Rivet Training at Purdue University's Bowen Laboratory

Training provided by Vern Mesler. Engineering research project under the direction of Robert J. Connor: Member-level Redundancy in Built-up Steel Members [Study Description http://www.pooledfund.org/Details/Study/482]



Matt Hebdon, Purdue Ph.D. research assistant, adjusts propane forge in preparation for riveting.



Ryan Sherman, Purdue Ph.D. student



Sherman, Hebdon and Vern Mesler inspect rivet snaps



Hebdon drives 7/8" rivets with a #80 Boyer rivet hammer. Sherman positions a holder-on which keeps the hot rivet in place.



Sherman positions holder-on and Mesler drives rivet. In background is Dave Koppes, Purdue M.S. student, as heater.



Brian Richter Purdue M.S. student practices using the holder-on, while Sherman and Hebdon look on.



Teresa Washeleski, Purdue M.S. student, with holder-on; Sherman heats rivets.



Becky Reising, Purdue M.S. student, drives rivet; Washeleski positions holder-on.



Hebdon positions holder-on with extension bar; Sherman inserts heated rivet.



Hebdon sets holder-on; Robert Connor, Purdue Associate Professor of Civil Engineering, drives rivet.



Hebdon prepares to drive rivet, Sherman inserts heated rivet, And Jason Lloyd positions holder-on.



Left to right: Robert Connor, Vern Mesler, Nan Jackson, Matt Hebdon, Teresa Washeleski, Luke Snyder, Jason Lloyd, and Ryan Sherman

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Vern Mesler, Rivet Training.
Bowen Laboratory, Purdue Univerphoto by Vern Mesler

Nan Jackson, Mathematics Professor, Lansing Community College, Michigan



Jackson, Robert Connor, Purdue Associate Professor of Civil Engineering, Matt Hebdon, Purdue Ph.D. research assistant



Purdue Engineering students observe riveting



Purdue engineering Ph.D. students Corbin St. Aubin and Tim Francisco, with Jackson, all Michigan State University alumni [Francisco was ISPC 2010 scholarship award recipient)



Teresa Washeleski, Purdue M.S. student, filming the rivet training session



Left to right: Robert Connor, Vern Mesler, Nan Jackson, Matt Hebdon, Teresa Washeleski, Luke Snyder, Jason Lloyd, and Ryan Sherman

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Vern Mesler, Rivet Training,
Bowen Laboratory, Purdue University,
photo by Nan Jackson

Boyer pneumatic field rivet hammer #80

Pneumatic rivet holder-on



Pneumatic rivet holder-on being positioned to clamp heated rivet in place.



Manufactured head of the heated rivet is held in place with the holder-on.



Propane forge heats rivets to 1900 - 2000 degrees F.



Two new rivets, with more to follow (plate is bolted to angle; new rivets will replace the bolts)