

# UNISIGN EXPERIENCE



**Front axles** | applications



Unisign UNITWIN6000,  
machining front axles  
revolves around efficiency »

[www.unisign.com](http://www.unisign.com)

 **unisign**  
machine tools

## » Unisign UNITWIN6000, machining front axles revolves around efficiency.

**Machining forged non-drive front axles for trucks and buses comes with its challenges. As the market leader in this field, we know exactly what you need to machine a front axle on every side perfectly, using just one set-up. Our UNITWIN6000 has been embraced by respected truck manufacturers and suppliers across the world. Thanks to this machining centre, you can also make your manufacturing methods more productive, more flexible and more accurate.**

The UNITWIN6000 has been specially developed and constructed for use in the truck industry. Back in the 1990s, we paved the way with our UNIVER6 front axle machine, for customers including Scania. But now, with the UNITWIN6000, we have taken the revolutionary next step.

### **For light and heavy goods vehicles and buses**

Practically all well-known manufacturers and their preferred suppliers worldwide swear by the UNITWIN6000, using it to machine front axles for trucks and front axles with air suspension systems for buses. Most front axles processed are between 1600 and 1900 mm long. But the UNITWIN6000 can also handle smaller front axles for light commercial vehicles. Whatever your situation, we will adapt the UNITWIN6000 to your specific product range.

### **Two powerful spindles**

The UNITWIN6000 is equipped with two powerful spindles, doubling your output and slashing your cost per product. The spindles can be tilted, so you can work on any kingpin quickly and accurately, regardless of the angle. The spindles work simultaneously, so you can achieve a cycle time of no more than 4.5 minutes per front axle.

When it comes to maintenance and changing tools, you can temporarily shut down one of the spindles. The other spindle then takes over machining the entire front



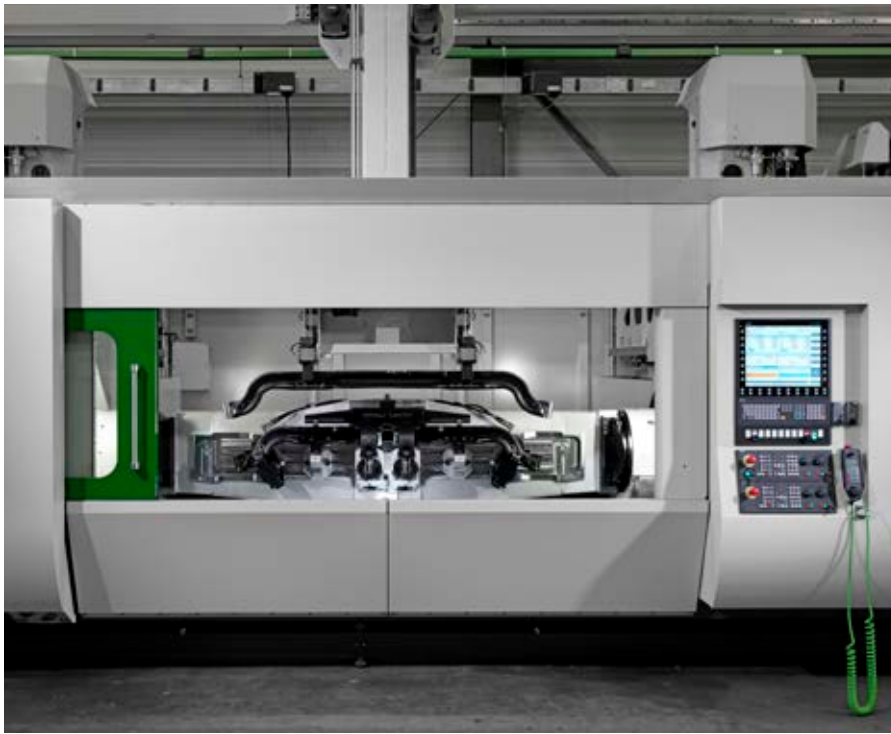
axle, so your production can continue as normal. Tools can be changed on one spindle while the other is still machining a front axle – meaning no loss of output.

### **Automatic loading: safely and efficiently**

There's no need to pull any of your staff aside to help load the UNITWIN6000 – boosting productivity while ensuring continuous output and increasing safety in the workplace. The UNITWIN6000 comes with an automatic loader crane with double gripper. This ensures components are changed over as fast as possible and, in turn, production downtime is reduced to an absolute minimum.

Want to go one step further and automate your production process even further? We would be happy to discuss the possibilities of fitting your machine with automated conveyor systems.

At UNISIGN, we are constantly developing machine solutions that we can use to change markets. Based on our experience and expertise in front axles, we are now working on a CNC machine for machining driven rear axles.



we develop and build our CNC machines almost entirely ourselves. The people who design, manufacture and assemble our CNC machines are the same people you speak to when you need help. They know exactly what they are talking about, down to the smallest detail, and are more than happy to share that knowledge with you. So, you can always count on the very best technical support from Unisign.

### The machining and clamping experts

As front axles are becoming lighter to save fuel, stability and accuracy is more important than ever while clamping. Unisign's Innovation Department is tracking developments in the truck industry closely. Our years of experience have taught us what can be done and, more importantly, what can't. Thanks to our shared pool of in-house expertise in machining and clamping adaptors, you benefit from an incredible amount of added value. Added value that comes from the expertise we have used to develop the UNITWIN6000.

### Tension-free clamping

Today's front axles are lighter and more flexible, but they still require a substantial cutting force for machining, making this process extremely complex. Tension-free clamping is the key to success and largely determines product quality and machining accuracy. Unisign is one of the few players to have fully mastered this process, resulting in our unique CNC machine: the UNITWIN6000.

### Additional features

The UNITWIN6000 offers a range of options to optimise your machining process. One such feature allows you to deburr your front axles, without any additional work required outside the machine. The machine can also



take a number of key measurements, such as the diameter, height and angle of the kingpin. And let's not forget that the UNITWIN6000 can be fitted with an integrated function for cleaning the front axles.

### Programming and operation

The UNITWIN6000 is easy for your employees to operate and programme. In fact, programming is just a matter of setting the correct parameters and the production programme is then automatically generated. It goes without saying that we will also train your employees to do this. We provide three standard training courses: Programming, Maintenance and Operation.

### Craftsmanship is key

At Unisign, craftsmanship is what drives us. We don't use parts from anyone else;

### UNITWIN6000: The benefits

- Outstanding track record globally
- Low cycle time: up to 4.5 minutes per front axle
- Automatic loader crane with double gripper
- High processing speed
- High degree of accuracy
- Suitable for machining with few or no staff
- Easy to programme
- Safety guaranteed thanks to closed design





# UNITWIN6000: in a league of its own



The UNITWIN6000 is a state-of-the-art CNC machine for processing front axles on light and heavy goods vehicles and buses. Its unique machine design features two spindles that can run simultaneously yet independently. This double operation

delivers unprecedented performance in quality, accuracy and speed – with an impressively cycle time of up to only 4.5 minutes per front axle. The UNITWIN6000 can process any type of front axle effortlessly, regardless of the kingpin angle.



*For detailed product information about our UNITWIN6000, please visit our website [www.unisign.com](http://www.unisign.com).*

*If you have any specific questions about using the UNITWIN6000 to machine front axles, please contact Alex Te Baerts on +31 77 307 37 77.*

## UNISIGN EXPERIENCE:

### FRONT AXLES

#### Products

Machining of front axles for light and heavy goods vehicles and buses

#### Material

Forging

#### Benefits to you

- Outstanding track record globally
- Low cycle time: up to 4.5 minutes per front axle
- Automatic loader crane with double gripper
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