



## **NDT** *Consultancy Services Inc.*

Training ♦ Consulting  
Auditing ♦ Inspection

**NDT Consultancy Services Inc.** provides classroom training, certification, auditing, inspection, specialized witness services and assisting in development of an entire Inspection Program and Level III consulting services in Non-Destructive Testing (NDT) for various industrial applications. We provide the necessary information and resources to complete your quality task through our trained, certified and well experienced staff, within a specified time period.

### **Training**

NDT Consultancy Services Inc. provides classroom training and examination to meet employer written practice and internationally recognized certification schemes. We are providing training in Ultrasonic Testing (UT), Eddy Current Testing (ET), Magnetic Particle Testing (MT), Liquid Penetrant Testing (LPT), Radiographic Testing (RT) and Visual Testing (VT) at our training location in Houston TX .Onsite training and certification is also provided at customer facility.

### **Certification**

NDT Consultancy Services Inc. provides level I and level II certification examination to meet the requirements of ASNT SNT-TC-1A, CP-189 and customer specific written practice.

### **Consulting**

NDT Consultancy Services Inc. provides consulting, preparing procedure, written practice, third party Level III Services, witness services, WPS/PQR Review and other QA/QC services. Witness services by Level III, Level II and CWI inspector. The Level III Services are available in the area of Radiography Testing (RT), Ultrasonic Testing (UT), Eddy Current Testing (ET) Magnetic Particle Testing (MPT), Liquid Penetrant Testing (LPT) & Visual and Optical Testing (VT)

### **Third Party Audit**

Third party internal and supplier audit shall be conducted as per code, standard (ISO 9001-2000 Quality System module) or client's requirement. Checklists are prepared according to ASTM E1359 - "Standard Guide for Surveying Nondestructive Testing Agencies" and ISO requirements. Audit report includes audit finding, major area of concern, and recommendation for corrective and preventive action.

## *Specialized Quality NDT Inspection*

NDT Consultancy Services Inc provides highest quality NDT Inspections. Specialized inspection in steel industries, pressure vessels, petrochemicals, oil and gas equipment through staff of Level III, Level II and CWI Inspectors. NDT Inspection services are available in Ultrasonic Testing (UT), Eddy Current Testing (ET), Magnetic Particle Testing (MPT), Liquid Penetrant Testing (LPT), Visual Testing (VT) and Radiographic Film Interpretation.

### **Ultrasonic Testing**

Ultrasonic Shear Wave testing of welds as per ASME Sec. VIII, AWS D1.1 and other codes/specifications. Crack detection and sizing in welding, casting, forging and rolling product.



### **Magnetic Particle Testing**

Visual and Fluorescent Magnetic Particle Testing using Yokes and Coil methods, Dry and wet type magnetic particles inspection

### **Liquid Penetrant Testing**

Visual and Fluorescent, Solvent removable and water washable penetrant testing as per different codes and specifications

### **Visual & Optical Inspections**

Visual inspection of structural welds as per AWS D1.1, Oil and gas manufacturing equipments, rolling product, and other power and processing equipment as per different code/standard and engineering specifications

### **Eddy Current Testing**

Eddy Current Testing of services component , overhaul facilities, heat exchanger, other component where service discontinuities are required to inspect and sorting of material by conductivity checking.

### **Radiographic Film Interpretation**

Radiographic film interpretation as per ASME Section VIII Division I UW 51 and UW 52, API 5L, API 1104, AWS D1.1 and other codes and specification used in engineering practices

## **NDT Training, Education and Experience Requirement for Initial Qualification as per SNT-TC-1A, 2006**

Candidates for certification in NDT should have sufficient education, training and experience to ensure qualification in those NDT Methods in which they are being considered for certification.

### **Levels of Qualification as per SNT-TC-1A, 2006**

**Level I:** Qualified to properly perform specific calibrations, specific NDT, specific evaluations for acceptance or rejection determinations according to written instruction and to record results. A NDT Level I personnel should receive necessary instruction and supervision from a certified NDT Level II or III individual

**Level II:** Qualified to set up and calibrate equipment and interpret and evaluate results with respect to applicable codes, standards and specifications. Should be thoroughly familiar with scope and limitations of methods for which qualified and should exercise assigned responsibility for on-the-job training and guidance of trainees and NDT Level I personnel. He should be able to organize and report the results.

**Level III:** Qualified to develop, qualify and approve procedures, establish and approve techniques, interpreting codes, standards, specification and procedure and designate the particular NDT Methods, techniques and procedure to be used. Should have sufficient practical background in applicable materials, fabrication and product technology to establish techniques and acceptance criteria when one are otherwise available. A NDT Level III Personnel should be capable of training and examining Level I and II personnel.

**Education** - Minimum High school or Equivalent

**Training** - Organized Class Room Training Program with required hours. The training program should include sufficient examinations to ensure understanding of necessary information (Section 7.0 of SNT-TC-1A, 2006)

**Experience:** Experience as per section 6.3 and to be verified by Employer.

**Vision Examination** - Near vision Acuity and Color Contrast Differentiation should be performed annually (Section 8.2 of SNT- TC-1A, 2006).

**Examinations:** Administration and Grading in General, Specific and Practical with minimum number of questions. (Section 8.0 of SNT-TC-1A, 2006)

**NOTE:** Certification of all levels of NDT is the responsibility of the employer (9.1 of SNT-TC-1A, 2006)

**Recommended Initial Training and Experience Levels as per  
SNT-TC-1A**

Method	Level	High School GED or Equivalent	2 Years Engg. or Tech. School	Min. Work Experience (Hours)	Total Hours in NDT	Experience Level (Months)
PT	I	4	4	70	130	1
	II	8	4	140	270	2
MT	I	12	8	70	130	1
	II	8	4	210	400	3
RT	I	40	30	210	400	3
	II	40	35	630	1200	9
UT	I	40	30	210	400	3
	II	40	35	630	1200	9
ET	I	40	30	210	400	3
	II	40	35	630	1200	9
VT	I	8	4	70	130	1
	II	16	8	140	270	2

\* For other information please refer table 6.3.2 A, B and notes below table

**Training and Experience Levels for Level II Limited Certification**

Method	Limited Certification	Technician Starting Point	Formal Training	Min. Required Exp. (Hours)
RT	Film Interpretation	Trainee	18	22
	Film Interpretation	Level I	2	22
	Digital Radiography	Trainee	32	175
UT	Digital Thickness	Trainee	8	40
	A-Scan Thickness	Trainee	24	175

**Non- Radiographers**

Interpretation of Radiographs- total =22 hours  
 Artifacts - 2 hours  
 Castings- 6 hours  
 Weldments- 14 hours

**Radiographers** (Certified RT Level I) - Refresher Instruction - 2 hours

**Recommended Initial Training and Experience Levels as per  
NAS 410**

Method	Formal Training Hours			Experience Time in Hours*		
	Level 1	Level 2 with Level 1 certification	Level 2 without Level 1 certification	Level 1	Level 2 With Level 1 certification	Level 2 without Level 1 certification
PT	16	16	32	130	270	400
MT	16	16	32	130	400	530
ET	40	40	80	400	1200	1600
UT	40	40	80	400	1200	1600
RT	40	40	80	400	1200	1600
IRT	20	40	60	200	600	800
ST	20	40	60	200	600	800

\* Experience in multiple methods may be accumulated simultaneously. Experience in a method must be at least half this time when remaining time is spent working or training in other NDT methods when approved by the responsible Level 3 or NANDTB

## **Type industries where NDT methods are used extensively**

### **Refineries**

Non-Destructive Testing for reliable inspection and interpretations of service damage in the equipments over a period have provided adequate fitness for purpose and plant safety. Conventional methods such as RT, UT, MT , PT, VT , EMI and Special advanced NDI like TOFD, IRIS, AUS LFET, AET, RFET, OLCM etc. have been adopted at regular intervals during plant turn around shutdown.

### **Petrochemicals**

One major application for Non Destructive Testing (NDT) in the petrochemical sector is the inspection of welds in pipe work, both for offshore and onshore line pipe for gas and oil, to pipe work and valve gear on refineries and petrochemical plants.

### **Nuclear Plant**

NDT is the basic technique for both detecting and sizing large flaws and monitoring material degradation. Consequently, it is a fundamental element of nuclear plant maintenance and its effectiveness influences the maintenance performance.

### **Aerospace**

Non destructive inspections (NDI) are still significant means to fulfill the stringent quality requirements such as structure with higher fatigue life (endurance), higher damage tolerance capability and higher corrosion resistance.

### **Steel Plant**

Non Destructive Testing method such as ultrasonic testing, Radiographic Testing, Radioscopic Testing Magnetic Particle Testing, Liquid Penetrant and Eddy current testing is largely used in plate, welded and seamless pipe industries for detection of planar, volumetric and oblique oriented larges size flaws.

### **Shipbuilding**

NDT methods are used for structural and weldment testing, Hull and bulkhead thickness measurement, engine components testing and corrosion of bulkheads. These methods are applied for raw material, in-process, final and in-service inspection of weldment and rotary parts. UT, RT, MT, PT methods are extensively used in ship building industries.

## NDT Training Fees

Training will be provided as per ASNT SNT-TC-1A and following rates are applicable for scheduled training in our Houston location.

Course Description	Level of Certification	Hours	Days/weeks	Year-2010	Special
Ultrasonic Digital Thickness (Limited Certification)	Level II	8 hrs	1 Day	\$375	
Liquid Penetrant Testing (PT)	Level I and II	16 hrs	2 Days	\$575	
Radiographic Film Interpretation (Limited Certification)	Level II	24 hrs	3 Days	\$675	
Ultrasonic A-Scan Thickness (Limited Certification)	Level II	24 hrs	3 Days	\$675	
Magnetic Particle Testing (MT)	Level I and II	24 hrs	3 Days	\$675	
Visual Testing (VT)	Level I and II	24 hrs	3 Days	\$675	
Ultrasonic Testing (UT) or Radiographic Testing (RT)	Level I	40 hrs	5 Days (1 Week)	\$1050	
Ultrasonic Testing (UT) or Radiographic Testing (RT)	Level II	40 hrs	5 Days (1 Week)	\$1050	
Eddy Current Testing (ET)	Level I	40 hrs	5 Days (1 Week)	\$1150	
Eddy Current Testing (ET)	Level II	40 hrs	5 Days (1 Week)	\$1150	
Introduction to NDT	General NDT	40 hrs	5 Days (1 Week)	\$1150	
Package # 1- Basic NDT Technician with UT-II (Ltd)**	UT-II (Ltd), MT-I&II, PT-I&II	64 hrs	8 Days (1.5 Weeks)	\$1925	
Package # 2 - Basic NDT Technician	UT-I, MT-I&II and PT-I&II	80 hrs	10 Days (2 Weeks)	\$2300	\$2250*
Package # 3 - NDT Technician	UT-I&II, MT-I&II, PT-I&II, VT-I&II	144 hrs	18 Days (3.5 Weeks)	\$4025	\$3900*
Package # 4 - NDT Technician with RT-II (Ltd)	MT, PT, UT, VT I&II, RT II (Ltd)	164 hrs	20 Days (4 Weeks)	\$4700	\$4500*
Package # 5 - NDT Technician with RT-II (Ltd) & ET	MT, PT, UT, VT, ET I&II and RT II (Ltd)	244 hrs	30 Days (6 Weeks)	\$7000	\$6500*

## NDT Training Fees (cont)

NDT Training fees for scheduled classes in Houston office is as following and these courses will meet the requirement of NAS 410

Course Description	Level of Certification	Hours	Days/weeks	Year-2010
Magnetic Particle Testing	Level II	32 hrs	3 Days	\$995
Liquid Penetrants Testing	Level II	32 hrs	3 Days	\$995
Ultrasonic Testing	Level I	40 hrs	5 Days	\$1150
Ultrasonic Testing	Level II	40 hrs	5 Days	\$1150
Eddy Current Testing	Level I	40 hrs	5 Days	\$1150
Eddy Current Testing	Level II	40 hrs	5 Days	\$1150

**Note:**

1. \* Rates are subject to change. Course Fee shall be paid in advance.
2. \*Special rates are applicable for the courses starting 1 March 2010 and for limited time only.
3. \*Special rate are only applicable for package and payment made by check or cash only not by online credit /davit card payment.
4. \*\* A Scan Ultrasonic Thickness - Limited Level II certification

### **Refunds and Cancellation Policy:**

1. If course is canceled by NDTCS, all amount of course fees will be refunded.
2. If participant cancels within 15 working days prior to starting of course, all amounts of course will be refunded.
3. If participant cancels between 6 & 14 working days prior to starting day of the course, only 50% of the course fees will be refunded.
4. No refunds will be given for cancellation within 5 working days of the course starting.
5. There will be a \$ 50 service charges up on the refunds of fees when payment made by Credit card

- **In-House Training (Client Location)**

Training is also available at the client's location. In-House training can be scheduled as required. Please call (832) 237-2800 for In-house training rates.

- **Training can also be scheduled on an "as needed basis."**

## NDT Training Schedule

NDT Training Schedule for Level I and Level II certification as per SNT-TC-1A and NAS 410 requirements

**Year - 2010**

Method	Level	Hours	Scheduled Date	Status
<a href="#">Magnetic Particle Testing</a> per SNT-TC-1A	I & II	24	Jan 4 - 6	Register Register Register Register Register Register
	I & II	24	Feb 1 - 3	
	I & II	24	Mar 1 - 3	
	I & II	24	Apr 5 - 7	
	I & II	24	May 3 - 5	
	I & II	24	May 31- Jun 2	
	I & II	24	Jul 5 - 7	
	I & II	24	Aug 2 - 4	
<a href="#">Magnetic Particle Testing</a> per NAS 410 Every Day 11 Hours from 7.00 AM to 6.00 PM	I & II	32	Jan 4 - 6	Register Register Register Register Register Register
	I & II	32	Feb 1 - 3	
	I & II	32	Mar 1 - 3	
	I & II	32	Apr 5 - 7	
	I & II	32	May 3 - 5	
	I & II	32	May 31- Jun 2	
	I & II	32	Jul 5 - 7	
	I & II	32	Aug 2 - 4	
<a href="#">Liquid Penetrant Testing</a> per SNT-TC-1A	I & II	16	Jan 7 - 8	Register Register Register Register Register Register
	I & II	16	Feb 4 - 5	
	I & II	16	Mar 4 - 5	
	I & II	16	Apr 8 - 9	
	I & II	16	May 6 - 7	
	I & II	16	Jun 3 - 4	
	I & II	16	Jul 8 - 9	
	I & II	16	Aug 5 - 6	
<a href="#">Liquid Penetrant Testing</a> per NAS 410 Every Day 11 Hours from 7.00 AM to 6.00 PM	I & II	32	Jan 7 - 9	Register Register Register Register Register Register
	I & II	32	Feb 4 - 6	
	I & II	32	Mar 4 - 6	
	I & II	32	Apr 8 - 10	
	I & II	32	May 6 - 8	
	I & II	32	Jun 3 - 5	
	I & II	32	Jul 8 - 10	
	I & II	32	Aug 5 - 7	
<a href="#">Ultrasonic Testing</a> per SNT-TC-1A & NAS 410	I	40	Jan 11 - 15	Register Register Register
	I	40	Feb 8 - 12	
	I	40	Mar 8 - 12	
	I	40	Apr 12 - 16	

	I	40	May 10 - 14	Register
	I	40	Jun 7 - 11	Register
	I	40	Jul 12 - 16	Register
	I	40	Aug 9 -13	Register
<u>Ultrasonic Testing</u>	II	40	Jan 18 - 22	Register
	II	40	Feb 15 - 19	Register
	II	40	Mar 15 - 19	Register
per	II	40	Apr 19 - 23	Register
SNT-TC-1A & NAS 410	II	40	May 17 - 21	Register
	II	40	Jun 14 - 18	Register
	II	40	Jul 19 - 23	Register
	II	40	Aug 16 - 20	Register
<u>Visual Testing</u>	I & II	24	Jan 25 - 27	Register
per	I & II	24	Feb 22 - 24	Register
SNT-TC-1A	I & II	24	Mar 22 - 24	Register
	I & II	24	Apr 26 - 28	Register
	I & II	24	May 24 - 26	Register
	I & II	24	Jun 21 - 23	Register
	I & II	24	Jul 26 - 28	Register
	I & II	24	Aug 23 - 25	Register
<u>Radiographic Film Interpretation</u>	II	20	Jan 28 - 29	Register
(Limited) per	II	20	Feb 25 - 26	Register
SNT-TC-1A	II	20	Mar 25 - 26	Register
	II	20	Apr 29 - 30	Register
	II	20	May 27 - 28	Register
	II	20	Jun 24 - 25	Register
	II	20	Jul 29 - 30	Register
	II	20	Aug 26 - 27	Register
<u>Ultrasonic Testing - A Scan</u>	II	24	Jan 11 - 13	Register
<u>Thickness</u> (Limited) per	II	24	Feb 8 - 10	Register
SNT-TC-1A	II	24	Mar 8 -10	Register
	II	24	Apr 12 - 14	Register
	II	24	May 10 - 12	Register
	II	24	Jun 7 - 9	Register
	II	24	Jul 12 - 14	Register
	II	24	Aug 9 -11	Register
<u>Digital Radioscopy (Limited)</u>	II	32	Jan 28 - 30**	Register
per	II	32	Feb 25 - 27**	Register
SNT-TC-1A	II	32	Mar 25 - 27**	Register
(Weekend Classes)	II	32	Apr 29 - 1 May **	Register
	II	32	May 27 - 29**	Register
	II	32	Jun 24 - 26**	Register
	II	32	Jul 29 - 1 Aug**	Register
	II	32	Aug 26 - 28**	Register

Eddy Current Testing per SNT-TC-1A & NAS 410	I	40	Jan 18 - 22	<a href="#">Register</a>
	I	40	Feb 15 - 19	<a href="#">Register</a>
	I	40	Mar 15 - 19	<a href="#">Register</a>
Eddy Current Testing per SNT-TC-1A & NAS 410	II	40	Jan 25 - 29	<a href="#">Register</a>
	II	40	Feb 22 - 26	<a href="#">Register</a>
	II	40	Mar 22 - 26	<a href="#">Register</a>

\* 12 Hours every day

\*\* Saturday

\*\*\* Sunday

Note:

1. Training dates are subject to change or cancellation and solely depend on the availability of instructor.
2. Classes will be scheduled up on meeting the minimum threshold of three student
3. Other Courses are available on request.
4. Registration will be confirmed only upon the receipt of payment.
5. Certification as per NAS 410 and other methods is available; please see the training calendar for schedule.
6. Per NAS 410, MT & PT Classes will be 11 Hours every day from 7.00 AM to 6.00 PM.

Visit our website [www.ndtcs.com](http://www.ndtcs.com) for our training schedule and [on-line registration](#)

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