A Triad Relationship to Making A Hobby Safer

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Zurich Risk Engineering
Triad Relationship

National Board

Jurisdiction

Steam Engine Clubs
Agenda

History
Preservationist Clubs
Jurisdiction
National Board
History
Industrial Age of Agriculture

There was no bigger jump in agriculture than animal power to steam power.
Virgin Soil Being Tilled
Fullerton, ND 1910 circa
Tools of Leisure
Dynamo

David Collidge Steam Scenes.org
Preservationist Clubs

Photo By Jon Wolf
Museum that comes to life

Photo Courtesy Charlie Hendrickson
Mid-sized Event
Baraboo, WI
Powering the Saw Mill

Photo By Jon Wolf
Steam Driven Pile Driver

Photo by Dan Hegyi
Steam School
Classes Teach Students to Handle Traction Engines

Photo By Jon Wolf
Four Million Acres More
OF WHEAT PUT IN LAST FALL THAN EVER BEFORE

This big increase in winter wheat acreage was made possible only by the use of the traction engine. Hundreds of outfits were busy day and night. With a largely increased acreage this spring, the demand for the traction engines is going to be very heavy. This will be a tractor year from plowing and seeding time to harvest time.

This demand for the traction engine has increased the demand for competent engineers. Can you fill the bill? Do you measure up to the requirements? Are you familiar with the different kinds of engines and boilers, pumps, etc., and relative advantages of each? Are you able to test an engine or boiler for capacity and durability? And, above all, are you able to develop, through successful operations, the greatest amount of power with the least expenditure of money, time and labor?

THE CLARKE SCHOOL

The Clarke School of Traction Engineering by Correspondence has helped hundreds of young men to a better understanding of the traction engine. Hundreds of others are now taking the course while many more are enrolling every day. It is without exception the most complete course of its kind that has ever been prepared. It is a voluminous work and represents the labor and experience of nearly half a century. In fact, it is the gathering together of nearly all the available information, both theoretical and practical, regarding steam power, especially that part which is applied to the traction engine. The course contains more than seven hundred pages of text, and more than three hundred specially designed illustrations. Nothing has been left undone that would tend to make the work more complete and thorough, and within the several lessons is to be found information that cannot be obtained from any other course.

If you want to improve your time and fit yourself for a good position, why not put in your spare moments studying traction engineering? It will pay you and pay you well.

Write for a Copy of the Clarke School prospectus and look it over.
It is free. Address

The Clarke School of Traction Engineering, Madison, Wis.
Steam School
No Substitute for Experience
Hands on Training
Steam School 2016  (Rock River Thresheree)

Photo By Jon Wolf
“You may own the Engine - But after you strike that match, it owns you”

Charlie Hendrickson
Jurisdiction
Medina, OH
Five people were killed when a Case 110 steam traction engine exploded.

Photo By Jon Wolf
Medina, OH
Ohio
Puts the Pieces Together

- Non Code Repairs
- Operator Error
Jurisdictional Action
Ohio expands their “Administrative Rules” to include Historic Steam Engines

1. License to Operate

2. Inspection & Permit to Operate
Inspection Line-Up

Photo By Jon Wolf
Success Story

Photo By Jon Wolf
PART 3 REPAIRS AND ALTERATIONS
Section 6 - Supplement 2 - Historical Boilers
Corroded Rivets
S2.10.2.2 INSPECTION OF CORRODED RIVETS

d) Allowable corrosion:

1) For rivets in pure shear load, the amount of measured head deterioration shall not exceed 80% of their total head volume. Where rivets have countersunk heads, the head diameter must be equal to or greater than 65% of the original head diameter. Severe head corrosion shall require further evaluation of the condition and thickness of the plate at the joint.

2) For rivets in pure tension, the amount of measured head deterioration shall not exceed 35% of the original head thickness. FIGURE S2.10.2.2

3) Explanation showing the rivet head, shank, and the plate.
Conclusion
Thank You

Photo By Jon Wolf
Credits

- Rock River Thresheree
- Farm Collector
- NDSU Institute for Regional Studies
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