

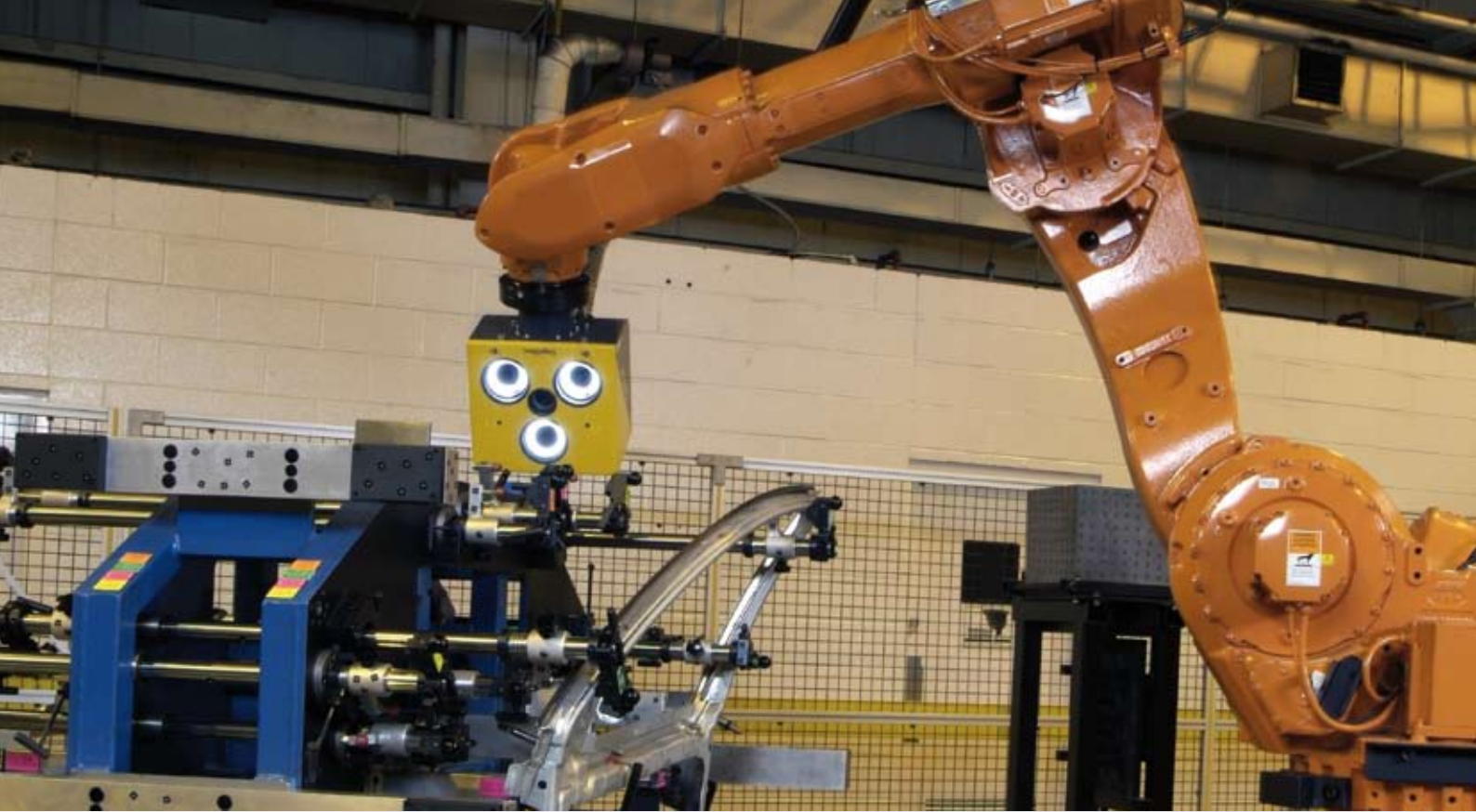


CogniTens
Beyond Any Measure

Case Study Oghihara America Corporation
Oghihara Eliminates Hundreds of Inspection
Hours with OptiCell by CogniTens



 **HEXAGON**
METROLOGY



Based on our experience, OptiCell has paid for itself in about three months simply by eliminating hundreds of CMM inspection hours and iterative quality procedures.



Ogihara America Corporation is a subsidiary of the Japanese Ogihara Corporation, one of the largest independent automotive die manufacturers in the world today. Ogihara is a Tier 1 supplier known for its exceptional product quality of automotive class A parts, assemblies and related body panels. Ogihara operates in the US from its Howell based facility in Michigan. Ogihara's production facilities provide critical parts and assemblies to General Motors, Ford and DaimlerChrysler as well as to several Japanese "transplants" across North America. All Ogihara facilities around the world share common processes for ensuring lean and streamlined operation. Common processes help Ogihara develop and manufacture more cost effectively while ensuring the best quality for the customer at all times.

Ogihara's Howell plant specializes in long-term production jobs requiring stamping and sub-assembly of Class A quality panels via robotic material handling; robotic weld, sealer, and adhesive application; automated assembly lines; and automated material transfer. These panels are the visible surfaces of finished vehicles, fenders, hoods, trunk-lids, doors, body sides, roof panels, and other areas of high visibility for the customer.

Expanding into Fully Automated Measurement

Following a successful implementation of CogniTens Optigo based solutions at Ogihara's US based facilities; Ogihara's management decided to take its implementation to the next level. Ogihara chose to be one of the first suppliers to fully automate the dimensional measurements of automotive parts and assemblies using advanced non-contact gauging technology from CogniTens.

Based on Ogihara's requirements for the highest level of operational flexibility possible CogniTens together with its partner InspectionAir Gauge designed a fully automated and standardized OptiCell footprint for providing rapid dimensional results for closure sub-assemblies originating from multiple vehicle programs.

Advanced Optical Technology, Robust Shop Floor Operation

The standardized OptiCell configuration offered tight integrations of sophisticated robotics technology, operator-machine interface as well as cell automation and control devices such as rotary tables and flexible holding fixtures. This integrated approach accommodates the maximum number of parts and assemblies, while minimizing the costs associated with making changes



and providing maintenance. Additionally, it allowed parts and assemblies to be easily adapted to specific GD&T requirements.

The OptiCell's clean cell design and robust measurement technology was designed to allow easy operation directly within the assembly bay area on the production floor and fits nicely into Ogihara's common production processes. Through implementing the OptiCell systems, Ogihara was expecting to meet and surpass the highest quality standards for automotive parts and assemblies and cutting short launch and start of production times.

Process Integrated Metrology Systems

Ogihara installed its first OptiCell in 2007 and added a second system in 2008 to support a new vehicle program by a major North American OEM to which Ogihara is providing various sheet metal parts and sub-assemblies. Today based on its automotive OEM customers' requirements has Ogihara has over 50 different parts to measure as details and shipping units.

Ogihara's unique process called to combine OptiCell's white light measurement technology with fast and agile laser welding systems at Ogihara's manufacturing facility. Ogihara also devised process to complement the detail part inspection with func-

tional build applications to produce the best parts for its automotive customers.

Welcomed Asset for Launch and Production Teams

Today, Ogihara's OptiCell systems provide production associates with instant line side data required to make comprehensive functional build adjustments as needed. The ease of use, rich metrology data set and location on the plant floor turned the OptiCell into a welcomed asset for the Ogihara launch and production teams.

"Implementing OptiCell is a major step forward towards realizing Ogihara's vision of moving from traditional gauging systems to highly flexible and integrated measurement systems", said Steve Peca, Executive Manager for Quality Systems at Ogihara America.

Harnessing the Power of 3D Measurements

Based on their initial study Ogihara was expecting to considerably reduce checking fixtures costs, shorten the time required to correct deviations and deliver the first production run.

Following their first system implementation Ogihara reported additional benefits:

- Easier and faster full understanding of initial part quality
- Realizing less quality loops for new production and assembly tooling
- Starting mass production faster than ever before
- Higher quality products delivered to customers with lower cost of quality

After realizing the benefits of their first OptiCell systems, Ogihara decided to expand its use in their processes.



CogniTens

CogniTens is the leading provider of 3D optical measurement solutions for industrial applications. CogniTens dimensional measurement systems help improve engineering and manufacturing processes in automotive and other manufacturing industries.

Based on innovations in 3D non-contact measurement technology, CogniTens solutions help increase efficiency during critical stages of preproduction, launch, ramp up and mass production.

CogniTens provides tools and processes for capturing, analyzing and distributing highly meaningful dimensional metrology information to support different industrial engineering activities such as tooling, part production, assembly, quality and process control.

CogniTens, founded in 1995 is today part of Hexagon Metrology group, the world's largest measurement technologies company.

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