



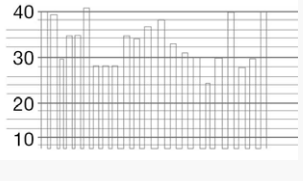


## Portable Non-Destructive Roll Testing Instruments



# Paper, Film and Foil Roll Hardness Testing

				
		<b>Equotip 550 Leeb U</b>	<b>PaperSchmidt</b>	<b>Original Schmidt (L/LR)</b>
<b>Test method</b>	Principle	Measurement of the impact body's velocity propelled by spring force against the surface of the test piece	Measurement of the rebound of a spring-loaded mass impacting against the surface of the test piece	
	Native scale	HLU	R <sup>1)</sup>	R <sup>1)</sup>
	Impact energy	200 Nmm	735 Nmm	735 Nmm
	Measuring time	Less than 1 sec	~ 1 sec	~ 1 sec
	Angle independent	Manually select: ↓ ↘ →	Auto	
	Endurance	Extremely durable	Highly durable	Durable
<b>Applications</b>	Large paper rolls	•	•	•
	Midsized paper rolls	•	•	•
	Small paper rolls	•		
	Thick film rolls		•	•
	Thin film rolls	•		
	Foil rolls	•		
	Coated rolls	•		
<b>Display and User interface</b>	Display	Color Touchscreen	Monochrome display	Mechanical indicator
	Memory (number of values)	> 1'000'000	~ 4'000	< 4'000 per registration paper roll (only LR)
	Multiple languages	11 languages and timezone supported	Language independent	Language independent
	Verification wizard	•		
	Profile view	Sophisticated digital	Simplified digital	Analog
	Adjustable tolerance limits	•	•	
<b>Reporting</b>	Roll numbering	Keyboard or external barcode reader	Predefined list or character selection table	Handwritten (only LR)
	PC-software (free of charge)			
	Direct reporting			
	Custom reports	•		

<sup>1)</sup> R values of PaperSchmidt and Original Schmidt can not be compared to each other

# Equotip® 550 Leeb U

The **Equotip 550 Leeb U** enables the user to quickly and precisely diagnose roll imperfections, hardness inconsistencies and uneven winding, thereby preventing problems for printing and converting operations. Portable and lightweight, the Equotip 550 Leeb U is perfect for roll hardness testing in the warehouse or on the production floor, providing an immediate visual assessment of the hardness profile.

### Downward compatibility

The new Equotip 550 Leeb U is compatible with the existing Parotester impact devices. The measurement is identical while the endurance of the cable has been significantly improved.



Supporting **barcode reader** for fast, easy and reliable roll identification



**Protected hardware connections**  
Probe connector, USB host, USB device and Ethernet

**Touchscreen features**  
For simplified and improved usability on high resolution display

**Personalized screens**  
Arrange the view according to your needs

**Loading tube**  
Easy handling with loading and release in one smooth movement

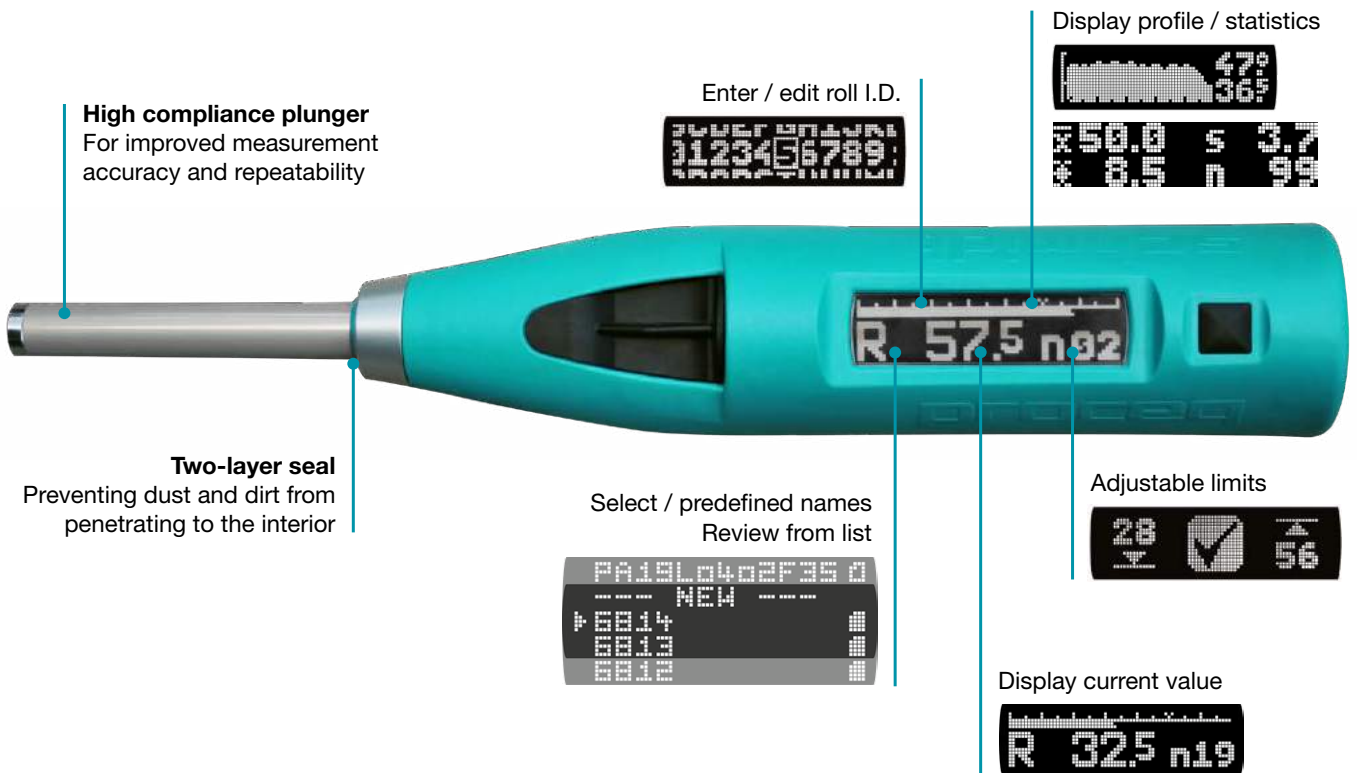
**Support ring**  
Large crown for a safe and stable impact on curved surfaces



Display	7" color display 800x480 pixels	Weight	2'500 g (5.51 lbs)
Memory	Internal 8 GB flash memory	Battery	Lithium Polymer, 3.6 V, 14.0 Ah
Regional settings	Metric and Imperial units, multi-language and time zone supported	Battery lifetime	> 8 h (in standard operating mode)
Power input	12 V +/-25 % / 1.5 A	Operating temperature	-10 to 50 °C (14 to 122 °F) (Non-charging)
Dimensions	Display Unit: 250 x 162 x 62 mm (9.84 x 6.4 x 2.44") Impact Device: Ø 45 x 295 mm (Ø 1.77 x 11.61")	IP classification	IP 54
		Certification	CE

**PaperSchmidt** is the first rebound hammer designed specifically for roll hardness testing. A new measuring principle and a high compliance plunger provide unachieved roll-profiling accuracy and repeatability.

In addition to this it has an extended lifetime to cope with the heavy demands of the paper, film and foil industry and dedicated tools, such as pre-defined tolerances that make assessing a profile a simple matter.

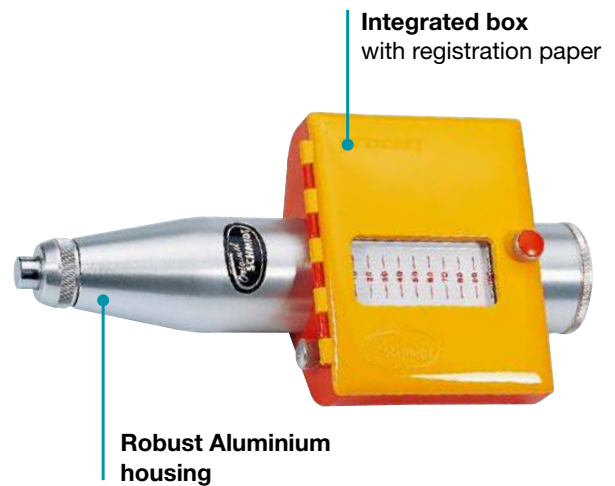
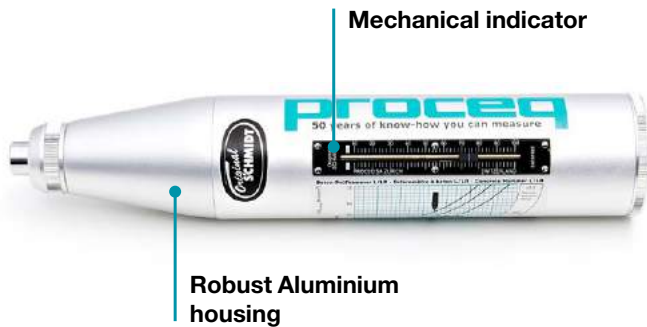


Display	Monochrome graphic display 17 x 71 pixel
Memory (dynamic)	Example 1: 401 series with 10 values per series
Regional settings	Language independent
Power consumption	~13 mA measuring, ~4 mA set-up and review, ~0.02 mA idle
Charger connection	USB type B (5 V, 100 mA)
Dimensions	55 x 55 x 250 mm (2.16 x 2.16 x 9.84"), 340 mm (13") to tip of plunger

Weight	570 g (1.26 lbs)
Battery	Lithium Polymer, 3.6 V, 160 mAh
Battery lifetime	> 5'000 impacts
Operating temperature	0 to 50 °C (32 to 122 °F)
IP classification	IP 54
Certification	CE

The **Original Schmidt L/LR** has a long tradition in paper and film roll hardness testing e.g. for hardness profiling of paper rolls.

The system is easy to use and gives immediate information about the quality of the paper roll. The Original Schmidt L/LR is mostly used on the production floor. The classic rebound values “R” of the Original Schmidt LR are printed as bars on registered paper.



	Original Schmidt Type L	Original Schmidt Type LR
Impact energy	735 Nmm	735 Nmm
Dimensions	Ø 55 x 275 mm (Ø 2.17 x 10.83")	275 x 137 x 80 mm (10.8 x 5.4 x 3.15")
Weight	0.8 kg (1.76 lbs)	1.1 kg (2.43 lbs)

## Verification Tools

To verify the proper function of the devices, Proceq offers for each instrument a dedicated test block or anvil.

These optional accessories allow the user to check on a regular basis the correct function in a fast and easy way directly on-site.



**Equotip Test Block U**  
550 HLU ±12



**Testing Anvil**  
75 R ±2



**Low Range Anvil**  
51 R

# Ordering Information

## Equotip 550 Leeb U

356 10 006	Equotip 550 Leeb U (for paper, film and foils) consisting of Equotip Touchscreen incl. Battery, Equotip Leeb Impact Device U, Cleaning Brush, Probe Cable, Power Supply, USB-Cable, DVD with Software, Documentation, Carrying Strap and Carrying Case
356 10 001	Equotip 550 consisting of Equotip Touchscreen incl. Battery, Power Supply, USB-Cable, Surface Roughness Comparator Plate, DVD with Software, Documentation, Carrying Strap and Carrying Case
356 00 083	Equotip Leeb Impact Device U Cable 1.5 m (5 ft)
360 04 600	Equotip Leeb Impact Device U
360 04 503	Equotip Test Block U
356 00 082	Display Antiglare Protection Film for Touchscreen Unit
327 01 033	Battery complete
327 01 053	Quick Charger (external)
360 89 000	Premium calibration certificate

## PaperSchmidt

342 10 000	PaperSchmidt consisting of battery charger with USB-cable, DVD with Paperlink software, carrying strap, documentation, carrying bag
342 10 400	Low Range Anvil
341 10 400	Testing Anvil

## Original Schmidt

310 03 002	Test hammer Original Schmidt, Type L complete with standard accessories and carrying case
310 04 000	Test hammer Original Schmidt, Type LR complete with standard accessories and carrying case
310 09 040	Testing Anvil N/NR/ND/L/LR/LD
310 99 072	Registration paper (5 rolls/pack)

## Recommended Barcode Readers (for Equotip 550 Leeb U only)

- Honeywell Xenon 1900
- Honeywell Voyager MK 9540
- Motorola Symbol DS 6707
- Any other HID-compatible barcode scanner

## Service and Warranty Information

Proceq is committed to providing complete support for each testing instrument by means of our global service and support facilities. Furthermore, each instrument is backed by the standard Proceq 2-year warranty and extended warranty options for electronic portion.

### Standard warranty

- Electronic portion of the instrument: 24 months
- Mechanical portion of the instrument: 6 months

### Extended warranty

When acquiring a new instrument, max. 3 additional warranty years can be purchased for the electronic portion of the instrument. The additional warranty must be requested at time of purchase or within 90 days of purchase.

Subject to change without notice. All information contained in this documentation is presented in good faith and believed to be correct. Proceq SA makes no warranties and excludes all liability as to the completeness and/or accuracy of the information. For the use and application of any product manufactured and/or sold by Proceq SA explicit reference is made to the particular applicable operating instructions.

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