The use of advanced ultrasonic testing techniques for the inspection of industrial plants has increased in recent years, demanding more and more qualified inspectors in the field of advanced non-destructive testing (NDT). Our NDT training courses have been designed to offer broad theoretical and practical knowledge, particularly for time of flight diffraction (TOFD), phased array (PA) and critical defect sizing.

Courses to obtain both formal NDT qualifications and training tailored to client needs, such as specific skills for managers and design engineers, or for quality assurance and quality control (QA/QC) personnel to interpret and review NDT inspection results, are now available.

Our courses are accredited in accordance with the International Standard ISO 9712 (formerly European Standard EN 473) and the recommended practices of the American Society for Nondestructive Testing (ASNT). Our courses are held in English, German, and Dutch.

Benefits at a glance

- Accredited training courses.
- Highly-qualified instructors with years of experience in the field of advanced NDT.
- Extensive theoretical and practical knowledge.
- Our global experience.
- An internationally-recognized certification.

TOFD and PA Training Courses

TÜV Rheinland Sonovation offers TOFD and PA training courses that are fully accredited to ISO 9712, an International Standard which specifies requirements for principles for the qualification and certification of personnel who perform industrial NDT. Alternatively, participants can obtain ASNT certification.

The following table illustrates available modules and module objectives for TOFD and PA training:

<table>
<thead>
<tr>
<th>Module</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three-day course</td>
<td>This course is for those seeking knowledge in the principles, theory and practice and specification of the techniques for different applications.</td>
</tr>
<tr>
<td>Five-day course</td>
<td>This course offers more in-depth theory, practice and instruction on the analysis of data. The five-day course includes explanation of respective codes and standards.</td>
</tr>
<tr>
<td>Eight-day course</td>
<td>This course offers complete in-depth theory, practice and data analysis required for ISO 9712 or ASNT Level 2 certification. For certification as an ISO 9712 TOFD Level 2 operator, a valid ultrasonic testing (UT) Level 2 certificate is required.</td>
</tr>
</tbody>
</table>

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Critical Defect Sizing Training Course

The training course for critical defect sizing has been designed for current holders of Personnel Certification in Non-Destructive Testing (PCN) Level II ultrasonic practitioner weld certification. After successful completion, participants are qualified to size defects within a tolerance level commensurate with the capabilities of the ultrasonic method.

Topics covered during the course:

- Production of beam plots for relevant probes.
- Practical examination of artificial simulations to assess plotting accuracy.
- Discussion of relevant normative documentation, including British Standards (BS) and European Standards (EN).
- The production of distance amplitude corrections (DAC) and sensitivity levels.
- Discussion surrounding echo-dynamic patterns.
- Reporting formats.
- Practical defect sizing on a variety of weldments.

About TÜV Rheinland:

Founded 140 years ago, TÜV Rheinland is a global leader in independent inspection services, ensuring quality and safety for people, the environment, and technology in nearly all aspects of life.

Our experience - your benefit

TÜV Rheinland Sonovation has over twenty years of experience with advanced NDT techniques and special applications. Our inspection team is one of the best resourced in the world. Our deep involvement in equipment development, inspection solutions and accredited training courses demonstrate our commitment and leadership in this segment.

Your contact:

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