

ESTEST**M**AKER

NDT Training Examination Software

TestMaker is an easy to use application for generating printable and interactive exams for use by training facilities or for internal training of staff on topics important to your company. Developed by renowned ultrasonics expert Edward Ginzel, TestMaker includes a extensive built-in library of questions specific to the Non-Destructive Testing industry. TestMaker is a valuable resource for any training facility or company interested in taking their employee training to the next level.

Rationale

Whether you are preparing for a certification or just wanting to stay on the top of your game, practice makes perfect. Reexaminations are costly, time consuming and non-certification can hinder your ability to go on a job. Mistakes in the field and in the workplace not only hurt your bottom line but it affects your reputation and the safety of your employees. TestMaker allows you and your staff to be prepared as possible.

Benefits

TestMaker includes over 5000 questions specific to the Non-Destructive Testing industry.

The questions cover the fields of:

- Phased Array
- TOFD
- UT
- RT
- LPI
- MPI
- ECT
- UT Mathematics
- WHMIS

Expand the scope of the questions available by using the Question Editor to enter and edit your own questions specific to your company's protocols and various in-house best practices. Include Safety and WHMIS questions or even generate First Aid course content. Cite references and attach bitmaps to create consistent and professional looking custom tests. All the exams are interactive and printable with automatic grading upon completion.

PANDA-UT

Included with TestMaker is PANDA-UT, a suite of UT utilities that can be used to aid in the creation of custom mathematical questions. Use PANDA-UT to calculate probe parameter characteristics, wave characteristics, geometric-optical treatment of ultrasound, modulii and reflections as well as access an extensive list of conversion tables and reference equations ensuring both accuracy and variety.



| 🐼 PANDA-UT Desktop 1.0.4 | | | | | | | | |
|--|-----------|----------------|--------|-----|-----------|--|--|--|
| 🔇 Back | | s: Snell's Law | | | | | | |
| Calculate Snell's Law for any angle and velocity. | | | | | | | | |
| Velocity of the wave in the first 1.48 mm/µsec | | | | | | | | |
| Velocity of the wave in the second 5.8 mm/µsec | | | | | | | | |
| Incident angle | e from tl | ne first n | nedium | 10. | 4 degrees | | | |
| Resultant refracted angle in medium 2 is 45.027 degrees. | | | | | | | | |
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| | 4 | 5 | 6 | • | | | | |
| | 1 | 2 | 3 | • | | | | |

- 5000 NDT specific questions
- Add your own questions
- Printable or interactive exams

Specifications

The Test Builder is used to create tests with as few or many questions as desired. Filters can be applied to the extensive list of questions to quickly and easily define the type and level of questions to be used. The available Randomize feature tool button will guickly assemble a test of random guestions based on specified content, skill level and number of questions required. Each test set can be customized with a distinctive title, instructor name and introduction and generated exams including corresponding answer sheet can be saved for distribution and future reference. Test your knowledge in any discipline using the Test Me on screen exam. Select the Test Builder to create a custom set of questions which can be compiled and displayed as an on screen exam. Answer the multiple choice questions and have TestMaker grade the test. Questions with an incorrect answer display the incorrect as well as the correct answer and an exam summary including final mark is clearly displayed at the bottom.

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| through a | range of a | angles? | | | | | Principles of P | A – slide 68 Orient: | s6B | | |
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| 371 | ECT | 1 | An eddy | urrent instrument's ability to provide a | reliable outpu | | | 54 | | | |
| 372 | LPI | 1 | Parts pla | Types | Levels | Retz | | 162 | | | |
| 373 | MPI | 1 | For dem | ECT | 1 | Betz | | 313 | | | |
| 374 | RT | 1 | Mutual i | | 2 | in an | h | 213 | | | |
| 375 | UT | 1 | A large (| MPI | 3 | Krantkr | me | 129 | | | |
| 376 | ECT | 1 | "Resona | | 4 | ECM | | 54 | | | |
| 377 | LPI | 1 | Inspectio | WHMIS | | Betz | | 163 | | | |
| 378 | MPI | 1 | For best | MATH | h A.C. and pas | Beta | | 314 | | | |
| 379 | RT | 1 | Mutual i | TOFD | | Jaundn | 0 | 213 | | | |
| 361 | ECT | 1 | Stripcha | Phased-Array | rding eddy cur | ECM | | 52 | Although light sen | | |
| 362 | LPI | 1 | Contami | NDT-Math | | Beta | | 159 | | | |
| 363 | MPI | 1 | The adva | M&P-Properties | netization is | NDT Ha | hdb | 32 | | | |
| 364 | RT | 1 | The prac | M&P-Metallurgy + | enote electric | Jaundri | 0 | 87 | | | |
| 365 | UT | 1 | The func | The survey of a piezoelectric of | 😭 😭 | Krautkr | me | 126 | | | |
| 366 | ECT | 1 | In the ba | ic 📽 ly 🖵 rent machine, the oscillato | 1 | | | 53 | | | |
| 367 | LPI | 1 | Wet dev | oper can be agitated using a | OK Can | | | 161 | | | |
| 368 | MPI | 1 | The mag | etic flux in a part increases as app <mark>resed</mark> | OK Can | icei | | 309 | | | |
| 369 | RT | 1 | The energy | y acquired by an electron accelerated | across a potent | Juanan | du 👘 | 92 | | | |
| 370 | UT | 1 | The ratio | ratio of vibration amplitude at resonance frequency to the Krautkrame | | | | | | | |
| 380 | UT | 1 | Resonance | nance peaks at frequencies of odd numbered multiples of Krautkrame | | | | | | | |
| 381 | ECT | 1 | Probe sel | election (size and test frequency) are determined by wh ECM | | | | | Probes are usually | | |
| 382 | LPI | 1 | Inspectio | on tables under the black light should be kept clean to Betz | | | | 166 | | | |
| 383 | MPI | 1 | Small par | rts can be demagnetized in multiple lots by passing th Betz | | | | | | | |
| 384 | RT | 1 | If the tran | nsformer ratio is greater than 1 it is said to be a(n) Jaundrell | | | | | | | |
| 385 | UT | 1 | In pulse- | echo testing there is an advantage to using short puls Krautkrame | | | | | | | |
| 386 | ECT | 1 | Which of | the following variations would not be | | 55 | | | | | |

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| ESTestMaker Answers | * | | | | | | | | | |
| An eddy current instrument's ability to provide a reliable output signal as a function of the inspection speed is based on the instrument's A frequency response | | | | | | | | | | |
| Parts placed in a drier after wet developer is applied should be positioned so A fillets and recesses drain | | | | | | | | | | |
| For demagnetizing large parts, field reversals are usually A lower frequency than for small parts | | | | | | | | | | |
| Mutual induction is used in which part of an x-ray machine C high voltage transformer | | | | | | | | | | |
| 5. A large Q factor indicates B narrow bandwidth | | | | | | | | | | |
| "Resonance" in the circuit used by crack detectors results from a balance in inductance and capacitance. A coil, cable | | | | | | | | | | |
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| Ready 6 Questions Selected for Test 6 Records in Current View | .: | | | | | | | | | |



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