



# Greater Houston ASNT NEWSLETTER

WINTER 2016 ISSUE

ONLINE AT [ASNTHOUSTON.COM](http://ASNTHOUSTON.COM)



## Do You Know Our Next Technician of the Year?

We know he or she is out there and we're guessing you know who it is!

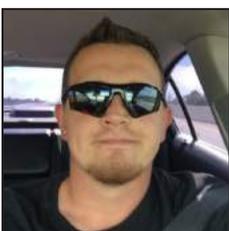
For 2016/17, GHASNT is proud once again to award the winner of the Jerry Fulin Technician of the Year a \$ 2,500.00 for continuing education.

We encourage any supervisor or mentor who knows of a deserving Level I or Level II working technician to nominate him or her. If you think you could be the Technician of the Year, you are invited to apply yourself as well! Not only is it a great honor to be acknowledged with this award, but it's an excellent opportunity to further advance your NDT knowledge, receive recognition and a chance to be nominated for ASNT National Technician of the Year representing the Greater Houston ASNT section in 2017.

**IF YOU HAVE SOMEONE IN MIND OR IF IT'S YOU**, please give Roger Jordan a call at (713)-263-4303 or download the application at [www.asnthouston.com/technician-of-year](http://www.asnthouston.com/technician-of-year). Applying is easy enough and we can help you get through the steps quickly.



**Submission Deadline: March 1, 2016**



### CONGRATULATIONS AGAIN TO OUR 2015/16 RECIPIENT!

**Christopher Chamblee**  
Level 2 in UT, MFL, MT, ET and RT  
NDT Maintenance Supervisor  
Tenaris



## What Questions Should Manufacturers Be Asking About 3D Computed Tomography?

By Shana Telesz, Senior Product Manager, GE Measurement & Control

### Introduction

While computed tomography (CT) scans are common and well-known as a critical evaluation tool in the medical field, they are becoming increasingly important in industrial settings. Three dimensional (3D) industrial CT for non-destructive testing (NDT) has long been confined to the research and development (R&D) environment and its application restricted to structure and defect analysis of high value, complex components and new materials. But imagine an automotive manufacturer being able to fully examine and measure a cylinder head, or an aerospace component manufacturer being able to inspect and measure highly complex turbine blades or parts made by additive manufacturing technologies.

Recent automation, speed, and accuracy developments are driving the migration of CT technology onto the production floor. There, it can be used as a powerful quality control and process optimization tool, providing fast inspection and accurate 3D measurement of components which are difficult to examine by conventional two dimensional (2D) radiography or coordinate measuring machines (CMMs). Because of technological advancements and speed enhancements, the same internal structure visibility provided to medical professionals by CT technology can now be invaluable for manufacturers and inspectors.

### Understanding CT Technology

CT imaging begins with the acquisition of a large number of 2D X-ray images. The acquisition can be through a fan beam, where discrete slices are radiographed as the component is rotated in small angular steps and moved linearly through the fan beam. As a result, the data collected is a series of slices through the component. Alternatively, it can be done by means of a cone beam, where a cone of radiation captures the target piece and takes discrete 2D images as the component is rotated 360 degrees in small steps. Fan beam CT traditionally provides much better results due to minimized scatter radiation artifacts, but can take up to 100 times longer than cone beam CT. For extremely fast scanning of large parts such as cylinder heads, the sample can be moved in the scanner on the inspection table while x-ray tube and multiline detectors rotate around. This inspection method is particularly useful for parts that are cast molded in a foundry, including automotive and engine parts and cylinder blocks. It also can easily inspect compressor blades and valve bodies. In all cases, the accumulated raw data from inspection is then used in reconstruction algorithms to calculate and visualize the volume data.

The basic data-acquisition hardware components of a CT system are a high power source of radiation, a component manipulation table with rotation unit, and an X-ray detector. The quality of the raw data and the accuracy of all subsequent evaluations are significantly influenced by the sharpness of the X-ray images. The sharpness of the X-ray images ultimately depends on the quality of the source and detector and the stability and precision of the manipulation mechanism.

CT developments are not just in the hardware, but also in the speed of volumetric reconstruction, in the ease of operation, in image quality, and in the storage, retrieval, and management of data.

So how do these advancements apply to the production floor and what do manufacturers need to know?

From shortening the prototype process, to reducing processing costs, to getting faster feedback during the production process, the benefits of CT technology are endless. In order to determine whether CT technology is right for their facility, manufacturers must ask the right questions.





### Asking the Right Questions

**What type of parts am I inspecting?** When dealing with critical machinery in the industrial sector, 2D radiography has its limitations. It is sometimes unable to detect, localize, or visualize the indications and internal geometries found in many of today's complex engineering components. 3D CT can effectively inspect metals, composites, plastics, and additives manufactured or 3D printed parts with complex internal structures.

**What percentage of parts do I want to inspect?** Previous CT speeds once limited the number of parts that could be inspected to only a few per shift. Advances in scan time, part manipulation, workflow, and software now allow many more scans per hour – approaching full production inspection.

**How can CT analysis improve my operations?** CT analysis can be useful in assuring product quality, enabling real-time process optimization, and potentially consolidating inspection steps. High quality 3D CT scans and metrology allow manufacturers to compare completed parts to specifications and tolerances with a high degree of accuracy. Automated defect recognition (ADR) software can speed and simplify the pass/fail decision for operators. The increasing speed and production-readiness of CT now allows manufacturers to sample a larger percentage of parts and process the results quickly, which allows for real-time optimization of process parameters, resulting in improved yields, quicker changeovers, and reduced scrap or waste. With 3D data sets available, manufacturers can even consider replacing steps previously analyzed with other technologies into a single operation. Many parts are inspected multiple times with 2D radiography for casting defects and residual materials, in addition to ultrasonic measurement for wall thickness, and sometimes CMM for external measurements. Most of this could be replaced by a single, highly reliable 3D image.

**What type of CT technology would be best for my manufacturing process?** Over the past 15 years, important hardware advancements, including the development of nanofocus X-ray tubes, have allowed focal spots of less than one micron. This has provided higher resolution and clearer images, e.g. for nano-CT evaluation of electronic components. At the same time, high power X-ray sources can penetrate high absorbing objects, purpose-designed component-manipulation mechanisms, and extremely fast detector systems. There have also coincidentally been advances in volume reconstruction packages and associated software, improving the speed of availability of results and facilitating operations. Furthermore, new advances in ADR and 3D metrology for dimensioning with CT, enable more

sophisticated analysis and allow near real-time corrections to the production process. The latest technology advances in scatter correction technology now enable operators to perform fast cone beam CT scans at a high quality level up to hundred times faster than fan beam CT, dramatically increasing CT inspection throughput and precision.

**How will I adapt CT to my production environment?** No longer just for the lab, more rugged CT systems, improved parts handling workflows, bar-code parts scanning, and robotic manipulators have been integrated into today's production CT systems. This allows them to assimilate more seamlessly to the factory floor environment. In fact, the latest innovation in CT brings the technology directly to the production line. Based on proven technology, it offers a new workflow concept for production process control. It features high speed, automatic helix CT, where a gantry with an X-ray tube and a corresponding 64 channel, multi-line detector rotates around the work piece being transported in the system. The reconstructed CT data of the part under examination is automatically evaluated as the next part is loaded in the system. For example, by scanning a cylinder head in 15 seconds, instead of several hours with conventional fan beam CT, the quantitative production quality data is available almost immediately. This allows for fast adjustment of production parameters if any serious defect is detected or any dimension is out of tolerance. This is of vital importance if the work piece is to undergo subsequent production procedures. In this example, one fast CT scanner can be used to optimize the processes of up to 10 production lines. For critical parts, such as complex turbine blades, fully automated CT solutions now allow 100% inspection with just one operator running three or four CT machines. Operators only have to feed boxes with up to 25 blades in the sample holder and press the "Start CT" button.

**Where will I find qualified operators?** At one time you needed an advanced degree to operate a CT system. Now Level 3 experts can set up systems with macros and one-button workflows that make it easier for trained production operators to run CT systems and collect the data. Furthermore, the results and reconstructions can be reviewed remotely by experts who can make determinations about the findings. By fully automating the CT scan and evaluation chain, operator time and influence are minimized. Not only saving operator costs, but also greatly increasing the repeatability and reproducibility of the CT results by minimizing the human factor. In addition, new industrial CT operator and data analyst training courses are emerging to help develop the next generation of CT operators.



## GHASNT SALUTES OUR VETERANS with a SPECIAL NDT OFFER

With gratitude for their service to our country and in recognition of the great professional contribution that many of our veterans have made to the NDT industry, GHASNT invites our military Non-destructive Testing (NDT) personnel to become members with a special offer.

The Greater Houston Section is sponsoring any active duty military or veteran with their first year's membership, a value of \$30.00.

Many NDT practitioners draw on ASNT as a common source for all things related to this profession. The ASNT organization and membership provide a forum for the exchange of NDT technical information, NDT educational materials and programs, and standards and services for the qualification and certification of NDT personnel. ASNT promotes the discipline of NDT as a profession and facilitates NDT research and technology applications.

As an ASNT member, military personnel will receive a complimentary subscription to the monthly journal, Materials Evaluation, and the quarterly newsletter, The NDT Technician. Those choosing the Greater Houston section as their Local Section will also receive a monthly meeting bulletin describing our section's activities, and a quarterly

newsletter with local NDT industry news. Another advantage of membership to ASNT is that you will be in touch with thousands of NDT professionals across the globe. Having an affiliation with the local section, which holds meetings and workshops, also provides the tools and contacts needed to succeed in an NDT career.

**TO LEARN MORE ABOUT ASNT:** please visit [www.asnt.org](http://www.asnt.org) or our GHASNT Section's website at [www.asnthouston.com](http://www.asnthouston.com). Should you have any questions, feel free to contact Becky Judkins ([beckyjudkins10@gmail.com](mailto:beckyjudkins10@gmail.com)) or Jeff Wagner ([jeff@ndtqa.com](mailto:jeff@ndtqa.com)).

**Please share this opportunity with your military NDT Personnel, students and instructor personnel.**

**TO APPLY FOR MEMBERSHIP:**

Use the following link <https://asnt.org/MajorSiteSections/Membership/JoinASNT/PrintableApps.aspx> to fill out a printable application and e-mail it to the Becky Judkins, GHASNT Membership Chair, [beckyjudkins10@gmail.com](mailto:beckyjudkins10@gmail.com) or mail it to our address: The Greater Houston Section American Society for Nondestructive Testing P.O. Box 2602 Houston, TX 77252 for membership submission on your behalf to ASNT.

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	<div style="text-align: center;">  </div> <p style="font-weight: bold; margin-top: 5px;">Jaime Daigle Business/Accounting Manager</p> <p style="font-size: 8pt; margin-top: 5px;">office: +1.281.873.0980 fax: +1.281.873.0981 mobile: +1.832.284.1654 email: <a href="mailto:jdaigle@hellierndt.com">jdaigle@hellierndt.com</a> <a href="http://www.hellierndt.com">www.hellierndt.com</a></p> <p style="font-size: 8pt; margin-top: 10px;">Hellier 16631 West Hardy Street Houston, TX 77060 USA</p> <p style="font-size: 8pt; margin-top: 10px;">Worldwide Training Provider a Rockwood Company</p>	<div style="text-align: center;">  </div> <p style="font-size: 8pt; margin-top: 5px;">Ultrasonic / Thickness / Flaw Detection / Radiography / PMI Dye Penetrant / Mag Particle / AWS/API Inspectors / Drafting / Rope Access</p> <p style="text-align: center; font-weight: bold; margin-top: 5px;">STEPHEN POTTER Rope Access Dept. Manager</p> <p style="font-size: 8pt; margin-top: 10px;">2717 S. RUBY DRIVE, GONZALES, LA 70737</p> <p style="font-size: 8pt; text-align: right; margin-top: 5px;">OFFICE (225) 357-3671 FAX (225) 357-0833 CELL (281) 352-5006 EMAIL: <a href="mailto:Stephen@capitolut.com">Stephen@capitolut.com</a></p>



## Merry and Bright!

With the holiday magic of Amy Hoyt and Bonnie Blanchard, the 2015 Annual Holiday Party at the South Shore Harbour Resort was a seasonal wonderland of good cheer and festive camaraderie. The memories and goodwill from another great year of GHASNT fellowship and progress lingered in the air as 115 members and their guests enjoyed casino night and an abundance of prizes and decorations beautifully presented. Amidst the fun, there was a true spirit of community and charity as attendees once again showed the meaning of giving with their generous donation of 61 toys for the Marine Corps Toys for Tots program.



### Many Thanks to our Casino Prize Sponsors!

- Samsung Flat Screen TV – Donated by Mistras Group
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- Texans football, 4 Tickets & Parking pass – Donated by Team Industrial Services
- Two night stay at Sam’s hotel in Las Vegas – Donated by Casino Parties Unlimited

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# How to Use Welding in Your Design

By John Chen  
Materials Engineer, Schlumberger

## SPEAKER SPOTLIGHT ARTICLE

GHASNT's monthly meetings offer not only great networking opportunities, but also feature many informative talks by industry experts on a range of topics applicable (and helpful!) to our work. To share this useful information with more of our membership, we are pleased to reprint selected excerpts from the presentation of our October speaker, Mr. John Chen. For more detailed information on this topic, please contact John directly at: JChen07@slb.com.

## WHAT YOU WILL LEARN IN THIS LECTURE ABOUT WELDING ENGINEERING:

- Available options to make a weld
- How to make sure weld will work
- How to get reliable welding services
- How to communicate to welding services
- How to communicate to welding personnel what you want
- What you get may not be what you ordered.

### How to Design a Weld

- Start from loading and service conditions
- Engineer the intermediate requirements
  - Weld mechanical properties
- Strength, Ductility, toughness, hardness, fatigue properties
  - Special considerations
- Rigidity, magnetic properties, wear, corrosion, erosion resistance, elevated/low temperature, etc.
  - Other design guidelines
- Manufacturability, maintenance, inspection, transportability, etc.
- Finalize with following practical solutions
  - Type of joint
  - Type of welding material or consumable
  - Weld size
  - Welding procedure

### A Weld Design Can Be:

- Based on experience
  - From other engineering drawings of same or similar, successful parts
  - Use formula / charts / tables in standards / codes
- AWS D1.1
- API Spec 5DP, Spec 6A, Spec 7-1
- ASME BPVC Section VIII, Division 1
- By experiment
  - Pick design using the above criteria as much as possible
  - Produce weld and/or component
  - Lab test and/or field test
- Do not use weld metal with higher than necessary strength
  - Consumables with higher strength usually
    - has inferior weldability therefore more difficult to work with
    - has lower ductility
  - Most time, do not over-match base material's strength

### Welding Processes:

- Heat, pressure or heat + pressure
- Remove barrier and bring atoms together to form coalescence
  - Electric welding
- Arc welding: shielded metal arc welding, gas tungsten arc welding, gas metal arc welding, flux cored arc welding, submerged arc welding, plasma arc welding, electron beam welding
- Resistance welding
- Capacitor discharge welding
  - Mechanic welding
- Friction: Inertia friction welding, friction stir welding

- Chemical welding
- Oxy-fuel: oxy-acetylene welding
  - Brazing / soldering
- Oxy-fuel: oxy-acetylene brazing
- Air-fuel: natural gas brazing, propylene brazing
  - Thermal spray
  - Thermal cutting and gouging

### Selection of Welding Processes

- The more common processes usually are more economical
  - Shielded metal arc welding
  - Gas metal arc welding
  - Gas tungsten arc welding
- Automatic processes are less demanding on personnel
  - Plasma arc welding
  - Friction welding
- Certain processes are capital intensive and hard to justify
  - Friction welding
  - Electron beam welding
  - Certain types of laser beam welding





**Welding Qualifications**

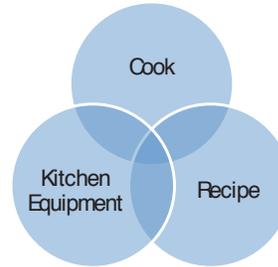
- To make sure a weld works as intended
  - Include several aspects of qualifications
    - Welding procedure qualification
    - Welding personnel qualification
    - Welding equipment calibration
  - Governed by industry codes and standards
    - ASME BPVC Section IX: pressure vessels.
- Most popular in oil and gas industry.
- AWS D1.1: structural
  - API Standard 1104: pipeline
  - ASTM A488: steel castings
- Should be completed prior to production welding start
  - It takes time to complete qualifications
    - Two weeks or more
    - Plan ahead

**Welder Qualification**

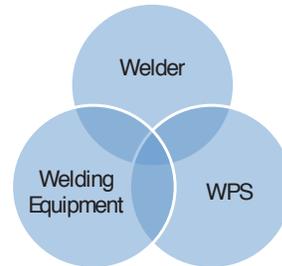
- To make sure welder has what it takes to make a sound weld
  - Physical fitness
  - Mechanic skills
  - Ability to read, understand and follow procedure
- Qualification of welder is documented by certificate
- DT&R welder qualification is managed by Categories.
  - A certificate in one Category usually makes a welder qualified to work in multiple procedures
  - Qualification requirement for each WPS is stated in the WPS
  - ES14 documents are DT&R's Welder Qualification Program
- Welder who get a WPS qualified is qualified to work with that WPS

**Making a Good Weld – a Cooking Analogy**

A Good Dish



A Good Weld



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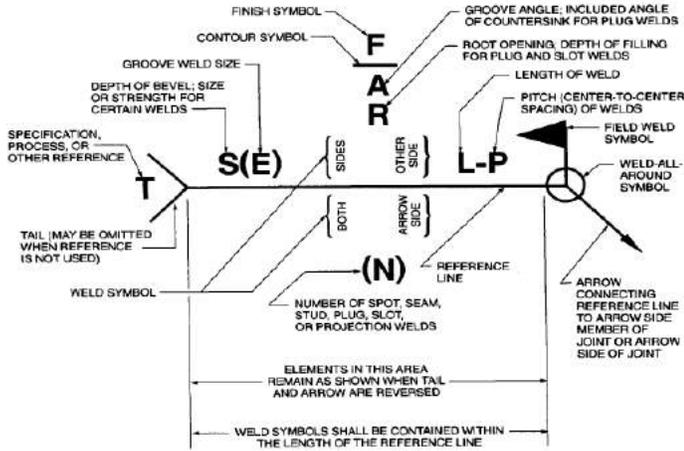
**David Carter**  
TX/NM Regional Manager

**SENTINEL** www.SENTINELNDT.com  
David.Carter@qsa-global.com



# Welding Symbols

- Standard Location of Elements of a Welding Symbol



- To designate type of weld

GROOVE							
SQUARE	SCARF	V	BEVEL	U	J	FLARE-V	FLARE-BEVEL
FILLET	PLUG OR SLOT	STUD	SPOT OR PROJECTION	SEAM	BACK OR BACKING	SURFACING	EDGE

## Supplementary Weld Symbols

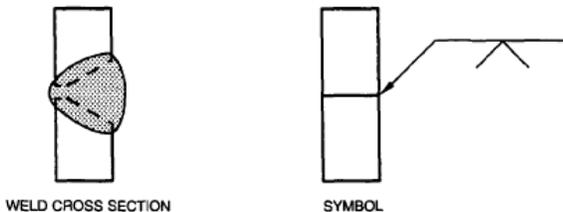
WELD ALL AROUND	FIELD WELD	MELT THROUGH	CONSUMABLE INSERT (SQUARE)	BACKING OR SPACER (RECTANGLE)	CONTOUR		
					FLUSH OR FLAT	CONVEX	CONCAVE

## Rules of Thumb!

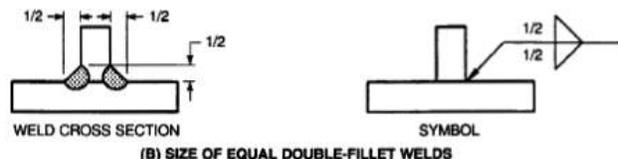
- Do not use welding without justification.
- When you have a problem, consult a professional.
- Many local laws require endorsement from a professional/authority on design of welded structures.

## Using Welding Symbols in Drawing

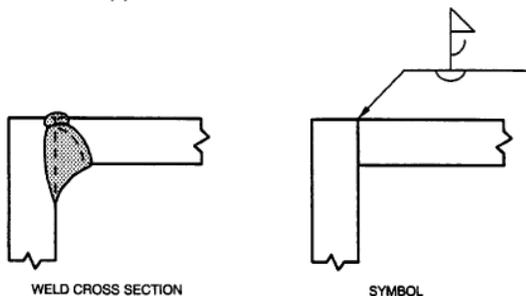
- Examples how to use welding symbols on drawing



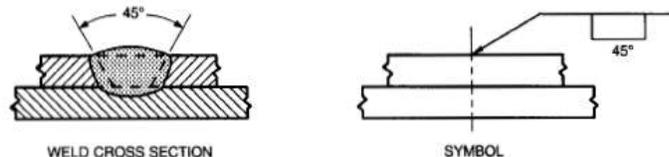
(A) ARROW-SIDE V-GROOVE WELD SYMBOL



(B) SIZE OF EQUAL DOUBLE-FILLET WELDS



(A) BACK OR BACKING, SINGLE-J-GROOVE AND FILLET WELD SYMBOLS



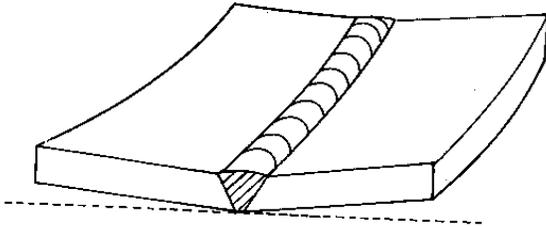
(B) INCLUDED ANGLE OF COUNTERSINK



How to Use Welding in Your Design (continued from page 8)

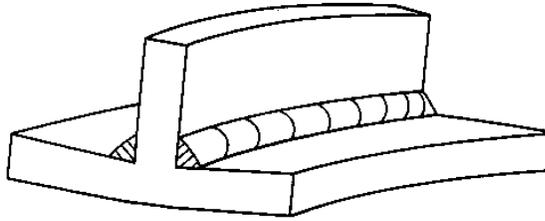
How Do You Know Something is Wrong

When you see this



Uneven heating / cooling

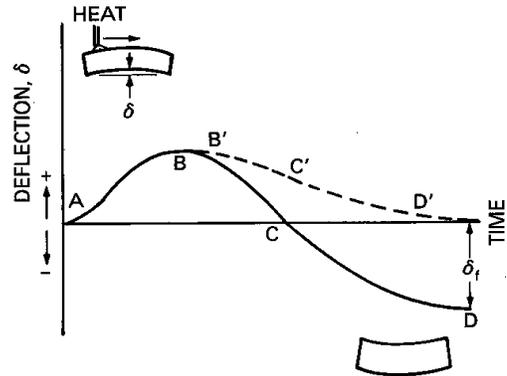
Or this

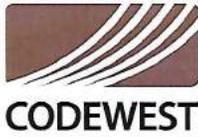


Change of material yield strength at high temperature

Deformation of Plate with Heat Source

- Heating a plate with a heat source traveling across the plate
- Deflection is measured at the middle part of the plate
- Deflection changes with time, while heat travels across the plate
- By the end, the plate deforms, changes shape



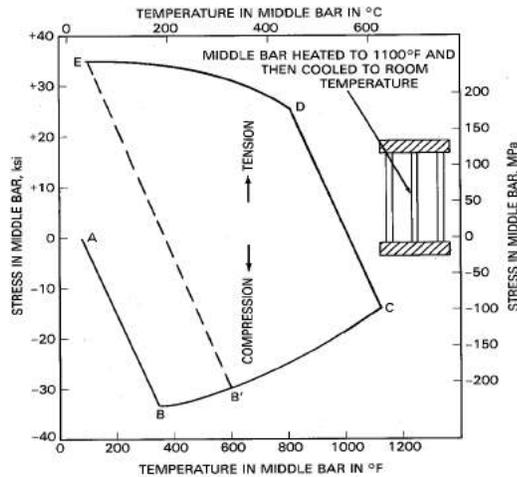
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How to Use Welding in Your Design (continued from page 9)

### Three Bar Experiment

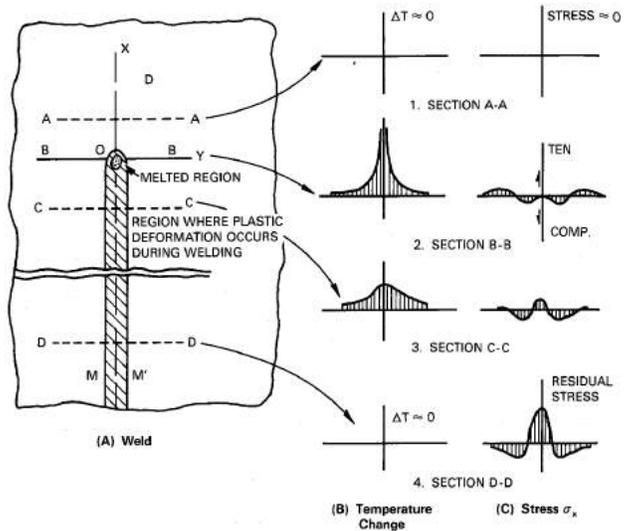
- Evolution of stress in the middle bar when it is heated to 1100 deg F and then cooled to room temperature
- Deposit a weld has a similar effect due to the constrain of the materials next to the weld, which is not heated or heated to temperatures lower than the weld



### Residual Stress & Distortion Control

- Less welding
  - Reduce volume of weld metal
    - Use U-groove instead of V-groove; double V-groove instead of single V-groove
    - Smallest groove angle and root opening
- Do not over heat
- Assembly procedure / welding sequence
- Elastic pre-straining
- Preheating / post weld heat treatment
- Distortion correction
  - Thermal straightening
  - Mechanical straightening

### Distribution of Temperature and Stress



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# Never Stop Learning!

## GHASNT 2015 Fall Education Day

### Eddy Current Surface and Tubing Inspection Methods for Ferrous and Non-Ferrous Materials

Held at the San Jacinto College campus this past September, GHASNT's Fall Educational day featured an 8-hour course on the NDT physics, methodology, equipment and software involved in eddy current surface array and tubing inspection.

Included were eddy current theory and applications for surface eddy current array and tubing inspection using the Eddyfi Ectane 2 Reddi instrumentation and Magnifi software. With Instruction led by Bruce Stetler, Director of Sales at Eddyfi, 14 students got demonstrations, personal instruction and hands-on experience using real surface cracking test specimens and tubing flaws in various materials.

For more information, please contact Bruce Stetler at: [bstetler@eddyfi.com](mailto:bstetler@eddyfi.com) or John Nyholt at: [john.nyholt@bp.com](mailto:john.nyholt@bp.com)



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# GHASNT SHINES AT NATIONAL

## Another Gold!

The ASNT President's Award Program is an annual nationwide initiative intended to promote the successful operation and management of local ASNT sections.

Program achievement levels are as follows:

**Gold:** 10,501 to 14,750 Points

**Silver:** 8,001 to 10,500 Points

**Bronze:** 5,500 to 8,000 Points

Through the tireless efforts and great talents of our GHASNT membership, we are proud to have received gold status for 8 years running!



Becky Judkins proudly accepts the 2015 Gold Award on behalf of GHASNT.

### WHAT'S INVOLVED IN GOING FOR THE GOLD?

Using a points-based system, several areas must be completed and confirmed including:

- Report of Section Officers (1000 Pts.)
- Section Publications & Yearbook (3500 Pts.)
- Section Budget (500 Pts.)
- Advance Program (1000 Pts.)
- Nomination for Awards & Selection Committee (1000 Pts.)
- Membership Growth and Retention (1750 Pts.)
- Adult Education/Training (2500 Pts.)
- Student Outreach (1500 Pts.)
- Section Outreach (1500 Pts.)
- Final Financial Reconciliation (500 Pts.)

**Maximum available points: 14,750**



Representing the strength and vitality of GHASNT, more than a dozen members participated in the ASNT National Fall Conference & Exhibition in Salt Lake City, UT in October, 2015.



## What the heck is an ASNT Fellow?

According to the Merriam-Webster dictionary, the many definitions of "Fellow" include:

- 1: comrade, associate
- 2: an equal in rank, power, or character: peer
- 3: a member of a group having common characteristics; specifically, a member of an incorporated literary or scientific society.

### Doesn't that basically describe all of us as members of ASNT?

Well, yes sure, but no, not really. ASNT National qualifies this further in order to distinguish a very worthy group of its (our) own.

#### An ASNT Fellow is:

A person who is acknowledged and honored for outstanding service in the field of non-destructive testing. Recipients have a history in the fields of research and development, application, teaching and/or management.

A recipient must have demonstrated support for the Society through contributions and participation at the local and/or national level. He/she must also have at least 15 years of professional NDT-related experience, and have been a member of ASNT for not fewer than 10 years.

In addition, membership shall not have been interrupted more than two (2) times with at total interruption time not to exceed two (2) years.

### At GHASNT, we are proud to have a strong lineage of ASNT Fellows among us. Are you next?



Among a distinguished group of peers, GHASNT member John T. Iman is honored as an ASNT Fellow.



David Bajula CEng  
General Manager - ANDE  
ASNT/ACCP Level III - UT, RT, MT, PT, VT, ET, LT, IR, ML  
AWS CWI, API-QUTE, QUPA, 510

## Volunteering on the Board of Directors

With his deep commitment to the NDT industry and promoting its safety and advancement, Dave Bajula, like many of our GHASNT members, has made participation in ASNT a priority, not only locally but nationally as well.

In recent years, Dave, with the backing of his employer, has moved through the ranks of ASNT National's Board of Directors. For the 2015/2016 term, he was elected as Vice President.

We asked Dave about the value and importance he sees in funneling his energy, experience and know-how into his positions within the ASNT leadership.

**GHASNT:** What drove you to get involved with ASNT?

**DAVE:** Personally, I was recruited by Al Baker to join GHASNT. Al, an icon in our NDT community, took me aside and said "Dave, you really need to get involved in our Houston section. You have a lot of passion, present well and I believe you can contribute". It was a wakeup call to get involved and with someone like Al Baker encouraging me, how could I not do it?

**GHASNT:** For those thinking about volunteering in ASNT, what would you say to them about your experience?

**DAVE:** Looking back over the years and also ahead in the future, I cannot imagine NOT being a part of an organization so dedicated to "creating a safer world". The importance and significance of what we do (NDT) cannot be easily put into words. For me, it is an honor to work with ASNT, both locally and nationally, and I would extend to all NDT professionals a "call of duty" to volunteer and contribute in any way you can.



## ASNT Fellows from GHASNT

John T. Iman	2015	Danny Keck	2002	Roderic Stanley	1991	Don Childers	1987	Robert Spinetti	1979
Greg Hudkins	2012	Morteza Jafari	1998	Hal Dale	1991	Robert East, Jr.	1985	Irving Boyce	1979
Skip Hoyt	2011	Nat Faransso	1997	Donald Bray	1988	Dave Culbertson	1985	Joe Marx	1976
Jerry Fulin	2005	Chuck Woodruff	1994	Syl Viaclovsky	1987	Charles Sherlock	1982	Bob Dunn	1974
Dave Bajula	2005	Bob Cameron	1992	Frank Malek, Jr.	1987	Lee Stroud	1981		



*GHASNT Shines At National (continued from Page 13)*

## Morteza K. Jafari Receives Charles N. Sherlock Meritorious Service Award

A long-standing member of GHASNT, Morteza was honored at the ASNT Fall Conference as the 2015 recipient of the Charles N. Sherlock Meritorious Service Award.

Standing before a crowd of several hundred representing the worldwide NDT community, he accepted with a meaningful and heartfelt speech.

He has graciously agreed to GHASNT's request to allow us to reprint it here in this newsletter in order to share his message with all of the members of our local section.



Morteza K. Jafari, PE, Director of Integrity Management Services at ABS Consulting, receives award from ASNT President L. Terry Clausing.

### In Morteza's Words

*"Let me start by expressing that I am humbled and honored to receive this award.*

*I would like to thank the ASNT organization and its entire membership for creating the opportunity for me to volunteer my time and efforts in support of making the world a safer place for everyone. I further would like to thank my spouse for her support and allowing me to take a few hours a week from our family time to provide these volunteer services. Finally, I would like to thank the awards committee to select me to be honored with this award.*

*I am given this award in memory of Mr. Charles N. Sherlock. Chuck lived in Houston, Texas and volunteered a lot of his life to the NDT world especially in the field of leak testing. He was the author of the first two editions of the ASNT Leak Testing Handbooks. All of the Greater Houston section of ASNT who knew Chuck attest that he was a very humbled and helpful man. Let me share a quick memory of Chuck just about couple of months before his departure from our world.*

*I received a call to perform a leak testing project and since my knowledge in this field was minimal, I decided to contact Chuck.*

### About this Award

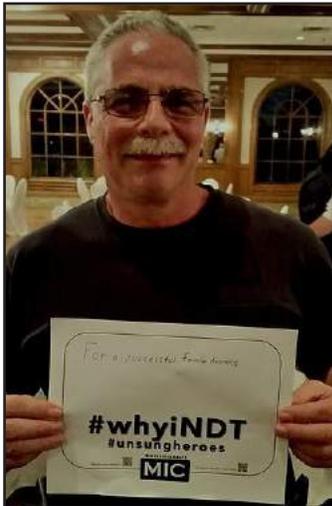
This prestigious award was created to recognize an individual's outstanding volunteer service to the Society, through single or aggregate activities. To be eligible, an individual must have performed outstanding voluntary service to the Society outside of an elected office or paid services.

*When I called him he immediately volunteered to help me even though he did not know me very well. He asked me to go to his home in an area north of Houston. I met his wife there and then he took me to his private library where he kept many of his books and notes there. He generically told me to go over the library and take anything that I thought would help me with my project. He told me to take a copy of the documents that he had duplicate and bring back the original documents when I made a copy for myself. He taught me to be generous when sharing the technical knowledge and know-how with others.*

*May GOD bless his soul.  
Thank you again."*



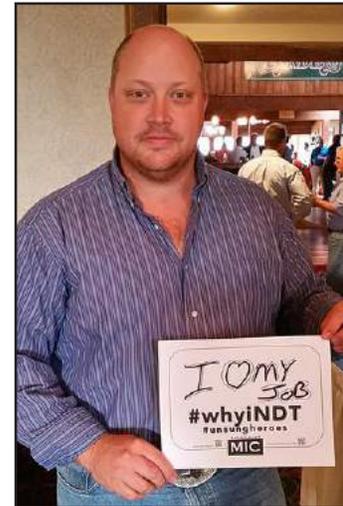
# #whyINDT



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*"Continued Learning!"*



*"I Love My Job"*

Everyone in the NDT industry has their reason why they have built a career in NDT. The social media awareness campaign #whyINDT, brought to us by Miceli Infrastructure Consulting (MIC), highlights the NDT industry and its practitioners as the unsung heroes they are. Here are some more of the "whys" of many of our own GHASNT members.

**WHY DO YOU NDT? Send an e-mail today to:**  
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## Professional Progress

GHASNT would like to congratulate the following new certificate holders (August – December 2015). Well done!

Program Type	Method	Name	
ACCP Level II	UT	Kass	Allen
ACCP Level II	VT	Allen	Gress
ACCP Level II	MT	Ryan	Guess
ACCP Level II	MT	Michael	Hartz
ACCP Level II	RT	Arnold	Jones Jr.
ACCP Level II	VT	Gerardo	Lara
ACCP Level II	VT	David	Marrow
ACCP Level II	VT	Dave	Ramnanansingh
ACCP Level II	VT	Richard	Rushing
ACCP Level II	VT	William	Viles
ASNT NDT Level II	VT	Brandon	Dove
ASNT NDT Level III	UT	Thomas	Engel
ASNT NDT Level III	MT	Gianni	Gangeri
ASNT NDT Level III	RT	Scott	Garrett
ASNT NDT Level III	RT	Eliezer	Maya
ASNT NDT Level III	UT	Rickmanuel	Okere
ASNT NDT Level III	RT	Christopher	Plemons
ASNT NDT Level III	ET	Kenny	Schanlaub
ASNT NDT Level III	MT, PT	Randy	Tankersley
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*Inspectioning Journal article (continued from page 3)*

**How will I manage the large volumes of data?** A single 3D CT scan can generate 20GB or larger volumes of data. Advanced data processing, storage, and archiving solutions are available to make it possible to manage, share, and evaluate these large data sets. Including data management as a part of the initial project scope is critical to ensuring a successful transition to production CT.

**Conclusion**

By asking the right questions and considering the immediate benefits CT could provide a production facility, manufacturers could drastically enhance industrial inspection processes. Now designed for high productivity and limited downtime, modern industrial components have more intricate features and require advanced inspection techniques. CT provides greater accuracy and speed, increasing productivity and helping production floor operators to meet quality control challenges in a wide range of industrial applications, both in defect detection and in metrology. CT is a continuously evolving technology, and the 3D application for industrial inspections will drastically improve the accuracy of indications, keep machines in operation longer, and ensure the quality control for production process optimization becomes more precise and effective.

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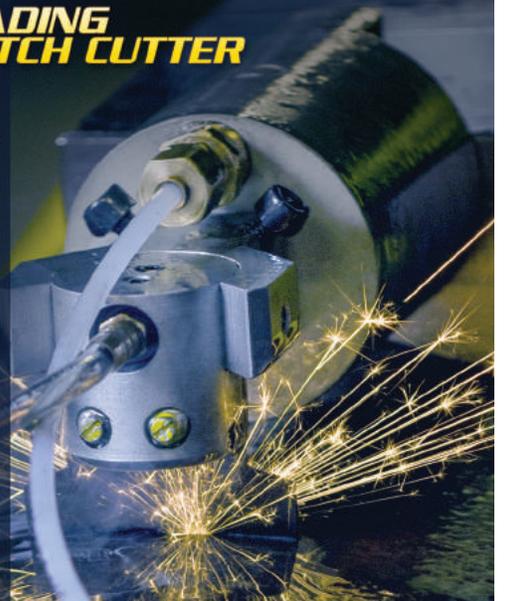
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## Thinking BIG in our small world

January 13, 2016	Section Meeting @ Brady's Landing Jason Landers and Matt Hendrix - Top Notch EDM "Calibration Standards in UT"
February 10, 2016	Spouses Night @ Brady's Landing John O'Brien - Chevron "Samples for the Advancement of NDE Skills"
February 16-18, 2016	NDTMA Conference - Las Vegas, NV (ndtma.org)
March 1-20, 2016	Houston Livestock Show & Rodeo (rodeohouston.com)
March 6-10, 2016	NACE Corrosion Expo - Vancouver, BC (nace.org)
March 9, 2016	Awards Night @ Brady's Landing Scholarships & Jerry Fulin Technician of the Year
April 11-14, 2016	25 <sup>th</sup> ASNT Research Symposium - New Orleans, LA (asnt.org)
April 20, 2016	Vendors Night @ South Shore Harbour
April 21, 2016	PMIES Expo & Conference - Pasadena, TX (pmies.org)
April 22, 2016	Golf Outing @ Timber Creek Golf Club
May 11, 2016	Past Chairs Night @ Brady's Landing Jonathan Martinez - Panel Discussion
May 24-27, 2016	AFPM Reliability & Maintenance Conference San Antonio, TX (afpm.org)
June 2016	Family Day (Date & Location to be determined)
June 13-17, 2016	World Conference on NDT - Munich, Germany (wcndt2016.com)

### Proposed 2016 / 2017 Election Slate

As per our GHASNT bylaws, we are publishing our proposed slate of officers for the Section for next fiscal year beginning July 1, 2016.

These will be announced at our February meeting and any additional nominations may be made to Section Chair Jeff Wagner, supported by 10 member signatures, until March 1, 2016. The final slate will be voted on by the membership at our March 9, 2016 meeting.

- **Chair of the Board:** Jeff Wagner
- **Section Officers:** Tim Roach, Jeff Hocker, John Huffman and Becky Judkins
- **Directors-at-Large (1 Year):** Rick Arnett, Bonnie Blanchard, Hunter Thompson, Justin Lecourias
- **Directors-at-Large (2 Years):** Jerry Fulin, Deal Moore and Jonathan Martinez

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Vendors Night	Tim Roach	Tenaris	936-523-3150	<a href="mailto:troach@tenaris.com">troach@tenaris.com</a>
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