



SPECIFICATION

Set of NDT equipment for concrete testing for Peru (RLA0054)

1. Scope

This Specification describes the requirements for a Set of NDT equipment for concrete testing, hereafter referred to as the “Equipment” quality control of civil structures to be used in Peru by Instituto Peruano of Energia Nuclear or IPEN, hereinafter referred to as the “End-User”.

2. Technical Requirements

The Equipment shall meet the technical requirements as in Table 1. Below.

3. Marking

The Equipment shall have all safety markings in English language.

4. Packing

The Equipment, for the shipment by air to the End-User, shall be packed in accordance with international standards that are applicable for the shipment of this kind of equipment.

5. Quality Requirements

The Equipment shall be manufactured, shipped and installed in accordance with the Supplier’s ISO quality assurance system or an equivalent quality assurance system.

6. Testing and Acceptance

The Equipment, prior to shipment, shall be tested for its conformance with manufacturer’s performance specifications and the requirements specified herein.

7. Deliverable Data Items

The Supplier shall provide one (1) complete set of operation and servicing manuals and technical drawings in the English or Spanish language in hard copy and electronic version.



Table 1. – Technical requirements

No.	Description	Quantity	Main features and applications
1	Rebar detector-Profometer	1	Applications: <ul style="list-style-type: none"> - Corrosion investigation - Quality Control and Assurance of new concrete structures. - Location of rebar for penetrations or coring - Profometer with universal probe and scan cart. - Full 2D rebar visualization with detailed cover, rebar size and spacing data for fast reporting - Cover measuring range: 185 mm or more - Diameter measuring range: 60mm or more
2	Kit for profometer corrosion electrode	1	
3	UT pulse velocity measurement system	1	Ultrasonic testing to be used for: <ul style="list-style-type: none"> - The homogeneity of a material - The presence of voids, cracks or other internal imperfections or defects - Changes in the concrete which may occur with time (i.e. due to the cement hydration) or damage from fire, frost or chemical attack - The strength or modulus of a material - The quality of the concrete in relation to specified standard requirements - Single sided thickness measurement - Poisson's ratio and E modulus calculation - Scan modes: A-scan, B-scan, Area scan
4	Carbonation detection kit	1	