

## WATER CONSUMPTION OF AN UNJACKETED COMPOUND ENGINE. 13

TABLE IX.

SPRING A.—Calculations of Equivalent Scale Corrected for all Variations in the Hot Scale of the Spring.

AVERAGE CARD, HEAD END OF LOW-PRESSURE CYLINDER.

Division of Card.	Area.	Mean Height.	Corre- spond'g Scale.	Area × Scale.	Division of Card.	Area.	Mean Height.	Corre- spond'g Scale.	Area × Scale.
A1 . . . . .	+0.275	+0.629	20.03	+5.508	B1 . . . . .	-0.083	-0.190	20.83	-1.729
A2 . . . . .	+0.233	+0.533	20.01	+4.662	B2 . . . . .	-0.217	-0.497	20.90	-4.535
A3 . . . . .	+0.198	+0.453	20.04	+3.958	B3 . . . . .	-0.232	-0.531	20.91	-4.851
A4 . . . . .	+0.155	+0.355	20.09	+3.114	B4 . . . . .	-0.234	-0.536	20.91	-4.893
A5 . . . . .	+0.105	+0.240	20.16	+2.117	B5 . . . . .	-0.236	-0.540	20.91	-4.935
A6 . . . . .	+0.047	+0.108	20.16	+0.948	B6 . . . . .	-0.236	-0.549	20.91	-4.955
A7 . . . . .	-0.013	-0.030	20.83	-0.271	B7 . . . . .	-0.234	-0.536	20.91	-4.893
A8 . . . . .	-0.047	-0.108	20.83	-0.979	B8 . . . . .	-0.230	-0.535	20.90	-4.807
A9 . . . . .	-0.083	-0.195	20.33	-1.771	B9 . . . . .	-0.225	-0.515	20.90	-4.703
A10 . . . . .	-0.110	-0.252	20.85	-2.294	B10 . . . . .	-0.203	-0.465	20.90	-4.243
Totals... . . . .	+0.758	.....	.....	+15.002	Totals... . . . .	-2.130	.....	.....	-44.524

$$\text{Equivalent scale} = (15.001 + 44.524) + (0.758 + 2.130) = 20.61.$$

AVERAGE CARD, CRANK END OF LOW-PRESSURE CYLINDER.

Division of Card.	Area.	Mean Height.	Corre- spond'g Scale.	Area × Scale.	Division of Card.	Area.	Mean Height.	Corre- spond'g Scale.	Area × Scale.
A1 . . . . .	+0.303	+0.603	20.04	+6.072	B1 . . . . .	-0.119	-0.273	20.86	-2.482
A2 . . . . .	+0.255	+0.584	20.02	+5.105	B2 . . . . .	-0.229	-0.524	20.90	-4.786
A3 . . . . .	+0.223	+0.510	20.00	+4.460	B3 . . . . .	-0.233	-0.533	20.91	-4.872
A4 . . . . .	+0.163	+0.373	20.08	+3.273	B4 . . . . .	-0.233	-0.533	20.91	-4.872
A5 . . . . .	+0.078	+0.178	20.16	+1.572	B5 . . . . .	-0.233	-0.533	20.91	-4.872
A6 . . . . .	+0.013	+0.080	20.16	+0.262	B6 . . . . .	-0.231	-0.529	20.90	-4.828
A7 . . . . .	-0.037	-0.085	20.83	-0.771	B7 . . . . .	-0.229	-0.524	20.90	-4.786
A8 . . . . .	-0.069	-0.158	20.83	-1.457	B8 . . . . .	-0.224	-0.513	20.90	-4.682
A9 . . . . .	-0.093	-0.211	20.84	-1.917	B9 . . . . .	-0.220	-0.508	20.90	-4.598
A10 . . . . .	-0.125	-0.286	20.86	-2.608	B10 . . . . .	-0.203	-0.465	20.90	-4.243
Totals... . . . .	+0.712	.....	.....	+14.011	Totals... . . . .	-2.154	.....	.....	-45.021

$$\text{Equivalent scale} = (14.011 + 45.021) + (0.712 + 2.154) = 20.60.$$

TABLE X.

SPRING B.—Calculation of Equivalent Scale Corrected for all Variation in the Hot Scale of the Spring.

AVERAGE CARD, HEAD END OF LOW-PRESSURE CYLINDER.

Division of Card.	Area.	Mean Height.	Corre- spond'g Scale.	Area × Scale.	Division of Card.	Area.	Mean Height.	Corre- spond'g Scale.	Area × Scale.
A1 . . . . .	.325	.759	16.08	+5.226	B1 . . . . .	-.073	.171	16.81	-1.227
A2 . . . . .	.388	.659	16.12	+4.546	B2 . . . . .	-.263	.614	16.98	-4.466
A3 . . . . .	.245	.572	16.19	+3.967	B3 . . . . .	-.285	.606	17.00	-4.845
A4 . . . . .	.201	.470	16.30	+3.276	B4 . . . . .	-.291	.680	17.01	-4.950
A5 . . . . .	.132	.308	16.49	+2.177	B5 . . . . .	-.291	.680	17.01	-4.950
A6 . . . . .	.048	.112	16.50	+0.592	B6 . . . . .	-.290	.678	17.01	-4.953
A7 . . . . .	-.015	.035	16.81	-0.252	B7 . . . . .	-.287	.671	17.00	-4.870
A8 . . . . .	-.060	.140	16.81	-1.009	B8 . . . . .	-.284	.664	17.00	-4.888
A9 . . . . .	-.098	.229	16.81	-1.647	B9 . . . . .	-.280	.654	16.99	-4.757
A10 . . . . .	-.135	.315	16.84	-2.273	B10 . . . . .	-.257	.600	16.97	-4.361
Totals... . . . .	+.925	.....	.....	+14.803	Totals... . . . .	-2.601	.....	.....	-44.196

$$\text{Equivalent scale} = (14.803 + 44.196) + (.925 + 2.601) = 16.73.$$