LEYLANDSME



IMLEC 2019

12th /13th /14th JULY 2019

Visit www.leylandsme.co.ukfor more info

A message from the Chairman

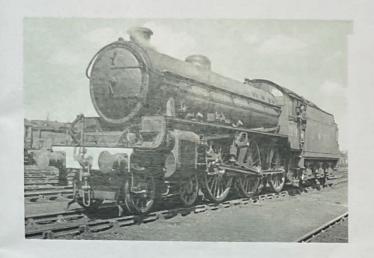
On behalf of the Leyland Society of Model Engineers may I offer a warm welcome for competitors and visitors alike to the 2019 International Model Locomotive Efficiency Competition. Now in its 51st year the event is still an important part of many person's calendars and dare I say, aspirations.

Although Leyland SME has held the competition several times before it was not in our plans to do so again this year. The circumstances surrounding the future of the Bristol Society, which had originally volunteered to hold this year's event, meant another club had to pick up the baton. As I compile this missive in late April I hope that by the time it is read Bristol have been able to secure a future and can move on. It would be a tragedy if a club in such high regard as Bristol SME were to lose all it had invested at their Ashton Park location. I can, from personal experience state that Bristol is a great club with first rate facilities always an inviting welcome and rightfully holds a place in the Premier League of model engineering Societies. Best wishes and good luck to all our friends there.

A well-established feature of all IMLEC's is the camaraderie of those involved. The regular faces meeting and greeting those who nervously have a first time go. It's all good fun, whether you have an eye on the trophy or whether you just want a continuous half hour run with a train full of passengers egging you on.

To all our entrants I say thank you for taking part, without your efforts the weekend wouldn't be happening at all. For Leyland SME it has all been a bit short notice but our members have done their best and we hope you enjoy your time with us. Keep your fingers crossed for the weather!

John Barr



5" gauge LNER B1 4 – 6 – 0
"Springbok"
Built to the Martin Evans design and successfully ran in the 2018 IMLEC at Birmingham MES.

Marcus Peel

(stock image)



5" Gauge 2 – 6 – 0 Polly 6 Modified from the original, has entered IMLEC on two previous occasions.

Bryn Jones

Chesterfield Society and Leeds Model Engineering Society

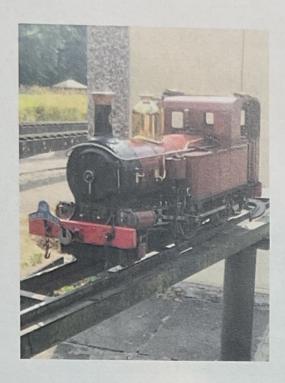


5" Gauge 2 – 8 – 0 O1 design
Built & owned by Peter Wardle
Completed 44 years, 2 boilers and
2000 miles ago, the loco is being
driven by Birmingham SME member

Stephen Harrison

"Stephen first drove my 7 %" gauge Hunslet class Elidir when he was 8 years old. Now having been a member of BSME for 19 years his interests include 16mm garden railways and all the popular live steam gauges. Stephen can often be seen visiting other clubs and rallies and he is a regular at the annual LittleLec for models under 50lbs in weight"

Peter Wardle



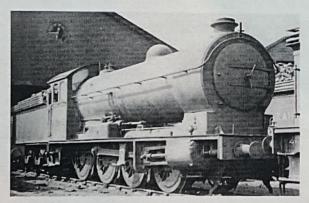
5" Gauge 2 – 4 – 0
Isle of Man loco
"Peveril"

Built by Mike Casey and has entered IMLEC on 7 occasions.

Mike completed the model using all

his own drawings and patterns.

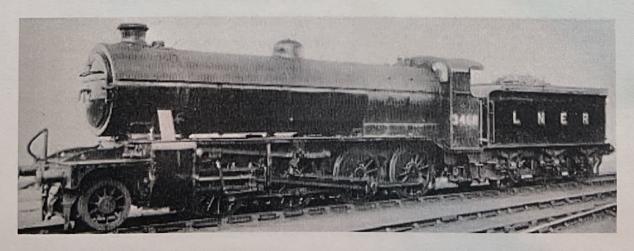
Jack Dibnah



0-8-0 LNER Q5 (Stock image)

5" Gauge "Netta"
Based on LBSC's design, the model is built with enlarged cylinder-bores plus additional adhesive weight.
Following runs at Southport and Birmingham, IMLEC 2019 will be its third attempt.

Ben Pavier Southport MES



LNER Gresley 2-8-0 (none preserved in full size as in the photo)

5" gauge version entered by **Stuart Hamilton**

5" Gauge 4 – 6 – 2 Britannia
"Apollo"
I was given the model as a part
build in 2002 and finished it four
years later in 2016.
This will be my 3rd IMLEC
Karl Midgeley





5" Gauge A4 4-6-2 Pacific "Wild Swan"

I built the model over a 4 year period roughly to Michael Breeze's drawings with some modifications. The only castings used are the driving wheels everything else is either fabricated or machined from the solid. My first attempt in IMLEC was at Leyland in 2013 to which I managed only half a lap! Hoping to do better this time round.

Roger Holland



5" Gauge LMS 2 – 6 – 0
"Lochwood"

A scaled up version of LBSC's
Princess Marina
Andrew Hulse



5" Gauge 2 – 8 – 0 O1 design
"Nigel Gresley"

A last minute withdrawal from the competition left a space in the running order. LSME member

Richard Prideaux offered his model to fill the gap and it is driven by club Chairman John Barr.

(This live commentary run, will not form part of the competition itself)



5" Gauge BR (ex SR) 2-6-0
U Class Mogul
Came 5th at 2013 Leyland IMLEC
when only a few weeks old.
Achieved 4th place at Birmingham
last year. Based on Martin Evans's
"Ashford" with some added detail
and corrections.

Glyn Winsall



5" BR 9F 2 – 10 – 0 "Evening Star"

(as in the full size photo)

Completed in 2012, this will be my

6th attempt to take the Trophy!

Dave Kerry



5" Gauge Thompson 4 – 6 – 0 B1 "Korrigum"

The name "Korrigum", an African antelope, was allocated to 1036 when a second batch of 30 engines (1010-1039) were built at Darlington works. The nameplates were cast but not fitted as 1036 was later named "Ralph Assheton" after going into service for the first time. As well as being an LNER director, Ralph Assheton was a member of parliament and served as Minister of Supply in Churchill's wartime cabinet.

Trevor McKelvey

(owned by Arran Wheeler and extensively rebuilt in 2017/18)



5" Gauge 4 – 6 – 0 Merchant Navy
"Isle of Man Steam Packet"
The loco has been fitted with a rosebud
grate and 2019 will be her 5th IMLEC entry

Toby Lampitt

Manx MES (stock image)

The model was built by Mike Casey and so named to commemorate the following:-

At the outbreak of the Second World War 10 of the 16 vessels in the fleet of the Isle of Man Steam Packet Company were requisitioned. Four were lost.

Eight of the company's ships took part in the Dunkirk evacuation. By the end of operations, the fleet had rescued a total of 24,699 souls, 1 in 14 of those evacuated from Dunkirk. Whilst the evacuation is widely regarded as the Isle of Man Steam Packet Company's "finest hour", it also saw its blackest day.

Three of its ships were lost in one day, 29 May 1940



5" Gauge LNER Proposed Gresley
4-8-2 "Duke of York"
Built in 1974 by Ray Milliken
using Clarkson A3 drawings as a
guide but largely to his own
design.

Tom Parham

The model travelled to Japan in 1977 and 1987, after which it remained in its cradle in the workshop. Ray passed the engine to me in 2018 as he was suffering from terminal cancer. I have been running it basically untouched since, but still have a few jobs to do.

5" Gauge 4 – 6 – 0
Thompson B1
Built by Bob Bramson
and ran in IMLEC in 1999
under the name of
"Rodeer"

Roger Hopkins



This is my second entry into an IMLEC event, my first being at Birmingham in 2018. Since owning the locomotive it has been renamed "Dibatag" No. 1033. I am a member of Nottingham Society of many years but am still an "IMLEC Novice"

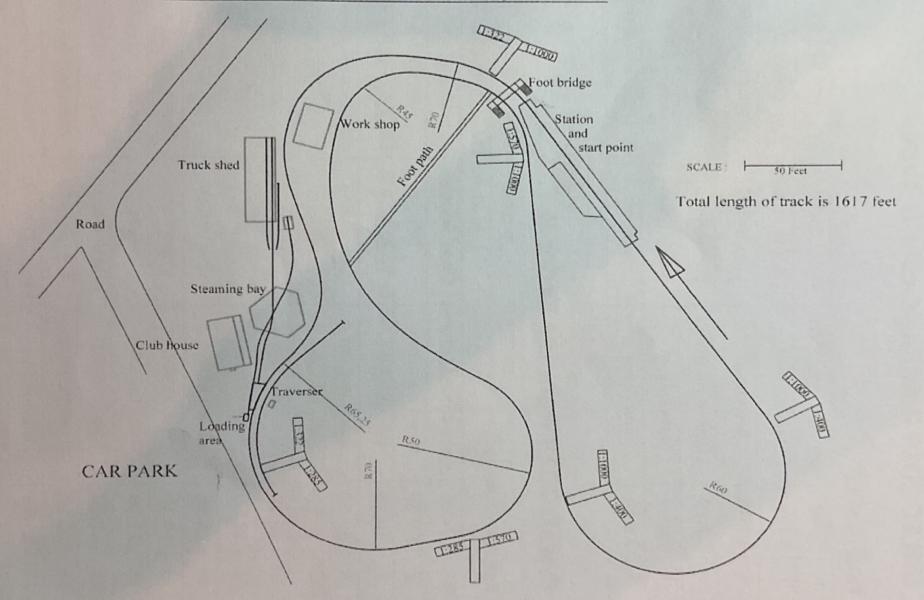


5" Gauge 2 – 8 – 4
Berkshire "Hustler"
1200lbs, 10 feet long.
Ran in IMLEC 1990 at
Guildford, 2nd rebuild
completed in 2017

Nigel Potter

American standard gauge, 10 gallon tender, Westinghouse compressor, steam turbine driven water pump, feed water heater, s/s motion and piston rings, original oil fired steel boiler replaced with copper and of course coal fired.

Leyland Society of Model Engineers



IMLEC 2019 Running Order & Times

Friday July 12th

Ru	Time	Competitor / Driver	Club / Society	Locomotive
1	13.00	Marcus Peel	Southport	"Springbok" B1 4-6-0
2	13.40	Bryn Jones	Chesterfield	"Polly 6" 2-6-0
3	14.20	Stephen Harrison	Birmingham	GNR O1 2-8-0
4	15.00	Jack Dibnah	Manx MES	Peveril 2-4-0
5	15.40	Ben Pavier	Southport	LNER Q5 0-8-0

IMLEC 2019 Running Order & Times

Saturday July 13th

Run	Time	Competitor / Driver	Club / Society	Locomotive
6	09.30	Stuart Hamilton	Sale	GNR O1 2-8-0
7	10.10	Karl Midgeley	Gravesend	"Apollo" Brit' 4-6-2
8	10.50	Roger Holland	Chesterfield	"Wild Swan" A4 4-6-2
9	11.30	Andrew Hulse	Maidstone	LMS Mogul 2-6-0
10	12.10	Non Competitor	LSME	GNR O1 2-8-0
11	12.50	Glyn Winsall	Rugby	SR "U" Class 2-6-0
12	13.30	Dave Kerry	Chesterfield	BR 9F 2-10-0
13	14.10	Trevor McKelvey	Urmston	"Korrigum" B1 4-6-0
14	14.50	Toby Lampitt	Manx	Merchant Navy 4-6-2
15	15.30	Tom Parnham	Maidstone	Prop. Gresley 4-8-2
16	16.10	Roger Hopkins	Nottingham	"Dibatag" B1 4-6-0
17	16.50	Nigel Potter	West Cumbria	"Hustler" USA 2-8-4

IMLEC 2019 Running Order & Times

Sunday July 14th

Run	Time	Competitor / Driver	Club / Society	Locomotive
18	09.30	James Tilbury	Urmston	Prairie Dog 4-4-0
19	10.10	Jason Pattinson	Sale	3½" 4-6-2 "Pamela"
20	10.50	George Winsall	Rugby	3½" 4-4-0 "Virginia"
21	11.30	David Mayall	Bracknell	LMS Jubilee 4-6-0
22	12.10	Billy Stock	Urmston	Britannia 4-6-2
23	12.50	Judith Bellamy	Leeds	LNER B1 4-6-0
24	13.30	Nick Elliot	NW Leicester	"Duchess" 4-6-2
25	14.10	John Cottam	Chesterfield	LNER P2 2-8-2
26	14.50	Joanne Flippance	Worthing	BR Prop 2-8-2
27	15.30	Les Pritchard	Harlington	LNER B1 4-6-0
28	16.10	Steve Eaton	Chesterfield	Freelance 2-8-0

Calculations and results

The dynamometer car measures and gives readings of the 'Total Work Done' in foot-pounds and 'Total Distance Travelled' in feet. In addition, the 'Overall Run Time' in minutes and 'Weight of Coal' in pounds are recorded. Using that data the following calculations are made:-

Overall Thermal Efficiency % = Work Output x 100%
Heat Input

The calorific value of the coal is 14,000 B.T.U. per pound.

The number of foot / pounds per B.T.U. is 778.

Overall Thermal Efficiency % = Total Work Done x 100
Weight of coal used x 14,000 x 778

The locomotive that returns the highest thermal efficiency wins

A brief History of how I.M.L.E.C. came about

On March 7th 1969, Martin Evans, the then Editor of Model Engineer, announced that a locomotive efficiency competition, to be known as The Model Engineer International Model Locomotive Efficiency Competition was to be held. Model Engineer magazine was to sponsor the competition as well as provide prizes for the winning entry -atradition that continues to this day. The event went ahead in July of that year; it was hosted by Birmingham SME and became the first IMLEC. Since 1969, the competition has been held on an annual basis with representatives from Model Engineer being on-site to photograph and later write-up the proceedings in the magazine. Although rules of the competition itself have changed little over the years, those governing the entry criteria have been subjected to gradual adjustment, reflecting changes within the hobby. For example IMLEC 2000 saw the first entry of a kit built locomotive. Previously all locomotives entered had to have been built entirely by the competitor. Another rule from the same period and now also relaxed, prohibited locomotives from being entered into the competition on more than two occasions. This worked well enough by introducing fresh locomotives into the competition, but had the negative effect of eliminating locomotives at a faster rate than new ones could be built! Since the millennium the competition has had mixed fortunes, IMLEC 2001 for example, was cancelled due to restrictions caused by the Foot & Mouth epidemic. Between 2003 and 2009 organizers began to split the competition into two groups, segregating past winners into a separate category. That idea did not gain universal approval and has since been dropped. IMLECs held in 2007, 2010 and 2011 concluded with no indication as to where and when the next competition would take place. Competitors and spectators like to plan ahead and at that stage it was felt that Model Engineer, as overall sponsors, should have been doing more to maintain continuity. By the end of 2011 it was clear that a review of the rules was overdue and early in 2012 Diane Carney, then assistant editor of Model Engineer, organized a meeting at the headquarters of Nottingham SMEE. The purpose of the meeting was to evaluate the existing rules and provide guidelines in grey areas. Present at that meeting were Diane Carney, Alan Crossfield, Lionel Flippance, Steve Eaton and Pete Thomas. Pete represented Nottingham SMEE who had, at rather short notice, volunteered to host the event later in the year. This went ahead and will be marked as the first occasion when IMLEC was spread over three days. This was a bold decision, made in order to accommodate all competitors and to rid the event of the need to draw names from a hat. At the closing ceremony, all witnessed the handover of the IMLEC flag, (a tradition initiated by Leeds in 1992)

5" Gauge USA 4 – 4 – 0

The model originated in France, believed to have been built as a commission by John Clarke. (Stock image)
Rebuilt and re-painted by James Tilbury (stock photo)





3½" Gauge 4 – 6 – 2 LBSC design
"Pamela"

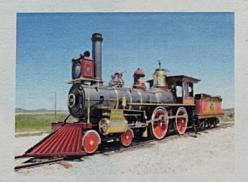
Completed in the early 1950s and winner of the H.E.White Locomotive

Trophy in 1963

Built in the 1950's the loco is ballasted with lead and is a substantial two-man lift. The injector steam valves are push-pull types and the motion and valve gear are hardened silver steel, that likely explain its condition after sixty years of running. The model won the best 3½" prize in IMLEC 2013 here at Leyland and still runs like a sewing machine today!

Jason Pattinson

Sale Area MES



3½" Gauge "Virginia" (Stock image)
The model has gunmetal cylinders with cast iron liners, single injector and twin crosshead pumps for water feed, leaf springs and hydrostatic lubricator.

The model was started by my father Glyn, his first attempt when he was 10 years old. Completed in the early 90's it won the New Zealand cup at the ME exhibition then competed in IMLEC 1994 at Gravesend, a year before I was born! The loco has been in a box since 2000. This year's IMLEC marks 10 years since I first entered the competition at Bristol in 2009 and is my 8th attempt. I also entered IMLEC 2000 here in Leyland at the tender age of 5, but let my father drive, for obvious reasons......

George Winsall



5" Gauge 4 – 6 – 0 LMS Jubilee
A Silvercrest model with
modifications to make it more user
friendly plus some added detail

David Mayall

Bracknell Railway Society



5" Gauge 4-6-2
Britannia
"William Wordsworth"
built by Barrie Purslow
from a Winson kit between
1998 and 2000

It took Barrie 18 months of sorting to iron out the niggles. It is far from a basic Winson Britannia having new cylinders bored out to 2" and several details added to make it look more like a prototype. The loco has never been entered into an IMLEC before.

Billy Stock



(Stock Image)

5" Gauge 4 – 6 – 0 B1
"Wildebeeste"
Built over 17 years by Arthur
Bellamy and recently reboilered. Ran in IMLEC 2014 at
Bournemouth but had to retire
owing to regulator failure.

Judith Bellamy (Leeds SME)





5" Gauge LNER 2-8-2 P2 "Wolf of Badenoch"

Built in 2007 - 2013 to Michael Breeze's drawings and my own modifications. Working pressure is 110 psi, two vertical injectors and an axle pump, Kylchap blast pipe, steel tyres, everything handmade except the wheel castings. The loco first ran in IMLEC 2013 here at Leyland but I had to use the tender from my Merchant Navy class as the P2 tender wasn't then finished.

On that occasion the model and I achieved 3rd place.

John Cottam



IMLEC legend Lionel Flippance with his 2 – 8 – 2 BR Proposed Class 9 heavy freight loco in 5" gauge, hopefully driven this year by his daughter Joanne. The first version Lionel built won IMLEC's 1988, 1989, 1990, 1998, 2000 & 2012. In 2016 Lionel entered a revised version, one of three he is currently building with no added weight. On that occasion at Urmston MES, driver George Evensis took the Trophy, a feat he was again to repeat at Birmingham last year.

"George was a retired engineer from Yorkshire who settled in Worthing. He was a great raconteur and an inspiration to me in my early years at the Worthing club."

Lionel Flippance



5" Gauge 4 – 6 – 0 LNER B1
"Gemsbok"
Won second place in IMLEC 2009
at Bristol MES
(stock image)

Les Pritchard

The B1s were designated as the 'Antelope' Class, with the first being named "Springbok", the next 40 were allocated antelope names when built.

The photograph shows preserved B1 "Mayflower"



5" Gauge 2 – 8 – 0
German Outline
"built to my own design"
Steve Eaton
Chesterfield MES

Leyland SME says "Thank You!"

South Ribble Borough Council for permission to stage the event,

Birmingham Society of Model Engineers for the loan of the marquee,

Mike Taylor's mate for the use of his fencing,

Chris Murphy for the loan of the PA system,

Station Road Steam for a backup dynamometer box,

Our supporters from Keatley Metals,

Peter Nowell for printing the program,

LSME members for taking part and in particular the ladies for catering,

And all the competitors and to everyone who turned up!

*** Bristol News ***

BSMEE chairman Norman Rogers has said: "We have been negotiating with the City Council for several months and believe we have reached an agreement that we are all happy with. A new 5 year lease has to be finalised but we are delighted at the outcome of the negotiations that mean we do not have to up sticks and find a new home". June 2019

Rules for Competitors

- 1 On arrival competitors will be required to register at Reception where all necessary information concerning the day's events will be available, including the approximate time of run. One hour before the start of the run the competitor / Driver will be called to prepare their locomotive and will be allocated an Observer.
- 2 Two sizes of coal will be available in pre-weighed bags, the Driver may select the size required which will be weighed in their presence and the weight recorded.
- 3 As much charcoal, wood, paraffin as required will be available in order to raise steam. The change to weighed coal will be at the Driver's discretion; however the locomotive must have a good coal fire before going onto the track. No fuel other than the weighed coal will be taken onto the track.
- 4 The train will be prepared in the steaming bays with the Dynamometer car and sufficient empty passenger cars to carry the number of passenger the Driver has nominated.
- 5 The Track Marshal will advise the driver when to go onto the track and will assist in coupling the locomotive to the train.
- 6 The locomotive and train will be driven light to the station with just the Driver and Observer on board
- 7 The passengers will board at the station from where the official timed run will start.
- 8 The Distance and Work Done measurements will start from the steaming bay area, therefore work done during the light run up to the station will be credited to the timed run.
- 9 Immediately before the timed run the Driver will be asked to confirm that the load is to their satisfaction so that any adjustments can be made.
- 10 The Timekeeper will advise the Driver when to start the timed run.
- 11 The duration of the run is a nominal 30 minutes. No time allowance will be made for stops, other than non-locomotive related occurrence, e.g. truck derailment or track obstruction. The Driver may opt to stop once 25 minutes have been completed but the run must terminate in the station. Any competitor not completing 25 minutes will be deemed to have retired. A lineside clock will be provided so that drivers may see the progress of their run. Drivers will be advised

when they have 10 and 5 minutes to go and when on the last lap. The total period of locomotive related stoppage during the run must not exceed 8 minutes. If this is exceeded the Driver will be deemed to have retired.

- 12 The run will end at the station. Any competitor stopping short of the station because of lack of steam must raise sufficient steam to bring the train into the station before the run is deemed to be completed.
- 13 Reversing back to the station in order to terminate the run is not allowed.
- 14 Passengers may be dropped off at any time during the run but additional passengers may not be taken on board once the timed run has started.
- 15 The Observer will supervise the off-loading of passengers only on instruction from the Driver.
- 16 Passenger cars must not be dropped off or the train divided during the timed run, the load may be reduced by dropping passengers only.
- 17 The maximum speed will be 10 miles per hour. The Observer will tell the Driver when this speed is being approached and will give a warning if it is exceeded. Excessive speed may result in disqualification.
- 18 Drivers must not lean on the tender or locomotive in such a way as to increase the drawbar pull, infringement will result in disqualification. The use of the hand pump is not permitted except in emergencies in which case the locomotive must be retired.
- 19 Water in suitable containers will handed to Drivers as required to enable the Driver to top up as required.
- 20 If the locomotive is fitted with sanding equipment then it may be used, other sanding will not be allowed.
- 21 At no time during the run may assistance be given, all work must be provided by the locomotive.
- 22 All unused coal will be collected and weighed in the driver's presence. No allowance will be made for un-burnt coal in the firebox.
- 23 The adding of ballast including water, fitted externally to the scale outline or likely outline of a freelance model, is not allowed.
- 24 Although the fitting of spark arrestors is no longer mandatory for locomotives operating in Worden Park, the organisers of IMLEC 2019 strongly recommend their use if there is a possibility of harmful sparks being thrown from the chimney. The responsibility rests with the driver but the observer will have the authority to stop the run if either he, or the passengers are endangered.
- 25 The decision of the Chief Judge is final on all matters.
- 26 Have a good time! The competition organisers wish each contestant the very best of luck.

Previous IMLEC Winners

1990 Guildford - Lionel Flippance 5" BR proposed 2 - 8 - 2 1989 Leyland - Lionel Flippance 5" BR proposed 2 - 8 - 2 1988 Leeds - Lionel Flippance 5" BR proposed 2 - 8 - 2 1986 Bournemouth - Alan Crossfield 5" Nigel Gresley 1991 Bristol - Kevan Ayling 5" BR proposed 2 - 8 - 2 1987 Birmingham - Kevin Moonie 5" LSWR Adams 1985 Urmston - Alan Crossfield 5" Nigel Gresley 1973 Chingford - P Killan / B Longstaff 5" LNER L1 1971 Southampton - A. Haydon 5" Dean Single 1978 Guildford - Percy Wood 5" Maid of Kent 1969 Birmingham - John Drury 5" Royal Scot 1983 Guildford – Les Pritchard 5" Royal Scot 1979 Bristol - David Morris 5" Stirling Single 1974 Bristol – Fred Winsall 5" Nigel Gresley 1981 Bournemouth - Percy Wood 5" J39 1993 Leyland - John Heslop – 5" Stanier T 1984 Bristol - Les Pritchard 5" Royal Scot 1980 Bedford - Percy Wood 3%" Class 7 1982 Leyland - Roy Amsbury 5" De Glen 1972 Tyneside – Norman Spink 5" 57XX 1975 Tyneside – Laurie Joyce 31/4" King 1992 Leeds - Dave Sutcliffe 5" S&D 7F 1977 Chingford - Bill Perret 5" Speedy 1970 Witney – Len Abram 5" Firefly 1976 Kinver – Bill Perret 5" Speedy

Previous IMLEC Winners

2018 Birmingham - Lionel Flippance 5" BR proposed 2 - 8 - 2 2012 Nottingham - Lionel Flippance 5" BR proposed 2 - 8 - 2 2001 Postponed owing to UK wide foot and mouth outbreak 2016 Urmston - Lionel Flippance 5" BR proposed 2 - 8 - 2 2000 Leyland - Lionel Flippance 5" BR proposed 2 - 8 - 2 1998 Kinver - Kevan Ayling 5" BR proposed 2-8-2 1996 Northampton – Alan Crossfield 5" GWR Manor 2006 Fareham – Les Pritchard 5" L&Y 0 – 6 – 0 T 2008 Southport – Brian Remnant 5" Sweet Pea 2014 Bournemouth - John Cottam 5" LNER P2 2010 Bournemouth - Steve Eaton 5" Britannia 2017 Southport - Paul Tompkins 5" Britannia 2015 Nottingham – John Cottam 5" LNER P2 2011 Bromsgrove - Ben Pavier 5" Britannia 2004 Kinver – Glynn Winsall 5" Gresley O1 1999 Northampton – Jim Elliot 5" Speedy 2005 Northampton – Ballan Baker 5" K1 2007 Llanelli – Steve Eaton 5" Britannia 2009 Bristol - Neil Mortimer 5" Polly III 2013 Leyland – Steve Eaton 5" Class 5 1997 Llanelli – Len Steel 5" Britannia 2003 Bristol – Geoff Moore 5" Minx 2002 Leeds – Geoff Moore 5" B1