

Percent of strength of longitudinal seam: $J = \frac{235 - 36}{235} \times 100 = 84.7\%$	$3\frac{3}{8}"$ longitudinal stays, 6 threads pr. 1". W.P. = $\frac{670(85.7 - 8.6)^2}{250 \times 490} = 15.97 \text{ kg/cm}^2$
Rivets: $J = \frac{36 + 0.18 \times 5.1875}{49 + 235 \times 35} \times 100 = 85.2\%$	$1\frac{1}{2}"$ staybolts, 9 threads pr. 1". W.P. = $\frac{580(85.2 - 6.8)^2}{195 \times 187} = 15.58 \text{ kg/cm}^2$
Circum seams: $J = \frac{36 + 0.18 \times 2.1}{49 - 35 \times 102} \times 100 = 42.0\%$	$1\frac{1}{2}"$ " " " " (Shell plate) W.P. = $\frac{580(42.0 - 6.8)^2}{202 \times 187} = 15.8 \text{ kg/cm}^2$
Shell plate: W.P. = $\frac{580(42.0 - 6.8)^2}{187 \times 202} = 15.52 \text{ kg/cm}^2$	$1\frac{1}{2}"$ " " " " W.P. = $\frac{580(42.0 - 6.8)^2}{187 \times 202} = 15.4 \text{ kg/cm}^2$
Front and back in steam space: W.P. = $\frac{580(42.0 - 6.8)^2}{202 \times 187} = 15.64 \text{ kg/cm}^2$	$3\frac{3}{8}"$ stay tubes, 8 mm thick: W.P. = $\frac{402 \times 5.27}{287.5 \times 220(3.5 - 5.45)} = 15.6 \text{ kg/cm}^2$
Wide water space, front end: W.P. = $\frac{580(42.0 - 6.8)^2}{187 \times 202} = 15.86 \text{ kg/cm}^2$	Girders, combustion chambers (center): W.P. = $\frac{580(42.0 - 6.8)^2}{175 \times 202(3.5 - 7.3)} = 16.05 \text{ kg/cm}^2$
" " " " " " back end: W.P. = $\frac{580(42.0 - 6.8)^2}{187 \times 202} = 16.61 \text{ kg/cm}^2$	" " " " " " (side): W.P. = $\frac{580(42.0 - 6.8)^2}{175 \times 202(3.5 - 7.75)} = 15.75 \text{ kg/cm}^2$
Tube plate, combustion chambers: W.P. = $\frac{580(42.0 - 6.8)^2}{202 \times 187} = 15.52 \text{ kg/cm}^2$	$1\frac{1}{8}"$ staybolts on top of comb. chamb.: W.P. = $\frac{476(6.8 - 8)^2}{318 \times 200} = 15.59 \text{ kg/cm}^2$
Shell " " " " W.P. = $\frac{580(42.0 - 6.8)^2}{202 \times 187} = 20.2 \text{ kg/cm}^2$	Back end: W.P. = $\frac{580(42.0 - 6.8)^2}{202 \times 187} = 16.22 \text{ kg/cm}^2$
Top " " " " W.P. = $\frac{580(42.0 - 6.8)^2}{202 \times 187} = 17.8 \text{ kg/cm}^2$	" " " " " " W.P. = $\frac{580(42.0 - 6.8)^2}{202 \times 187} = 16.01 \text{ kg/cm}^2$
Back " " " " W.P. = $\frac{580(42.0 - 6.8)^2}{202 \times 187} = 16.33 \text{ kg/cm}^2$	
Furnaces, Morison W.P. = $\frac{580(42.0 - 6.8)^2}{202 \times 187} = 15.9 \text{ kg/cm}^2$	

Heating surface of 326 - 3 $\frac{1}{4}$ " tubes	= 214,00 m ²
" " " Combust. chambers, top & sides	= 13,30 "
" " " tube & backpl	= 12,40 "
" " " furnaces	= 16,30 "
Total heating surface	2755 m ² = 256,00 m ²
Koeff. k = $\frac{2755}{15,25 \times 12,08}$	= 0,98

Totalt gjennengangsareal av rør: $A = 1,34 \text{ m}^2$

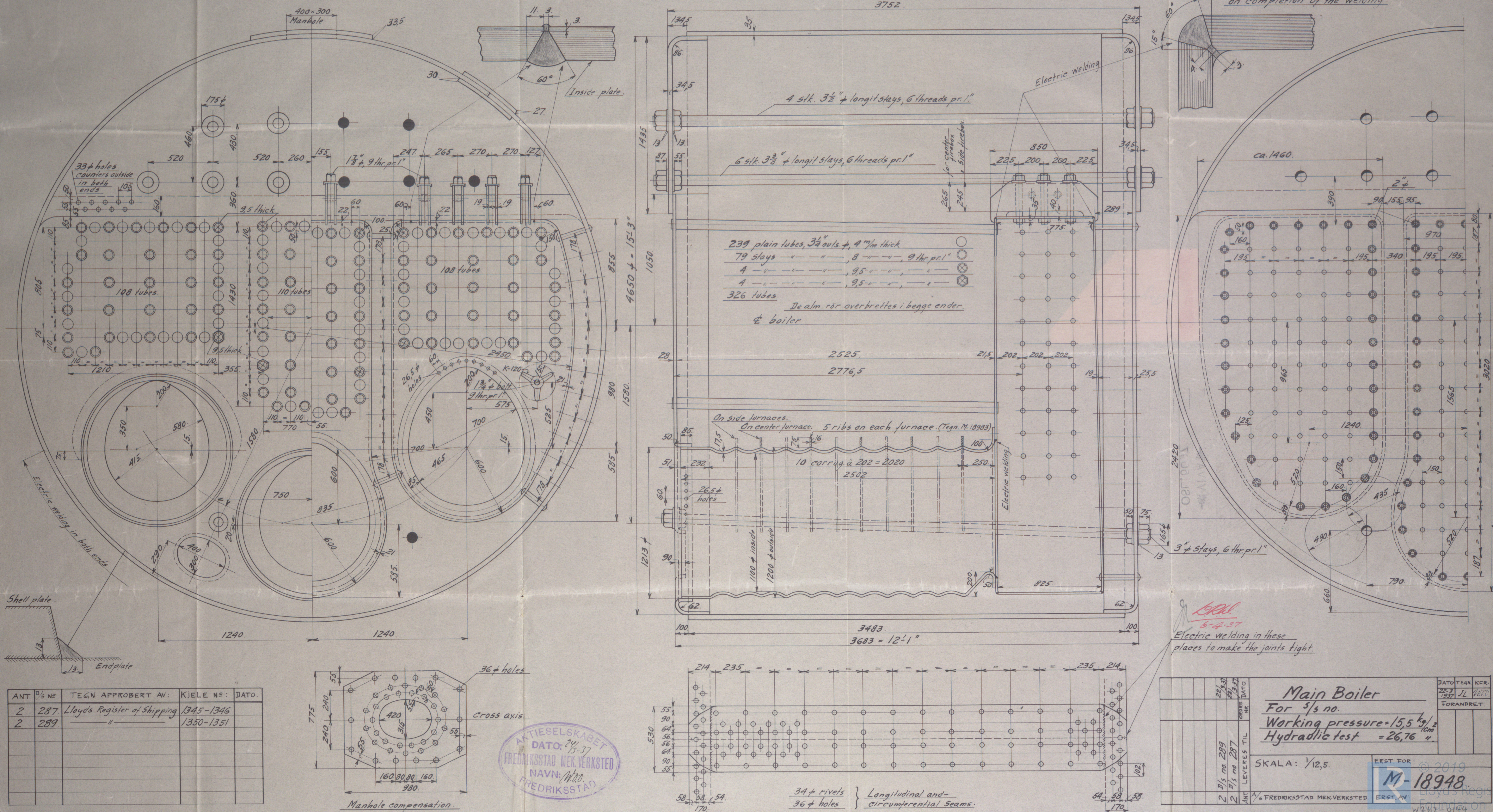
$$\frac{\text{Gjennengangsareal}}{\text{Ristareal}} = \frac{A}{R} =$$

Totalt ristareal pr. kjele =

$$\frac{\text{Heteplate}}{\text{Ristplate}} = \frac{H}{R} =$$

○ $1\frac{1}{2}$ " ϕ staybolts, 9 threads pr. 1", riveted over in- and outside.
 ◎ $1\frac{3}{4}$ " ϕ — " — " — " — " — " — "

Note:
The combustion chambers to be annealed
on completion of the welding.



W267-0144 1/2

FREDRIKSTAD MEK. VERKSTED		EKS. N.	
8481-14		EKS. FOR	
Hydrogely - 28.12		EKS. FOR	
Morking - 12.12		EKS. FOR	
for 1000		EKS. FOR	
Main Boiler		EKS. FOR	
VIVA		EKS. FOR	
K.G. MELDAHL		EKS. FOR	
OSL, 5097		EKS. FOR	

~~WS 368~~

Fredrikstad Mek. Verket

Jard Nos 287 + 289

Cylindrical Boilers

(14)

~~Cancelled~~

[Signature]

VIVA
K.G. MELDAHL

VIVA
OSL, 5097

Innlegg

Fredrikstad Register

Fredrikstad 24-3-37

2/2

A/S Fredrikstad mek. Versted

