

M. BERENDT,
Ingenieur.
Engineer Surveyor
to Lloyd's Register of British
and Foreign Shipping.

Telegramm-Adresse:
Ingbert-Hamburg.

Hamburg, 10th March 1904.
Admiralitätstrasse 52.

LLOYDS REGISTER
LONDON.

RECD 11 MAR. 1904

ANSR 15

E. Sir,

In answer to your esteemed letter of the 8th inst. and having regard to the diameter of screw shaft of the new steamer "Östergötland", Ham. 1st Entry Report No. 7867, I beg to say that I checked my calculation and found, that this diameter works out by Rules to 8.44", whereas it was erroneously stated to be 8.63".

With Cylinders 16.87", 87.5" & 43.25", stroke 24.75" and pressure 178 lbs. the intermediate shaft works out 7.78". Propeller 10.2" diam., the factor for screw shaft is: $(.63 + \frac{122 \times .03}{7.78}) = 1.24 = 1.00$
Then diam. of screw shaft without liners:
 $[(7.78 \times 1.04) \times 1.05] = 8.44"$

The shaft being really fitted 8.45" in diam. it appears sufficiently strong.

The difference between your and my calculation has probably arisen through the diameter of propeller being rather indistinctly written as 10.2" and may have been taken for 11.2".

The Secretary,
Lloyd's Register
London.

I am, Sir,
Your obedient Servant,
M. Berendt.

Referred to the Chief Engineer Surveyor.

CED

11 MAR. 1904

It is submitted that the Hamburg Surveyor be informed that he is wrong in his calculation for the screw shaft, which is governed by the diameter of the propeller. In the case of the "Pötergörländ" the intermediate shaft works out 7.78 and the diameter of the propeller is 10.2. Thus $(.63 + \frac{122 \times .03}{7.78}) = 1.1004$ (not 1.07 as stated in his letter), thus the screw shaft diameter is $7.78 \times 1.1004 \times 1.05 = \underline{8.98}$

The factor 1.07 is only to be used when the calculation works out less than that figure. & he should be guided by this in all future cases.

Yms

11.3.04

R.S.

11.3.04



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