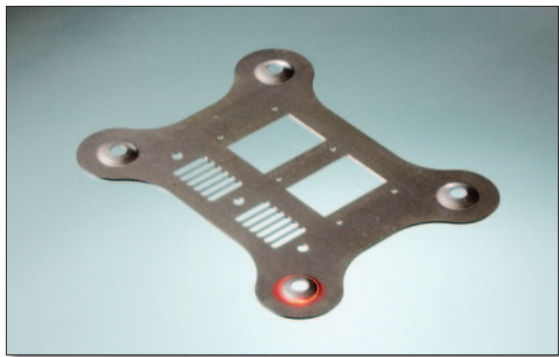
Since FabriVISION is fully integrated with API00US, inspections can be performed by the machine operator right at the production station. A full scan is completed in seconds while comparing each measurement to CAD specifications. This reduces the time between CAD drawing and first article inspection up to 96%.

## VARIABLE HEIGHT SCANNING



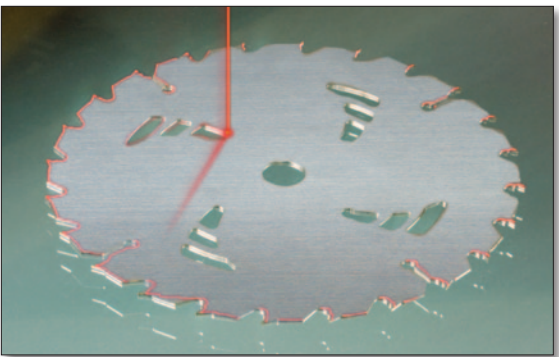
FabriVISION detects a part's form features by utilizing its built-in scan height adjustment function. Variable height scanning allows the operator to precisely measure holes within formed and/or embossed parts.

## VISUAL VERIFICATION



FabriVISION is able to qualify form features by projecting an outline of the form directly onto the part surface while the part is being visually inspected. This enables the operator to verify the proper placement of the formed feature.

## REVERSE ENGINEERING

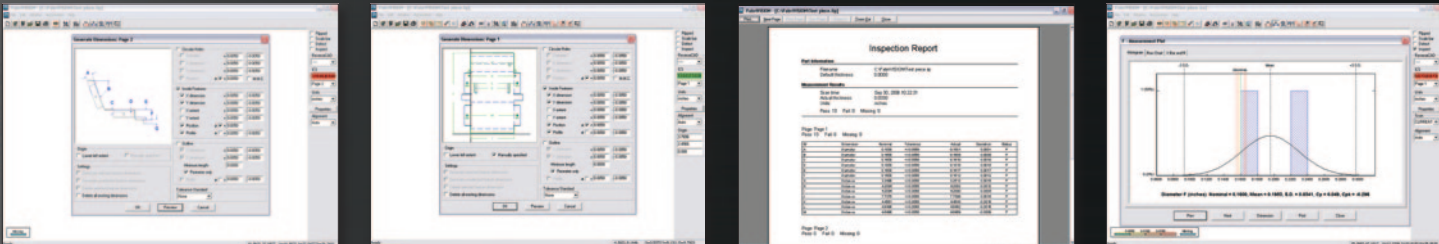


The scanning process captures the complete profile of existing parts or templates at laser speed. Then, the data is stored in API00US PRT files or DXF files. The software also allows you to manipulate the scan data and part profile on-screen so that you can optimize the quality of the CAD model.

## SPC AND QUALITY REPORTING

Within seconds of completing a scan, FabriVISION generates a detailed report from the inspection file to your exact specifications. This automatically-generated color report, records data files of the scanned part and includes any variances from the CAD data. SPC functions also include charting data in a Histogram, Run Chart, and X Bar/Range Plot for specific analysis of part production processes over a specified period of time.

The system provides complete traceability and automatic documentation to meet requirements for ISO and QS reporting in addition to data files you can easily export to common Microsoft Windows® based programs. The simplicity and speed of FabriVISION combined with its automated documentation capabilities, enable you to upgrade your quality process with minimal cost, training or effort.



## QUALITY BUILT INTO THE PROCESS

