

MECHANICAL ENGINEERING DEPARTMENT.

HEAD OF DEPARTMENT:
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Heriot-Watt College.
Edinburgh 11th April, 1916.

REPORT on Tensile Tests of 5 specimens of Steel, stated to have been prepared from samples cut from a transverse section cut from a crank shaft 15½" diameter.

Messrs Reid and Rutherford witnessed the tests.

Received: 10/4/16. Tested: 11/4/16.

H.W.C.E.L. No.	4410	4411	4412	4413	4414
Marks.....	Ext. diam.	Outer heart	heart	Outer heart	Ext. diam.
Diam. in.....	0.80	0.80	0.80	0.80	0.80
Area. Sq. in...	0.5026	0.5026	0.5026	0.5026	0.5026
Length, ins....	3.0	3.0	3.0	3.0	3.0
Yield Stress, tons per sq.in.	10.96	10.55	13.05	10.86	12.2
Ultimate Stress tons per sq.in.	26.65	24.35	24.42	24.10	25.40
Extension on 3" per cent.....	35.66 <i>62.31</i>	29.33 <i>53.68</i>	31.33 <i>55.75</i>	31.0 <i>55.1</i>	29.66 <i>55.06</i>

Remarks:-

Coarse grain structure at fracture; the results indicate a low grade mild steel.

R. Stanfield
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Received from Messrs James Currie & Co.,
Leith.