



Non-destructive Spot Welding Inspection Equipment

# NUGGET PROFILER

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Model : NPH03



- Dimensions : 230(W)×195(D)×65(H)mm (excluding protrusions)
- Weight : Approx. 1.91 kg

## Small sensor probe!

- Sensor body size : 20(W)×20(D)×100(H)mm
- Sensor contact surface size : 18(W)×10(D)mm

## Features

- Non-destructive inspection equipment using magnetism.
- A nugget can be quantified.
- Can distinguish between nugget and cold-joint (pressure weld).
- Needs no gel, water or other medium.
- A sensor is applied lightly and inspected.
- The inspection speed is around 4 seconds per weld point.
- Can check the fluctuation of welding quality.
- Can be used on High Tensile Strength Steel.
- Automatically save results to electronic file (traceability).
- The powered is a battery.

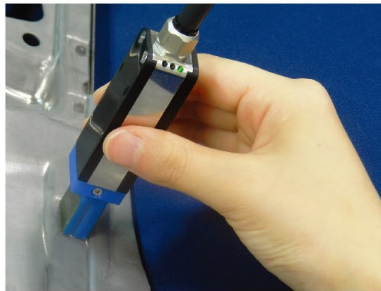


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<http://www.magnegraph.com/>

**Inspection method**

- The condition of the nugget is digitized and indicated on-screen together with the inspected waveform.
- Digitized data and inspection waveform differ in magnitude between defective products and non-defective products (pressure welding), allowing identification.



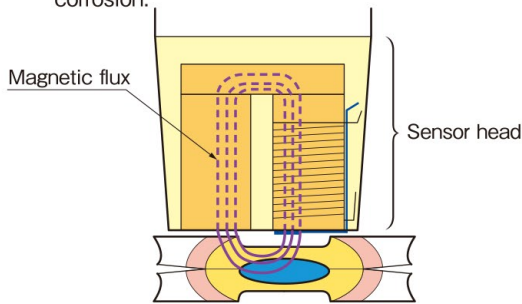
### Detection of nugget

**Non-defective product**

**Defective product**

**Non-destructive**

- Will not damage test samples.
- 100% inspection possible.
- Will not cause shock or metal fatigue to nugget.
- Does not use solvents that may cause corrosion.



[Non-destructive inspection method using magnetism]

**Application**

- Inspection history can be reviewed.
- History can be managed in the assembly line, shipment inspection, receiving inspection, etc.



**Specifications**

Model		<b>NPH03D</b>	<b>NPH03B</b>
Dimensions		230(W)×195(D)×65(H)mm (excluding protrusions)	285(W)×205(D)×70(H)mm (excluding protrusions)
Weight		1.91 kg	2.32 kg
Screen display size		7 inch	10 inch
Welding inspection part	Inspection welding diameter	3 mm to 7 mm [Indentation diameter 8mm or less; Effective sensor width: 11 mm] (The equipment may support the ranges other than the above. Please inquire us.)	
	Applicable tip	R electrode	
	Specimen sheet thickness (Thickness of one inspection side)	0.7 to 2.3 mm (The equipment may support the ranges other than the left. Please inquire us.)	
	Specimen sheet type	270 to 1280 MPa (The equipment may support the ranges other than the left. Please inquire us.)	
	Specimen sheet surface treatment	No treatment, electrogalvanizing, hot-dip galvanizing (As for the aluminizing, please inquire us.)	
	Number of specimen mating sheets	Two sheets, three sheets (Inspection from both sides are necessary.)	
PC	Sensor edge material	FR	
	Data storage	XLS form	
	Setting of inspection condition	Set in the inspection screen. (The setting contents can be stored in the file.)	
	Judgment method	OK/NG judgment, The diameter of a presumed nugget	
	Option	Navigation mode, Inspection record management	
Operating temperature range		0°C to 45°C (32°F to 113°F)	
Operating humidity range		Up to 80%RH (No condensation occurs.)	
Power supply		Two kinds of power supplies selectable. (1) AC85V to 240V, 0.5A (2) Battery (8 size AA Ni-MH battery)	