

# Ferrovial

by **CGS Labs**



## How to Change Station Format

Tutorial





**CGS Labs d.o.o.**

Brnčičeva ulica 13

1000 Ljubljana

## **How to Change Station Format**

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T: +386 1 235 06 00

E: [info@cgs-labs.com](mailto:info@cgs-labs.com)

Internet: [www.cgs-labs.com](http://www.cgs-labs.com)

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# Introduction

This tutorial will show how to change the station format.

## 1. Changing Station Format in Layout

1. At the beginning of the Layout tab, under Initial Setup, you can find the "Axis (22A31)" command.
2. After launching this command, a new dialog box opens where you can find the parameter for the "Main element station", which has the ID 201019.
3. Double-click on the name of this parameter, "Main Element Station," and a new window will open. In this window, you will see that you have 20 different format options available for station notation.
4. In the next step, select the desired format and confirm by clicking OK.

The screenshot shows the software interface with the 'Layout' tab selected. The 'Initial Setup' menu is open, showing the 'Axis' option. The 'CGS Labs parameters' dialog box is open, showing a list of parameters. The 'Main Element Station' parameter (ID 201019) is selected. A 'Parameter' dialog box is open, showing a table of 20 different station format options.

ID	Parameter	Value
201007	Autodraw longitudinal axis (1-Yes, 0-No)	1
201011	Section name for point on longitudinal axis	AXIS
201012	Maximum distance from longitudinal axis for writing...	0.10
201013	Label offset	-10
201014	Major labels step (0 no labels):	1000
201015	Minor labels step (0 no labels):	100
201016	Tick labels step (0 no labels):	20
201017	Minor tick size	2
201018	Major tick size	4
201019	Main Element Station	1
202001	Cross-axis station	1
202002	Checking for and erasing multiple cross-axes (0-99...	1
202003	Distance between cross	
202004	Superelevation-slope s	
202005	Superelevation-label h	
202006	Distance between cross	
202007	Number of vertices on	
202008	Distance between cross	
202009	Cross-axis station-label	
202010	Side for placing station	
202011	Side for placing cross	
202012	Circle-radius for labels	
202013	Cross-axis profile-num	
202014	Distance between cross	
202015	Cross-axis profile-num	
202016	Prefix for profile-num	
202017	Side for placing cross	
202018	Starting cross-axis pro	
202019	Placing cross-axes pro	
202020	Cross-axes width left	
202021	Height-difference betw	

The 'Parameter' dialog box shows the following table of options:

Value	Initial values
1 -1.0-5.00	11 -1-005.00
2 -1-5.00	12 -05.00
3 -1005.00	13 -10-05.00
4 -5.00	14 -10-5.000
5 -1.0-5.000	15 -1.0-05.000
6 -1-5.000	16 -1-005.000
7 -1005.000	17 -05.000
8 -5.000	18 -10-05.000
9 -10-5.00	19 -1.0
10 -1.0-05.00	20 -1.00500

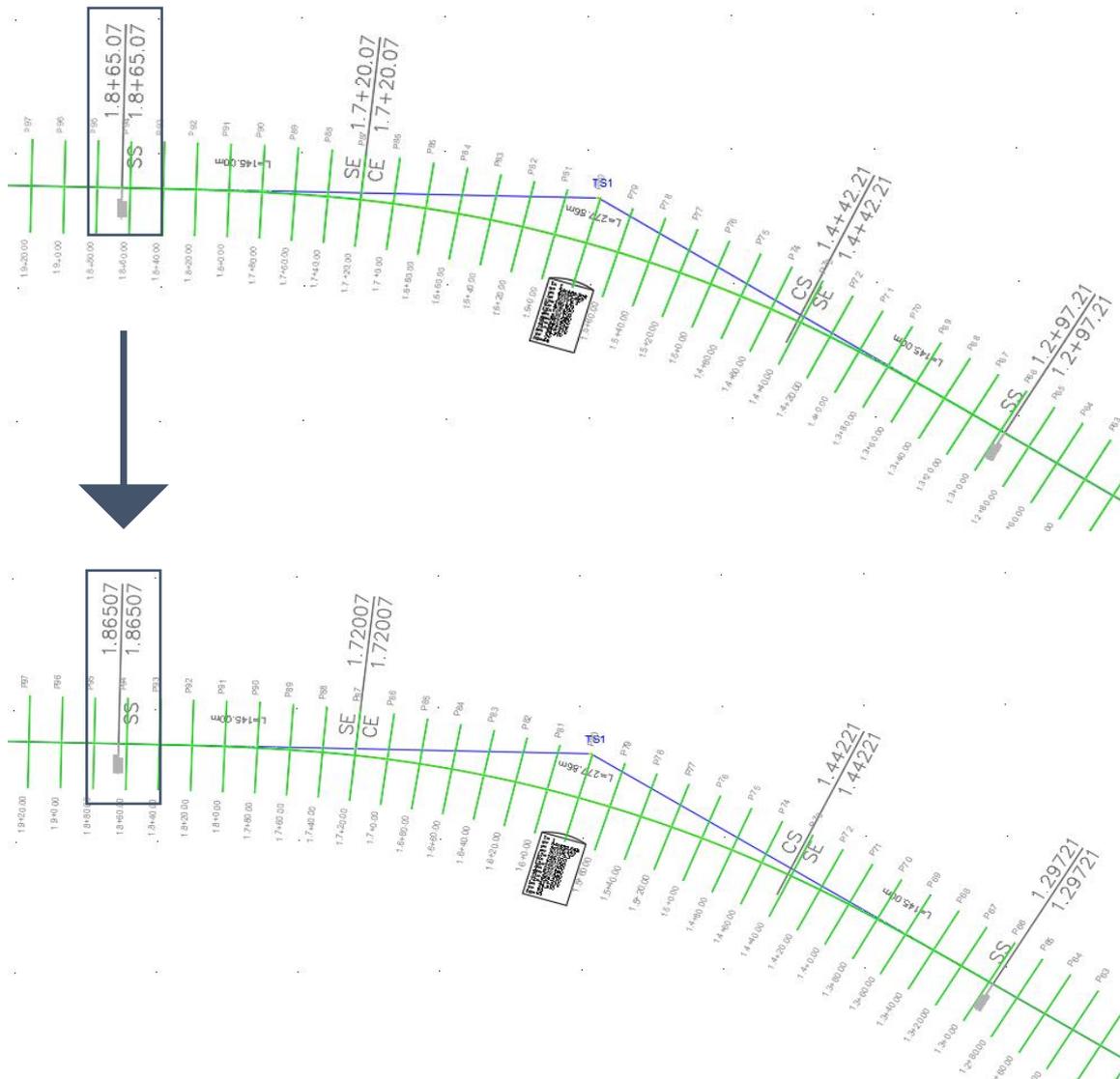
### 1.1 Refresh Station Format in Layout

If you already have some stations in the layout, you need to refresh the layout to see the changes. However, if you set this from the beginning, you'll have these settings throughout.

1. Run the "Refresh Labels (22F9)" command.
2. Select the label redraw method and press OK.
3. The labels in the layout are now updated.

The screenshot shows the software interface with the 'Layout' tab selected. The 'Refresh Labels' command is highlighted in the 'Alignment' menu.

The images below show different formats for station:



## 1.2 Other Settings for Station Format in Layout

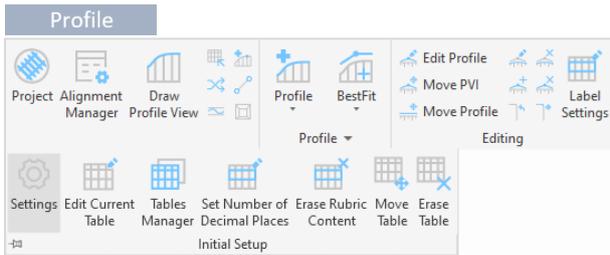
In the program, you can find additional settings related to station format in layout:

201001 Klothoid-curve segment length (> 0):	1
201006 Logitudinal axis Station-labels	6
201007 Autoredraw longitudinal axis (1-Yes, 0-No)	1
201011 Section name for point on longitudinal axis	AXIS
201012 Maximum distance from longitudinal axis for writing points on lo...	0.10
201013 Label offset	-10
201014 Major labels step (0 no labels):	1000
201015 Minor labels step (0 no labels):	100
201016 Tick labels step (0 no labels):	20
201017 Minor tick size	2
201018 Major tick size	4
201019 Main Element Station	20

202001	Cross-axis station	1
202002	Checking for and erasing multiple cross-axes (0-No, 1-Yes)	1
202003	Distance between cross-axes for equidistant generation (>0)	20
202004	Superelevation-slope scale factor for superelevation labels (1-r...	0.25
202005	Superelevation-label text height (> 0)	2

## 2. Changing Station Format in Profile

In a similar way, you can change the station format in the longitudinal section. The commands can be found under the "Profile - Initial Setup - Settings (32A31)" tab.

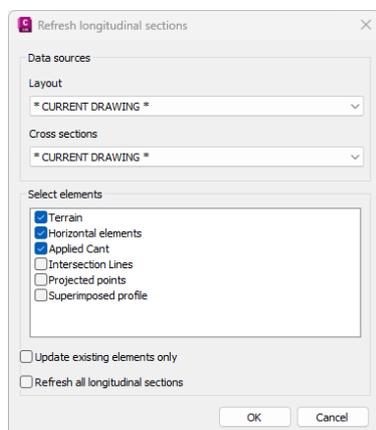


In the dialog box, you can then find the following parameters related to station format:

300225	Label terrain data into rubrics (0-no, 1-yes)	1
300226	Base elevation symbol - distance from plot origin	2.
300230	Label terrain stations (0-no, 1-standard, 2-6- select format)	1
300231	Number of decimal places for terrain stations labeling	2
300232	Draw horizontal elements automatically (0-no, 1-yes)	1
320301	Vertical curve labeling style	1111111111
320302	Maximum approximation error (<1.0) or number of segments (...)	0.001
320303	Vertical curve station-labeling style (1=XXXX.XX, 2=X+XXX.XX, ...)	1
320304	Vertical curve label text-color	7
320305	Vertical curve number-label text-color	4

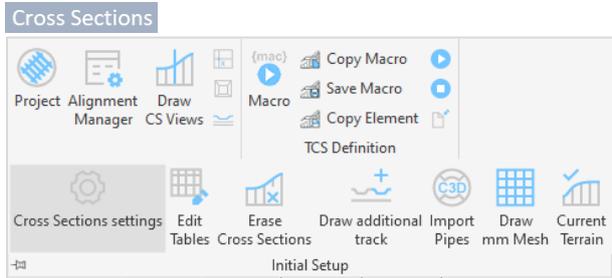
### 2.1 Refresh Station Format in Profile View

To refresh the station format in the longitudinal profile, you need to run the "Refresh Profiles (32X)" command and ensure that the Terrain option is selected.



### 3. Changing Station Format in Cross-Sections

You can also change the station format in cross-sections. The commands for this can be found under the "Cross-Section - Initial Setup - Settings (42A31)" tab.



In the dialog box, you can then find the following parameters related to station format:

400410	Command 4C2: minimum distance between two points	0.2
400411	Command 4C2: minimum angle difference between three points...	2
400412	Station format	2
400420	Display minus sign "-" for negative distances from axis	0
400421	Rubric number for labeling terrain	3

#### 3.1 Refresh Station Format in Cross-Sections View

To refresh the station format in the longitudinal profile, you need to run the "Refresh Cross Sections (42X)" command and ensure that the Terrain option is selected.

