

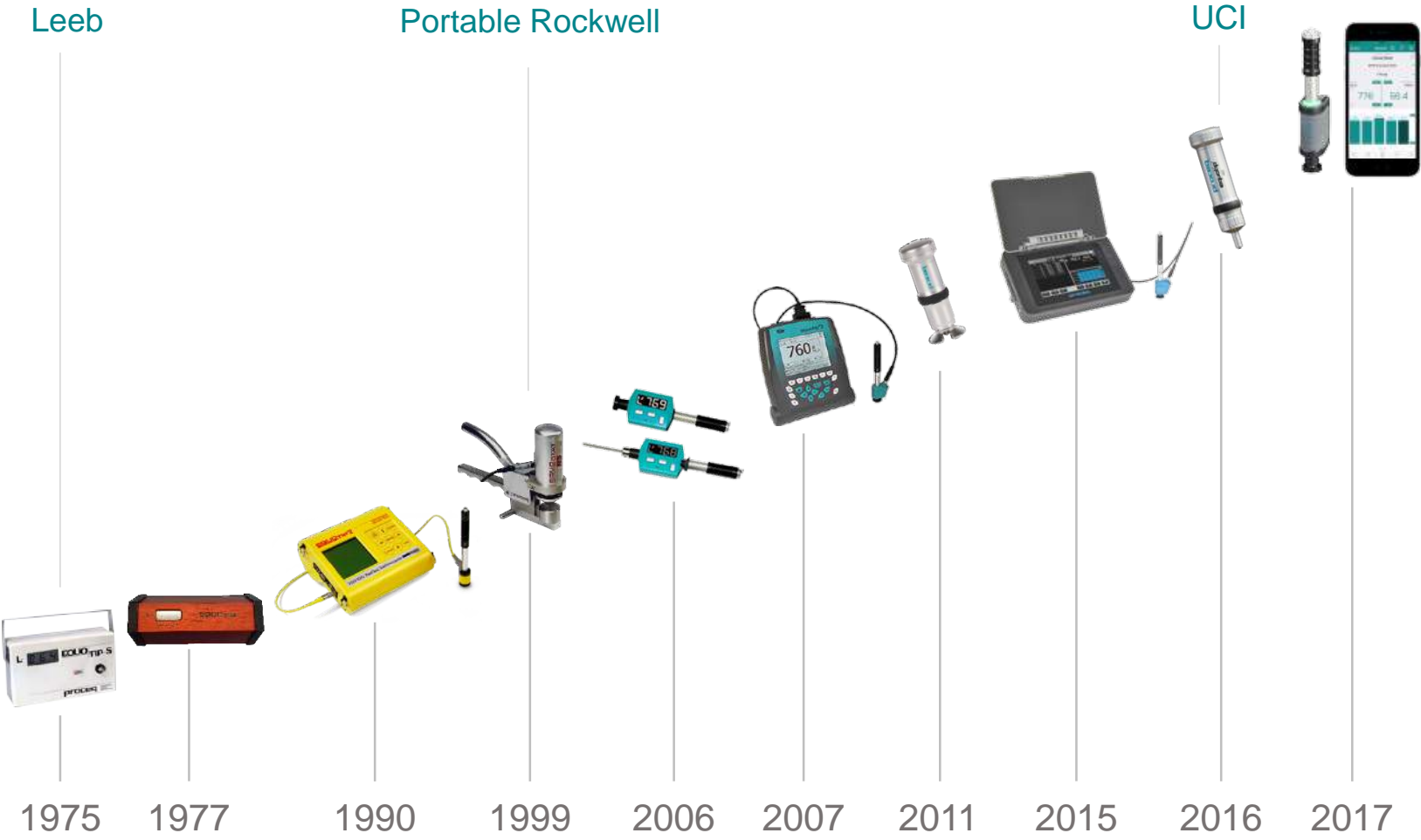
**proceq**

🇨🇭 Solutions since 1954



Equotip®  
Complete Portable Hardness Solution

# Revolutionizing Hardness Testing



# Hardness Testing

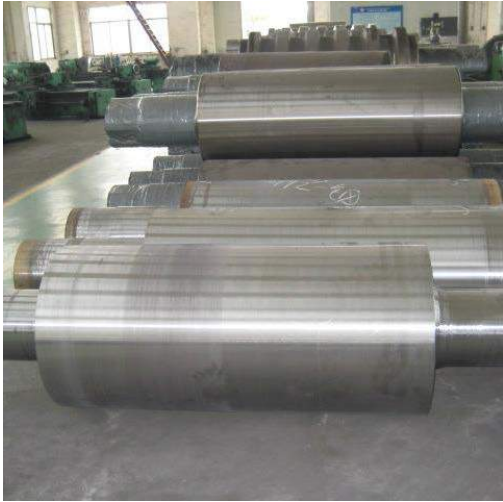


Incoming inspection



Metalworking industry

Process control



Heat-treatment and processing shops

On-site inspection

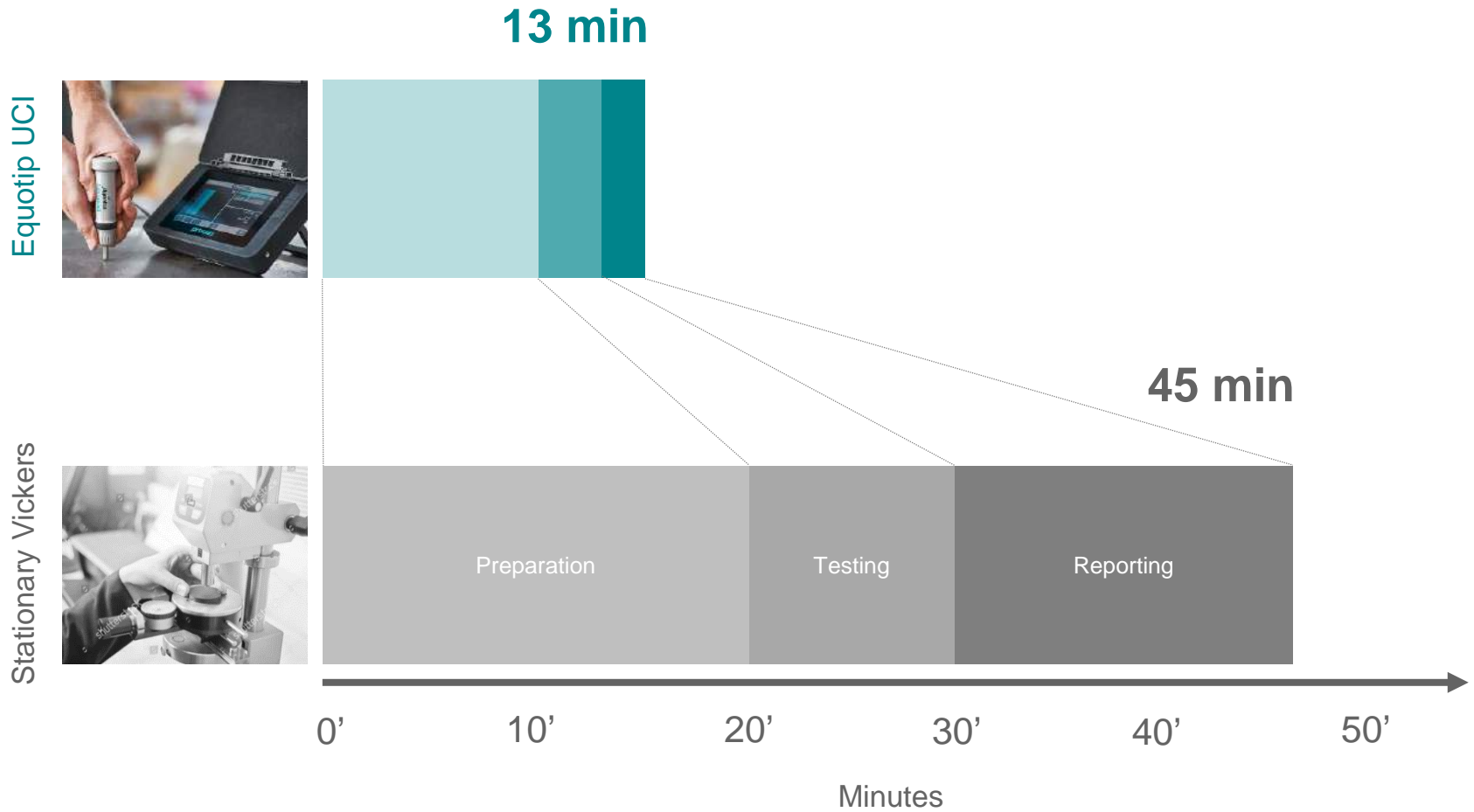


Inspection companies

# Spotlight: Portable vs. Stationary






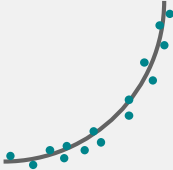
10 (Portable) resp. 5 (Stationary) hardness measurements on a steel bar



# Portable Technologies



New ISO Standard

	Leeb	UCI	Rockwell	
Measure				
	HL (Leeb)	HV (Vickers)	HR (Rockwell)	
Convert				
Results	HR (Rockwell)	HB (Brinell)	HV (Vickers)	HS (Shore)

# Applications

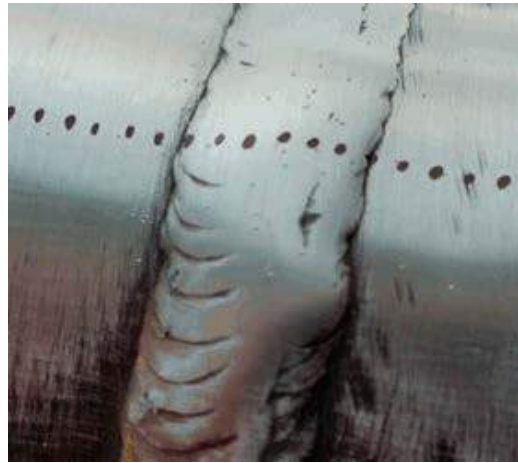


Leeb



Heavy parts

UCI



Welds / HAZ

Rockwell



Small parts

# Industry Pain Points



Incomplete offering



Time consuming



Poor consistency

# Equotip Solutions



New

New

Equotip Piccolo /  
Bambino 2

Equotip Live

Equotip 540

Equotip 550



Leeb Probes

UCI Probe

Rockwell Probe



# Equotip Probes



# Leeb: Ultra-versatility



D Standard surfaces

DC DL Inaccessible areas

# Leeb: Ultra-versatility



**G** Cast and forgings

**C** Smaller parts

**S** Ultra durable

**E** Very hard surfaces

# Leeb: Accessories



- ✓ 12 support rings
- ✓ on any shape
- ✓ for stable results

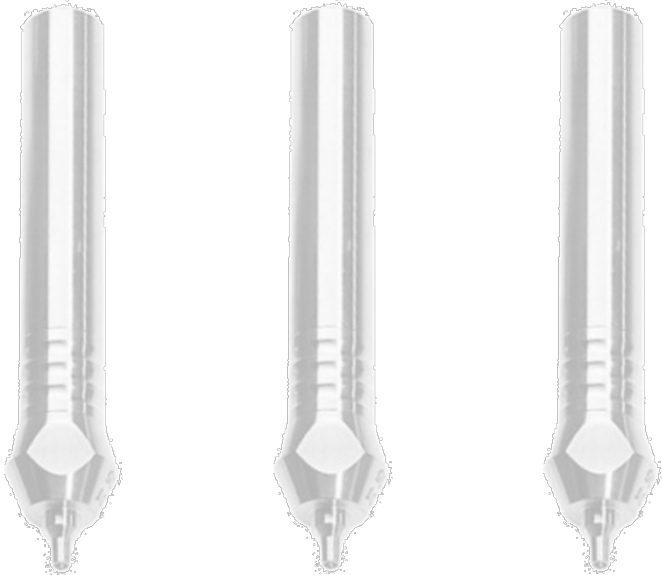
# UCI: All-in-One Probe



## Equotip UCI ONE probe



## Other UCI solutions Many probes



**HV1-10**  
All UCI applications

HV1  
Turbines

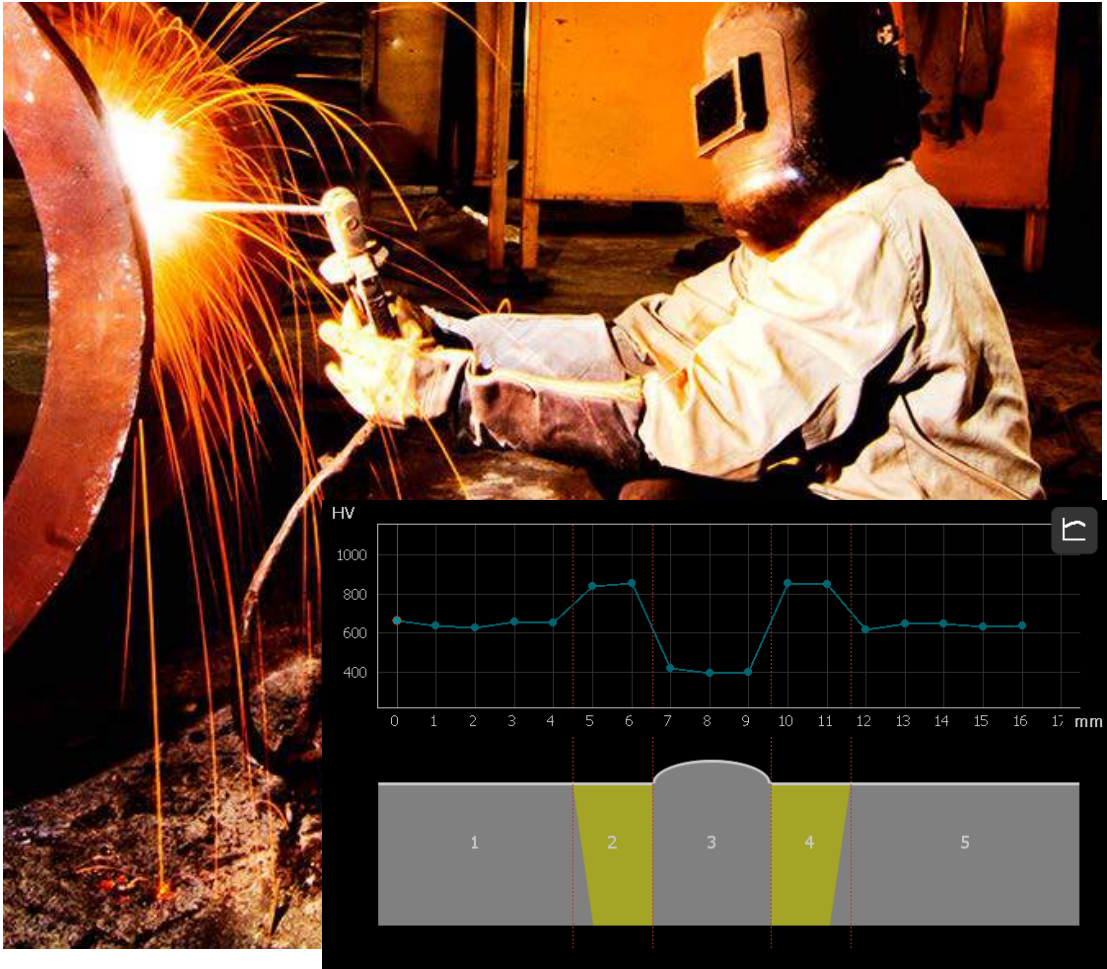
HV5  
Welds

HV10  
Forgings

# UCI: Ideal for Oil & Gas



- ✓ Standard compliant
- ✓ Minimal surface preparation
- ✓ HAZ (weld) visualization



# UCI: Smart foot



- ✓ Magnetic for maximum stability
- ✓ Flat surfaces
- ✓ Curved surfaces

# Rockwell: Universal



Scratch-sensitive, polished, thin parts



# Rockwell: Accessories



- ✓ Clamp adapter
- ✓ 3 special feet
- ✓ for any geometry



Equotip Piccolo / Bambino 2

# Integrated



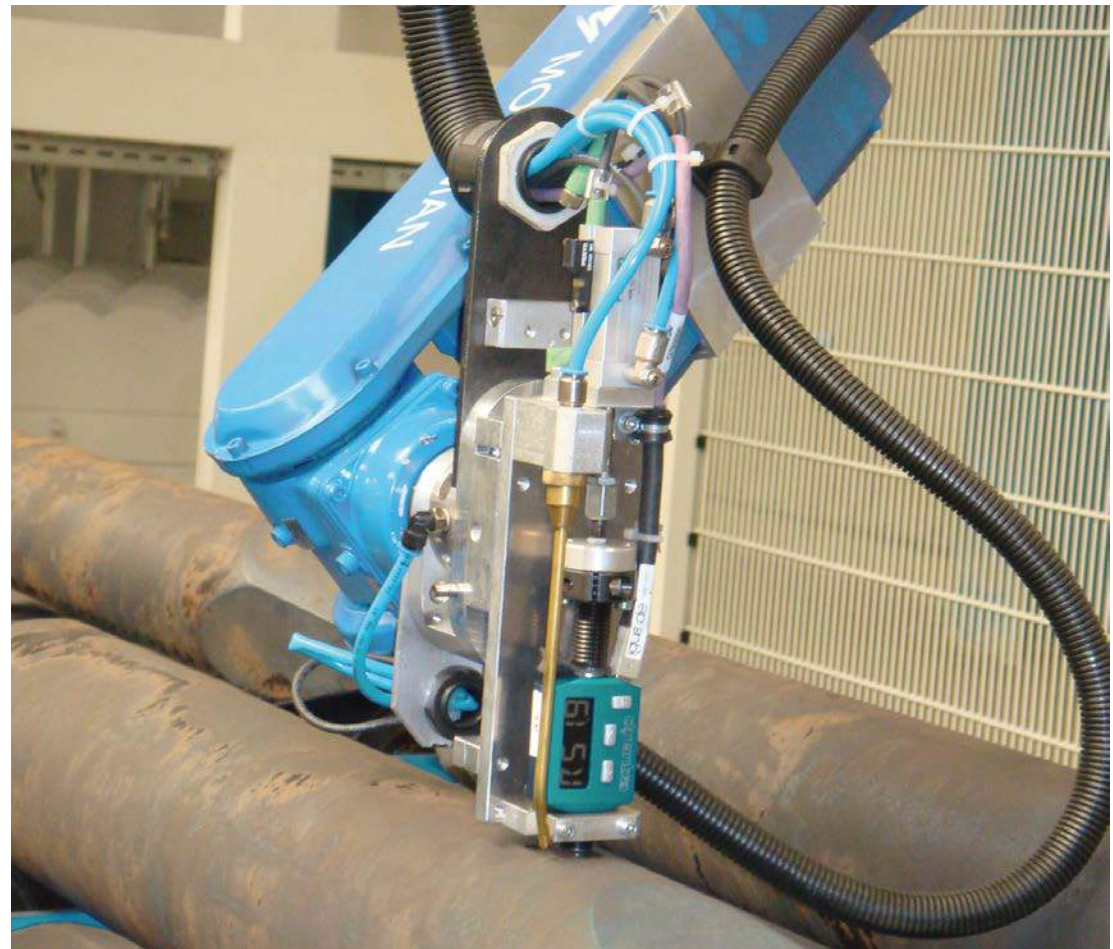
- ✓ Leeb D + Leeb DL
- ✓ Compact
- ✓ Large display



# Automation



- ✓ Patented trigger
- ✓ In-line testing
- ✓ Remote control and read-out



# Equotip Live

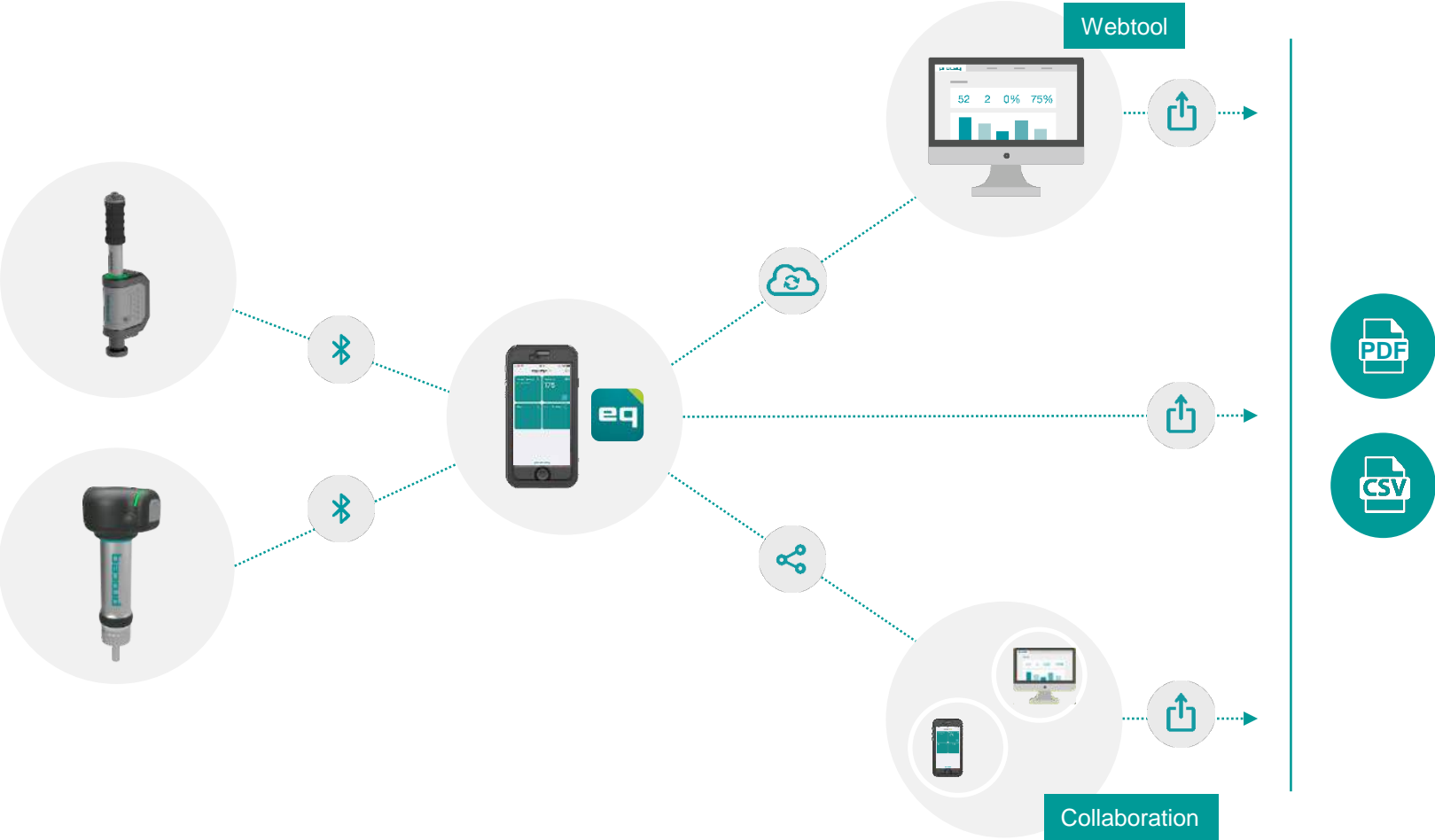


# Wireless



- ✓ Leeb D + UCI
- ✓ Connected
- ✓ Intuitive

# High Connectivity



# Best-in-class Design



Leeb D

Ergonomic design

Multi-color status LEDs

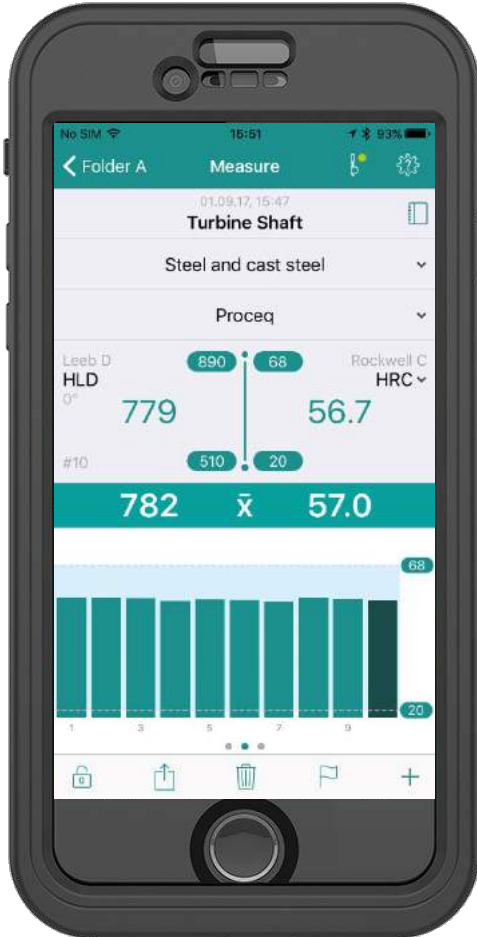
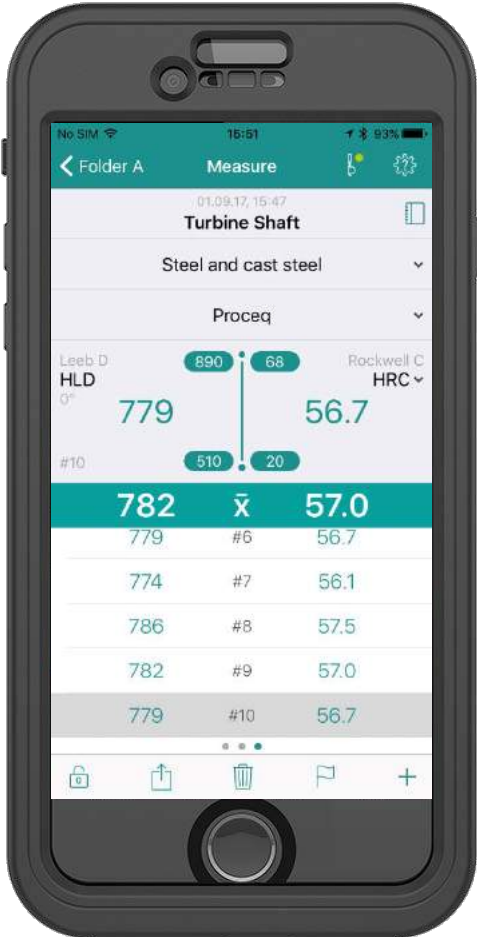
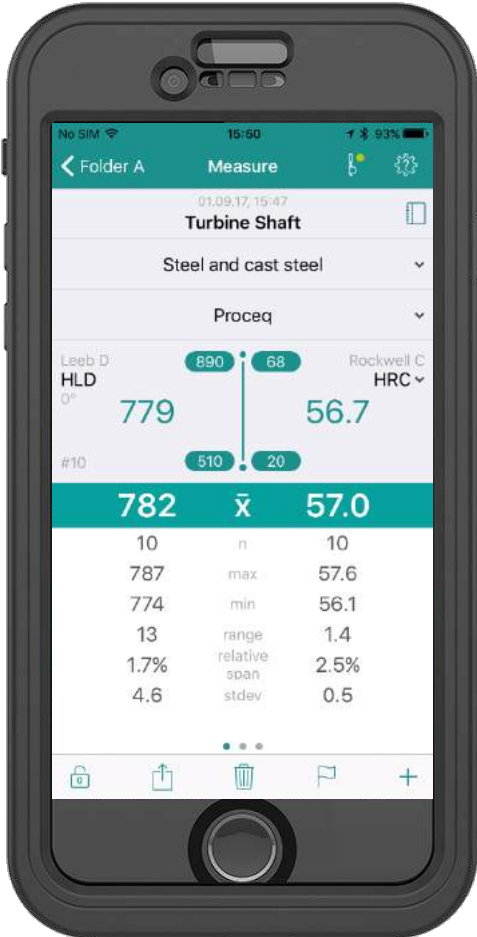
 Standard batteries



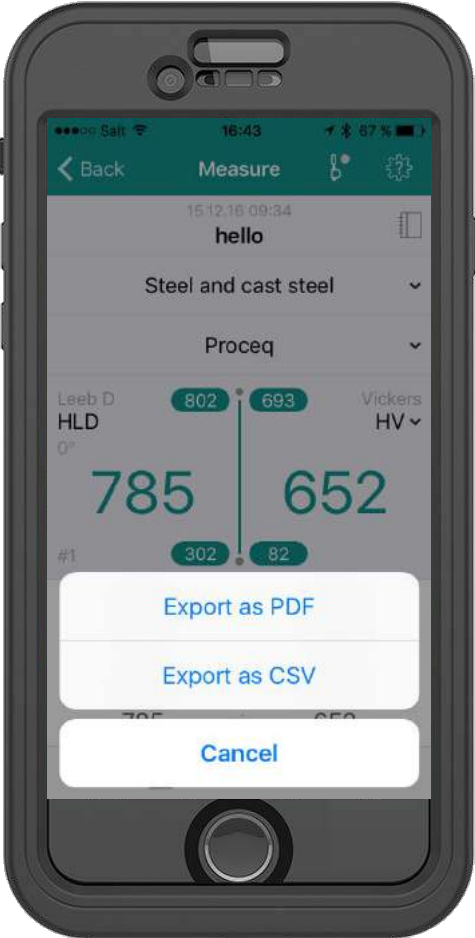
UCI HV1-10



# Intuitive



# Hassle-Free Reporting



**Steel Cylinder**

Operator: Christoph Fehren  
Folder Name: Folder A  
Created Date: 04/05/17 09:21:04  
Last Modified Date: 04/05/17 09:22:46  
Measurement Average Hardness: 57.2 HRC  
Measurement Bar Graph:

Table View:

#	Angle (°)	HLD	HRC	#	Angle (°)	HLD	HRC
1	0	777	54.4	4	90	765	57.5
2	0	785	57.2	5	90	765	57.8
3	5	787	58.9				

Statistics:

- Readings: 5
- Average: 57.5 HRC
- Standard deviation: 0.6 HRC
- Minimum: 54.4 HRC
- Maximum: 57.8 HRC
- Range: 3.4 HRC
- Relative Span: 2.4 %

Settings:

- Material: Steel and cast steel
- Primary Scale: Leeb D
- Secondary Scale: Rockwell C
- Conversion Standard: Proceq
- Units: High: 88.4 HRC, Low: 20.0 HRC
- Angle Correction: Auto

proceq equiptolive  
Measured with Equiptolive from Proceq  
Serial Number: 230517  
www.proceq.com

Equipment Information:

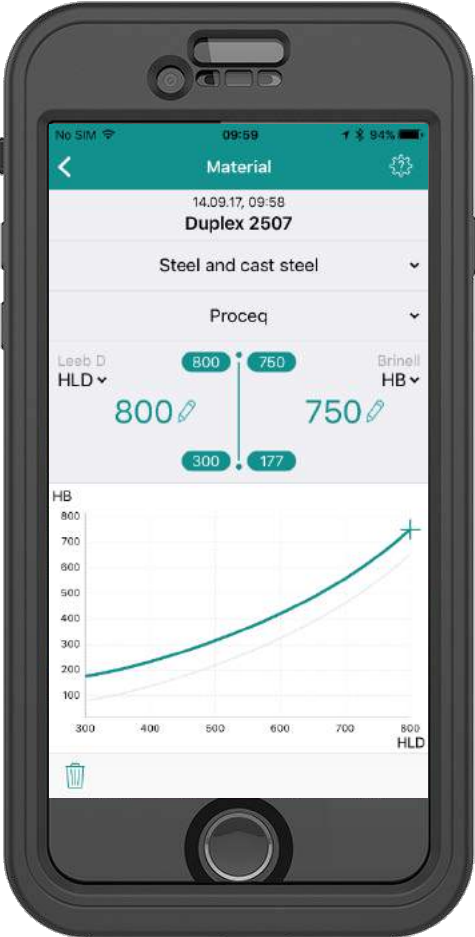
- Type: Equiptolive
- Last Verification Date: 23/05/17
- Serial Number: 055-001-0015
- Hardware Revision: 40
- Firmware Revision: 1.3.1

Serial Number: 0701-001-0015  
Hardware Revision: 40  
Firmware Revision: 0.9.0

Platform: iOS  
Version: 1.0.8.42

proceq equiptolive  
Measured with Equiptolive from Proceq  
Serial Number: 230517  
www.proceq.com

# Customizable Hardness Conversions



*“Easy to adapt for special materials (e.g. alloys)”*

Christoph Frehner, Product Manager Proceq

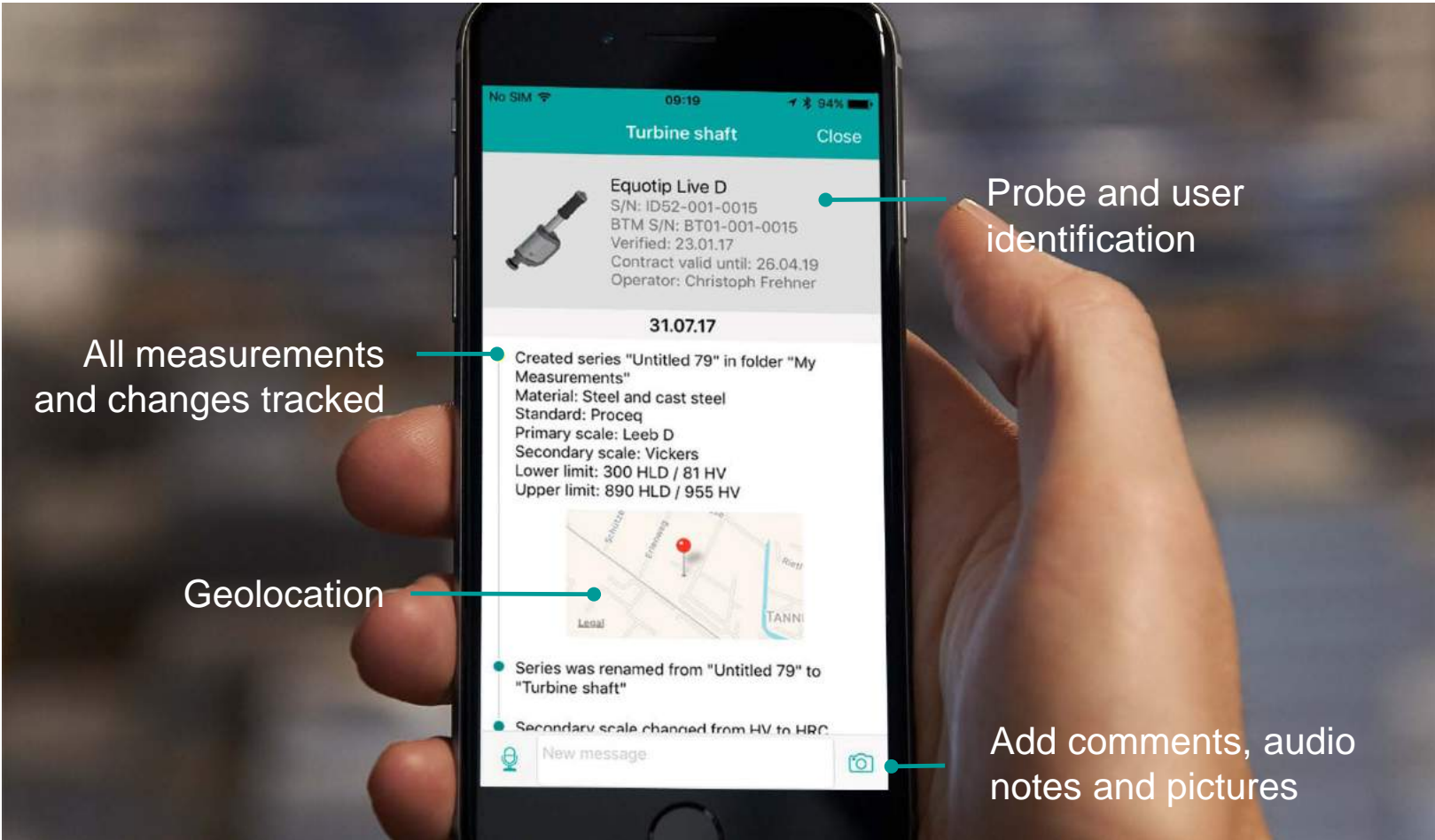
# Easy Verification



*“The performance of the instrument should be verified prior to use on each day...”*

ISO 16859-1 Metallic materials – Leeb hardness test

# Traceability through Logbook



# Ultimate Portability



# Web based Reporting Tool



Browser address bar: <http://live.proceq.com>

Navigation: proceqlive | Christoph Frehner | Equotip Live | Data Review | En | User | Help

### Data Review

- Crankshaft: 1
- Crankshaft 001: 0
- Engine block 24F: 2
- Engine Block 57C: 14
- My Measurements: 132
- Other Tests: 24
- Showcase: 27
- All Measurements: 200**
- Flagged: 15
- Trash: 0

Actions: [ ] Refresh [ ] Search: [ ]

Name	Created On	Mean	Material	Scale Unit
Steel Cylinder	04.09.2017 09:21	57.2	Steel and cast steel	HRC
Turbine Shaft	01.09.2017 15:47	57.0	Steel and cast steel	HRC
Engine Block	31.08.2017 09:01	--	Cast aluminium alloys	HB
Alublock 21	18.08.2017 16:41	--	Cast aluminium alloys	HV

**Measurements**

- 1 56.4 HRC
- 2 57.4 HRC
- 3 56.9 HRC
- 4 57.5 HRC
- 5 57.8 HRC

**Statistics**

- Average: 57.2 HRC
- Readings: 5
- Standard deviation: 0.5 HRC
- Minimum: 56.4 HRC
- Maximum: 57.8 HRC
- Range: 1.4 HRC
- Relative Span: 2.4%

**Settings**

- Upper Limit: 68.4 HRC
- Lower Limit: 20.0 HRC
- Material: Steel and cast steel
- Name: Rockwell C
- Unit: HRC

Logbook [ ]

# Equotip 550





Versatile



- ✓ Leeb - UCI - Rockwell
- ✓ Touchscreen
- ✓ Rugged IP54

# Feature-Rich User Interface



Personalized Screens

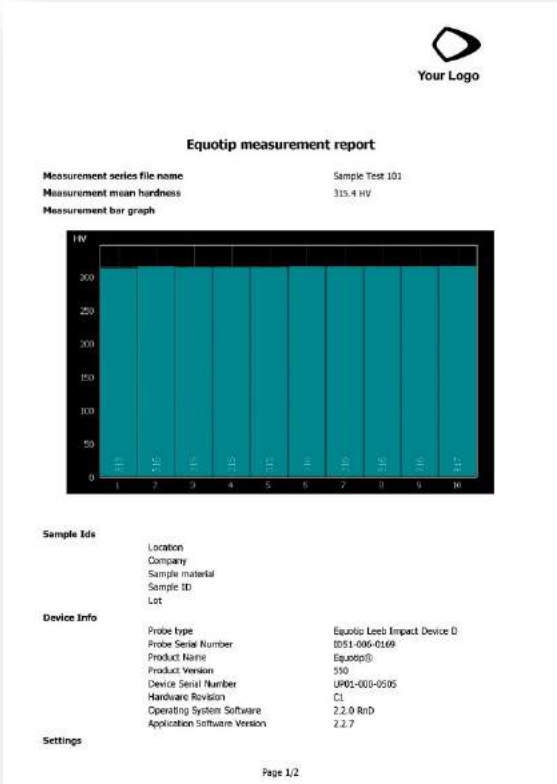
Multi-touch features

# Measurement Wizard



Step-by-step guide

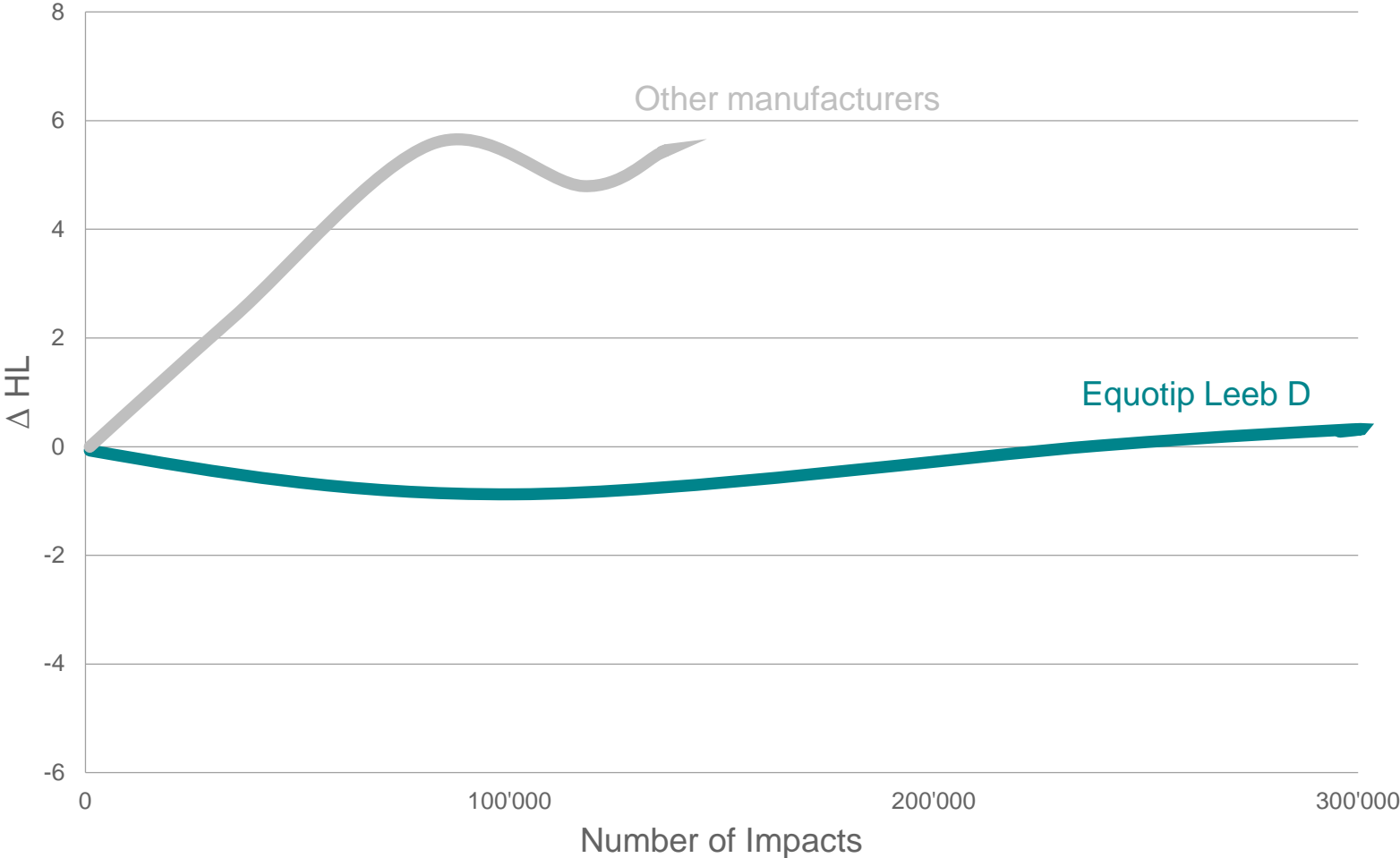
# Enhanced Reporting





Proceq Quality and Service

# Unmatched Consistency and Durability



# Replace Discontinued Solutions – Rely on Equotip



Contents Section	Page
Status Details	1
Affected Parts List	2
Product Support	2
Specific Recommendations	2
General Recommendations	2
Life Cycle Program Overview	3



## Status Details

This notice is to inform you that the MIC10 UCI Hardness Tester and UCI probes will be transitioning to life cycle Phase 3 on October 31<sup>st</sup> 2017. This change means we will accept orders for new units through October 31<sup>st</sup>, 2017. After this time new unit sales **will no longer be available.**

Due to age of our hardness portfolio and resulting availability of components with changes in technology, it is necessary that we transition the **MIC10 and UCI probes** to Phase 3 of our Life Cycle program. As an overall strategy of investment in new phased array and conventional product upgrades, we will not be offering a replacement rebound unit.

# Guardians of Leeb Standard



- ✓ Inventor of Leeb
- ✓ Conserved for over 35 years
- ✓ Supplier for National Metrology Institutes (NMI)



# Global Standards Conformity



**DIN**

**EN**



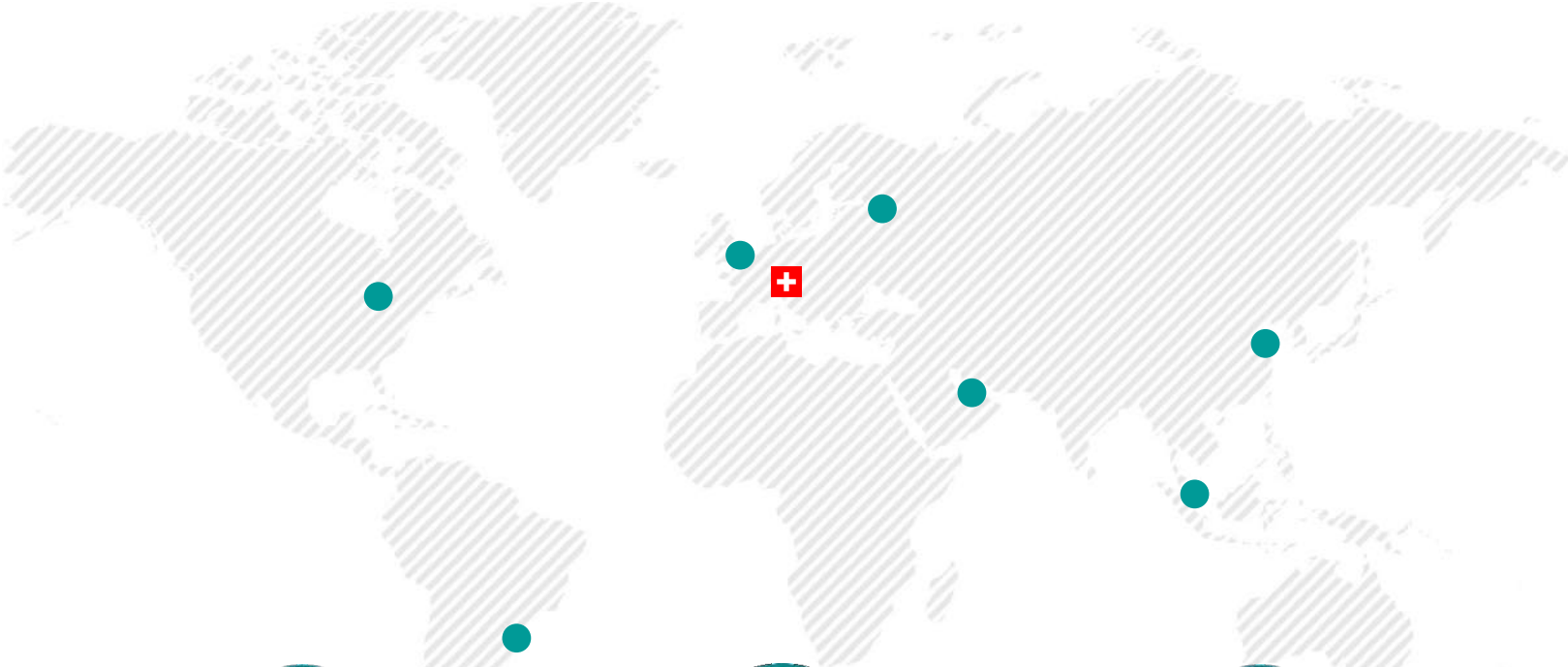
**VDI|VDE**

**nordtest**

**GOST**

**JB**

# Global Proceq Service Network



Fast



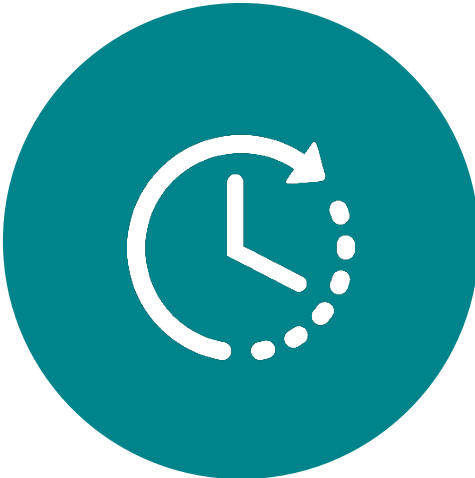
Local



Efficient



Complete offering



Increased productivity



From the inventor

# Attractive Pricing



	Equotip		Equotip Live		Equotip 540		Equotip 550		
	Bambino 2	Piccolo 2							
	Leeb	Leeb	Leeb	UCI	Leeb	UCI	Leeb	UCI	Rockwell
Probes	D+DL	D+DL	D		D		all		
Custom Conversions		simple shift	simple shift	simple shift					
Export									
Report									
Live Webtool									

New

New

New


New

# Equotip Live Offers



## One off purchase

Leeb D



CHF 3,750

Incl. 2 years Report, Export,  
Sharing, Live Webtool

UCI



CHF 4,550

Incl. 2 years Report, Export,  
Sharing, Live Webtool

CHF 599 / year

Option to extend  
Report, Export, Sharing, Live Webtool

## Rental

Leeb D



CHF 999 start-up fee  
+  
CHF 599 / year

Full feature set

Great deals you can rely on!



Trade-in of discontinued products



Send us your Equotip ...

... get 35% discount on any Equotip 550 unit!

Calibration



Send us your GE/Krautkrämer device ...



Send us your GE/Krautkrämer devices

... get a factory calibration!

# Future-proof



# Equotip<sup>®</sup> Complete Portable Hardness Solution



Pricing is subject to change. Features are subject to change. Tablet or smartphone not included in offerings. Additional fee may apply. General terms and conditions of sale and rental apply, see: [www.proceq.com/service](http://www.proceq.com/service)