

The Stephenson Memorial Miniature Locomotive Association

66th Trials Hosted By:- South Durham Society of Model Engineers 18th September 2022

ANALYSIS

									Average	Estimated Average						Equivalent
No	COMPETITOR	SOCIETY	LOCOMOTIVE	WHEEL ARR'T	GAUGE in	LOAD LBS	DISTANCE YDS	COAL OZS	Speed MPH	Drawbar LBS			Grate Area ins ²	Firing rate lbs/in2/hr	Coal lbs/ton mile	Scale Load Tons
											DBHP	Efficiency				
13	Nick Wright	Ryedale	Caledonian Dock Tank No 534	0-6-0T	7.25	2796	3665	24.945	6.25	29.60	0.4931	2.06	16.00	0.29	0.60	2587
8	Paul Stephenson	Sunderland	Simplex	0-6-0T	5	1213	3832	28.47	6.53	12.91	0.22	0.82	15.13	0.35	1.51	1122
3	Sam Yeales	Tyneside	BR(M) Class 4F	0-6-0	3.5	655	4329	19.65	7.38	7.08	0.14	0.74	11.00	0.33	1.71	1198
1	Wilf McHugh	South Durham	Alice Class Hunslet 'Alice'	2-4-2T	5	1160	2650	24.42	4.52	11.95	0.14	0.62	12.00	0.38	1.96	1073
11	Simon Newby	Furness	BR(M) Royal Scot	4-6-0	5	1300	3760	40.19	6.41	13.80	0.24	0.61	26.00	0.29	2.03	1203
6	Ronald Stevenson	South Durham	Simplex	0-6-0T	5	1005	1883	16.83	3.21	10.21	0.09	0.54	17.50	0.18	2.19	930
2	Eddie Gibbons	Tyneside	GNR Atlantic No 1418	4-4-2	3.5	657	3986	23.45	6.79	7.02	0.13	0.57	14.00	0.31	2.21	1201
4	Malcolm Lummas	York	Duchess of Swindon	2-6-2T	3.5	664	1839	12.07	3.13	6.74	0.06	0.49	21.00	0.11	2.44	1214
7	Charles Waddington	Furness	Simplex 'Furness'	0-6-0T	5	1113	1482	17.01	2.53	11.24	0.08	0.46	18.75	0.17	2.54	1030
12	Sean Bowler	Tyneside	BR(E) Class A3	4-6-0	5	1305	1723	24.95	2.94	13.22	0.10	0.43	42.00	0.11	2.73	1208
9	Daniel Duncan	Ryedale	GWR 15xx Pannier Tank	0-6-0PT	5	651	2827	23.18	4.82	6.74	0.09	0.39	13.60	0.32	3.10	602
5	Dave Fuller	Furness	Simplex 'Sally'	0-6-0T	5	1129	696	13.31	1.19	11.31	0.04	0.28	18.75	0.13	4.17	1045
10	Joe Gibbons	Tyneside	BR Standard Class 4MT	2-6-4T	5	1292	491	17.64	0.84	12.93	0.03	0.17	20.63	0.16	6.86	1195

The above figures are offered for interest and have no bearing on the result of the competition

Drawbar pull estimated using train resistance = gross train weight (lbs) x (0.01+0.000015 x speed(mph)²)

Efficiency calculation assumes coal CV = 12898 BTU/lb