# NS series 2600

## for TS Classic



# Manual

Version 1.0 Build 20240915

# Contents

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# NS series 2600

When in 1950 most of the war damage suffered by the Dutch State Railways (NS) had already been repaired, the abolition of steam traction was vigorously taken in hand. The entire central network had been brought under the wire, but outside western Holland many routes had not yet converted to electric traction. That is why the management of NS decided to order a large series of diesel-electric locomotives, with the aim of replacing the steam locomotive on those lines in passenger service.

Subsequently, a programme of requirements was drawn up with train weights and service speeds, from which Werkspoor managed to win an order for 27 machines. Unfortunately, it soon became apparent that electrification was progressing faster than expected and serious doubts had arisen with the NS about the diesel engine type that Werkspoor had selected. Consequently, the order was reduced to six units (NS 2601-2606) shortly after the start of production. These machines entered service in 1953 and '54 and were plagued from the start by frequent breakdowns. These were caused by the engines, which were actually designed for maritime purposes. As a result, the series soon disappeared from passenger service and were only used for freight trains, where obviously the locomotives proved unsuccessful either. Initially, they ran in Berlin blue, but in the last years of their careers they were given the same livery (UIC standard red-brown) as the NS 2200 and 2400. As early as 1958, the NS management diverted the series to the scrapyard.

This add-on includes eight locomotives in three colours, including a fictitious livery of the 2626 and 2627 in the same green colour of the NS 600. Consists are included in the release for each variant, including an 'Orient Express' composed of CIWL carriages. The layout of the cab in this TrainSimulator representation follows the TS Classic standard (expert mode) and can therefore deviate from the large example in parts. As with the NS 1100, the switches of the electrical installation are concentrated in a Faiveley panel on the dash board. The headlights and shunting lights are operated in accordance with TS. When they are switched on, the shunting signals are automatically extinguished. To drive the locomotive, the diesel engine must have been started first. When exceeding a local speed limit at driving with regulator notch 1 selected, the regulator will automatically fall back to its 'Neutral'-notch (for more details, see the 'Cab' section of this manual).
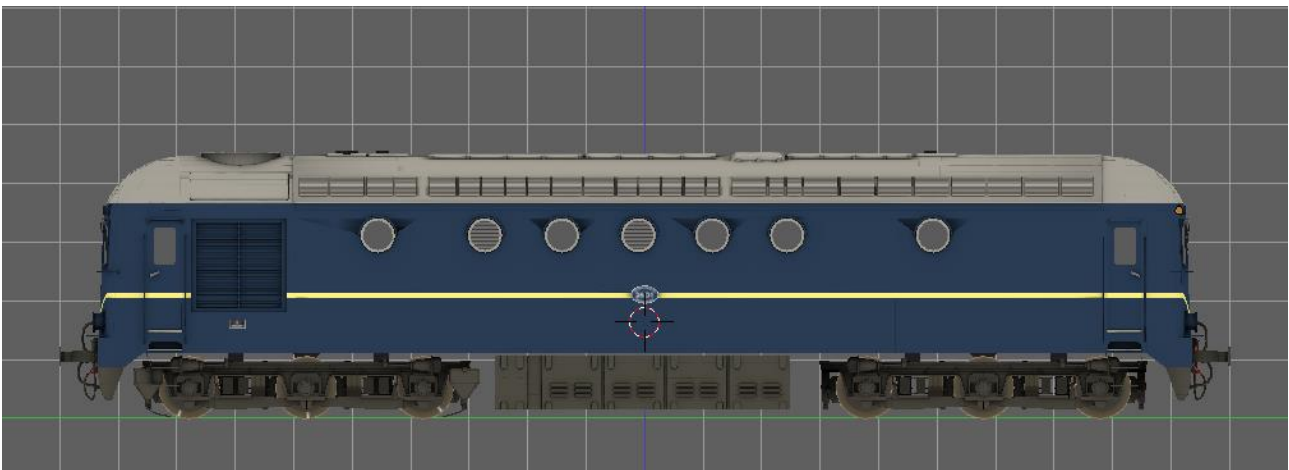
# Installation tips

The NS series 2600 by Wilbur Graphics may be downloaded as a .zip-file, which apart from a `Readme.txt` contains the following items:

- Folder Manuals\Wilbur Graphics  with German, Dutch and English language user manuals:

`WG_NS_2600_Handleiding_V1_0.pdf`
`WG_NS_2600_Handbuch_V1_0.pdf`
`WG_NS_2600_Manual_V1_0.pdf`

- Installer program `WG_NS_2600_V10_build_20240915.exe`

When started, the install .exe will prompt you to select and/or enter:
- Install procedure language (Dutch/English/French/German)
- Accepting an End User License Agreement (EULA)
…to continue the installation.

Please refer to the *release notes.txt*  for the latest changes etc.

## Notes on installation

- Please make sure that the .zip-file has been unpacked before you run the .exe-file
- If the installer can't find the Railworks folder please make sure that the Windows Registry correctly points to the Railworks folder. This situation normally only happens when you have manually moved your Steam environment to another PC or Harddrive. You should always install Steam to the new location to fix the registry.

# TS Object Browser Index



| Scenario Editor-name | Folder | Object name |
| --- | --- | --- |
| WG NS 2601 tp3 | Rollmat_NS | NS_2600_tp3\Engine\WG_NS_2601_tp3.xml |
| WG NS 2602 tp3 | Rollmat_NS | NS_2600_tp3\Engine\WG_NS_2602_tp3.xml |
| WG NS 2603 tp3 | Rollmat_NS | NS_2600_tp3\Engine\WG_NS_2603_tp3.xml |
| WG NS 2604 tp3 | Rollmat_NS | NS_2600_tp3\Engine\WG_NS_2604_tp3.xml |
| WG NS 2605 tp3 | Rollmat_NS | NS_2600_tp3\Engine\WG_NS_2605_tp3.xml |
| WG NS 2606 tp3 | Rollmat_NS | NS_2600_tp3\Engine\WG_NS_2606_tp3.xml |
| WG NS 2626 tp3 | Rollmat_NS | NS_2600_tp3\Engine\WG_NS_2626_tp3.xml |
| WG NS 2627 tp3 | Rollmat_NS | NS_2600_tp3\Engine\WG_NS_2627_tp3.xml |
| WG CIWL Orient F 1287 oxog | Rollmat_NS | CIWL_orex\WG_CIWL_F_1287_orex_oxog.xml |
| WG CIWL Orient PS 4035 ogog | Rollmat_NS | CIWL_orex\WG_CIWL_PS_4035_orex_ogog.xml |
| WG CIWL Orient VL 3496 ogog | Rollmat_NS | CIWL_orex\WG_CIWL_VL_3496_orex_ogog.xml |
| WG CIWL Orient WR 4008 ogog | Rollmat_NS | CIWL_orex\WG_CIWL_WR_4008_orex_ogog.xml |
| WG NS 30M3 LbEb Esso | Rollmat_NS | NS_30m3_Ketelwagens\WG_NS_tp3_30M3_Kwgn_EssoNL.xml |
| WG NS AB 7206 ogog | Rollmat_NS | NS_7200\NS_AB_7206\WG_NS_AB_7206_ogog.xml |
| WG NS B 7103 ogog | Rollmat_NS | NS_7200\NS_B_7103\WG_NS_B_7103_ogog.xml |
| WG NS Amstel Oppeln Tp3 | Rollmat_NS | NS_Amstel_Oppeln\WG_NS_Amstel_Oppeln_tp3.xml |
| WG NS D 6061 oxog | Rollmat_NS | NS_D_6060\WG_NS_D_6061_oxog.xml |
| WG NS tp3 Dg2426 | Rollmat_NS | NS_Dg\NS_tp3_Dg2426.xml |
| WG NS Frico Oppeln Tp3 | Rollmat_NS | NS_Frico_Oppeln\WG_NS_Frico_Oppeln_tp3.xml |
| WG NS tp3 GTMK 59228 | Rollmat_NS | NS_GTMK\WG_NS_GTMK_59228.xml |
| WG NS tp3 GTMK 59241 | Rollmat_NS | NS_GTMK\WG_NS_GTMK_59421.xml |
| WG NS tp3 GTUW 64153 | Rollmat_NS | NS_GTUW\WG_NS_GTUW_64153.xml |
| WG NS tp3 HHW laadk | Rollmat_NS | NS_HHW\WG_NS_tp3_HHW_93608.xml |
| WG NS tp3 HHW tankcont | Rollmat_NS | NS_HHW\WG_NS_tp3_HHW_94621.xml |
| WG NS Plan E A6547 ogog | Rollmat_NS | NS_Plan_E\Ad\WG_NS_Plan_E_A_6547_ogog.xml |
| WG NS Plan E B6605 ogog | Rollmat_NS | NS_Plan_E\Bd\WG_NS_Plan_E_B_6605_ogog.xml |
| WG NS Plan E B6712 ogog | Rollmat_NS | NS_Plan_E\Bd\WG_NS_Plan_E_B_6712_ogog.xml |
| WG NS Plan E P7921 oxog | Rollmat_NS | NS_Plan_E\Pd\WG_NS_Plan_E_P_7921_oxog.xml |
| WG NS Plan E RD6906 ogog | Rollmat_NS | NS_Plan_E\RDd\WG_NS_Plan_E_RD_6906_ogog.xml |
| WG NS S-CHO 5401 | Rollmat_NS | NS_S-CHO\WG_NS_S-CHO_tp3.xml |
| WG NS S-CHVO tp3 | Rollmat_NS | NS_S-CHVO\WG_NS_S-CHVO_26676.xml |
| WG NS tp3 S-HTS tubes/buizen | Rollmat_NS | NS_S-HTS\WG_NS_SSlmas53_tp3_buizen.xml |
| WG NS AB 7216 | Rollend mat | NS_AB_7201\WG_NS_AB_7201.xml |
| WG NS B 7284 bl | Rollend mat | NS_AB_7201\WG_NS_B_7184.xml |
| WG NS AB 7521 | Rollend mat | NS_AB_7521\WG_NS_AB_7521.xml |
| WG NS D 7521 skvb | Rollend mat | NS_D_7521\WG_NS_D_7521_skvb.xml |
| WG NS D 6068 gr oxog | Rollend mat | NS_D6000\WG_NS_D6061\WG_NS_D6063oxog.xml |
| WG NS D 6062 bl skog | Rollend mat | NS_D6000\WG_NS_D6061bl\WG_NS_D6062.xml |
| WG NS Mat 24 Bec 8501 | Rollend mat | NS_Mat_24\Bec\WG_NS_mat24_Bec.xml |
| WG NS Mat 24 Bec 8521 | Rollend mat | NS_Mat_24\Bec\WG_NS_mat24_Bec_8521.xml |
| WG NS Mat 24 bl B 8501 | Rollend mat | NS_Mat_24\Bec_bl\WG_NS_mat24bl_Bec.xml |
| WG NS S-CHR 1954 | Rollend mat | NS_S-CHR\WG_NS_S-CHR_1954.xml |

| Scenario Editor-name | Folder | Object name |
|---|---|---|
| **WG NS S-CHR 31577** | Rollend mat | NS_S-CHR\WG_NS_S-CHR_31577.xml |
| **WG DB E28 AB4u ogog** | Rollmat_de | DB_E28\WG_DB_E28_AB4ü28_ogog.xml |
| **WG DB E28 B4u ogog** | Rollmat_de | DB_E28\WG_DB_E28_B4ü30_ogog.xml |
| **WG DB E28 PwPost4u oxog** | Rollmat_de | DB_E28\WG_DB_E28_PwPost4ü_oxog.xml |
| **WG DB E28 WL4u ogog** | Rollmat_de | DB_E28\WG_DB_E28_WL4ü_Mitropa_ogog.xml |
| **WG DB E28 WR4u ogog** | Rollmat_de | DB_E28\WG_DB_E28_WR4ü_Mitropa_ogog.xml |
| **WG DB Ep3 Gmmhs30 Oppeln** | Rollmat_de | DB_Ghs30_Oppeln\WG_DB_Gmmhs30_Oppeln_tp3.xml |
| **WG DB Ep3 Gms30 Oppeln (Brh.)** | Rollmat_de | DB_Ghs30_Oppeln\WG_DB_Gms30_Oppeln_tp3.xml |
| **WG DB Ep3 Glmmhs57** | Rollmat_de | DB_Glmmhs57\WG_DB_Glmmhs_57_tp3.xml |
| **WG DB Ep3 Off 52 A** | Rollmat_de | DB_Off52\WG_DB_Off52_A_tp3.xml |
| **WG DB Ep3 Off 52 B** | Rollmat_de | DB_Off52\WG_DB_Off52_B_tp3.xml |
| **WG DB Ep3 Off 52 C** | Rollmat_de | DB_Off52\WG_DB_Off52_C_tp3.xml |
| **WG DB Ep3 Off 52 D** | Rollmat_de | DB_Off52\WG_DB_Off52_D_tp3.xml |
| **WG DB Ep3 R20 Stuttgart NKF** | Rollmat_de | DB_R_20_Stuttgart\WG_DB_tp3_R_20_NKF.xml |

Explanations of the abbreviations `ogug`, `oxog` and `skog` can  be found later in this manual under 'Diafragm animations'.

# Preload Consists

| Consist | Display name |
|---|---|
| WG NS 2601 tp3/era III | Light engine |
| WG NS 2602 tp3/era III | Light engine |
| WG NS 2603 tp3/era III | Light engine |
| WG NS 2604 tp3/era III | Light engine |
| WG NS 2605 tp3/era III | Light engine |
| WG NS 2606 tp3/era III | Light engine |
| WG NS 2626 tp3/era III | Light engine |
| WG NS 2627 tp3/era III | Light engine |
| WG NS 2601 tp3/era III | m/w Plan E P.RD.AB.B |
| WG NS 2602 tp3/era III | m/w Orient Express |
| WG NS 2603 tp3/era III | m/w stoptrein/local (1) |
| WG NS 2604 tp3/era III | m/w AutoPon VW |
| WG NS 2605 tp3/era III | w/m NS S-HTS Tubes/Buizen |
| WG NS 2606 tp3/era III | w/m G-mix |
| WG NS 2626 tp3/era III | Int. D-trein /Int. Express Service |
| WG NS 2627 tp3/era III | m/w stoptrein/local (2) |

**For the deployment of the rolling stock in this release, the above-mentioned subfolders of provider Wilbur Graphics (Rollend mat, Rollmat_NS and Rollmat_de) must be activated in scenarios, especially when they are part of a non-Wilbur Graphics route.**

# Cab

*When preparing the loco, the air pump and the fuel pump must also be switched on after the control current, after which the main engine can be started (steps 1 to 4 in the figure below):*



***Please note:***

1.     *When regulator notch 1 is selected the regulator will switch back to 'Neutral' if the local speed limit is exceeded*
2.     *The NS 2600 class was not equipped with a multiple unit option that made it technically possible to run in double heading or as helper engine. Our version of this locomotive does support this, but when the machine is pressed into service as helper engine, it must be coupled in the direction of travel (see picture), i.e. with the roof fan in front.*
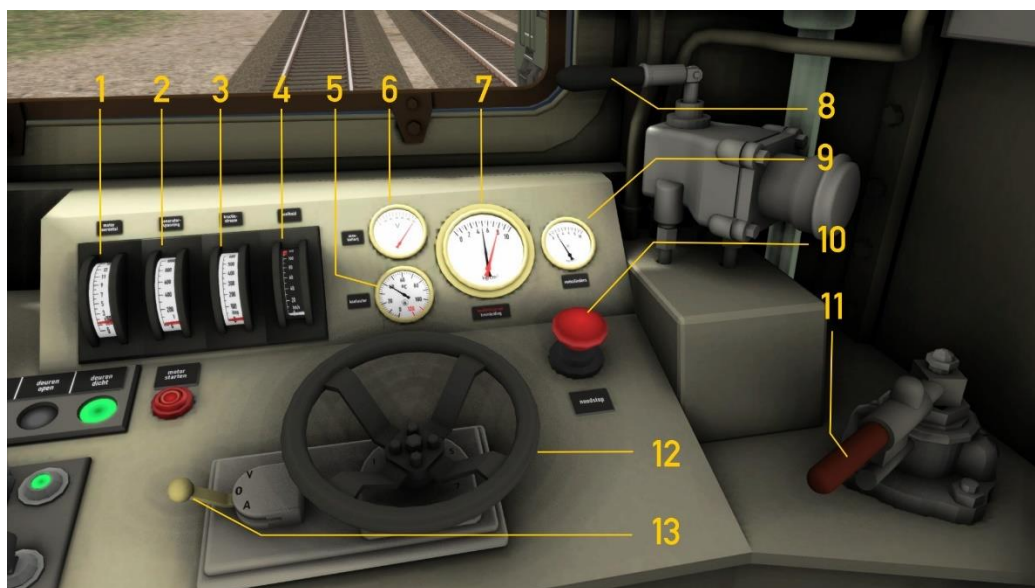
Overview of the steering position with the Faiveley block and the indicator lights in the foreground. At the top right, you can see the Hasler tachograph with its 24-hour clock, and above the windows are the levers that allow the supply of compressed air to be released to the wiper motors (which also respond to the 'V' key). The other controls are explained below.



**Faiveley block**

| | | | | | |
|---|---|---|---|---|---|
| 1 | Control light fuel pump | | 13 | Train current 220V | |
| 2 | Control light board current | | 14 | Wipers | V |
| 3 | Control light train heating | | 15 | Doors | T |
| 4 | Control light headlights | | 16 | Control current light | |
| 5 | Control light shunting lights | | 17 | Headlights | H / SHIFT + H |
| 6 | Control light doors open | | 18 | Fuel pump | |
| 7 | Control light doors closed | | 19 | Compressor | |
| 8 | Diesel engine start | Z | 20 | Sander | X |
| 9 | Shunting signals | CTRL + F9 | 21 | Horn (long) | SPATIE |
| 10 | Train heating | | | Horn (short) | N |
| 11 | Cab light | CTRL + F11 | 22 | Control key | CTRL + 0 |
| 12 | Paneelverlichting | CTRL + F12 | | | |

| | | | | |
|---|---|---|---|---|
| 1 | RPM Diesel engone | 8 | Engine brake | [ / ] |
| 2 | Generator tension | 9 | Brake cylinder | |
| 3 | Traction current | 10 | Emergency | BACKSPACE |
| 4 | Speedometer | 11 | Train brake | ; / ' |
| 5 | Cooling fluid temperature | 12 | Regulator (7 notches) | A / D |
| 6 | Battery tension | 13 | Reverser | W / S |
| 7 | Main reservoir (red)/ Train brake pipe | | | |

# Diafragm animation

When building consists with the included coaches in the Scenario Editor (SE) or the QuickDrive menu (QD), it is important to combine the right variants. The animation type is indicated by the letter combinations `sk`, `vb,` `ug` and `ux`, where:

`og` or `vb` = working animation (indicated by green arrow in SE)
`ox` or `sk` = dummy animation (indicated by a red arrow in SE)

Working and dummy animations look the same in the uncoupled state. However, the difference becomes visible when a carriages are coupled with their *ug* sides and the animation kicks in. Dummy diafragms come in handy when a carriage is placed behind an engine, or as a slip coach. However, coupling is always accomplished.

Carriages without suffixes are always equipped with working diafragms (`ogog` or `vbvb`).
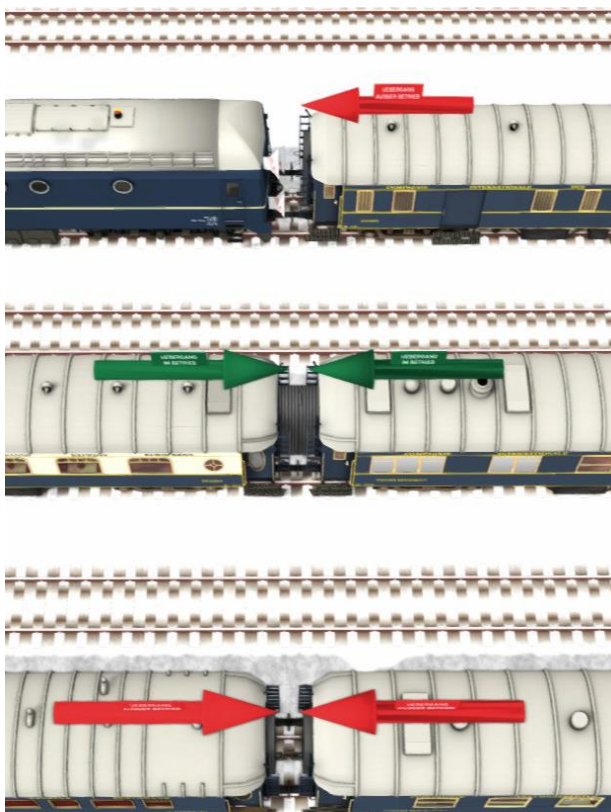
# QuickDrive

When a QD session is started with goods wagons that can be loaded (containerwagons, open box cars, etc.), these will initially be empty. To make the cargo involved visible, we choose the World `Editor` option in the Escape menu . In the header of the screen that is then shown, click on the gray line with a left mouse button click, which will cause a panel to appear:



Now you click with the left mouse button on the Scenario Tools icon, which will start the SE. You can handle the sim's alerts by clicking the `Yes` button . Then you can activate the individual car cargos by pointing to a car with the cursor and double-clicking with the left mouse button. A window appears at the top right of the screen in which you can tick a square, making the cargo visible. To load the entire train, go through these actions with SHIFT pressed.
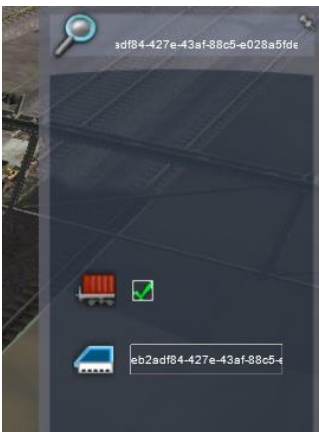


To return to the QD-Scenario, select the orange 'Drive' icon at the bottom right of the screen.

# Tips en tricks

When building a scenario, you can set the fuel level of the *player train* after selecting the locomotive with a double left mouse click:

# Colophon en credits

**Design and production:**

© Wilbur Graphics, Henk van Willigenburg ( www.wilburgraphics.com )

**WG diesel locos sounds:**

© Gainmaster

**Tips and advice**:

ChrisTrains.com

TrainworX (Paul Mersel)

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