

UHA INFORMATION MATERIAL

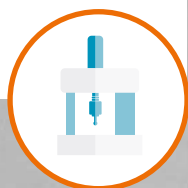
OVERVIEW AND QUICK SELECTION TOOL

VERSION 2018-04



PRODUCTS

Leitz PMM-C Line
Leitz Reference Line
Leitz SIRIO Line
Leitz PMM-F
Leitz PMM-G



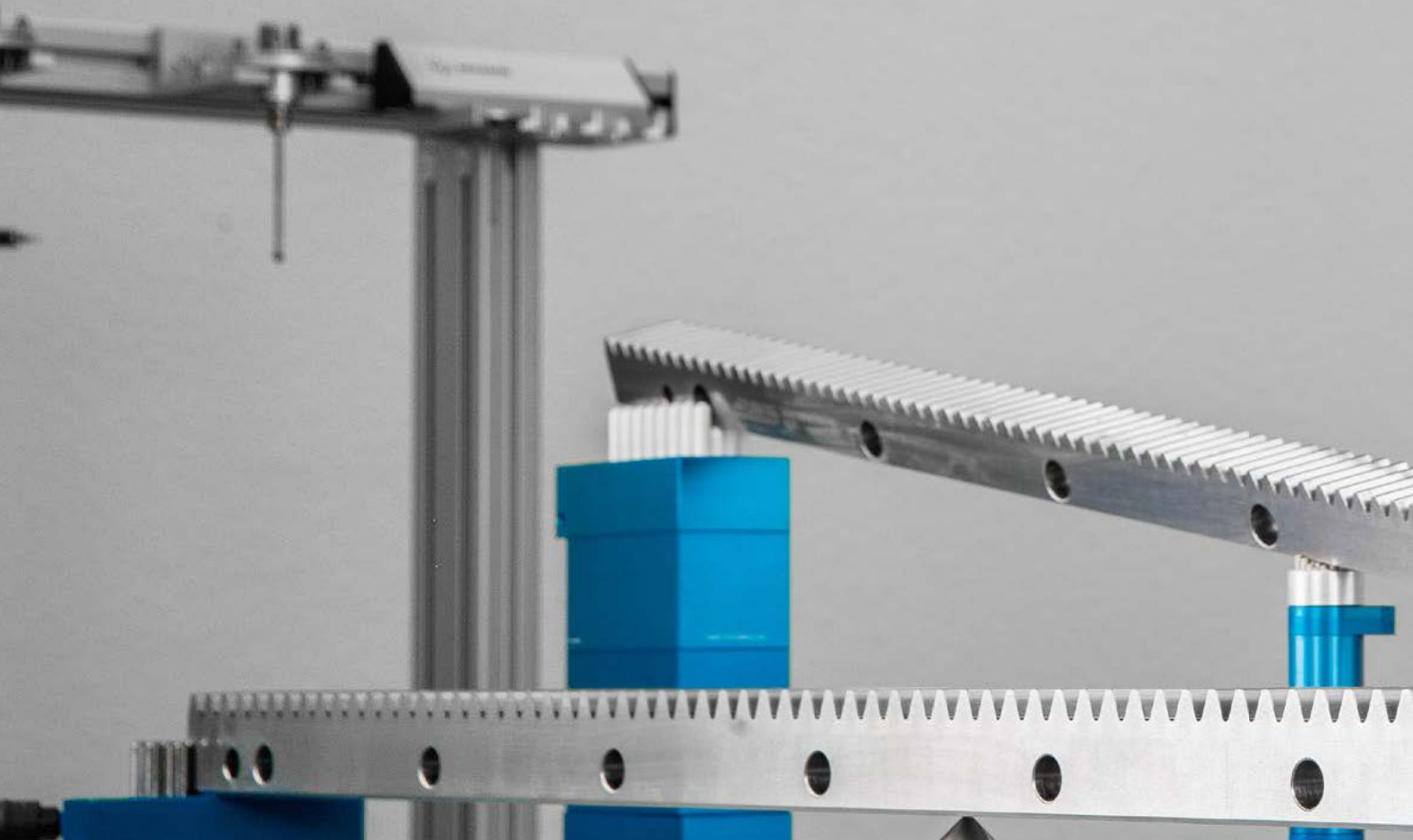
KEY FEATURES

Precitec
HP-O / HTA Solutions
HP-O Hybrid
SENIMATION



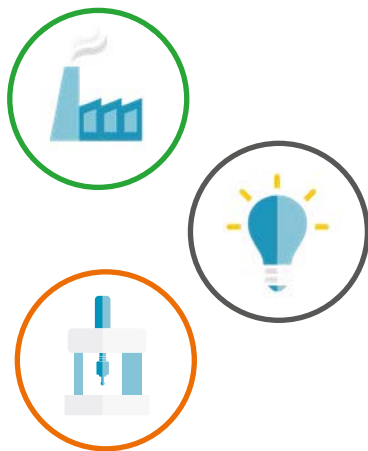
INDUSTRIES

Aerospace
Automotive
Machine Tool Industry
Research and Education





INDEX



			Brochures								Data Sheets				Case Studies						
			Leitz PMM-C Line	Leitz Reference Line	Leitz PMM-F/PMM-G	Blade and Blisk Measurement	HP-O Sensors	Precitec LR	HTA Solutions	SENIMATION Multi-Tactile	UHA Overview	Leitz PMM-C Line	Leitz Reference Line	Leitz PMM-F/PMM-G	Leitz SIRIO Line	Optical Sensors	Stihl: Leitz PMM-C - Crankshafts and Connectingrods	MTU: Leitz PMM-C - Blisk Measurement	Grunewald: Leitz Reference HP - Constant Velocity Joints	Weiss: Leitz Reference HP / PMM-F - Gear, Cam and Housing	BMT Aerospace: Leitz Reference HP - Pinions and Gears
Product	Leitz PMM-C Line	X						X	X				X	X	X						
	Leitz Reference Line		X					X		X			X					X	X		
	Leitz SIRIO Line												X	X							
	Leitz PMM-F			X				X				X	X					X			
	Leitz PMM-G			X				X				X	X							X	
Key Features	Precitec					X								X							
	HP-O / HTA Solutions				X		X							X							
	HP-O Hybrid				X									X							
	SENIMATION							X													
Industries	Aerospace			X												X			X		
	Automotive																				
	Machine Tool Industry																	X		X	
	Research & Education																				

Fette: Leitz PMM-F - Tablet Press Components			Application Reports								Videos						Presentations					
Siemens: Leitz Sirio - Blade Measurement			Premier Class Calibration Precision Measurement For High-Performance Components Efficient Engine Block Measurement Contactless Measurement Of Large Lenses Accelerated Turbine Blade Measurement Non-Contact Measurement Of Blisk Aerofoils And Gas Path Features Non-Contact Measurement Of Cams And Cam Segments Non-Contact Measurement Of Clutch Components Non-Contact Measurement Of Splined Shafts Non-Contact Measurement Of Synchro Rings And Shift Collars								Leitz SIRIO BX - Blade Measurement Leitz SIRIO - Safran SENMATION Leitz PMM-C Line HP-O Hybrid - Cam HP-O Hybrid - Clutch Basket HP-O Hybrid - Syncro Ring/Shift Collars Precitec LR Leitz PMM-G - Bruderer AG - Manufacturer of Punch Machines						Leitz PMM-C Product Presentation Leitz Reference Product Presentation Leitz PMM-F Product Presentation Leitz PMM-G Product Presentation Precitec Product Presentation SENMATION Product Presentation HTA Solution					
Audi: Leitz Sirio - Engine Components																						
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LEITZ PMM-C LINE



Brochures

- Leitz PPM-C
- SENMATION Multi-Tactile

Data Sheets

- Leitz PPM-C
- Optical Sensors

Case Studies

- Stihl - PMM-C - High-Accuracy Measurements of Crankshafts and Connectingrods
- MTU - PMM-C - Blisk Measurement

Application Reports

- A Leitz PMM-Xi combined with the optical white light sensor Precitec LR is used for the non-contact measurement of lenses.
- Leitz Infinity in use for calibration of gauges and master parts.
- Leitz PMM-C CMMs combine ultra-high accuracy measurements and high throughput for powertrain components.
- Multi-tactile engine measurements of geometries and roughness

Videos

- Leitz PMM-C Line

Presentations

- Leitz PMM-C Line

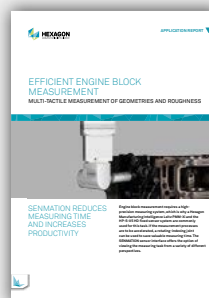
BROCHURES & DATA SHEETS



CASE STUDIES



APPLICATION REPORTS

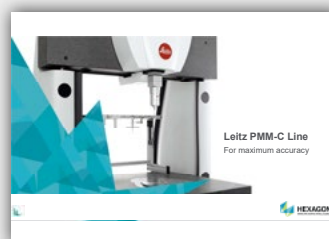


VIDEOS & PRESENTATIONS

Video



PPT



LEITZ REFERENCE LINE



Brochures

- Leitz Reference Line
- SENMATION Multi-Tactile

Data Sheets

- Leitz Reference Line
- Optical Sensors

Case Studies

- Weiss: Leitz Reference HP / PMM-F - Gear, Cam and Housing
- BMT Aerospace: Leitz Reference HP - Pinions and Gears

Application Reports

- Non-Contact Measurement of Cams and Cam Segments
- Non-Contact Measurement of Splined Shafts

Presentations

- Leitz Reference Product Presentation

BROCHURES & DATA SHEETS



CASE STUDIES



APPLICATION REPORTS



VIDEOS & PRESENTATIONS

PPT



LEITZ SIRIO LINE



Data Sheets

- Leitz SIRIO Line
- Optical Sensors

Case Studies

- Siemens: Leitz Sirio - Blade Measurement
- Audi: Leitz Sirio - Engine Components

Application Reports

- Accelerated Turbine Blade Measurement

Videos

- Leitz SIRIO BX – Blade Measurement
- Leitz SIRIO - Safran

BROCHURES & DATA SHEETS



CASE STUDIES



APPLICATION REPORTS



VIDEOS



LEITZ PMM-F

Brochures

- LEITZ PMM-F / PMM-G

Data Sheets

- LEITZ PMM-F / PMM-G
- Optical Sensors

Case Studies

- Weiss: Leitz PMM-F – Gear, Cam and Housings
- Fette: Leitz PMM-F - Tablet Press Components

Presentations

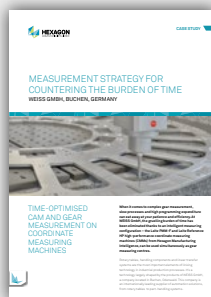
- Leitz PMM-F Product Presentation



BROCHURES & DATA SHEETS



CASE STUDIES



APPLICATION REPORTS

PRESENTATIONS





LEITZ PMM-G

Brochures

- LEITZ PMM-F / PMM-G

Data Sheets

- LEITZ PMM-F / PMM-G
- Optical Sensors

Case Studies

- Bruderer AG : Leitz PMM-G - Manufacturere of Punch Machines

Videos

- Leitz PMM-G at Bruderer AG – Manufacturer of Punch Machines

Presentations

- Leitz PMM-G Product Presentation

BROCHURES & DATA SHEETS



CASE STUDIES



APPLICATION REPORTS

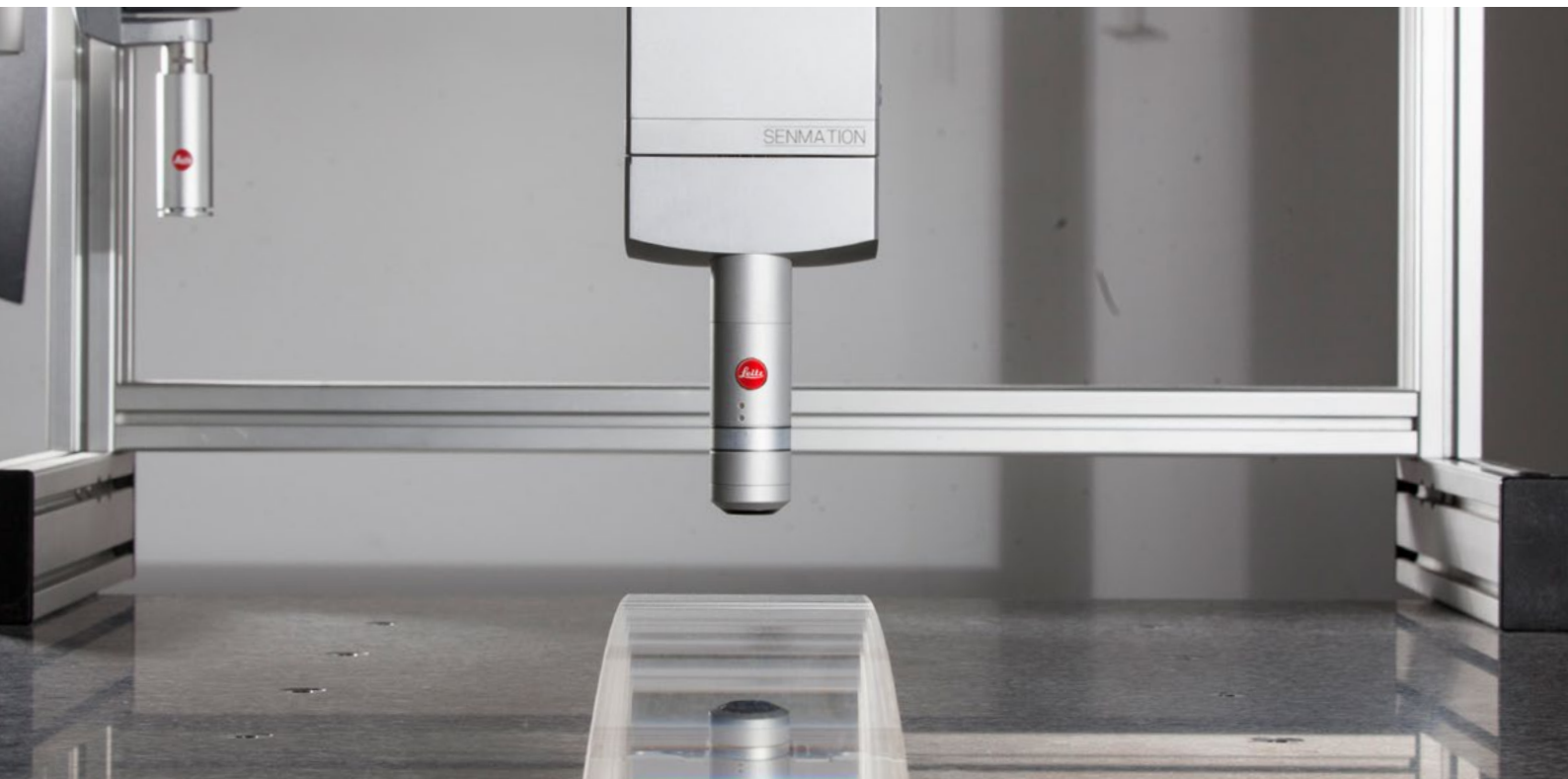
VIDEOS & PRESENTATIONS

Video



PPT





PRECITEC

Brochures

- Precitec LR

Data Sheets

- Optical Sensors

Application Reports

- Contactless Measurement of Large Lenses
- Accelerated Turbine Measurement

Videos

- Leitz SIRIO BX – Blade Measurement
- Precitec LR

Presentations

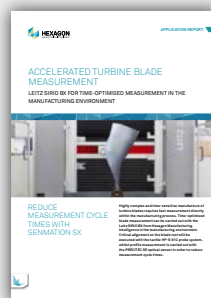
- Precitec Product Presentation

BROCHURES & DATA SHEETS



CASE STUDIES

APPLICATION REPORTS



VIDEOS & PRESENTATIONS

Video



PPT



HP-O / HTA SOLUTIONS

Brochures

- HP-O Sensors
- HTA Solutions

Data Sheets

- Optical Sensors

Application Reports

- Non-Contact Measurement of Blisk Aerofoils and Gas Path Features
- Non-Contact Measurement of Cams and Cam Segments
- Non-Contact Measurement of Clutch Components
- Non-Contact Measurement of Splined Shafts
- Non-Contact Measurement of Synchro Rings and Shift Collars
- High Throughput Aeroengine Blade Measurement

Videos

- HP-O Hybrid - Cam
- HP-O Hybrid - Clutch Basket
- HP-O Hybrid - Synchro Rings/Shift Collars

Presentations

- HTA Solution



BROCHURES & DATA SHEETS



APPLICATION REPORTS



VIDEOS & PRESENTATIONS

Video



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HP-O HYBRID

Brochures

- HP-O Sensors

Data Sheets

- Optical Sensors

Application Reports

- Non-Contact Measurement of Cams and Cam Segments
- Non-Contact Measurement of Clutch Components
- Non-Contact Measurement of Splined Shafts
- Non-Contact Measurement of Synchro Rings and Shift Collars

Videos

- HP-O Hybrid - Cam
- HP-O Hybrid - Clutch Basket
- HP-O Hybrid - Synchro Rings/Shift Collars



BROCHURES & DATA SHEETS

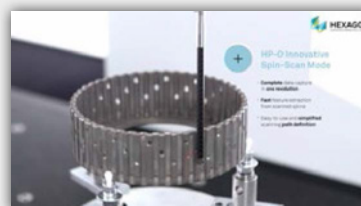


CASE STUDIES

APPLICATION REPORTS



VIDEOS





SENMATION

Brochures

- SENMATION Multi-Tactile

Application Reports

- Efficient engine Block Measurement
- Contactless Measurement of large lenses

Presentations

- SENMATION Product Presentation

Video

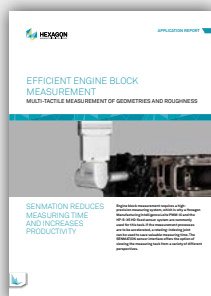
- SENMATION

BROCHURES & DATA SHEETS



CASE STUDIES

APPLICATION REPORTS



VIDEOS & PRESENTATIONS

Video



PPT





AEROSPACE

Brochures

- Blade and Blisk Measurement

Case Studies

- MTU: Leitz PMM-C - Blisk Measurement
- BMT Aerospace: Leitz Reference HP - Pinions and Gears

Application Reports

- Accelerated Turbine Blade Measurement
- Non-Contact Measurement of Blisk Aerofoils and Gas Path Features

Videos

- Leitz SIRIO BX - Blade Measurement
- Leitz SIRIO - Safran

BROCHURES & DATA SHEETS



CASE STUDIES

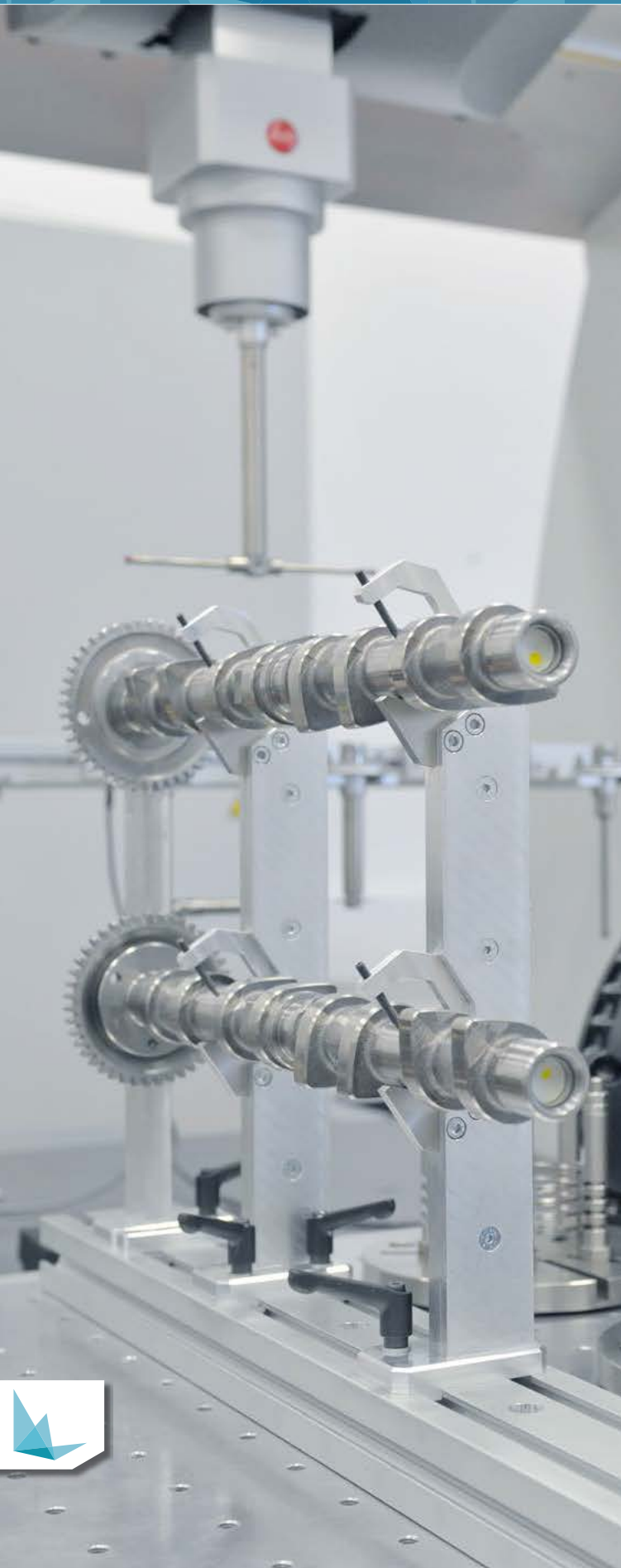


APPLICATION REPORTS



VIDEOS





AUTOMOTIVE

Case Studies

- Grunewald: Leitz Reference HP - Constant Velocity Joints
- Audi: Leitz Sirio - Engine Components

Application Reports

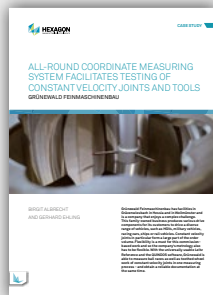
- Precision Measurement for High-Performance Components
- Efficient Engine Block Measurement
- Non-Contact Measurement of Cams and Cam Segments
- Non-Contact Measurement of Clutch Components
- Non-Contact Measurement of Splined Shafts
- Non-Contact Measurement of Synchro Rings and Shift Collars

Videos

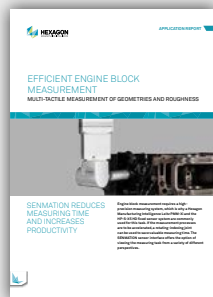
- HP-O Hybrid - Cam
- HP-O Hybrid - Clutch Basket
- HP-O Hybrid - Synchro Rings/Shift Collars



CASE STUDIES



APPLICATION REPORTS



VIDEOS



MACHINE TOOL INDUSTRY

Case Studies

- Weiss: Leitz Reference HP / PMM-F - Gear, Cam and Housing
- Bruderer AG : Leitz PMM-G - Manufacturere of Punch Machines
- Fette: Leitz PMM-F - Tablet Press Components

Videos

- Leitz PMM-G - Bruderer AG - Manufacturer of Punch Machines



BROCHURES & DATA SHEETS

CASE STUDIES

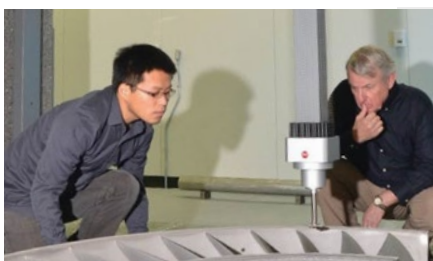


APPLICATION REPORTS

VIDEOS



RESEARCH & EDUCATION



PTB (Germany)

- The Competence Center for Wind Energy has arrived in a new building on the grounds of PTB, the "Euler Building I". It is intended to enter new technological territory by developing and providing PTB scientists with measuring technology that enables reliable operation of ever larger and more powerful wind turbines.

NTB Buchs (Switzerland)

- In the precision measuring room of the Production Metrology department of the NTB Buchs, the excellent metrological infrastructure offers tactile and non-contact measurements with accuracies in the micrometer and submicrometer range. In this controlled (20 ± 0.5) ° C environment, high precision tactile and non-contact CMMs and multi-sensor coordinate measuring machines as well as different roughness measurement systems are operated.

BIMAQ (Germany)

- BIMAQ analyzes the cause-and-effect relationships between gear production, geometry deviations and occurring gear damage. In the field of quality testing of gears, algorithms are also developed to evaluate areal measured data.

Nuclear AMRC (UK)

- The Nuclear AMRC metrology group provides dimensional metrology technologies and services to our manufacturing research groups and industrial partners, and leads research in large-volume metrology.

UNC Charlotte (USA)

- Siemens Laboratory faculty, students and staff work with industry partners to identify strategic research themes and conduct basic and applied research aimed at improving the productivity and accuracy of large-scale manufacturing operations.



Hexagon Manufacturing Intelligence helps industrial manufacturers develop the disruptive technologies of today and the life-changing products of tomorrow. As a leading metrology and manufacturing solution specialist, our expertise in sensing, thinking and acting – the collection, analysis and active use of measurement data – gives our customers the confidence to increase production speed and accelerate productivity while enhancing product quality.

Through a network of local service centres, production facilities and commercial operations across five continents, we are shaping smart change in manufacturing to build a world where quality drives productivity.

Hexagon Manufacturing Intelligence is part of Hexagon (Nasdaq Stockholm: HEXA B, a leading global provider of information technologies that drive quality and productivity across geospatial and industrial enterprise applications.

-  COORDINATE MEASURING MACHINES
-  3D LASER SCANNING
-  SENSORS
-  PORTABLE MEASURING ARMS
-  SERVICES
-  LASER TRACKERS & STATIONS
-  MULTISENSOR & OPTICAL SYSTEMS
-  WHITE LIGHT SCANNERS
-  METROLOGY SOFTWARE SOLUTIONS
-  CAD / CAM
-  STATISTICAL PROCESS CONTROL
-  AUTOMATED APPLICATIONS
-  MICROMETERS, CALIPERS AND GAUGES
-  DESIGN AND COSTING SOFTWARE



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