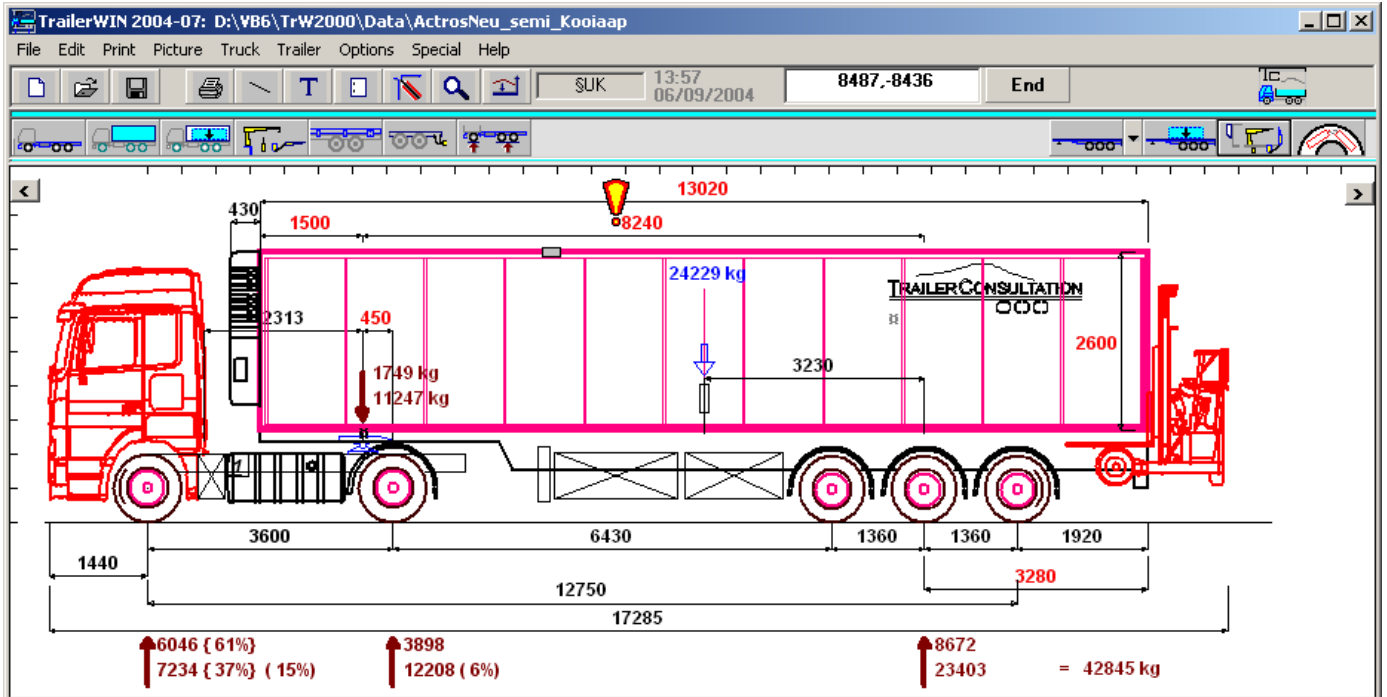


# TRAILERWIN

## Trailer Consultation

30 Year

Software for commercial vehicle construction,  
truck and trailer construction and body building since 1982



[TrailerWIN](#)

Truck and trailer constructions: weight distribution (axle loads), body building, mounting equipment (crane, rear lift, hook lift, truck mounted forklift, demountable, etc.) and turning calculations



[CraneWIN](#)

Crane stability calculation for a crane mounted on truck



[FrameWIN](#)

Subframe calculation for mounting a crane



[CornerWIN](#)

Turning calculations



[BusWIN](#)

Turning calculations for bus



[BrakeWIN](#)

Brake calculations for trailer brakes

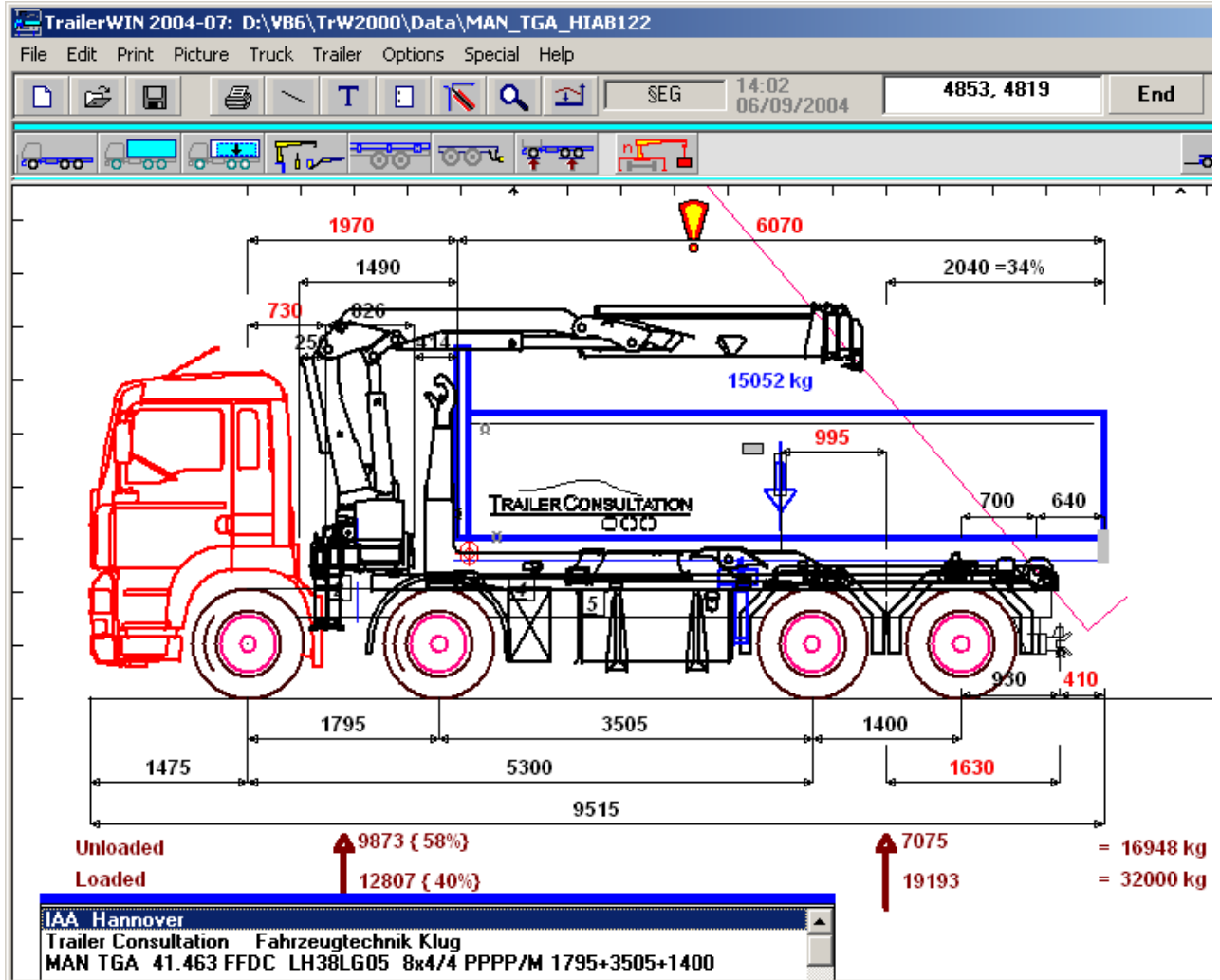


[DrivelineWIN](#)

Drive speeds and pulling force on tyres on all gears

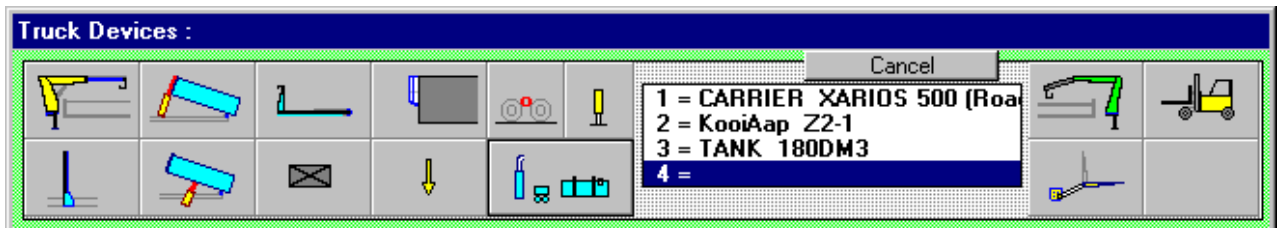
# TrailerWIN

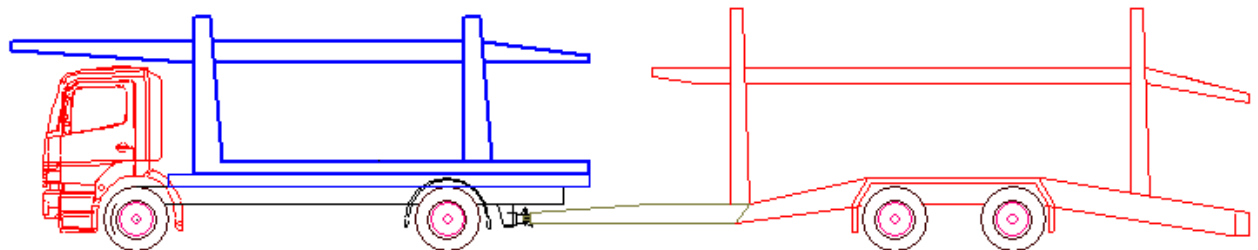
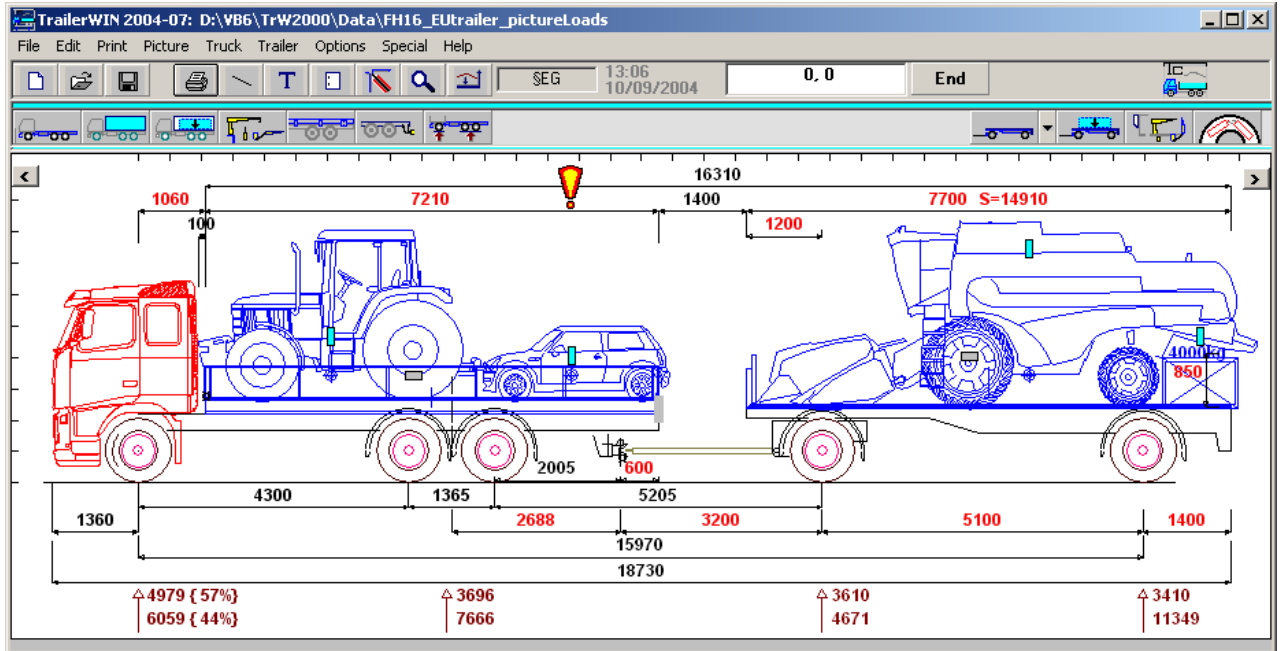
Software for commercial vehicle construction



TrailerWIN does the truck body calculations in accordance with weight distribution, total vehicle length, load weight point etc. TrailerWIN covers data on the most models by a wide range of truck manufacturers (more than 20000 truck models today) and data can also be given or changed by using the keyboard.

Truck and trailer may have various equipments: such as a crane, a tipping gear, a rear lifter, a hook lift, forklift truck and a refrigerator and a lengthened cab. TrailerWIN also contains data on some of the most common truck equipment, e.g. the weights and space requirements of certain tippers and crane types.



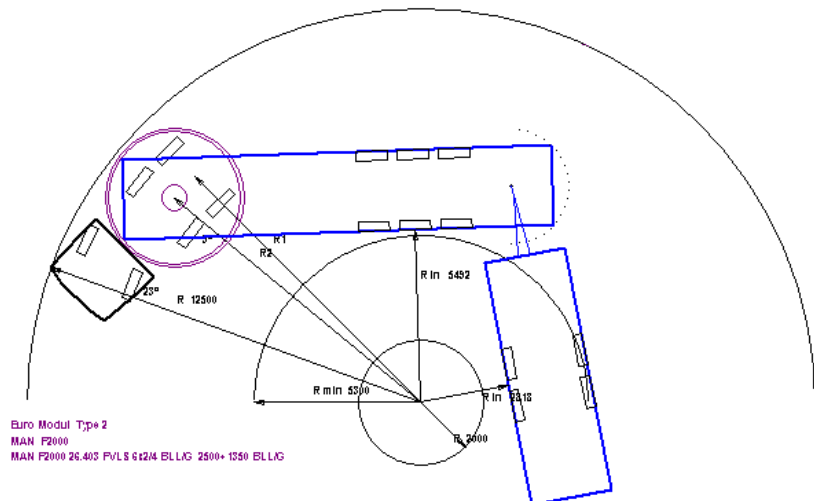


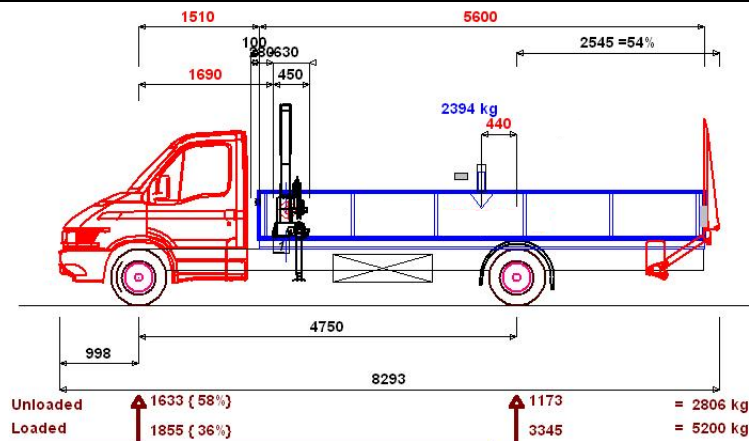
The current version of TrailerWIN identifies the following truck types: dual-axle, standard triple-axle (six-wheeler), middle axle type with steering front bogie, standard four-axle (eight-wheeler), eight-wheeler with triple bogie, and five-axle (ten-wheeler).

The trailer may have two, three, four or five axles and a semitrailer up to 4 axles. The program also identifies the single-axle (centre-axle) trailer, with a single axle or with dual-axle or triple-axle bogie.

TrailerWIN allows you to select any truck and trailer combination. TrailerWIN will automatically optimize the dimensions of the trailer. Should these dimensions be found inadequate, they can be modified to suit the requirements.

TrailerWIN carries out regulation check-ups of a trailer and combination dimensions regarding the weight distribution, overhangs, corner distance and turning circle. The presentation of the truck cab is created as a real-life picture. The program provides a wide range of cab picture options, which can be supplemented later if necessary.



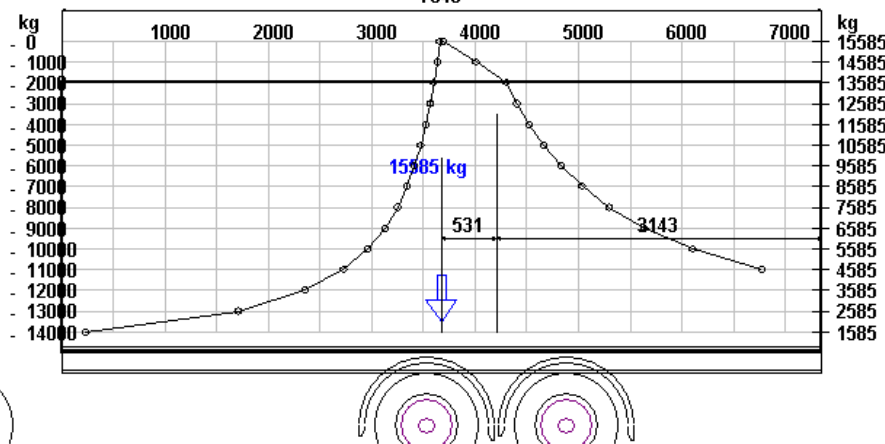


### TrailerWIN calculates also the Load and Deloading Curves.

#### Load Curve:

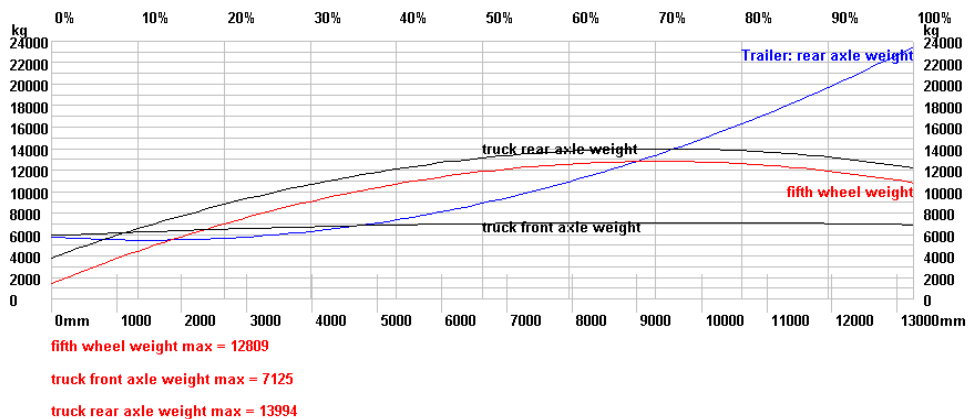
Shows where to put COG of load and how much we must reduce total load if COG of load is placed forwards or rearwards.

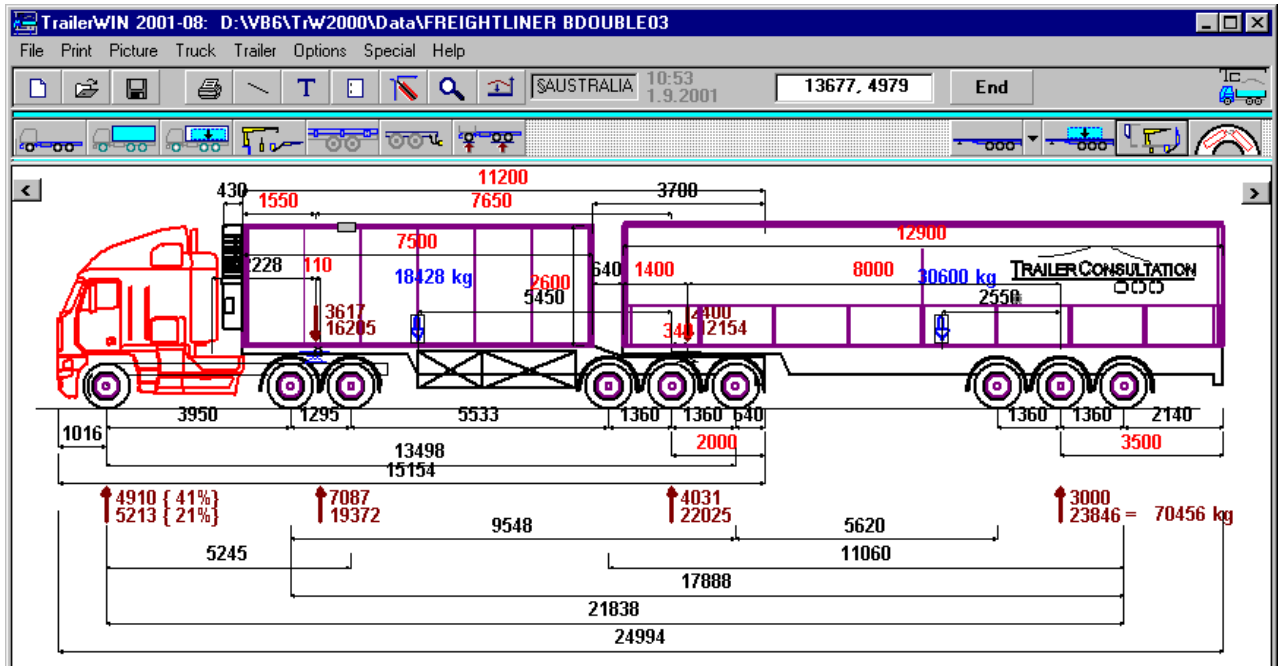
Load Curve: Truck  
MERCEDES-BENZ SN 2535L 6X2 4500+1350 F015  
7348



#### Deloading Curve:

Shows axle weights in deloading process when deloading from back. Example: deloading a semi-trailer.

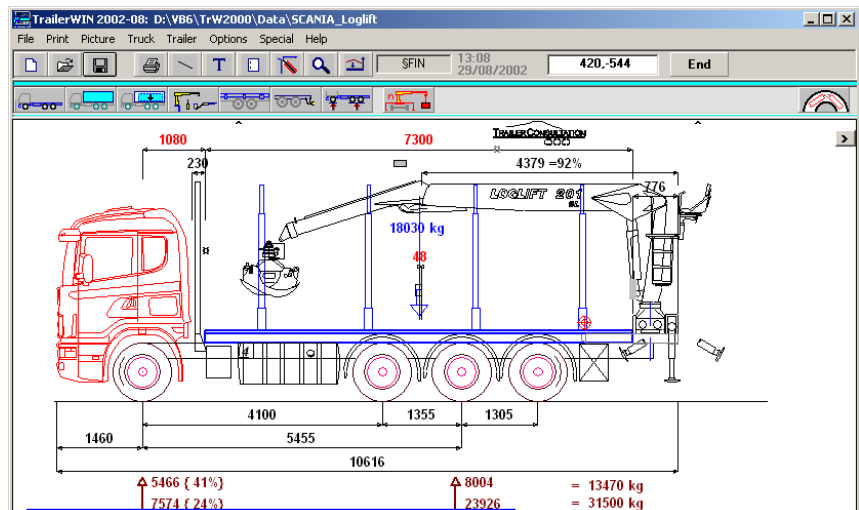




TrailerWIN is easy to run, however user should be familiar with the concepts of the calculations although no previous PC computing experience is required.

TrailerWIN runs on computers with Pentium processor and minimum of 16 Mb memory. The needed free space on hard disk is about 5 Gb.

Operating systems :  
Windows 95, W98, ME, NT, W2000, XP or WIN 7.



**TrailerWIN, CraneWIN, FrameWIN** programs are available in following languages:

Danish, Dutch, English, Finnish, French, German, Italian, Norwegian, Spanish, Swedish and Turkish.

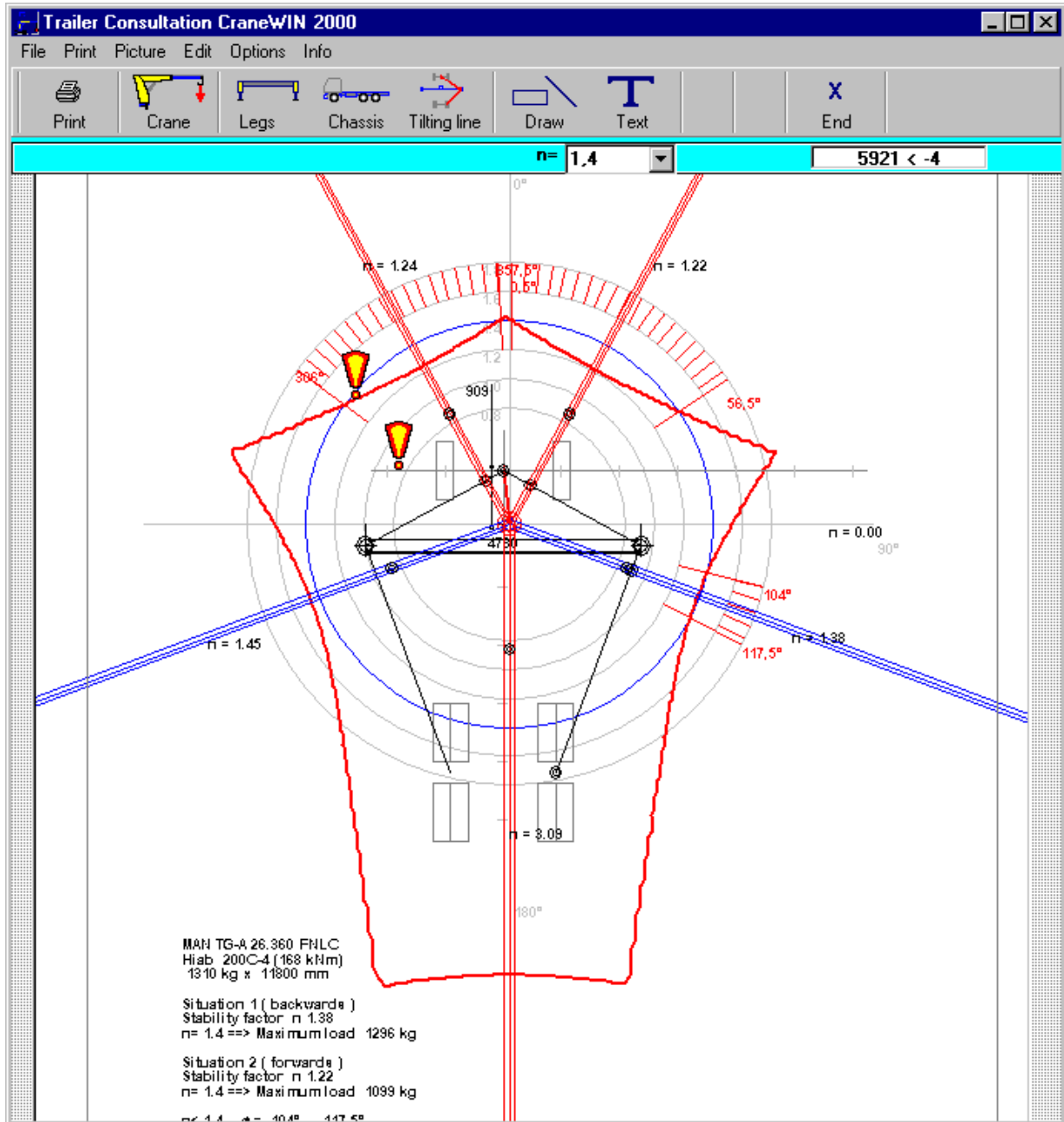
**File export formats:**

DXF-file for CAD programs (AutoCAD); BMP-file for Paintbrush, Word, Excel, Outlook  
TXT-file text data for text programs, or an option for taking picture into clipboard.

Weights				
	x CoG	Fa	Ra	Total
+ Chassis weight		5570	4885	10455
+ number of persons 1	0	70	0	70
+ body weight 0 kg/m	4730	0	0	0
1 Cab protection wall	940	99	21	120
2 LOGLIFT F 201 SL 80 A	7555	-780	2680	1900
3 GRAB X55_2	2160	134	91	225
4 TANK 600DM3	2500	373	327	700
= weights unloaded :		5466	8004	13470
+ carrying capacity	4730	2107	15923	18030
= Weights loaded :		7574	23926	31500
:: Gross Vehicle Weight		7500	24000	31500



# CraneWIN A software for crane stability calculating



## Circle diagram

CraneWIN gives a circle diagram with a stability factor  $n$  with different crane turning angles.

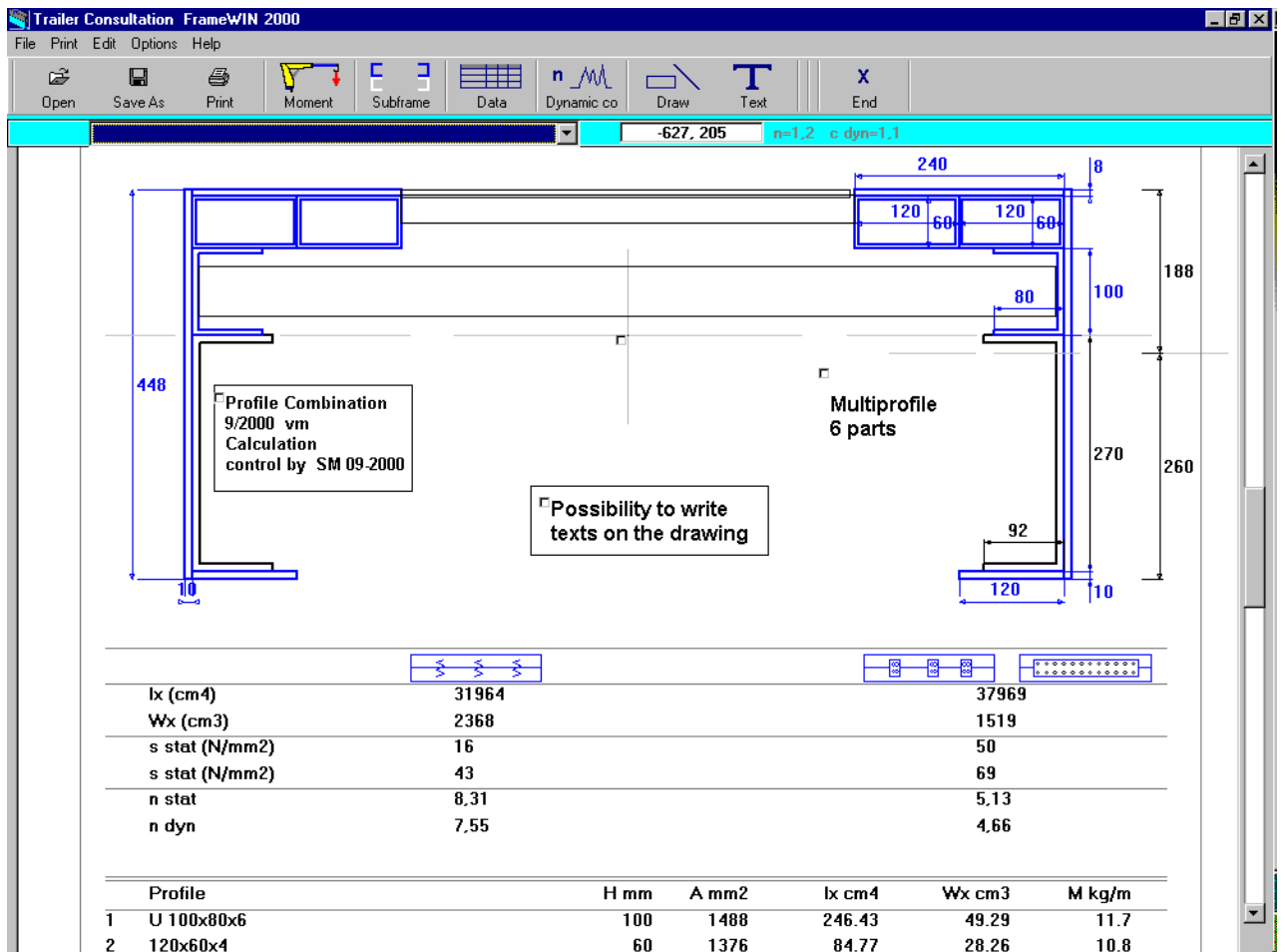
A straight line is displayed from the center of the circle to the direction in which the crane is turned. The stability factor to that direction is:  $a=0^\circ$  straight forwards,  $a=90^\circ$  straight angle to side,  $a=180^\circ$  straight backwards.

The stability factors are shown in the form of different sized circles. The centre of the circles is the cranes slewing centre. The circle with the biggest radius stands for the stability factor  $n=1.8$  and the smaller for: 1.6, 1.4, 1.2, 1.0, 0.8. The chosen critical stability factor will show on the screen in a different color from the others. The figure is shown above the diagram in the toolbar.

In the diagram there are two stability factors as  $n$ -curves. One for each tilting line.



# FrameWIN Subframe calculation



The FrameWIN screen will show pictures of the calculated Chassis Frame Profile and the Subframe Profile mounted on top of it. On the left side of the picture, beams are mounted flexibly. On the right side of the picture, beams are mounted with shear resisting plates.

Firstly with shear resisting mounting without the plates being calculated in strength calculation (mounting with many separate plates), secondly the plate being calculated in the strength calculation as a part of the beams (in this case the plate must be a continuous plate).

Below the beams You will see the calculation results for the combined beam - on the left side with flexible mounting and on the right side with mounting with shear resisting plates.

Second moment of area	Ix	( cm <sup>4</sup> )
Section modulus	Wx	( cm <sup>3</sup> )
Stress (on the subframe)	s	( N/mm <sup>2</sup> )
Stress (on the chassis frame)	s	( N/mm <sup>2</sup> )
Safety Factor Static	n stat	
Safety Factor Dynamic	n dyn	

Software is available in following Languages:

Danish, Dutch, English, Finnish, French, German, Italian, Norwegian, Spanish, Swedish.



# CornerWIN Turning calculations

## A software for complicated turning calculations



CornerWIN provides the following calculation possibilities:

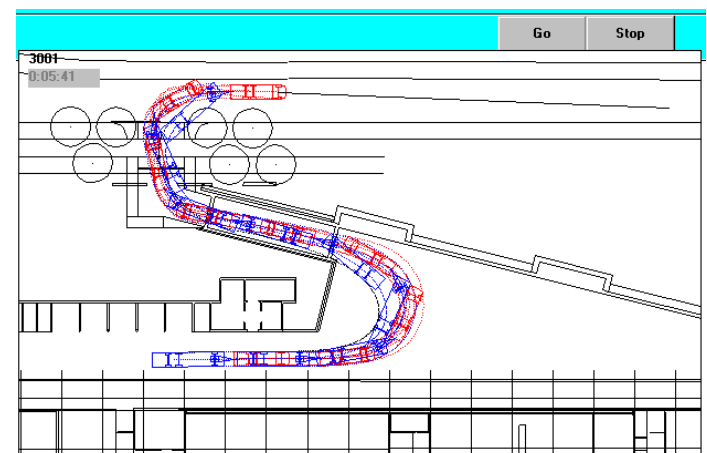
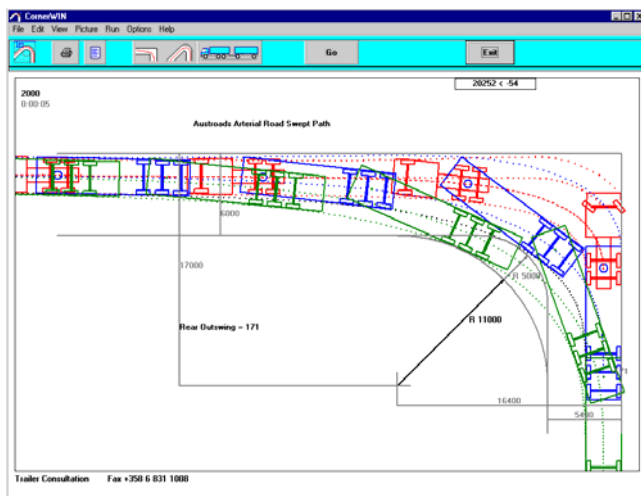
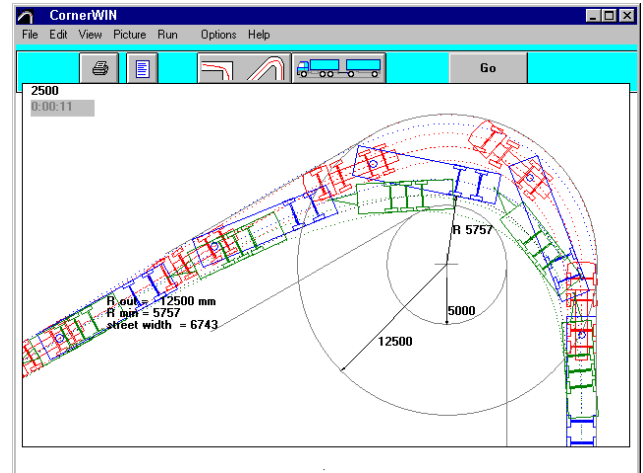
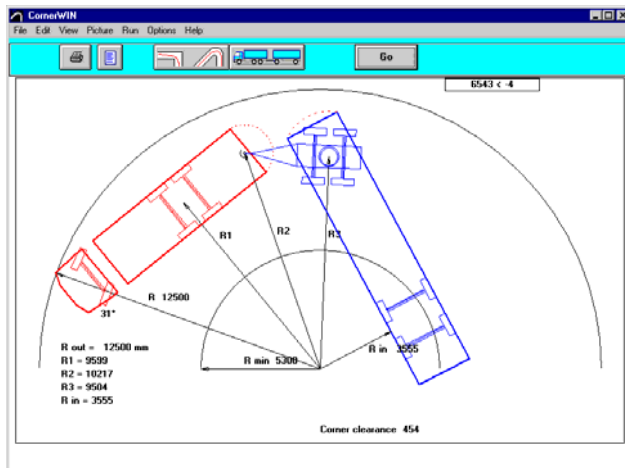
Turning in EU-circle, Turning in 120 deg arc, Turning in 180 deg arc, Circle with the chosen radius, 90 deg rectangular corner. (Swedish rule). Austroads Arterial Road Swept Path, Austroads Major Arterial Road Swept Path, Turning in 360 deg arc, Turning in arc, with chosen arc. Pull feature which allows You to drive the combination with the mouse.

CornerWIN has got the official approval from the AB Svensk Bilprovning in Stockholm, which is The Swedish Motor Vehicle Inspection Company.

'AB Svensk Bilprovning' is working to improve Road safety, environment and vehicle economy.

The picture is outputted in DXF-file so pictures can be transferred into CAD program.

CornerWIN is normally used in conjunction with TrailerWIN. The dimensions for the truck and trailer are chosen in TrailerWIN. It is also possible to use CornerWIN as a standalone module without TrailerWIN.

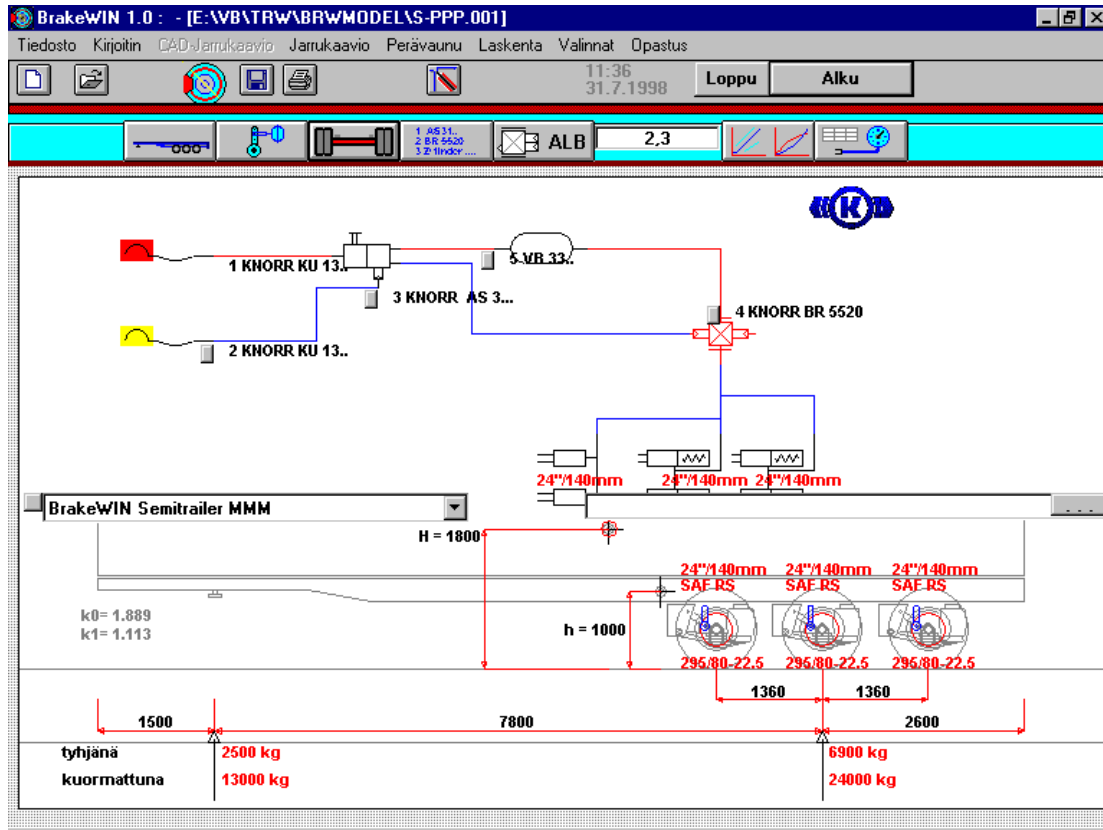






# BrakeWIN

A software for Trailer brake calculation

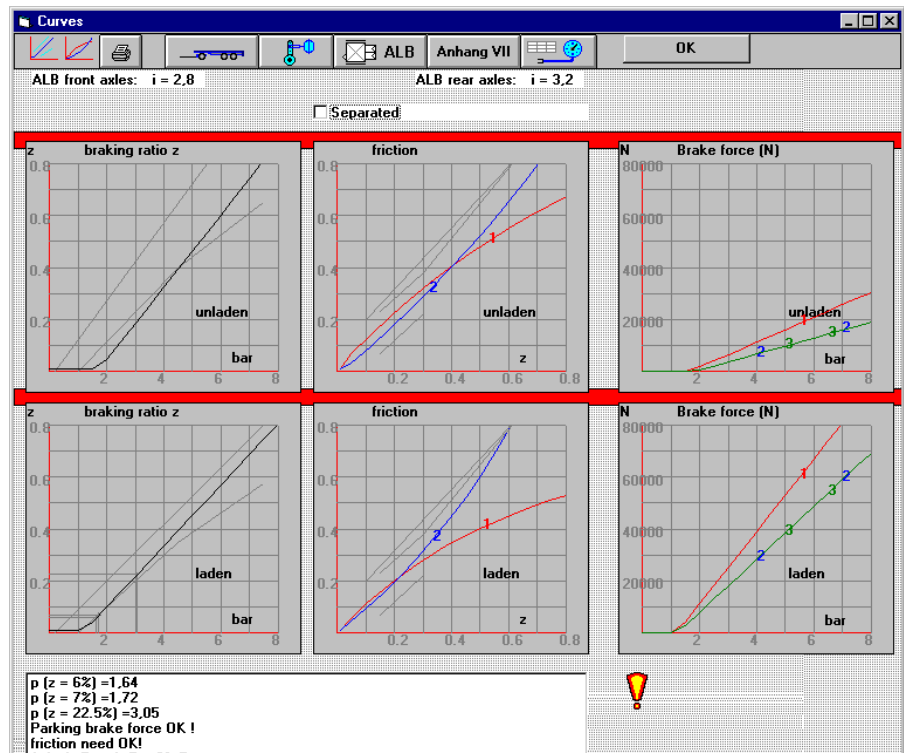


BrakeWIN does the theoretical brake calculation for trailer brakes.

User can choose: axles, tyres, brake cylinders, levers, valves (also EBS valves included), from menu in listboxes.

BrakeWIN menu includes data on axles and valves from many axle and valve brands.

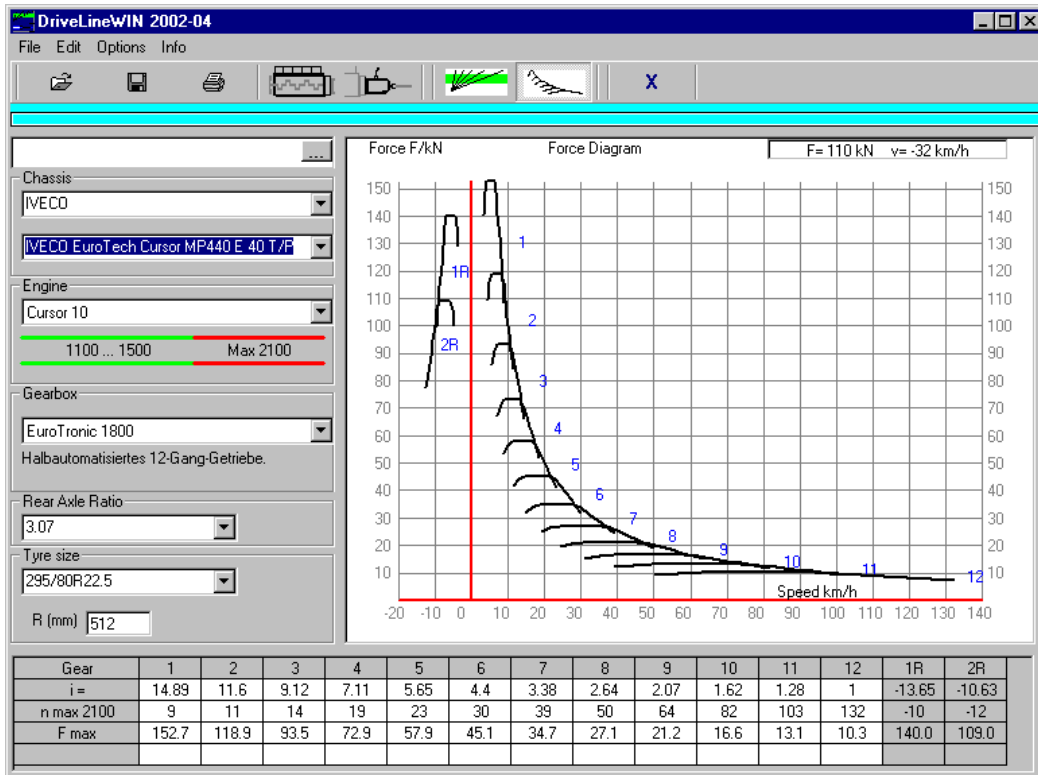
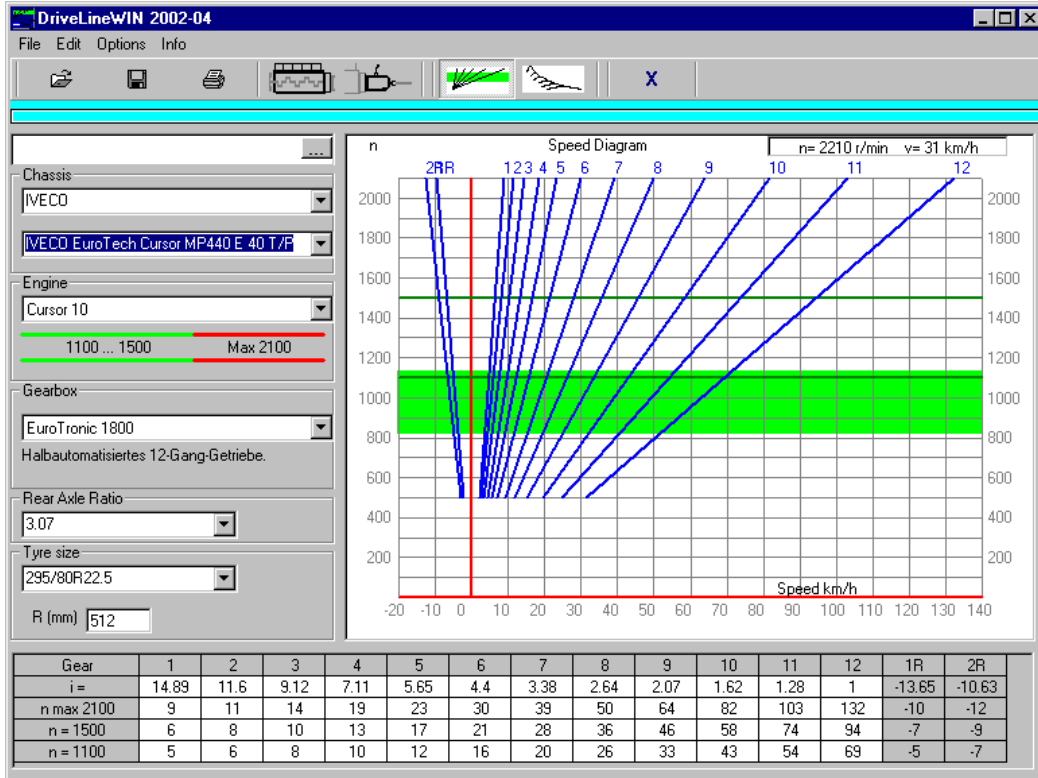
BrakeWIN calculates braking ratio, friction, brake forces, etc.

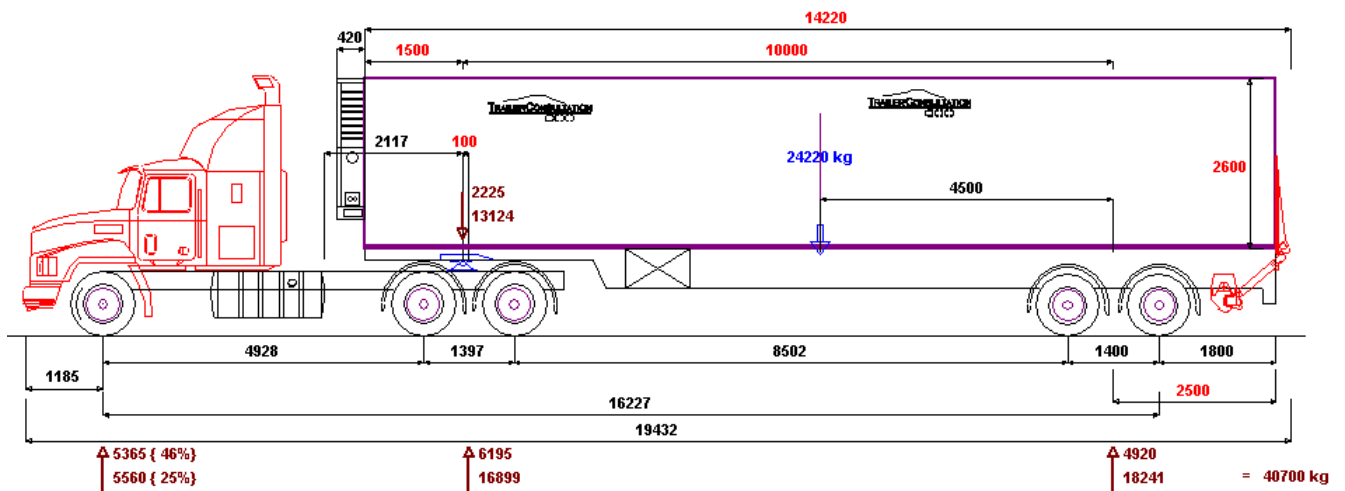
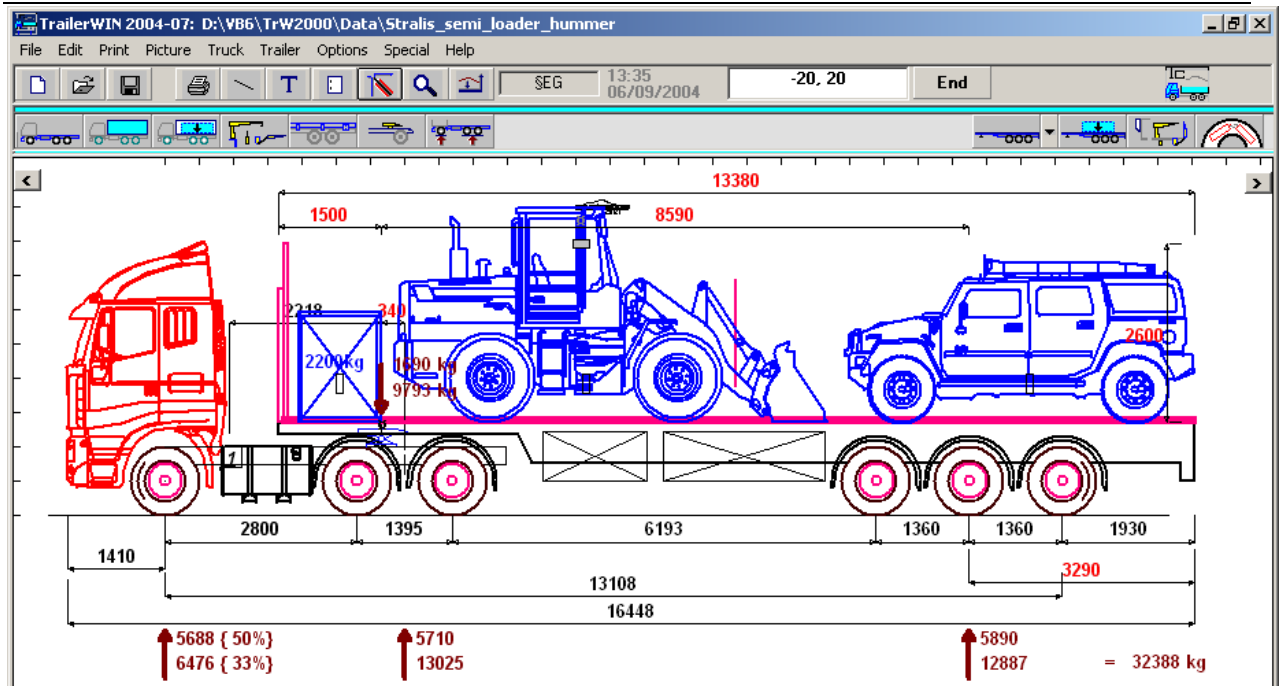


# DrivelineWIN



A software for calculating the drive speeds and pulling force on tyres on all gears.





## TRAILER CONSULTATION

Address: Kauppatori 2 FIN - 67100 Kokkola Finland  
 Phone: + 358 - 6 - 8319905  
 Fax: + 358 - 6 - 8311008  
 Mobile Roland Dahlin + 358 - 44 - 5184818  
 Mobile Sami Moisio + 358 - 40 - 5137745  
 Website: [www.trailerwin.com](http://www.trailerwin.com)  
 Email: [info@trailerwin.com](mailto:info@trailerwin.com)

Download free demo-version on [www.trailerwin.com](http://www.trailerwin.com)

