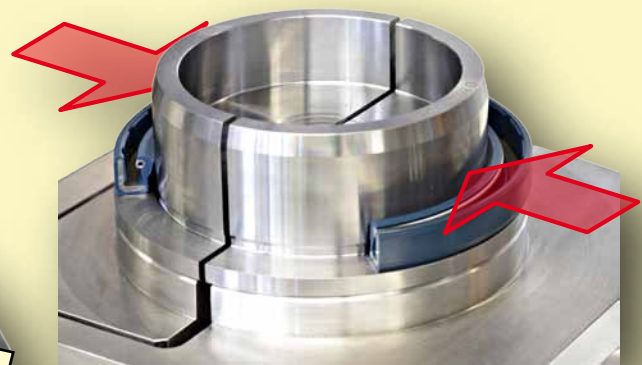
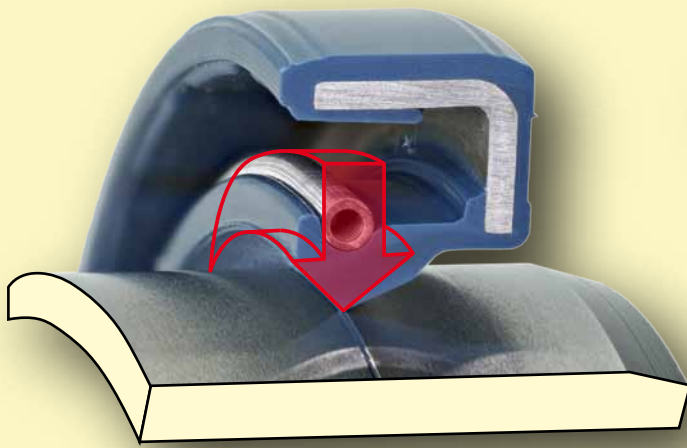


# iWA - Radiameter

Measurement of Radial Load according to DIN 3761-9  
with a fast, reliable and proven Desktop Device

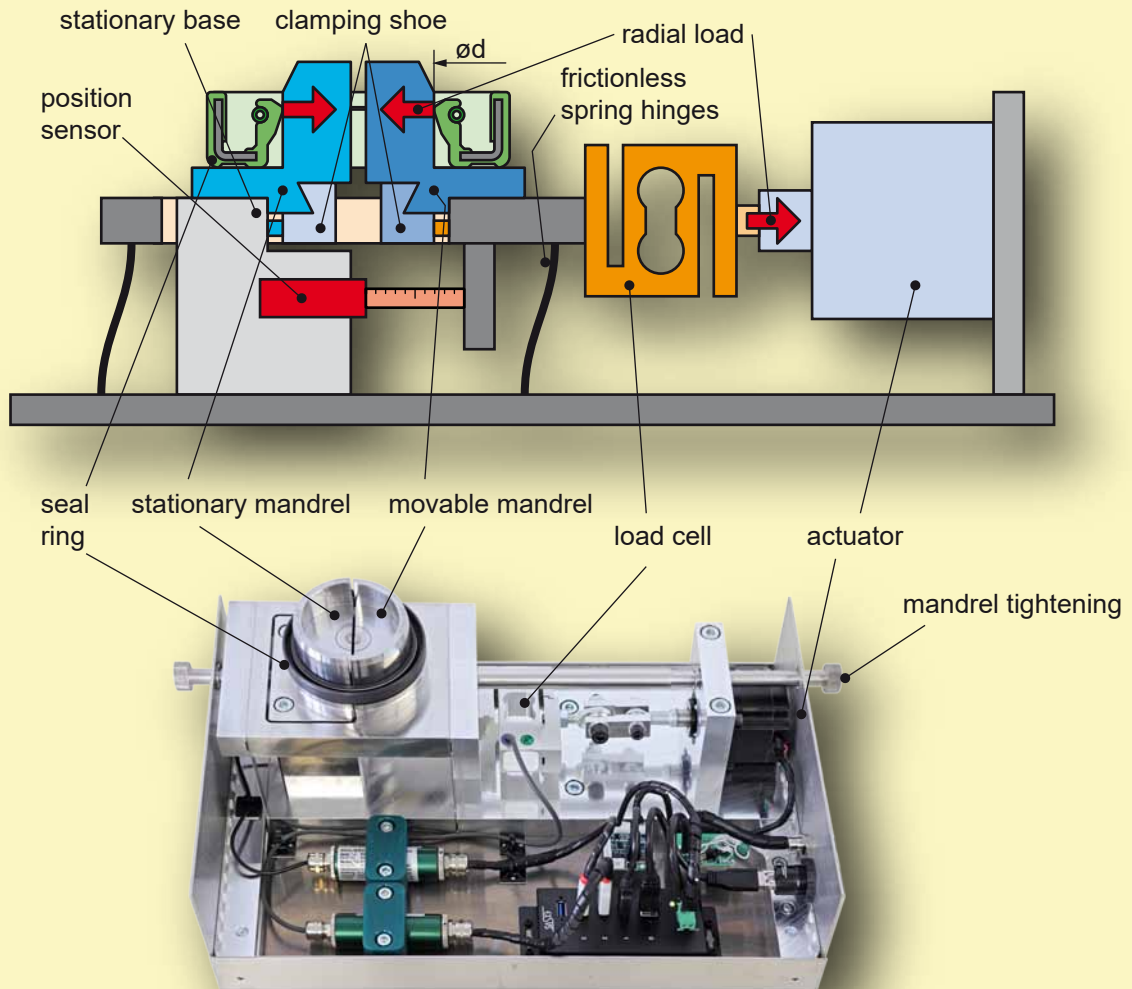
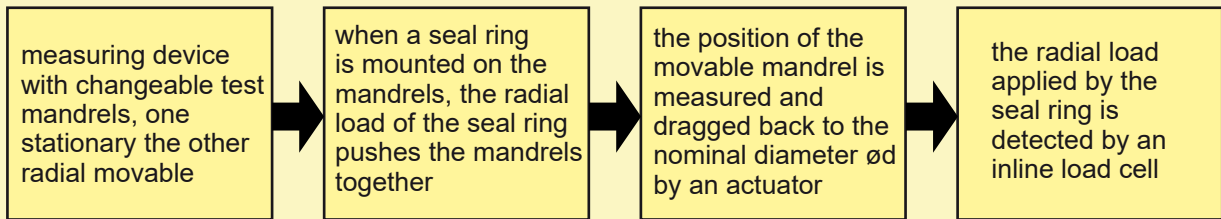


measurement of radial load with unique  
diameter compensation for all types of seals



tabletop measurement device

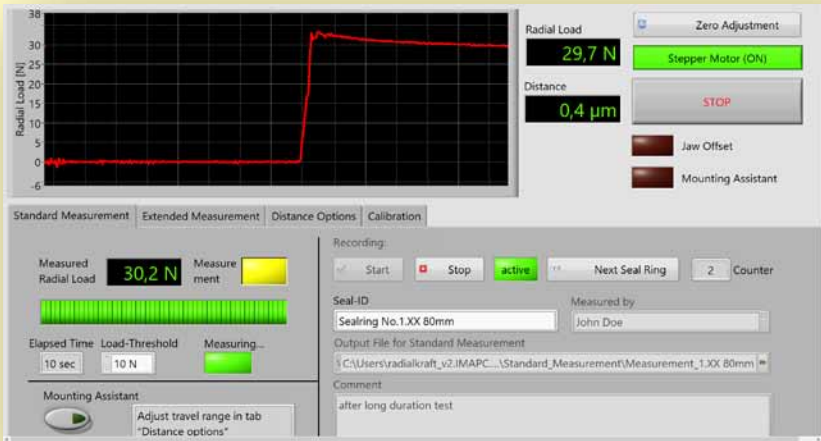
## Working Principle



## Key Features

- **proven and tested:** the measurement principle is according to the well established DIN 3761-9 method.
- **high accuracy:** by using spring hinges all moving parts are supported frictionless.
- **robust design:** with convenient jigs, the load cell and mandrel position can be calibrated by the operator at any time.
- **best practice:** since the distance between the mandrels is controlled, the radial load is always determined at nominal sealing diameter. Such a diameter compensation is crucial when stiff seals like PTFE lip seals, O-Rings or even hydraulic seals have to be measured. The IMA-Radiameter is the onliest commercial measuring device available with diameter compensation.
- **easy-assembly-mode:** For easy seal mounting the mandrels can be moved together, which decreases mounting force considerably.
- **convenient:** the mandrels have a new improved clamping system which is easier to manufacture, self aligning and tightened by clamping shoes - no tools needed. Existing mandrels can still be used with an adapter.
- **most versatile:** the mandrels can be made up to 300 mm test diameter, also adapters for other mandrel clamping systems are available.
- **large band width for radial load:** by selecting an appropriate load cell, a load range can be handled from low 0-30 N (soft, small diameter seals) up to high 20-3000 N (hydraulic seals).
- **data documentation:** measurement data is recorded and can be exported, shorttime (1 or 10 sec.) or longtime measurements (over hours/days) are easy to configure.
- **user friendly:** the Windows based software helps and guides the user on data aquisition.

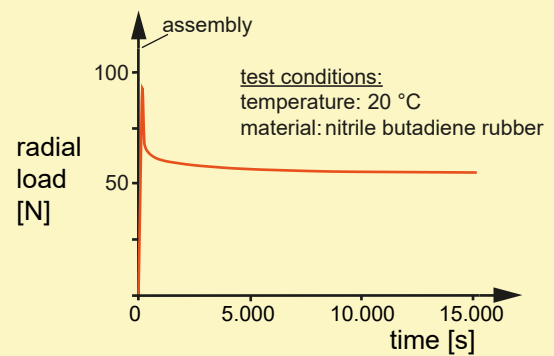
# IMA - Radiameter Control



- user friendly control, based on Lab-View
- stand alone software
- realtime radial load display
- configurable basic measurement
- longtime measurement
- data recording
- online operating instructions
- free configurable measurement plans
- force- and position calibration

## Possible Applications

- quality control for seal production or for seal assembly
- failure analysis
- measuring of time-dependant relaxation behaviour
- comparison of different seal types or seal manufacturers
- comparison before and after field tests
- measuring with and without garter spring in order to distinguish between spring and elastomer radial load
- identification of material properties for FE simulations

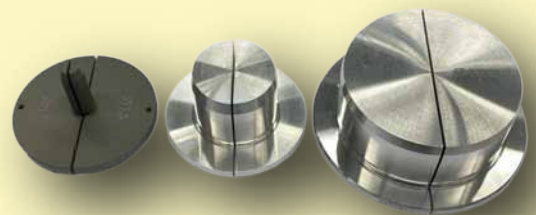


## Optional Available

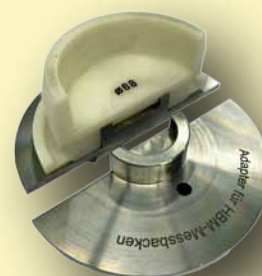
- version with tempering chamber
- integrated air heating up to 150°C
- by external liquid cooler and heat exchanger down to -40°C



## Accessory



mandrels in different material and diameter



adapter for existing mandrels made according DIN 3761-9 layout

Benefit from the measurement device development driven by the research activities at the fluid sealing group at Institute of Machine Components of University of Stuttgart

## Technical Data IMA-Radiometer

configurable force sensors	up to 3000 N
split mandrel measurement	according DIN 3761-9
exchangeable split mandrels	
measurable sealing diameter	up to 300 mm
diameter compensated design	
automated measurement data recording	
easy-assembly-mode for stiff seals	
data export via text file	
sampling frequency	4 Hz
power supply	230 V / 110 V
interface to computer	USB 2.0 or higher
dimensions (H x W x D)	134 x 475 x 282 mm
weight	18 kg

## Contact / Sales:



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