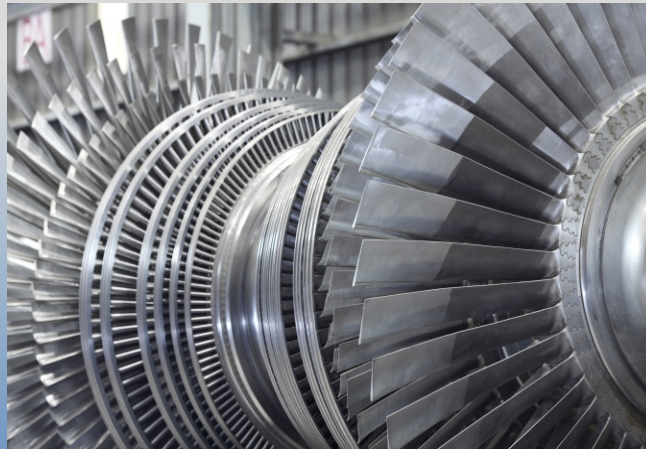




## The digital feeler gauge



Process  
monitoring

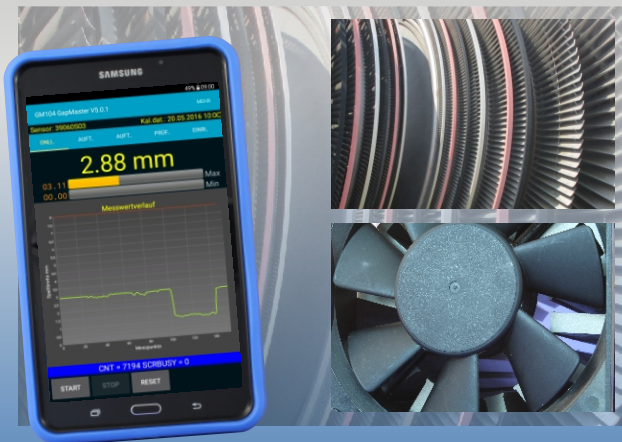
Information  
management

Quality  
assurance

Ideas for your success

## Measurement of turbine and pump gaps

### Digital measurement of all gaps



Electronic measurement processing

With the newly developed gapMaster, gaps of various shapes, such as between the blade and the housing, can be measured electronically. Various measuring probes enable measurement of gap widths between 0.2 mm and 10 mm or more. In contrast to optical and capacitive gap gauges, the gapMaster is independent of the material and surface. Thus material pairings of various types can be measured in gaps.

### Many test points fast documented

The gapMaster is used in rotating machines such as gas, steam and water turbines, aircraft turbines as well as pumps, mixers, fans and compressors.

## mobile - small - handy

### Interchangeable sensors

Compared to mechanical measuring instruments such as feeler gauges and spies, the digital electronics enable a fast recording of measured values even in places where access is difficult.

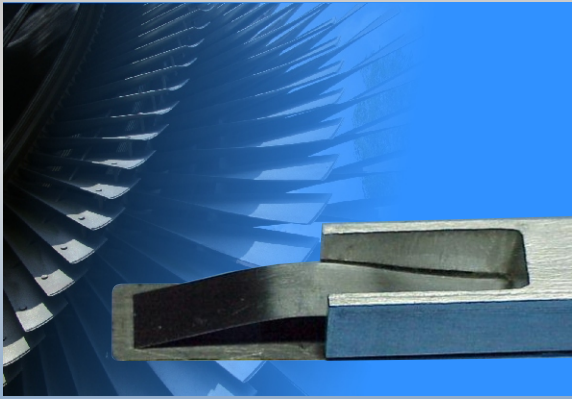
The small and handy mobile device can be used flexibly in production as well as in service. Test plans with feature groups and tolerance display as well as comprehensive and automatic documentation save time and avoid errors.

Specially developed sensors with different measuring ranges, shapes and lengths enable the contour measurement and the measurement of gaps in hidden positions. Minimum value measurements for axial as well as radial measurements provide quantitative information for the production.



Gap measurement on pumps

## Technology



Stop sensor for accurate positioning

## Electronics

- Test frequency 30 Hz (Android®) / 100 Hz (Windows®)
- Up to 4 channels
- Display depending on the device model 7-10" LCD touch
- USB and WIFI interface

## Other Applications

- ✓ Gap and distance measurement during machine and plant assembling
- ✓ Measurement of roller spacings
- ✓ Gap measurement in metal sheet and plastic production
- ✓ Air gap measurement on motors and generators
- ✓ Measurement of nozzle and matrix gaps
- ✓ Gap measurement in aircraft and car mounting
- ✓ Gaps between workpiece and gauge

## Patents

**MFP** owns patents, approvals and proprietary rights for various products and processes.

## Developments

The invention of the gap sensor offers a lot of room for further developments in this field. Against the background of 30 years of experience, **MFP** has set itself the task of supporting its customers in the gap measurement with optimized sensors, matched software for Android® and Windows® as well as latest electronics.

## Team and partners

We and our national and international partners will be pleased to pass on our extensive know-how in gap measurement technology, which we have gathered at the most diverse measurement projects and in almost all sectors since the invention of the gapMaster.

## Precision at every Measurement

### Sensors

- Measuring limits 0.2 mm to over 10 mm
- Measuring depths 2 mm to over 500 mm
- Accuracy depend on sensor up to  $\pm 0.03$  mm
- Resolution up to 0.003 mm depending on sensor
- Touch line or point
- Measuring force depending on sensor 0.5 - 2 N
- Material independence
- Surface independence

### Software

- Operating system depending on device model Android® and Windows®
- Measuring software with online / order measurement
- Multi language support
- Static and dynamic measurement
- Inspection plan and order management
- Calibration
- Data format XML, CSV and PDF

|                    |                           |
|--------------------|---------------------------|
| <b>Turbines</b>    | Power stations, airplanes |
| <b>Fans</b>        | Air conditioning          |
| <b>Compressors</b> | Compressors, turbines     |
| <b>Pumps</b>       | Chemistry, foodstuffs     |
| <b>Mixers</b>      | Rubber, liquids, solids   |



Worldwide application possibilities

## **MFP -** Competence in Gap Measurement

### Have we aroused your interest?

Ask for more information. Our team is at your disposal for further information.

Technical changes reserved

**MFP Messtechnik und  
Fertigungstechnologie GmbH**

An der Corvinuskirche 22-26  
D-31515 Wunstorf

Tel.: +49 5031 13790  
[www.mfp-spaltmessung.de](http://www.mfp-spaltmessung.de)