

REPORT ON WATER TUBE BOILERS.

No. 19

TUE NOV. 25. 1919

Received at London Office
of writing Report 17th Feb 1919 When handed in at Local Office 18th Feb 1919 Port of Cleveland Ohio.
No. in g. Bk. 17 Survey held at Cleveland Ohio. Date, First Survey 4th Sept 18 Last Survey 12th Feb 1919
on the W.T. BOILERS NOS 302-1, 302-2, 302-3 for S.S. ICELAND Number of Visits 25 Tons { Gross 5980.47
ster J. Amherman Built at Chester Pa By whom built Westinghouse Elec & Mfg Co When built 1919
gines made at Essington Pa By whom made Westinghouse Elec & Mfg Co When made 1919
ilers made at Cleveland Ohio By whom made The D. Connelly Boiler Co When made 1919
gistered Horse Power Owners United States Shipping Board Port belonging to Washington.

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel U.S. Steel Co
etter for Record 1 Date of Approval of plan 9th April 1918 Number and Description or Type
Boilers 3 Connelly Foster Type W. TUBE Working Pressure 200# Tested by Hydraulic Pressure to 400# Date of Test 14-8-19
of Certificate 363 Can each boiler be worked separately Yes Total Heating Surface of Boilers 9459 #
draught fitted Yes Area of fire grate (coal) in each Boiler 26.25 # Total grate area of boilers in vessel including
in and Auxiliary. No. and type of burners (oil) in each boiler 5 No. and description of safety valves on
h boiler 2 Spring loaded Area of each valve 7.06 Pressure to which they are adjusted 200 lbs
e they fitted with easing gear Yes In case of donkey boilers state whether steam from main boilers can enter the donkey boiler ✓
allest distance between boilers or uptakes and bunkers or woodwork 30" Height of Boiler 11'-6" Width and Length 14'-0" x 13'-7 1/2"
eam Drums:—Number in each boiler one Inside diameter 42" Material of plates Steel Thickness 3/4"
ange of Tensile Strength 58000 # Are drum shell plates welded or flanged No. Description of riveting:—
r. seams LAP SR long seams DRS/IR Diameter of rivet holes in long. seams 15/16" Pitch of Rivets 8 3/8" x 3"
p of plate or width of butt straps outer 13 7/8" Thickness of straps 9/16" Percentage strength of long. joint:—Plate 88.4% Rivet 76.7%
iameter of tube holes in drum 3 3/32" Pitch of tube holes 4 1/8" x 3 1/2" Percentage strength of shell in way of tubes 47.2%
Drum has a flat side state method of staying none Depth and thickness of girders at centre
fitted) ✓ Distance apart ✓ Number and pitch of stays in each ✓ Working pressure
rules ✓ Steam Drum Heads or Ends:—Material Steel Thickness 3/4" Radius or how stayed 42"
ze of Manhole Handhole 15" x 11" Water Drums:—Number in each boiler ✓ Inside Diameter ✓
aterial of plates ✓ Thickness ✓ Range of tensile strength ✓ Are drum shell plates welded
flanged ✓ Description of riveting:—Cir. seams ✓ long. seams ✓ Diameter of Rivet Holes in
ng. seams ✓ Pitch of rivets ✓ Lap of plates or width of butt straps ✓ Thickness of straps ✓
ercentage strength of long. joint:—Plate ✓ Rivet ✓ Diameter of tube holes in drum ✓ Pitch of tube holes ✓
ercentage strength of drum shell in way of tubes ✓ Water Drum Heads or Ends:—Material ✓ Thickness ✓
adius or how stayed ✓ Size of manhole or handhole ✓ Headers or Sections:—Number Two to each boiler
aterial Steel Thickness 3/4" Tested by Hydraulic Pressure to 400# Material of Stays Iron (Hollow)
rea at smallest part 1.63 # Area supported by each stay 56.85 # Working Pressure by Rules 253 # Tubes:—Diameter 3"
hickness 10 Gauge Number 504 each boiler Steam Dome or Collector:—Description of Joint to Shell as stated above.
ercentage strength of Joint ✓ Diameter ✓ Thickness of shell plates ✓ Material ✓
escription of longitudinal joint ✓ Diameter of Rivet Holes ✓ Pitch of Rivets ✓ Working Pressure of shell
Rules 256 # Crown or End Plates:—Material ✓ Thickness ✓ How stayed ✓
SUPERHEATER. Type Foster Date of Approval of Plan New York Tested by Hydraulic Pressure to 600 lbs
ate of Test Is a safety valve fitted to each section of the superheater which can be shut off from the Boiler Yes
iameter of Safety Valve 1" Pressure to which each is adjusted 208 Is easing gear fitted Yes
a drain cock or valve fitted at lowest point of superheater Plug Number, diameter, and thickness of tubes
bare Gear. Tubes ✓ Gaskets or joints:—Manhole ✓ Handhole ✓ Handhole plates ✓

The foregoing is a correct description,
The D. Connelly Boiler Co. Manufacturer.
E. E. Schaefer

Dates { During progress of 1918
Survey work in shops - Sept 4, 13, 19, 27, Oct 7, 14, 23, 31, Nov 6, 13, 19, 26 Dec 5, 9, 17, 19, 30
while Jan 6, 13, 15, 22, 28, 31 Feb 6, 12 Is the approved plan of boiler forwarded herewith No.
during board vessel - - - Total No. of visits 25

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The boilers have been constructed under Special
survey. The materials & workmanship employed in their manufacture are sound & good. The drums & header with
its in place have been tested by hydraulic pressure to 400 # per sq in & found satisfactory. They have
been shipped in sections to Philadelphia & are to be fitted in a vessel building by The Chester S. B. Co.
Boilers will be eligible for record of T.N.B. (with date) when satisfactorily installed & tested by hydraulic
pressure to 400 # per sq in.
Survey Fee 1/3 # When applied for, 191
Travelling Expenses (if any) Charge to Cleveland When received, 191
See report 4 A.

Committee's Minute
Assigned See Phil Rpt 3506
J. Robinson & W. R. R. R. R.
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute
Assigned
Lloyd's Register
Foundation