

The romance of steam...in miniature



GRAFAR
N
GAUGE

A new dimension

Introducing  gauge

We have been manufacturers of Scale Model Railways in H0/00 Gauge since 1947 — and in fact we are still making them today! The popularity of model railways as a Hobby has never ceased to grow but available space in the modern home has gradually diminished. In recent years advances in production methods and materials have enabled us as Manufacturers, to maintain our own high standard of detail and realism but do it in 'N' scale at 148 : 1 as well as '00' at 72 : 1. The effect of this is to give you the realism you want and at the same time enable you to have as interesting and extensive an 'N' gauge layout on a board 4 foot x 2 foot as you would have had in a '00' layout on an 8 foot x 4 foot board. Quite an advantage!

In the past 'N' Gauge suffered from a lack of Locomotives and Rolling Stock — particularly of British Types. Today, GRAFAR LTD have Suburban bogie coaches, Mainline bogie coaches, Vans and Wagons in most Regions plus a magnificent range of Private Owner Rolling stock, AND a superb range of Locomotives.

Additionally, we manufacture track and points renowned for their realism, and still the only type of pointwork with sprung blades correct to prototype, not pivoted. We have fixed track for the beginners, and we also make yard-long flexible track, which was originally invented by our Chairman Mr. T. Graham Farish in 1947.

With this Range you can now have as complete a layout in 'N' Gauge as an H0/00 layout. All our products are made in England. All designs and Patents are our own and, being proud of our versatility we not only make the original diecast and injection moulding tools we do most of the rest as well!

Nevertheless we do rely on certain materials supplied by others to our specifications and inevitably a proportion will be of European origin. In our opinion this does not alter the fact that our products are primarily British Made, and over 90% from British material.





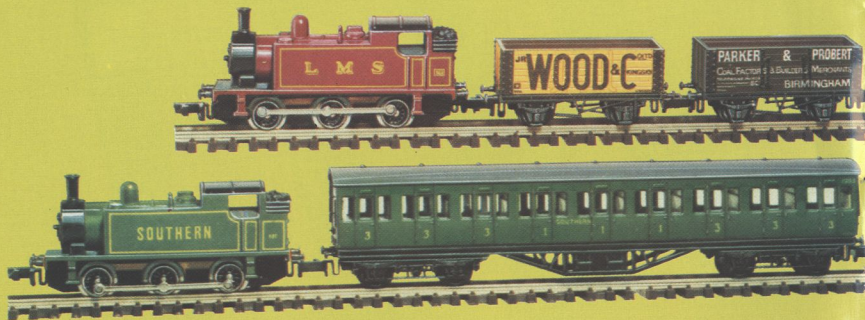
GRAFAR
GAUGE

Super Train Sets

NGS 3



NPS 3



The Grafar Train Sets have been especially designed for the newcomer to the fascinating life-long hobby of scale model railways. They are very easy to put together with fixed straights and curves that push-fit and have 'fishplates' or joiners already fitted. The power connection is provided on one of the straights so you have no soldering to worry about. But don't forget to get a transformer from your Dealer!

Grafar Train Sets are fun right from the start — just look at the delightful beautifully detailed locomotive and its attractive train of colourful Private Owner Wagons plus the

all-important Guards Van. Alternatively, you can have a Passenger Coach Set complete with the Brake End coach.

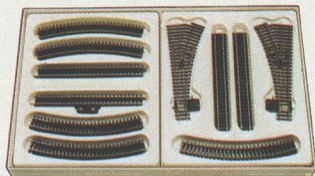
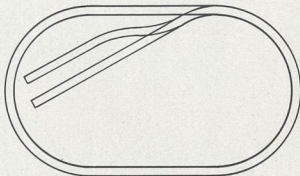
And don't forget these are not just toys, they are scale models too. Grafar Train Sets are the basis of your future model railway layout because we use Scale Models throughout and the track system is identical to our full range of track and pointwork. This means that with the addition of a point into the oval of track provided in your Train Set you can go on all the way to a really elaborate layout. Welcome to our Hobby!



NOTICE: The contents of the train sets illustrated may be varied from time to time. Customers should always check the contents prior to purchase, as the box lids are for decoration only and are not intended to represent content.

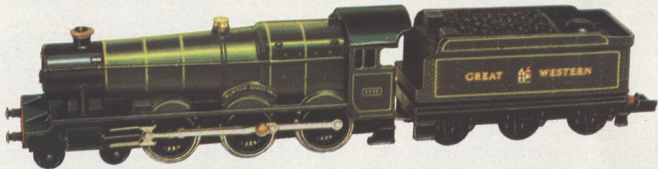
Track Sets

Every GRAFAR Train set contains an oval of track. But if you just want to add a small extension, or only want to buy the track, GRAFAR offer a Combined Track Set as per the diagram below. This provides an oval plus sidings for extra interest, and again is easy to fit.



NTS 1

Precision Locos



NE4W G.W.R. HALL CLASS MAINLINE LOCO

Here are a few notes on the prototypes of the scale models we make:

The Great Western Hall Locomotives were used for express main line, suburban and long haul good service, and were developed from the "Saint" class. Weight with tender 122 tons; drawbar pull 27,275 lbs. They were redesigned by S. W. Hawksworth in 1944 and 91 were built to the new design.

Work horse of the system, the Great Western Pannier Tank was used on suburban services, shunting, short haul goods and bringing express coaches from the sidings for a lordly "Hall" or "King" to head. Designed by S. W. Hawksworth in 1947. Weight 55 tons; drawbar pull 22,515 lbs. 210 were built to this design.

The famous Great Eastern Tank — many hundreds were built between 1890 and 1901 for the world's first commuter system which created the huge dormitory area of North East London. Designed by J. Holden; weight 42 tons; drawbar pull 19,090 lbs. 134 were still running when taken over by British Rail.

Tankers were widely used and built by numerous firms for export and private service in docks, steelworks, gasworks, collieries and so on. Many of these free lance types were also used by the Railway Companies and here are examples of LMS and Southern Standard side tank locos used for goods and short haul passenger duties, shunting and the like.

More **DETAIL** on the **MODELS** themselves:

- Diecast metal body
- Nylon type chassis
- Nylon spur and worm gears
- Steel shafts
- Reduction gear
- Detachable motor, suppressed
- All driving axles, gear driven
- Insulated metal tyres
- Four wheel pickups
- International standard
- Semi-matt paintwork
- Lined (where applic)
- Lettered
- Bright trim

The low friction qualities of the rolling stock ensures greater haulage potential with minimum current drain. The current pick-up system for locos provides a continuous power supply on our points even at slow speeds.



NE1W 9400 G.W.R. PANNIER TANK LOCO



NE1BR B.R. PANNIER TANK LOCO



NE2E G.E.R. HOLDEN TANK LOCO



NE2BR B.R. HOLDEN TANK LOCO



NE2NE L.N.E.R. HOLDEN TANK LOCO



NE3S SOUTHERN STANDARD TANK LOCO



NE3M L.M.S. STANDARD TANK LOCO



Private Owner Wagons



NR21/7 SET OF THREE
WOOD, PARKER & PROBERT, BULLCROFT



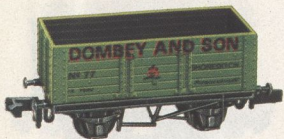
NR21/8 SET OF THREE
PRITCHARD, FROST, SOUTH LEICESTER



NR21/9 SET OF THREE
LEBON, WORTHINGTON, DUTTON MASSEY

In the days before long distance Road Haulage all goods were moved by rail and bulk goods were usually carried in Private Owner Wagons — many still exist. Goods trains became colourful for this was a means

of very efficient and powerful publicity. So that often, half the trucks on a goods train were these well kept and very attractive vehicles.



NR21/10 SET OF THREE
DOMBEY, SNOW, CAM RYS

NR21/11 SET OF THREE
SLEIGHT, PITT, POWELL GWYNNELL

NR23/1 SET OF THREE
FYFFES, BASS, SPIERS

Regional Wagons



NR20M 5 PLANK WAGON L.M.S.



NR21M 7 PLANK WAGON L.M.S.



NR23M SINGLE VENT BOX VAN L.M.S.



NR20N 5 PLANK WAGON N.E.



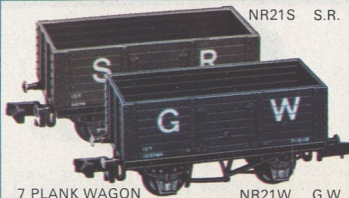
NR21N 7 PLANK WAGON N.E.



NR23N SINGLE VENT BOX VAN N.E.



NR20S 5 PLANK WAGON S.R.



NR21S S.R.
7 PLANK WAGON NR21W G.W.



NR23S SINGLE VENT BOX VAN S.R.

For goods transport the standard Railway Company vans and wagons were a part of the service — indeed cattle trucks were invariably company owned so were many Horse boxes and Fish Vans.

Grafar Goods Wagons are 5 plank, 7 plank and mineral. The vans with one vent or two vents were used for all goods requiring protection from the elements. Brake vans were obligatory on all goods trains.

The markings of vans and wagons were mostly two large letters but LMS and GER had three. Goods wagons and vans in a train were of all regions, the wagons being hauled to their destination over other systems as necessary.



NR24M TWIN VENT BOX VAN L.M.S.



NR26M CATTLE VAN L.M.S.



NR25N FISH VAN N.E.



NR24S TWIN VENT BOX VAN S.R.



NR26S CATTLE VAN S.R.



NR22M L.M.S.
MINERAL WAGON NR22W G.W.



NR24W TWIN VENT BOX VAN G.W.



NR26W CATTLE VAN G.W.



NR31 BRAKE VAN G.W.

Passenger Coaches

Pictured right is an LMS Suburban coach used principally by the commuter to and from the big cities. The one below is the Brake End.



NR61M



NR60M

And here (below) is a Southern Suburban Brake End carrying the guard with a luggage van incorporated. An ordinary guards van may also be attached. Right is the Southern Suburban coach.



NR61S

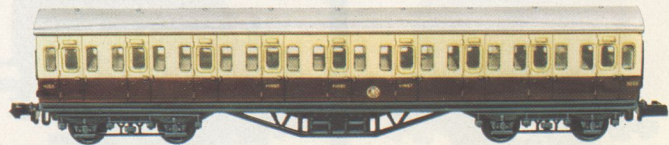


NR60S

The Great Western Suburban coach (right) and below the Brake End variation.



NR61W



NR60W



NR63M



NR62M

Main Line LMS Corridor coach with seats, corridor and toilets, again a composite 1st and 3rd (below). The Brake End is pictured left.



NR63S



NR62S

A Southern Main Line Brake End (left). The luggage compartment is somewhat larger than that of the suburban. Below is the Southern Main Line coach.



NR63W



NR62W

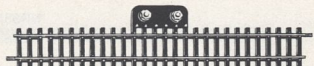
The 1st/3rd class Main Line coach of Great Western Region (below). All 1st class coaches in these days are very rare. Shown left is the GW Main Line Brake End.

Track and pointwork

Fixed Track



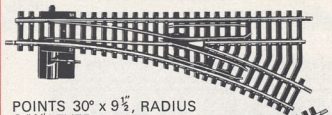
NT 1 STRAIGHT TRACK (28 SLEEPER)



NT 2 STRAIGHT TRACK (28 SLEEPER)
POWER INPUT



NT 3 30° x 9 1/2" RADIUS CURVED TRACK
(12 TO A CIRCLE)



POINTS 30° x 9 1/2" RADIUS
C/W LEVER

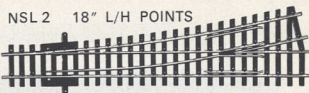
NT 4 R/H
NT 5 L/H



Super Liveway



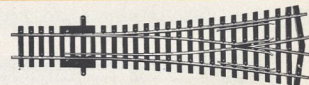
NL 1 TRACK (36")



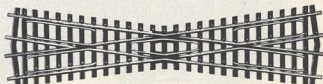
NSL 2 18" L/H POINTS



NSL 3 18" R/H POINTS



NSL 4 36" Y POINTS



NSL 5 12 1/2° DIAMOND CROSSING

Fixed curves and straights are available separately, as are the short radius points complete with point lever and fishplates fitted.

For the more experienced modeller there is the superb range of flexible track, with the famous Super Liveway pointwork.

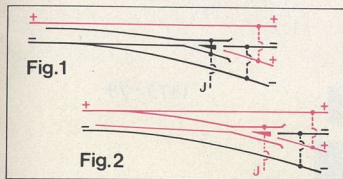
Both types match up perfectly.

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Power and points

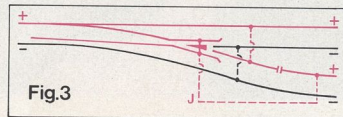
Grafar Super Liveway points are ideal for the ordinary modeller or even a beginner, for the connections to all the outlets are already made and therefore when put into a layout, the current from the controller can be connected anywhere on the layout and the whole will become alive ready for use without need of any extra wiring — you can hardly have anything simpler than that!

But for the experienced modeller there is a most ingenious feature which can use the switches incorporated in Super Liveway points to control sidings, passing loops, marshalling yards and so on, so first let us look at Figs. 1 & 2 to see how it operates.



You will notice the two switch blades and the live metal frog are all connected together and all change polarity according to the road to which the point is set. You will also find there is a jumper wire connection which we will call J brought out to the side of the point. If then an insulated fishplate is inserted between the outlet of say, the branch line and the running rail from it, and the running rail is then connected by a jumper wire to the connection J, this section of track will only be live when the point is set to that particular road; when set to the straight road the branch automatically becomes a dead end.

So this means such a siding can be used to 'park' a train whilst another runs through the main line and by only moving the point you can return it to the main track to continue its journey. Fig. 3 shows how it is done.



A marshalling yard is quite simply an extension of this idea, each siding has its own jumper wire controlling it.

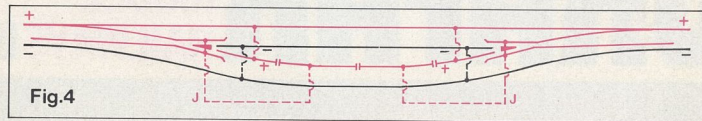


Fig. 4 shows a passing loop, since you may operate the two points independently, you must have two separate dead sections each with jumper wire connection as shown.

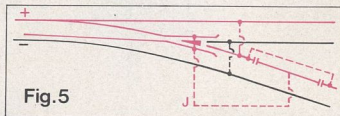


Fig. 5 shows how to hold a branch line train well clear of the main track at a junction with a safety stop section.

These are some of the things you can do and there are many others, but having grasped the principle you will be able to develop others — clearly whatever you can do on the branch you can also do on the main — or both if you wish — the possibilities are endless.

And of course many of your points will need no jumper wire at all but it's there if you need it later on.

NOTICE: The points above described are the invention of the patentee Mr. T. Graham Farish. 'Liveway' is a registered Trade Mark.



GRAFAR

MODEL
RAILWAYS **CF**

ROMANY WORKS • HOLTON HEATH
POOLE • DORSET • BH16 6JL • ENGLAND

1973-74