

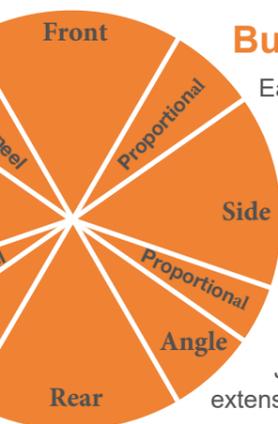
Rated Capacity Limiter (RCL) for hi-rail excavators

The Railics rated capacity limiter is specially designed for Hi-rail excavators being used for crane work. The system complies with the EN 15746 and the EN 13000 standard and can also be delivered complying with the RIS 1530 PLT6 High Performance (UK). The RCL safe guards against overload and instability. The operator receives all the information on, and programs the system with the 7" touch screen in front of him. He can select all kind of tools and buckets, the configuration of the machine; on tires, on outriggers or on rail. The system is standard equipped with a height, slew and area limiter, to enable him to select virtual walls.



Buildup and Load charts

Each jib section is fitted with a water proof Stainless Steel angle sensor which is connected by a CAN-bus system. Pressure sensors on the lift cylinders define together with the angle sensors very accurately the hook load and the radius. The slew angle is measured to a part of a degree with a sensor on the slew ring. This slew measurement allows us to create a separate load chart for each side of the machine and sector. These load charts flow flawlessly together from one into the other (see drawing left).



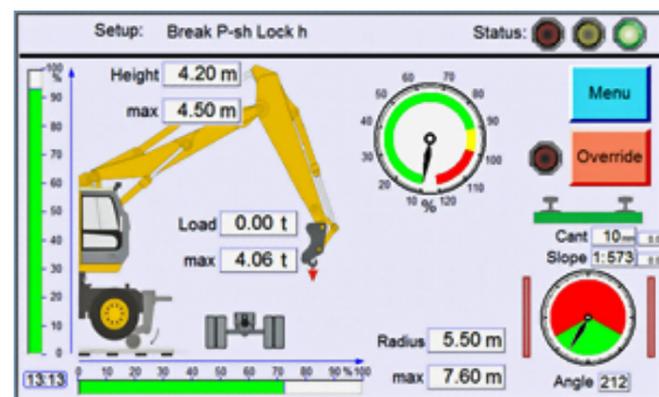
Jib extension and pallet fork use

Jib extensions and pallet fork can be calculated with their own Load chart. Next to ridged hoisting extensions, a range of mechanically and hydraulically telescopic masts can be used.

When an hydraulically telescopic jib extension is used, a length indicator is fitted to define the radius proportionally. hoisting extension can be supplied with a winch, over hoist switch and last winding switch which are incorporated in the safety system. Pallet fork sets can be programmed, fitted directly and backwards or forwards, on a quick coupler or on a tilt rotator.

Complete build up and testing according to TCVT W5-01

The Railics system will be fitted complete with hydraulics by us. The system will then be calibrated and the legal maximum possible load chart defined on our test simulator. The machine will be tested and approved by a CBI or PAB Notified Body before delivery.



Specifications

7" touchscreen display

IP67 Stainless steel angle sensors fitted to each section

Special hydraulic cut out valve block

Extensions programs (ridged, mechanically or hydraulically telescoping and/or with winch) available

Pallet fork program (forwards or reversed, with or without tilt rotator) available

Standard integrated height, slew and area limiter, to create virtual walls, both sides.

Option: 2D digging indication on screen

Option: Automatic direction changing back up alarm.



Make a clever combination with...

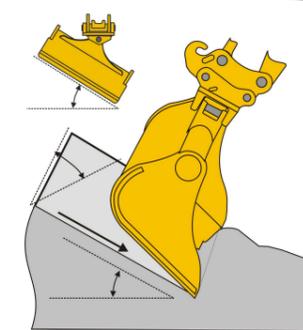
2D digging indication

The Railics system can also be used as a two-dimensional digging indication including a tilt bucket. Just by selecting the button the system is changed from safety system to digging control and indication. The operator adjusts the height to a reference point. A bar diagram in the screen indicates in centimeters and colours the offset to the reference point of the bucket cutting edge. One can also project two slope edges which are shown by a second bar graph.

The percentage of the slope can be easily adjusted in the display. Using the tilt bucket sensor, a very neat profile at the correct height can be created.

Automatic direction change of the reversing alarm

The Railics version with slew indication can be equipped with an output signal for a reversing alarm changes driving backwards irrespective the position of the undercarriage



We get the maximum legal load chart of your machine, by using our unique load simulation platform.

We have a multi purpose simulation platform at our test facility in Dronten. With this test platform we simulate every thinkable configuration and working position of the machine, while applying test loads and measuring the stability effect on the machine. A strain gauge is fitted under each road and rail wheel, defining the load or the lack of load under each support. By doing so, it enables us to create and implement an ideal load chart in the Railics RCL of your machine.

TM Jib extensions

Nijhuis Engineering manufactures jib extensions e.g. for excavators under the branch name TeleMast Dronten (TM). They can be supplied in different length, capacities and models. Options are; ridged, mechanicly or hydraulicly telescoping , with a fixed hook and / or a winch . All the extensions are light but robust and delivered with all the certificates and documents.

In case the standard jib does not fit your job, we can design and produce one to your specifications



You are at the right address for:

RCL safety systems	On board weighing systems	Constructions	Auxilliary products
EN 13000 limiters (weighing Load limiters)	Weighing for wheel loaders	Hi-rail conversions & BE-AR	EN280 Platform conversions
EN 15746 Safety systems for hi-rail machines	Weighing for excavators	Jib extensions (telescopic and/orwith winch)	Remote controls
Digital height, slew and area limiters	Weighing for conveyor belts	Access platforms (steel or aluminium)	Digging indication systems
Hose brake valves electrical and mechanical	Weighing system for agriculture trailers	Special constructions / 3D engineering	Special products

Rated Capacity Limiter for hi-rail excavators conform EN 15746