Beyond Any Measure
CogniTens is the leading provider of comprehensive dimensional measurement solutions, focused on improving common engineering and manufacturing processes in the automotive industry.

Dimensional Measurement is an increasingly significant strategy, which allows automotive manufacturers to accelerate product introductions, reach higher product quality, reduce production costs and bring about higher profits for each product.

For over a decade, our shop floor metrology systems, based on advanced non-contact optical measurement technology, have helped leading OEMs and suppliers speed up time-to-market, improve functional and perceived product quality and strengthen their core capabilities in an ever increasing competitive environment.
The global market is rapidly accepting CogniTens solutions considered as advantageous alternatives to conventional measurement and gauging systems.

5 key reasons why customers choose CogniTens as their partner of choice

- **We offer highly versatile systems suited for industrial metrology applications throughout the product lifecycle**
  Ranging from prototype part inspection, die build & tryout validation to replacing hard checking fixtures for automotive parts and assemblies with virtual gauging technologies, CogniTens both manually operated and fully automated systems offer a robust multipurpose solution for common industry processes.

- **Our products provide the fastest, most detailed and meaningful measurement results**
  Getting full dimensional information concerning the measured object is critical for qualifying the parts or guiding adjustment/rework operations. Our products provide highly informative dimensional data including complete surface deviation from CAD, features and edge positions, cross section measurements and other results in real time.

- **Our systems are optimized for operation in your demanding engineering & production environment**
  Unlike other systems CogniTens products were designed for robust operation directly on the shop floor. Our unique technology makes OptiCell and Optigo immune to common production line conditions such as vibrations, ambient light, temperature changes and supports measurement of untreated small to very large parts and assemblies.

- **We meet most demanding industry standards for safety, quality & measurement reliability**
  Our products have been certified by international organizations and have proven to meet strict quality and safety requirements for industrial metrology systems. Dozens of independent studies also confirmed our high correlation with CMM measurement results and compliance with Gauge R&R requirements.

- **Our solutions are easily integrated with existing metrology systems & software**
  CogniTens values your company’s past investments in other measurement systems and software products. This is why we’re developing our products to easily interface with your legacy systems and leverage the power of past investments coupled with our advanced solutions.
The CogniTens Dimensional Measurement Software Suite comprises various added-value software products that enhance the benefits generated by using CogniTens Optigo and OptiCell dimensional measurement platforms. This software suite, along with innovative business processes, allows manufacturers to migrate from traditional methods of costly checking fixtures and other technologies to flexible non-contact dimensional gauging.

**OptiPlan**

OptiPlan is a CogniTens software product used for planning, defining and preparing comprehensive dimensional measurement programs for execution by Optigo & OptiCell dimensional measurement platforms. OptiPlan allows planning multiple sets of measurement programs and optimizes utilization of Optigo/OptiCell platforms by providing the operator with the exact information for carrying out the measurement. Using OptiPlan, the engineer can easily define measurable features, set multiple alignment guidelines, capture GD&T requirements and prepare reporting templates for later use.

**CoreView Pro**

CoreView Pro is a powerful CogniTens software product used for viewing, analyzing and reporting dimensional measurement information. CoreView Pro enables viewing, analysis, reporting and enterprise wide collaboration based on common dimensional measurement information generated by Optigo and OptiCell dimensional measurement platforms. CoreView Pro allows remote viewing and analysis of actual shop floor parts as well as assembly and tool measurements as soon as they are produced. CoreView Pro requires no post processing of data before use and automatically presents detailed analysis and comparison with nominal data and design intent. CoreView Pro provides various part and process analysis tools to evaluate stability and conformity of manufacturing processes as well as unique engineering tools such as Master Part generation and tolerance adjustment.

**CoreView Lite**

CoreView Lite is a free CogniTens software product used for viewing measurement results produced by CogniTens Optigo and OptiCell. CoreView Lite empowers a large community of users to leverage rich and meaningful dimensional measurement information to improve quality and overall performance throughout the design, engineering and manufacturing processes.

**Off Line Measurement**

Off Line Measurement is the CogniTens software product used for offline computation of collected dimensional data, analysis of results and generation of CoreView files and other standard outputs. The optional Off Line Measurement allows you to optimize utilization of the Optigo platform and promotes higher overall throughput. An offline station is used to easily calculate measurements and transform them into meaningful dimensional information that can be analyzed and exported to CoreView Pro. Off Line Measurement also provides advanced tools for carrying out virtual assembly studies and reverse engineering activities.

**Dimensional Domain Server**

Dimensional Domain Server is a CogniTens software product that runs on a central server and is designed to fit the customer’s proprietary business processes and methodologies. The Dimensional Domain Server interfaces with various CogniTens platforms and software products and provides a secure and managed environment to collect, store and manage dimensional information generated across the organization. The Dimensional Domain Server answers customer needs to manage dimensional information throughout the vehicle program lifecycle, efficiently communicates between dimensional business process members in real time and propagates critical shop-floor dimensional information used for decision making, monitoring and ongoing improvement to engineers and managers.
Our Dimensional Measurement Software Suite offers numerous advantages and benefits, allowing companies to better leverage our platforms and generate higher returns.

- Improves the utilization and throughput of Optigo & OptiCell platforms
- Supports a distributed working environment including multiple sites
- Accelerates the learning curve for new users
- Enables effortless definition of measurement programs from remote locations
- Provides comprehensive reporting, customization and distribution of measurement information
- Allows pinpointing cause and effect of complex engineering problems
- Helps streamline complicated processes such as part approval for production
- Manages dimensional information from across the organization and makes it available to end users in real time.

A Portable Dimensional Measurement Platform

Supports critical product development, production engineering and other automotive manufacturing processes.

- Measures and analyzes a variety of parts, tools and assemblies regardless of shape and size
- Impervious to rough production floor conditions and requires no special treatment of measurement objects
- Provides comprehensive surface and feature measurements compared to CAD or master part
- Automatically generates meaningful measurement results for immediate use on the shop floor
- Highly correlates to CMM results and meets strict industrial criteria for measurement repeatability and reproducibility

Optigo is a portable, high-performance dimensional measurement platform used in engineering, production and assembly processes on the production floor. Compact for easy handling and access, Optigo’s design blends ruggedness with precise instrumentation. Its performance is not affected by vibrations, temperature variations or industrial lighting.

Optigo is a multi-purpose platform for tool and die development and tryout, part and assembly verification and complex root cause analysis during vehicle launch and ramp-up. Its detailed dimensional measurement results are automatically generated in our proprietary CoreView format and are made available either directly or through CogniTens’ Dimensional Domain Server to diversified communities – product development, engineering, quality assurance, and management. The CogniTens patented technology guarantees fast throughput and superior accuracy. From prototyping to mass production, Optigo delivers a comprehensive solution for the full range of automotive metrology challenges.
Intelligent reverse engineering
Our products are used for collecting detailed dimensional information from existing parts, assemblies & tools and generating accurate 3D models in common formats. By rapidly measuring part shapes, edges, surface geometries/features and producing engineering grade outputs, manufacturers can better support copy to exact activities, speed up product “face lifts” and digital archiving.

Dimensional Measurement Solutions for the Automotive Industry

Stamping tryout & ramp-up (At home-line)
Our products support secondary tryout at the home line and getting the die ready for full speed production while satisfying dimensional tolerances. Using detailed measurement information on part surfaces and features, the engineers are able to guide required rework, solve engineering problems and communicate results to their downstream “clients.”

Die development & tryout (At die source)
Our products support common die shop metrology and reverse-engineering applications. From casting measurement for machining path optimization through verifying dimensional performance of tryout panels to duplicating existing dies – generated comprehensive dimensional information helps die makers reduce number of quality iterations and reach die “buyoff” faster.

Prototype part development & QA
Our products support the production of prototype parts used to qualify the design and expected assembly process. By quickly providing full part surface deviation information and accurate feature dimensions, the OEM/supplier can eliminate checking fixtures from the process, reduce number of quality iterations and shorten overall time required to manufacture parts that conform to the design intent.

Part approval for production
Our products help accelerate this process by automating the part measurement directly on the shop floor. Streamlining submitting of multiple results and reports for each event and instantly uploading them to a central server makes this information available to engineering and quality communities across the organization for viewing and analysis.
Plastic mold development & parts QA
Our products assist plastic part makers speed up the process of producing dimensionally acceptable parts that ensure high quality fit and finish. By measuring the full surfaces & features of machined molds and tryout parts, producers can identify and correct possible phenomena such as shrinkage, flashings, short shots, faulty geometries and part distortions.

Closures & sub-assemblies development
Our products help support the entire engineering process of fine-tuning the production and assembly of all vehicle closures. By allowing dimensional measurement of closure subs on the assembly line as well as fully automated closure measurement during launch, OEMs and suppliers can easily identify required assembly tool changes, validate hemming quality and ensure that flush and gap are meeting spec.

Body to cockpit Interior matching
Our products are used by OEMs and suppliers for ensuring that various interior plastic parts and assemblies such as instrument panels will perfectly match the produced vehicle body. By measuring the interior interfaces to the body and virtually matching measurements, engineers can analyze the cause for assembly miss-fits and resolve perceived quality issues such as flush and gaps.

Vehicle assembly root cause analysis & launch support
Our products support pre-launch engineering activities in automotive assembly plants to identify and resolve complex vehicle body & interior assembly problems. By measuring large- body assemblies and parts throughout the assembly line using slow build methodologies and getting immediate feedback, unnecessary engineering changes are avoided and overall time to launch of new vehicle is reduced.

Dimensional process control during production
Our products are used for ensuring that mass-produced parts maintain their dimensional quality and that production of deformed batches is contained. By conducting comprehensive measurements on sampled stamping/hydro-formed parts, engine cradles or closures, plants can minimize the likelihood of shipping and using components that do not meet specifications in subsequent assemblies.

Tooling certification & adjustments
Our products are used for conducting dimensional assessments of forming, holding and assembly tools in periodical recertification and preventive maintenance. By measuring such fixtures and adjusting those when required, manufacturers reduce the probability of going out of “dimensional steady state” as well as production downtimes due to unplanned maintenance.
CogniTens products are available at the following European Hexagon Metrology Precision Centers:

**France:**
- Bron (Lyon):
  Tel. 04 72 37 90 60
  Fax 04 72 37 90 61
- Courtaboef:
  Tel. 01 69 29 12 00
  Fax 01 69 29 00 32
- Toulouse:
  Tel. 05 34 51 70 95
  Fax 05 34 51 79 44

**Germany:**
- Munich:
  Tel. 089 149810-0
  Fax 089 149810-59
- Wetzlar:
  Tel. 064 412 07 0
  Fax 06441 207 122

**Italy:**
- Calderara di Reno (BO):
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Printed in Switzerland. February 2008