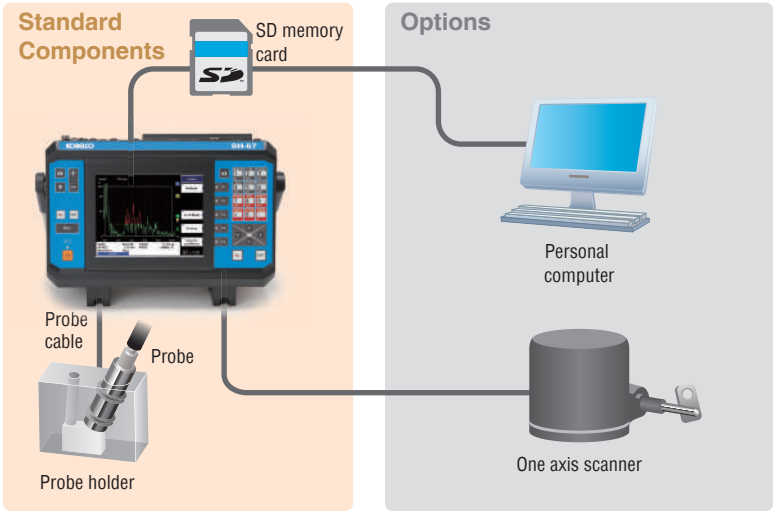


Equipment Configuration



Standard Components	
SH-67:	1
Probe:	1
Probe holder:	1 (designed and manufactured for each work)
Probe cable and other attachments:	1 set
Battery:	1
AC adapter:	1
SD memory card:	1

Specifications

	Item	Performance
Measuring casdepth function	Object to be measured	Depth of the induction hardened layer
	Measurement range	0.7 to 15mm
	Measurement resolution	0.1mm
	Measurement repeatability	±0.1mm (per one location)
	Scanner interface	Included (The scanner is optional.)
Ultrasonic testing function	Sensibility	80 dB or more (5 MHz narrow band)
	Adjustable gain	110 dB with 0.1 dB pitch
	Center frequency and band width	0.25/0.5/1/2/3/4/5/10/15/20/25 MHz
	Amplification linearity	±3% or less
	Test range	1 to 14,556mm (longitudinal mode in steel)
Common specifications	Display time-base linearity	±1% or less
	AC adapter	AC100 to 240V±10%, 50/60Hz±3Hz, Power consumption: approx. 20 W
	Battery	Lithium-ion battery
	Battery operating time	Approx. 8 hrs (Operating time is subject to the operation condition and ambient temperature.)
	Ambient temperature	0 to 40°C during operation, -20 to 60°C during storage
	Display and screen size	6.5" TFT color LCD (Super luminosity LED liquid crystal display)
	External dimensions (mm), Mass (kg)	286 (W) × 180 (H) × 110 (D) (not including the projection), 3.5 kg (including a battery)
	Body case	Waterproof and dustproof standard: Compliance with IP66. Made of reinforced ABS resin (front and back) and aluminum alloy (midsection)
	Card slot	SD memory card
	External interface	Connector
		USB (master/slave)
		LAN, VGA, Encoder (two-axis)
		DC input (A dedicated AC adapter is used.)
		Earphone microphone (JEITA RC-5240)



CAUTION!

Read the instruction manual carefully before using the SH-67.

KOBELCO INSPECTION & SERVICE CO.,LTD.

Sales & Marketing Department

2-3-1, Shinhamma, Arai-cho, Takasago-City, Hyogo 676-8670, JAPAN
Tel: +81-79-445-7253 Fax: +81-79-445-7156
E-mail : sisco.eigyo@kobelco.com

Tokyo Office

15th floor, ON Bldg., 5-9-12 Kitashinagawa, Shinagawa-ku, Tokyo 141-8688, JAPAN
Tel: +81-3-5739-5346 Fax: +81-3-5739-5348

<http://www.sisco.kobelco.com>

The specifications are subject to change without prior notice.

●Distributor

KOBELCO

Measuring Equipment
of the Hardened Layer Depth
SH-67

Nondestructive measurement of induction hardened layer depth



KOBELCO INSPECTION & SERVICE CO.,LTD.

High Operational Efficiency and Cost Savings!

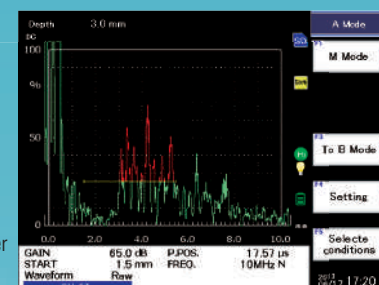
~ Ultrasonic method for measuring hardened layer depth ~



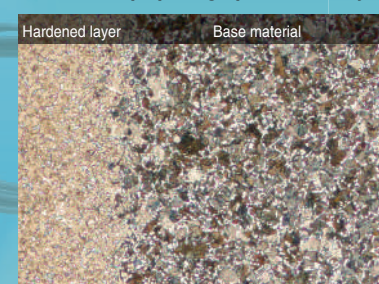
Measurement Principle

- ① The case-hardened layer has a finer metal texture than the non-hardened layer below it.
- ② Ultrasonic waves pass through the hardened layer and then scatter in the base material.

Result of measurement



Microscope photograph of boundary



Features

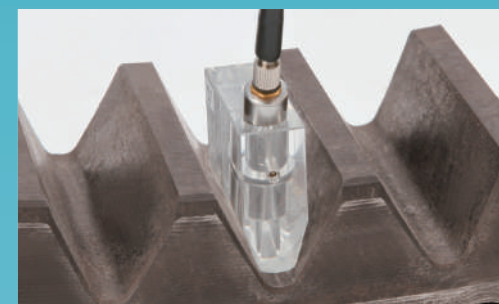
Simple ultrasonic measurement

High sensitivity probe

The highly sensitive convergent probe provides accurate measurement.

Hermetically sealed immersion probe holder

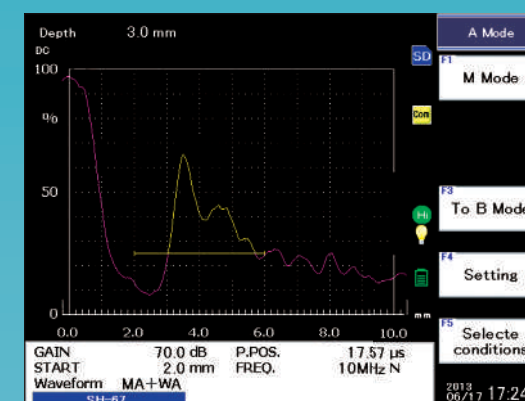
The optimal design ensures stable measurement.



The holder is designed and manufactured for each work.



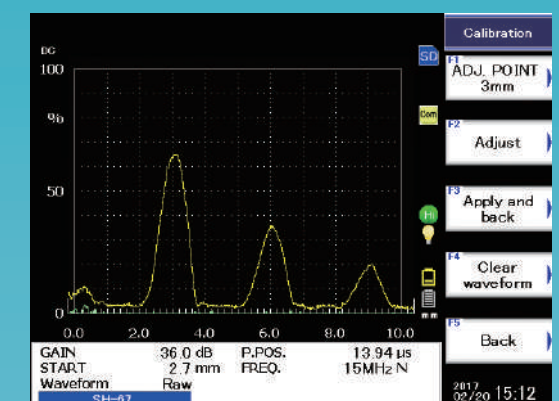
Waveform processing to clearly identify the boundary



Simple parameter settings by the Setup screen

Basic settings	Waveform processing	A depth judgment	A miscellaneous	Pass/fail judgment	Condition Setting
File name: TEST0101					F1 Save and return
Range: 10 mm					F2 Previous tab
Frequency: 10 MHz	Narrow				F3 Next tab
Water path: 12 mm	P.POS: 16.90 μ sec				F4 Setup defaults
GAIN: 67.0	(←: -0.5, →: +0.5)				F5 Back
Velocity: 2280 m/s					
Comments:					
Enter a file name to save as a measurement conditions file.					
					2015/09/01 13:37

Automatic calibration for easy setup



Applications

Measurement of induction hardened layer depth

Wind power facilities and construction machinery :
Swivel bearings

Automotives and vessels :
Crank shafts, gears, shafts, etc.

Other induction hardened products

