



WJTA AUTOMATION TRAINING

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WHY HYDROBLASTING

- Most process operations create fouling deposits such as sludge, rust and scale that build up on the surface of process equipment.
 - Refineries - Chemical Plants
 - Utilities - Upstream Oil and Gas
 - Steel Mills - Paper Mills
- Eventually, passageways get restricted to where they can get plugged solid, stopping process reliability.
- Hydroblasting is one of the quickest and best methods of removing these deposits.
 - 10,000psi - 40,000psi



HYDROBLASTING FORCE



- Water leaving a Hydroblast nozzle has a tremendous amount of pressure...

- Car Wash Around 1,200 PSI
- Pressure Washer 1,500-2,500 PSI
- Hydroblast Pump 10,000 – 40,000 PSI

PSI = Pounds Per Square Inch

- Also, hydroblasting uses more water...

- Car Wash/Pressure Washer Max 5 GPM
- HB – 10K 10 GPM
- HB – 20K 8 GPM
- HB – 40K 5 GPM

- As a result, hydroblast water streams carry a high amount of force



HYDROBLASTING INJURIES



- There are two major types of Hydroblast injuries
 - Watercuts – Where water injects into the skin
 - Struck by injuries where a water propelled Hydroblast tool strikes the body



- These injuries are almost always severe

Entry wound on the right leg where water stream entered. Water swelled inside knee about the size of a softball... resulting in surgery to clean impurities and let the wound drain.

May 2010 - Michigan



July 2019 - Illinois

A worker decided to clean his boots with the high-pressure water tool. He cut through the boots as well as his foot.

Doctors opened the foot to clean out the water resulting in an eight-week recovery.



WJTA FOUNDATIONAL TRAINING AND FIELD VERIFICATION



- Although injuries can be serious and even fatal, training requirements for **end users** vary and, in many cases may not exist.
- It is our moral responsibility to put industrial cleaning technicians and operators in an environment that insures proper knowledge of industry best safety and operating practices.
- WJTA has partnered with the Houston Area Safety Council (HASC) to develop a two-pronged approach to ensure HB craft certification for employees in the industry that consists of FT (Foundational Training) and FV (Field Verification) by a Verified Trainer.
- This training is the result of dozens of end users, manufacturers, vendors and clients collaborating to provide the best safety and operational knowledge at the lowest possible cost.



HBR BEST PRACTICE ENDORSEMENT



- Houston Business Roundtable (HBR) and their members fully endorse the WaterJet Technology Association (WJTA) Orange Book standard.
- HBR recommends that high pressure industrial cleaning (hydroblast) operations personnel obtain a valid WJTA or waterjet craft certification before performing automated or manual industrial cleaning activities.
- Utilizing this standard and training process will help attain the goal to reduce the risk of injury to personnel and improve production.
- Also endorsed by East Harris County Manufacturing Association (ECHMA) and being considered by the Greater Baton Rouge Industry Alliance (GBRIA)



BEST PRACTICE ENDORSEMENT

Purpose

To establish industry best practice processes and training as the standard for which all industrial cleaning workers must follow at a minimum to perform their craft's work activities. This includes following the WaterJet Technology Association (WJTA) recommended practices for High-Pressure Water Jetting.

Objective

To establish the guiding principles and training requirements for the use of high-pressure water-jetting equipment (hydro-blasting) for the high-pressure industrial cleaning craft and establish the use of automated cleaning as the preferred method. Require that all craft personnel attend the WJTA Orange Book foundational training and be verified through an established practical performance application review in a field setting, before allowed to perform water-jetting or activities. This "Best Practice" process shall be proactively utilized by owners, vendors, contractors, and/or any service provider alike, within our industry.

Recommendation

The Houston Business Roundtable (HBR) fully endorses the WaterJet Technology Association (WJTA) Orange Book standard and Hydroblaster Mini Orange Book-Pocket Handbook. It is the recommendation of HBR and our member companies that WJTA Orange Book innovative foundational training and field verification on both automated technology and manual waterjet applications shall be conducted prior to high pressure cleaning (hydroblast) activities being performed. The Orange Book includes the most up-to-date safety and health work practices that will ensure workers evaluate risks and utilize the safer automated processes in lieu of manual processes, in order to reduce the risk of incident or injury to as low as reasonably practical (ALARP).

It is the recommendation of HBR that high pressure industrial cleaning (hydroblast) operation personnel obtain and possess a valid WJTA or waterjet craft competency certification/qualification before performing automated or manual industrial cleaning activities.

In summary, HBR endorses the WJTA Orange Book Standards as the official high-pressure industrial cleaning standard for our industry and furthermore advocate that an automated application of high-pressure industrial cleaning is the preferred and safer method over a manual application. By utilizing this standard and training process it will assist with the attainment of our goal to reduce the risk of injury to personnel and improve production.

Key Business Advantages

- Consistent Training Standards and National Competency Verification
- Controlled Risks and Fewer Injuries
- Improved Productivity
- Periodic Technological Curriculum Updates

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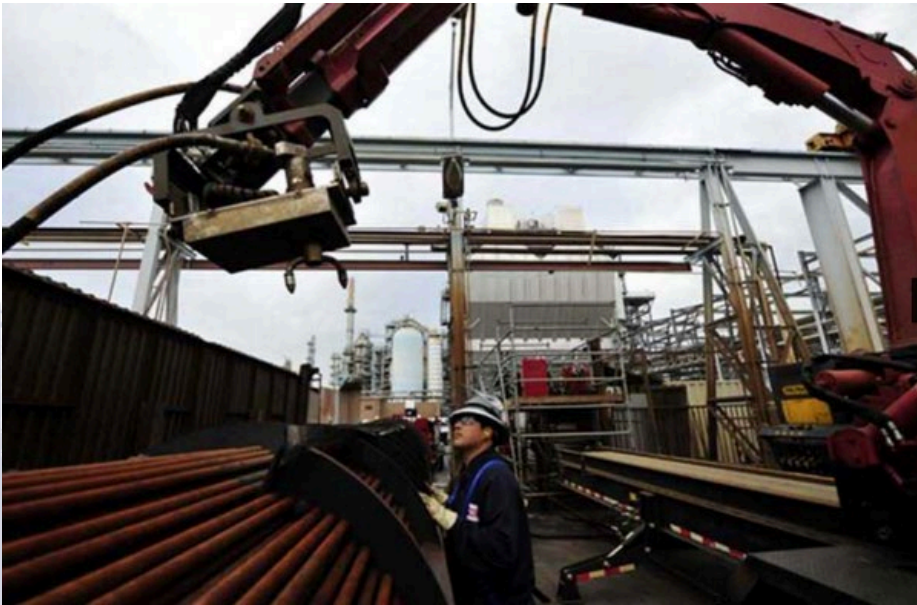
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WJTA AUTOMATION TRAINING



- WJTA is already taking the lead to develop a follow-on certification that address automation and advanced hydroblasting techniques.
- Additionally, the WJTA is updating and developing a Vacuum Services training that follows the same model as the FT/FV hydroblasting certification program.





THANK YOU!

FOR ADDITIONAL INFORMATION EMAIL US AT ADMIN@HOUBRT.COM

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