



HEXAGON METROLOGY

WHERE QUALITY COMES TOGETHER

Conference - Internationalization of U.S. Education in the 21st Century

Panel Discussion on April 12th, 2014

Silke A. Scholz

AGENDA

- 01** Introduction
- 02** Hexagon Metrology - Company Overview
- 03** Our Customers & Industries
- 04** Our Products & Solutions
- 05** Our Global Community & Network
- 06** Our Global Engineering Team
- 06** Our Outlook

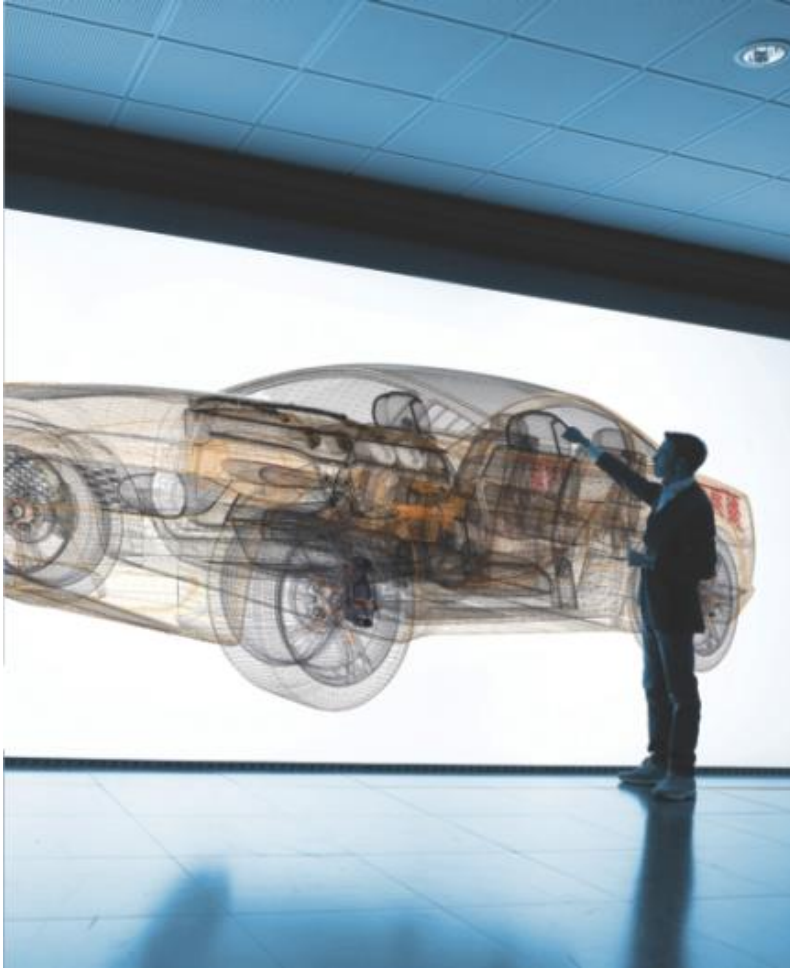
Introduction

- **Silke Scholz**
- **Professional Life:**
 - Product Specialist at Hexagon Metrology, Inc.
 - ‘Customer Ambassador’ for any international visitors
 - Work in multicultural and multilingual environment
- **Personal Life:**
 - Studied, worked and lived abroad
 - Raising children in trilingual atmosphere
 - MBA in Global Business from Johnson & Wales University
 - Trilingual



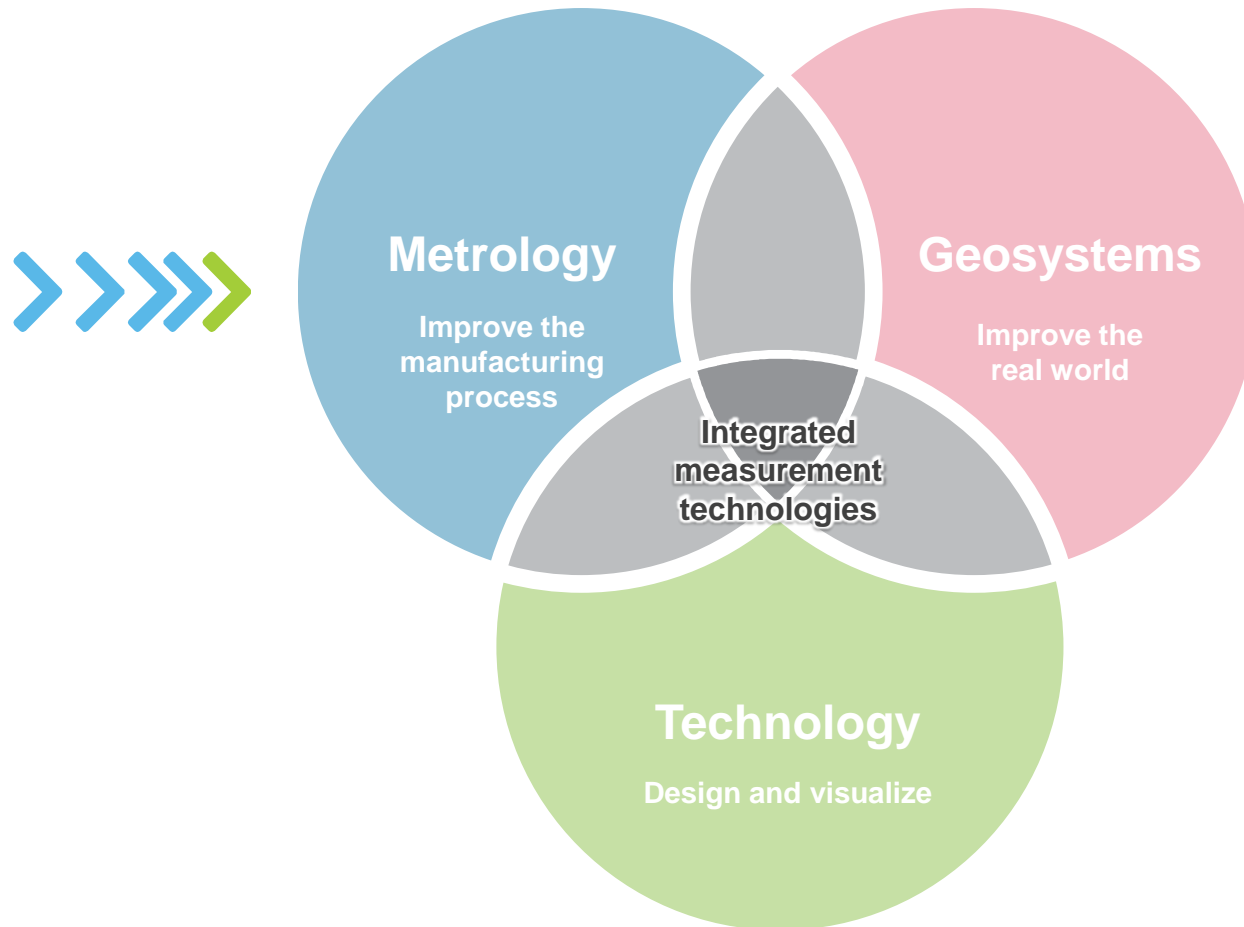
Hexagon Metrology, Inc. COMPANY OVERVIEW

Hexagon - Overview



- Deliver **actionable information**
- Offer **design, measurement and visualisation technologies**
- Enable customers to **create and share manageable multidimensional data**

Hexagon's three main business units



Hexagon and Hexagon Metrology Overview



6%

Of net sales
invested in R&D

13,000

Employees in 43 countries

12%

Of employees
engaged in R&D

100+

Companies acquired
since 2002



5,000

+

Products offered

4,200

Employees in 5 continents

1819

Year when Leica was
founded – the oldest
company that later
became Hexagon
Metrology

18

Brands integrated
since 2001

What are we about?

- Comprehensive range of **products and services** for all industrial applications
- Support of **complete life cycle of a product** – from development and design to production, assembly and final inspection
- **Global, research-intensive** design, measurement and visualisation technology group
- **Products and services work together** and provide a constant flow of updated information
- **Largest manufacturer** of measuring equipment, solutions and software in the world

Our mission





We are Hexagon Metrology

OUR CUSTOMERS & INDUSTRIES

Serving these industries – and more:

Aerospace

Research & Education



Machine industry



Medical Technology

Domestic Appliances

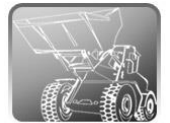


Mould & Die

Ironworks

Automotive

Heavy Industry



Precision Industry

Foundries

Reverse Engineering

Power Generation

Shipbuilding



Watch-making industry



... more than 100 industries !

Railway



Pulp & Paper

Customers in North America

- Aerospace
- Automotive
- Medical
- Off-Highway
- Heavy Equipment
- Defense
- Energy



Medtronic





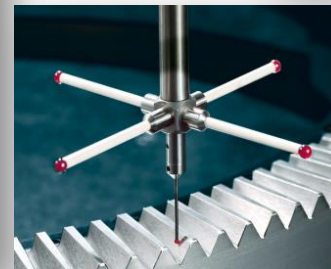
Hexagon Metrology Inc. OUR PRODUCTS & SOLUTIONS

Who are we?

Brown & Sharpe (USA, 2001) **DEA** (Italy, 2001)
Leitz (Germany, 2001) **PC-DMIS** (USA, 2001) **m&h** (Germany, 2008)
Leica Geosystems (Switzerland, 2005) **JMTC** (China, 2006)
CE Johansson (Sweden, 2002) **TESA** (Switzerland, 2001)
ROMER / CIMCORE (France/USA, 2004)
Sheffield (USA, 2004) **Cognitens** (Israel, 2007)
JMTC (China, 2006) **Serein Metrology** (China, 2010)
Messtechnik Wetzlar (Germany, 2008) **Optiv** (Germany, 2009)
Seven Ocean (China, 2011)

Figures in parentheses describe origin of company and when it joined Hexagon

Our product portfolio today



Offering solutions



No matter if you measure delicate electronic components or large castings: We offer a complete answer to your needs.

Aerospace Applications

- Hexagon Metrology Solutions are widely used in the aerospace sector
- Applications include exterior and interior part inspection, fully automated part positioning, gear measurement or setup of production facilities



Automated Aircraft Assembly with Laser Trackers, Airbus, Spain



Inspecting Aircraft Structural Components with CMM, Aircraft Philipp, Germany



Reality Check for Hubble Mission, NASA Goddard, USA

Automotive Applications

- Hexagon Metrology CMMs, Portable Systems and Software are a standard for most OEMs and their suppliers
- Applications include sheet metal measurement, inspection of gears, tools, and fixtures, robot alignment or prototype checks



Body in white measurement, CMM, Italdesign Giugiaro, Italy



Car body component inspection, White Light System, SEAT, Spain



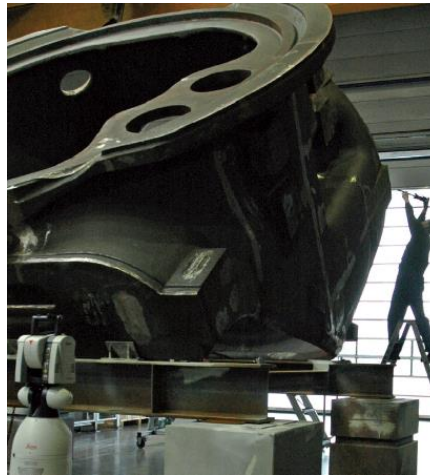
Feature Check, Laser Tracker, BMW, Germany

Energy Applications

- Hexagon Metrology offers a large variety of measurement solutions in all areas of power generation, and for objects in all sizes
- Applications include wind tower alignment, blade inspection, gear measurement or highly accurate marking off



Gear measurement,
CMM, BIMAQ, Germany



Large machine
support inspection,
Laser Tracker, DMR,
Germany



Quality Control of
Photovoltaic Modules,
Portable Measuring
Arm, AT&S, Austria



We are Hexagon Metrology
OUR GLOBAL COMMUNITY & NETWORK

Our global presence and representation

- Global Headquarters in London
- **20** production facilities:
US, Brazil, China, India, Japan, Israel, Germany, France, Italy, Spain, UK, Switzerland
- **70** solution centers
- Network of more than **100** distribution partners

North American Strategy





We are Hexagon Metrology
OUR GLOBAL ENGINEERING TEAM

Our global team

Why do we need team members with a global perspective and international experience?

Because we

- ...are a global organization
- ...with many different cultures
- ...speak many different languages

Because we

- ...have global customers
- ...with many different cultures
- ...that speak many different languages

Cross-cultural projects and collaboration at Hexagon

Most projects are cross-cultural due to...

- manufacturing origin of our products
- expertise distributed globally
- location of our customers
- mission to find and offer solutions rather than just providing products



Our global engineering teams

Our local Engineering Department:

- currently includes engineers from China, Colombia, India, Netherlands
- offers internships for Engineering students:
 - Mechanical Engineering
 - Electrical Engineering
 - Computer Software Engineering
- helps facilitate international internships abroad at sister companies/factories in Europe and China

Our global engineering interns

Collaboration with URI through the International Engineering Program (IEP)



What we offer to International Engineering students:

- I. **Local Internships:** Work experience at a global company
- II. **Internships abroad:** International work experience
- III. **Research Projects:** Capstone Design Master Project

Our global engineering interns

What do they say about the (language) experience abroad?

- “A great, mind-opening experience.”
- “It became easier to do things out of my comfort zone and to do things I would have never dared to consider before the year abroad.”
- “I am a more well-rounded individual now.”
- “In times of job scarcity, I was offered a job right after graduation.”

Our global engineering interns

What do our hiring managers say about the international engineering interns?

- “Interns are invaluable; they made connections in other parts of the company; they are comfortable travelling (abroad) and they can communicate.”
- “We respect their motivation, work ethic and new ideas.”
- “If a candidate has a decent GPA, international experience and a degree in mechanical Engineering, you can’t go wrong.”
- “Experience abroad in combination with a foreign language skill helps to get hired: it shows your flexibility, courage, and your investment.”

Challenges

- **Timing:** finding a spot exactly when and where it is needed – both locally and globally
- **Scheduling assignments:** aligning candidates, creating opportunities, and allocating resources for successful and meaningful training
- **Departure after Integration:** after Training, IEP interns are valuable part of the team; it is hard to let them go back to their studies

Opportunities

- **Mutual benefit:** Company and students learn from each other
- Students who **diversify themselves** bring **fresh and new perspectives**
- Different perspectives are invaluable when **developing new Solutions**
- Cultural diversity and diversity in thought are instrumental when **selling to global customer base**

Our global interns and engineers

Success Story: Sean

- BS in Mechanical Engineering
- BA in German
- Summer intern at Hexagon Metrology. Inc.
- One year abroad in Germany: TU Braunschweig and Hexagon Metrology GmbH
- Was hired by Hexagon upon his graduation
- Currently works in cross-functional and cross-cultural team to develop machine performance improvements; team includes colleagues from the UK and Germany

Our global interns and engineers

Success Story: Christian

- BS in Computer Software Engineering
- BA in Chinese
- Summer intern at Hexagon Metrology. Inc.
- One year abroad in China: Local University and Hexagon Metrology Qingdao
- Has given software training courses in Chinese in China and has taught English in China
- Continued internship in last year of studies at HMI; helped with ad hoc interpreting during important customer visit from China



We are Hexagon Metrology

OUR OUTLOOK

Our Outlook

We

- will **continue offering internships** to future international engineers.
- are currently working on a **corporate strategy** to collaborate with universities for talent recruitment in the future.
- will **further invest in international engineering interns** and facilitate international internship opportunities.
- see a need of employees with a global perspective including a **foreign language skill set**.
- **recommend** this approach and model to any organization that operates abroad or globally.

Closing Thoughts

- **A different language is a different vision of life.**

~ Federico Fellini

- **I am a part of all that I have met.**

~ Alfred Tennyson





THANK YOU!