

ANNEX 1

Special Requirements for Various Categories of Service Suppliers

1. Firms engaged in thickness measurements on ships

- 1.1 Extent of engagement – Thickness measurement of structural material of ships.
- 1.2 Supervisor – The responsible supervisor shall be qualified according to a recognised national or international industrial NDT standard (e.g. EN 473 level II or ISO 9712 level II).
- 1.3 Operators – The operators carrying out the measurements shall be certified to a recognised national or international industrial standard (e.g. EN 473 level I or ISO 9712 level I) and shall have adequate knowledge of ship structures sufficient to elect a representative position for each measurements.
- 1.4 Equipment – On coated surfaces, instruments using pulsed echo technique (either with oscilloscope or digital instruments using multiple echo, single crystal technique) are required. Single echo instruments may be used on uncoated surfaces, which have been cleaned and grinded.
- 1.5 Procedures – Documented work procedures are at least to contain information on survey preparation, selection and identification of test locations, surface preparation, protective coating preservation, calibration checks, and report preparation and content.
- 1.6 Reporting – The report shall be based on the guidelines given in UR Z10.1, Z10.2 or Z10.3, as relevant.
- 1.7 Verification – The supplier must have the Surveyor's verification of each separate job, documented in the report by his signature.

2. Firms engaged in tightness testing of hatches with ultrasonic equipment

- 2.1 Extent of engagement- Ultrasonic tightness testing of hatches
- 2.2 Operators – The operator is to have the following qualifications:
- Have knowledge of different hatch designs, their functioning and sealing features
 - Have experience with operation and maintenance of different hatch designs
 - Be able to document a theoretical and practical training onboard in using ultrasonic equipment specified
- 2.3 Equipment – The ultrasonic equipment to be used shall be type approved by the Society. It shall be demonstrated for the Surveyor that the equipment is fit for the purpose of detecting leakages in hatch covers.
- 2.4 Procedures – The supplier shall have documented work procedures which shall include the manual for the ultrasonic equipment specified, its adjustment, its maintenance, its operation and approval criteria.

3. Firms carrying out in-water survey of ships and mobile offshore units

- 3.1 Extent of engagement – In-water survey of ships and mobile offshore units.

