

## STEEL STEAMER or MOTORSHIP.

Received at London Office 27 JUN 1941

State if Report has been sent on the Freeboard of the Vessel ☒ YES.State if Report is sent on the Machinery of the Vessel ☒ YES.

Date of completion of report 18-6-41.

Port of MIDDLESBROUGH.

No. 17054.

Survey held at HAYERTON HILL ON TEES.

Date First Survey October 5<sup>th</sup>, 1939. Last Survey 11<sup>th</sup> June, 1941.

On the (State if Machinery fitted Aft and if Single, Double or Triple Screw) SINGLE SCREW STEEL TANKER MACHINERY AFT "EMPIRE MICA"

State Type (Full Scantling, Complete Scantling, or Partial Scantling)

FULL SCANTLING.

State Type of Erections <sup>130 53 77.5 130 53</sup> Full Bridge, Fell.

TONNAGE under Tonnage Deck... 7197.47.

CLASS 100 A.I. CARRYING State if with freeboard }  
PETROLEUM IN BULK as condition of Class }  
LONGITUDINAL FRAMING AT BOTTOM & AT DECK FEET.

Built at HAYERTON HILL ON TEES.

Launched APRIL 16<sup>th</sup> 1941. Yard No. 328.

Builders FURNISS S.B. &amp; CO.

Owners MINISTRY OF SHIPPING.

Managers ANGLO-AMERICAN OIL CO. LTD.

Residence LONDON.

Port of Registry MIDDLESBROUGH.

If surveyed while building, afloat, or in dry dock

Surveyed WHILE BUILDING &amp; AFLOAT.

Do. of space or spaces between Tonnage Dk. and Upper Dk. 5.

Total 7197.47.

Gross Tonnage 8032.20

Register Tonnage 4675.60

## REGISTERED DIMENSIONS.

Length 463.5

Breadth 61.2

Depth 33.05

Length from fore part of stem to after part of stern }  
most on summer L.W.L. See Sec. 3 (19) } L 460'-0"

Breadth (greatest moulded) B 61'-0"

Depth, at middle of length from top of keel to top of beam at side of uppermost continuous }  
D 33'-3"

1st Longitudinal Number (L x D) 15295

2nd Numerical L x (B + D) 43355

Framing Depth "d," at middle of length. See

Proportions—Depth to Length—Uppermost continuous deck to top of keel 13.83

Do. Long Bridge to top of keel

Draught Moulded 27'-13"

## FRAMES, DOUBLE BOTTOM AND BEAMS.

	INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.		INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.
FRAMES, Spacing amidships	31'		Bracket Floors, Frame	7 8 33 7/16	
" " from 1/2 length amidships to Collision bulkhead	30 3/4 in. 3.0 in.		" " Reversed Frame	7 8 33 45	
" " in peaks	31'-26"		" " Vertical Struts	2-11'-52"	
SIDE FRAMING.			Centre Girder, depth and thickness amidships	22.81'-38 1/2"	
Frame Amidships, Angle E or F	10 33 40		" " top Angles	22.100'-60"	
" " Extends up to	UPPER DECK		" " bottom Angles	22.33'-33 1/2"	
Reversed-Frame Amidships, Angle			Side Girders, No. each side and thickness	2 6' 6" 50"	
" " Extends up to			Margin Plate depth (excl. of flange) and thickness	2 6' 6" 50"	
Depth of Framing Girder	10 33 55 3/4		" " Vertical Angle to Tank side		
Frames in Uppermost Continuous 'tween Decks, Angle E or F	10 33 58 7/8		" " Bracket abaft 1/2 len. from stem		
" " Second 'tween Decks, Angle E or F	10 33 58 7/8		" " Vertical Angle to Tank side		
" " Third " " " "	10 33 58 7/8		" " Bracket from forward 1/2 len. from stem to Panting Area		
" " from 1/2 len. from d. to 15% len. from Stem	10 33 58 7/8		" " Gussets, spacing and scantling abaft 1/2 len. from stem		
" " in Peaks	10 33 58 7/8		" " Gussets, spacing and scantling from forward 1/2 len. from stem to Panting Area		
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	10 33 58 7/8		Tank Side Brackets, height above base line at toe of Frame and thickness	3 8 33 7/16	
State if Frame Joggled	YES		INNER BOTTOM PLATING.		
Are the scantlings and arrangements in the Panting Area in accordance with the Rules and/or as approved?	YES		Breadth and thickness of Middle Line Strake	3 8 33 7/16	
Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules and/or as approved?	YES		Thickness of remainder	3 8 33 7/16	
SINGLE BOTTOM. AT FORE END.			Are Rule requirements complied with regarding increases of scantlings in way of double bottom in E. & B. space and framing in Bunkers and Boiler Room?	YES	
Floors, Depth and thickness at mid-line in Holds	4'-0" 38 3/4"		BEAMS. IN WAY OF MACHINERY SPACE.		
Height of Brackets at side above base line at toe of frame	7'-0" 40 3/4"		Uppermost Continuous Deck, amidships in Wells, Angle E or F	8 33 7/16	
Middle Line Keelson, on Floors, Angles	40 1/2 42		" " in way of Bridge, Angle E or F	8 33 7/16	
" " Through Plate	33 33 7/16		Second Deck, amidships, Angle E or F	8 33 7/16	
" " Intercostal Plate	33 33 7/16		Spacing	EVERY	
" " Foundation Plate on Floors	33 33 7/16		Third Deck, amidships, Angle E or F		
" " Flat Plate Keel Angles	33 33 7/16		Spacing	EVERY	
Side Keelsons, No. each side	33 33 7/16		Fourth Deck, amidships, Angle E or F		
" " thickness of Intercostal Plate	33 33 7/16		Spacing	EVERY	
" " Angles	33 33 7/16		Poop Deck, Angle E or F	8 33 7/16	
DOUBLE BOTTOM. IN MACHINERY SPACE.			Spacing	EVERY	
Solid Floors, thickness and spacing	42 30 3 31 7/8 30		Bridge Deck, Angle E or F	8 33 7/16	
" " Are Frame and Reversed Frame joggled?	NO		Spacing	EVERY	
Bracket Floors, breadth and thickness at middle line	2-11'-52"		Forecastle Deck, Angle E or F	8 33 7/16	
" " breadth and thickness at margin plate	AS APPROVED		Spacing	EVERY	



## PILLARS AND DECKS.

	INCHES IN SHIP.		Any Departure from Approved Plans to be Noted.		INCHES IN SHIP.		Any Departure from Approved Plans to be Noted.
<b>PILLARS</b> , No. of Rows.....				Stringer Plate, breadth and thickness in way of Bridge .....			
"    in 'tween Decks, Size and Spacing.....				Thickness of Plating abreast Deck openings in way of Wells .....			
"    "    "    "    "    "				Thickness of Plating abreast Deck openings in way of Bridge .....			
in Holds				Thickness of Plating within line of openings.....			
<i>GIL TIGHT CENTER LINE BULKHEAD IN DEERTANK. FORWARD, PLATING 44-46" STRIPS 10-3 1/2" SPACED 26-31" APART, WEAR PLATE ON 165 28-40" WITH DOUBLE FACE BARS 8-3 1/2" 35' LONGITUDINAL</i>			<i>APART WEAR PLATE</i>	If Sheathed, material and thickness .....			
<i>Center Line Bulkhead. PORT &amp; STARBOARD</i>	<i>10' 3 1/2" 42'</i>	<i>✓</i>		<b>Third Deck.</b>			
Stiffeners and Spacing.....	<i>3' APART</i>	<i>✓</i>		Stringer Plate, breadth and thickness.....			
Plating, thickness of .....	<i>57'-40'</i>	<i>✓</i>		If Plated, state thickness.....			
<b>STRINGERS AND DECKS.</b>				<b>Fourth Deck.</b>			
Uppermost Continuous Deck.				Stringer Plate, breadth and thickness.....			
Stringer Plate, breadth and thickness in Wells	<i>40-78</i>	<i>✓</i>		If Plated, state thickness .....			
"    "    "    " <i>92 AT BREAK OF POOP &amp; BRIDGE.</i>	<i>78'</i>	<i>✓</i>		<b>Poop Deck.</b>			
"    "    "    "    in way of Bridge	<i>78'</i>	<i>✓</i>		Stringer Plate, breadth and thickness .....	<i>37'</i>	<i>✓</i>	
"    Angle in Wells .....	<i>6' 6" 5/8'</i>	<i>✓</i>		Plating, <del>Sheathing</del> , material and thickness .....	<i>30'</i>	<i>✓</i>	
Thickness of Plating abreast Deck openings in way of Wells .....	<i>72-60</i>	<i>✓</i>		<b>Bridge Deck.</b>			
Thickness of Plating abreast Deck openings in way of Bridge .....				Stringer Plate, breadth and thickness.....	<i>80 1/2' 37'</i>	<i>✓</i>	
Thickness of Plating within line of openings...				Plating, <del>Sheathing</del> , material and thickness .....	<i>34'</i>	<i>✓</i>	
If Sheathed, material and thickness .....				<b>Forecastle Deck.</b>			
				Stringer Plate, breadth and thickness.....	<i>37'</i>	<i>✓</i>	
<b>Second Deck.</b>				Plating, <del>Sheathing</del> , material and thickness .....	<i>36' 50 NUMBER WINDLASS.</i>		
Stringer Plate, breadth and thickness in Wells...							

## SHELL PLATING.

SCANTLING.					RIVETING.							
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES.		BUTTS.				
	AMIDSHIPS.		FORWARD.	AFT.		State if joggled?	No. of Rows of Rivets.	RIVETS.		STRAPPED OR LAPPED.		
	Breadth.	Thickness.	Thickness.	Thickness.				Diam.	Spacing cr. to cr.			
	Inches.	Inches.	Inches.	Inches.							Inches.	Inches.
FLAT PLATE KEEL .....	53"	97"	80"	82"		DOUBLE.	1.	4"	QUINTUPLE IN THIRDS, 1st 2nd 3rd 4th 5th	1	4	LAPPED.
" DELG. (if any)	TWO STRAKES NEXT KEEL INCREASED FROM 3 LTH 4 IN TO COLLISION BULK 77" 81" IN WAY OF 31" SPACING.								DOUBLE FOR 1/2 LTH QUARTERS			
BOTTOM PLATING, No. of Strakes ... 4 .....		70	50	66		DOUBLE.	7/8	3 1/2	4	7/8	3 1/2	LAPPED.
BILGE PLATING, No. of Strakes ... 2 1/2 .....	F	64	50	46		"	"	"	"	"	"	-
SIDE PLATING, No. of Strakes ... 3 .....	G	63	46	46		"	"	"	"	"	"	-
UPPER DECK, Sheer-strake in Wells.....	K. 72 1/2	94	46	46		"	1"	3 1/2	5-4	7/8	4 1/2	-
UPPER DECK, Sheer-strake in Bridge...	72 1/2	112				"	1"	3 7/8	5	1 1/8	5 1/2	-
STRAKE BELOW Sheer-strake in Wells.....	72	78	46	46		"	1"	3 7/8	4-3	1"	4"	-
STRAKE BELOW Sheer-strake in Bridge ...)										7/8	3 1/2	-
POOP SIDE PLATING .....			40			SINGLE.			2	3/4	2 5/8	-
BRIDGE SIDE PLATING ...	44					SINGLE			2	3/4	2 5/8	-
FORECASTLE SIDE PLATING		43.				SINGLE.	3/4	3"	1.	3/4	2 5/8	-

## WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel—	16 B/H
Extending to Upper Deck (Sec. 3 c)	15 OIL TIGHT, 2 WATER TIGHT } To Upper Deck.
Deck next below	ALL EXTENDED TO UPPER DECK.
As per Rule	

## FORGINGS and CASTINGS.

STIFFENERS.	VERTICAL.		HORIZONTAL.	
	Scantlings.	Spacing.	Scantlings.	Spacing.
MIDSHIP BULKHEAD, Upper tween decks	54" 10-3 1/2" 46 1/2 36"		120-32-137 144"	
" Second "	54" 10-3 1/2" 40 1/2 36"			
" Third "	41" 10-8 1/2" 36 1/2 36"			
" Holds .....	52-26 12-3 1/2" 45 1/2 24"			
COLLISION (in Hold) .....	52-26 6-3 1/2" 38 1/2 24"			
AFTER PEAK .....	50-36 9-3 1/2" 38 1/2 24"			

Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture)	Open Hearth Process.
STEEL.	Plates, South Durham S.D.C.
	Sections, Corby Steel Lm C.L. Dorman Long & C.L.
Has the Steel been tested as required by the Rules?	Yes.

GENERAL REMARKS—(The Surveyor should state the Number of Report and Name of any Sister Vessel. Plans showing Vessel as built should be forwarded and a List of the Plans should be embodied.)

The Owners have been informed that 30 fathoms of cable are required to complete the equipment & the say this will be placed on board at the first convenient opportunity.

No. of Certificate	Length of Cable Supplied	Test Pressure	Height of Cable	Description	Makers	When Tested
112837	15 28'	113 1/2	159 1/2	38-0-9	Taylor	5.10.1900
112838	"	"	"	37-0-21	"	"
112839	"	"	"	37-0-0	"	"
112840	"	"	"	37-0-0	"	"
112841	"	"	"	37-0-0	"	"
112842	"	"	"	36-3-17	"	"
112843	"	"	"	37-2-14	"	"
112844	"	"	"	37-2-0	"	"
112845	"	"	"	36-2-21	"	"
112846	"	"	"	37-0-14	"	"
112847	"	"	"	37-0-14	"	"
112848	"	"	"	37-3-7	"	"
112849	"	"	"	36-3-14	"	"
112850	"	"	"	37-2-14	"	"
112851	"	"	"	37-2-14	"	"
112852	"	"	"	38-0-3	"	"

Total 547.0-22

Sister Vessels built by Messrs. Furness S.D.C. N° 326. EMPIRE GOLD. RPT N° 16969.  
N° 326 EMPIRE GRANITE. N° 17010.  
N° 327. EMPIRE OIL. N° 17038

## PARTICULARS OF ELECTRIC WELDING (if employed)

RUGER. (RUGER ARE ELECTRODES)

SPECIAL NOTATIONS:—Either as part of the vessel's class or for record in the Register Book. 100 A.I. CARRYING PETROLEUM IN BULK  
LONGITUDINAL FRAMING AT BOTTOM AND AT DECK. CRUISER STERN. MACHINERY AFT. ECHO SOUNDING, DIRECTION  
FINDING BARRETTUS.

Particulars of Drop Test of Cast Steel Anchors, viz. —	1st Bower	43-1-0	J.D.	N° 3190	16-8-40
Weight, Surveyor's Initials, Number of Certificate, Date of Test.	2nd "	43-0-6	J.D.	N° 3185	9-8-40
	3rd "				

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 105-3 1/2 ft., R.Q.D. ft., Bridge 43-1/6 ft., Forecastle 38-2 ft. (in feet and tenths). When the Poop or Forecastle are joined to the B.D., this should be distinctly stated.

Official No. 164846 Signal Letters Extreme Breadth over Belting Over-all Length 479-0 1/2  
No. and Material of Decks 1 D(51) 2 D(67) CLEAR OF CARGO TANKS  
Parts of Bottom of Vessel coated with cement or approved composition. AS BELOW  
STEEL PLATING 40' LAST STEEL EXTENSION.

Particulars of composition (if fitted) and of approval FOR & AFTER PEAK TANKS, PEAK TANKS, CARGO TANKS IN BR. CEMENT IN BOTTOM (CARGO TANKS) REMAINS OF TANKS INCLUDING CARGO TANKS LAST 2000.

PARTICULARS OF WATER BALLAST:—(Comprising all tanks which may be used for Water Ballast. (Circ. 1284) Wells are not to be included in the lengths of the tanks, but Cofferdams and Dry Dock Tanks are to be included.)

Where Fitted.	Length.	Water Capacity.	Where Fitted.	Length.	Water Capacity.
	Feet.	Tons.		Feet.	Tons.
Double bottom, aft,			Fore peak tank,		
Double bottom, under Engines and Boilers,			After peak tank,		
Double bottom, if under Engines only,	38-8	95	Deep tank, aft,	23-5	140
Double bottom, if under Boilers only,	43-11 1/2	279	Deep tank, forward,	32-2	664
Double bottom, forward,	2-6 3/4		Other tanks, if fitted,		
Total length (if continuous) and Capacity	82-2 1/2	374	(If necessary, furnish further information by sketch.)		

Say 85-0

Order for Special Survey No. 1534	1939.	1940.
	Oct. 5. 9. 10. 12. 13. 17. 19. 20. 23. 25. 26. 28. 30. Nov. 1. 12. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. March 5. 6. 7.	Oct. 5. 9. 10. 12. 13. 17. 19. 20. 23. 25. 26. 28. 30. Nov. 1. 12. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. March 5. 6. 7.
	Apr. 4. 5. 8. 11. 15. 24. 25. 26. 29. 30. May 2. 3. 4. 16. 20. 21. 23. 24. 27. 30. June 3. 6. 12. 14. 18. 24. 25. 27. July 1. 2. 22. Aug. 6. 22. 29.	Apr. 4. 5. 8. 11. 15. 24. 25. 26. 29. 30. May 2. 3. 4. 16. 20. 21. 23. 24. 27. 30. June 3. 6. 12. 14. 18. 24. 25. 27. July 1. 2. 22. Aug. 6. 22. 29.
	Sept. 4. 11. 12. 13. 17. 23. 24. 26. Oct. 8. 14. 15. 16. 17. 21. 22. 23. 24. 25. 29. 30. Nov. 2. 7. 12. 20. 25. 26. 28. 29. Dec. 2. 11. 12. 24. Jan. 8. 9. 10.	Sept. 4. 11. 12. 13. 17. 23. 24. 26. Oct. 8. 14. 15. 16. 17. 21. 22. 23. 24. 25. 29. 30. Nov. 2. 7. 12. 20. 25. 26. 28. 29. Dec. 2. 11. 12. 24. Jan. 8. 9. 10.
	19. 24. 29. Feb. 4. 10. 12. 14. 17. 19. 24. 26. 27. 28. March 3. 7. 10. 11. 13. 14. 16. 19. 26. 28. 29. Apr. 7. 9. 10. 11. 22. 25. May 14. 16. 20.	19. 24. 29. Feb. 4. 10. 12. 14. 17. 19. 24. 26. 27. 28. March 3. 7. 10. 11. 13. 14. 16. 19. 26. 28. 29. Apr. 7. 9. 10. 11. 22. 25. May 14. 16. 20.
	June 5. 7. 11.	June 5. 7. 11.
	Total No. of Visits 146	Total No. of Visits 146

W34-002312/22



EQUIPMENT No 44835

LETTER C

ANCHORS. 32. 15.

Number of Certificate.	Anchors.	WEIGHT, EX. STOCK.			WEIGHT OF STOCK.			TEST, PER CERTIFICATE.				WEIGHT REQUIRED BY TABLE 53.	Description of Anchor.	Makers.	Where and when tested and Superintendent.
		Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.	Tons.	cwts.	qrs.	lbs.				
40254	1st Bower	73	3	0				55	15	0	0	73-1-0	BYERS STOCKLESS	✓	SUNDARLAND, 17-10-40, W.U.N.
40256	2nd "	73	1	12				55	10	0	0	73-1-0	Do	✓	Do
	3rd "														
	Collective weight.	147	0	12								146-2-0			
53712	Stream	22	1	22	5	3	7	22	15	0	0	22-0-0	COMMON	✓	CAROLAN NORTH, 27-1-40 S.C.P.

## CHAIN CABLES.

## HAWSERS AND WARPS.

Number of Certificate.	Length and size supplied.		Test per Certificate.		WEIGHT OF CHAIN CABLE.			Length and size per Table 53.		Description.	Makers of Cables.	Where and when tested, and Superintendent.	Material.	Length and size supplied.		Breaking Test of Steel Wire.	Length and size per Table 53.	
	Length.	Diam.	Stations.	Break-ing.	Supplied.	Per Rule.		Length.	Diam.					Length.	Ins.		Length.	Ins.
112837										STUDLINE								
To	240	2 1/2	113 8/10	134 3/10	59 1/2	0-22		300	2 1/2	TAILO.	S. TAYLOR & SONS	11/12/40 J.A.R.	TOWLINE	130	5 1/2	77.5	130	5 1/2
112852													HAWSERS & WARPS	2	2 1/2	15.2	200	2 1/2
														2	2 1/2	15.2	200	2 1/2
Iron Stream Chain or Steel Wire	120	5			70.9			120	5	STEEL WIRE.								

Steering Gear, Type (Power or hand) *Donkin & Co's Compound Steam Hydraulic* Alternative Means of Steering *Blocks-Tackler led to Capstan on Poop.*Steering Chains (Size and Test) *NONE FITTED.* Windlass *EMERSON WALKER STEAM DIRECT* *4 24" x 7" 6" 3" 1"*Ceiling in Holds, thickness and material *FORE HOLD STEEL COAMINGS 30 1/2" x 44" STEEL COVER 50"* Cargo Battsens, thickness, material and spacing *NONE FITTED.*Cargo Hatchways.—(Upper Deck) *OIL TIGHT COAMINGS 30" x 40" STEEL COVERS 60"* Thickness of Hatches *WT. 160" STEEL FORE HOLD HATCH 50"*Size of Hatchways No. 1 (Fwd.) *7' 5" x 7' 0"* No. 2 *OIL TIGHT HATCHES TO CENTRE TANKS 9' 0" x 3' 0" 4' 6" x 3' 0"* No. 3 *WING 9' 0" x 3' 0"* No. 4 *2' 6" x 3' 0"* No. 5 *2' 6" x 3' 0"* No. 6

Number of Shifting Beams and/or Fore and Afters

Builder's Signature *FURNESS SHIPBUILDING CO. LTD*GENERAL DECLARATION. It should be stated (a) whether the vessel (if not a motorship) is fitted for the carriage and burning of oil used as fuel *Yes.*(b) whether the vessel, not being an oil tanker, is fitted for carrying oil as cargo *Yes.* The positions in which oil is carried as fuel or cargo should be indicated, together with the flash point (where required to be inserted in the Notation). *Fitted for oil fuel Flash point above 150°F.**Double bottom in boiler space & side bunkers*

*This vessel has been built in accordance with the approved plans, the Secretary's letters and in general conformity with the Rules and regulations for the class contemplated.*

*The main Oil tanks, Cofferdams, Oil Fuel Bunkers, Double bottom tanks in boiler space, Forward ballast tank, Fore & after peak tanks & Fresh water tank have been tested to Rule requirements with satisfactory results.*

*The upper part of the fore peak bulkhead & weather decks clear of Oil tanks have been tested with water from a hose and found tight.*

*The steering gear, Auxiliary steering gear, Windlass, and winches have been tested under working conditions and found satisfactory.*

*The workmanship and materials are good.*

*The Freeboard has been marked on the vessel's sides and verified.*

The amount of Entry Fee ..... £ 11 : 0 : 0

Special Survey Fee.... £ 601 : 4 : 0

*Freeboard.* 19 0 0.

Travelling Expenses, if any £ :

Fees applied for,

25/6/1941

Received by me,

19

(Special notations, where part of class, to be stated.)

I am of opinion the Vessel should be Classed *100 A.1.*

*CARRYING PETROLEUM IN BULK WITH NOTATION*

*LONGITUDINAL FIRMING AT BOTTOM AND DECK.*

*FITTED FOR OIL FUEL F.P. ABOVE 150°F.*

State whether the Vessel has been built under Special Survey *Yes.*Signature *Capt B. Seaver*

Surveyor to Lloyd's Register of Shipping.

Certificate to be sent to *Middlesbrough* Date of issue *3/7/41*

Committee's Minute

Character assigned

TUE. 1 JUL 1941

*+ 100 A.1 Subject**Carrying petroleum in bulk**Lloyd's acc. O.L. E.S.D.**White Hpl**note S.R.L.**+ Lmb. 6.41**Fitted for oil fuel 6.41 F.P. above 150°F.**Lloyd's Register**Foundation*