Commercial vehicle wheel alignment with camera technology
This compact wheel alignment system enables truck and bus workshops, as well as tire service centers, to offer wheel alignment services quickly and accurately.

Wheel angles like
- toe, steering box position, camber, out of square, parallelism and axle offset
- caster, KPI, Toe Out On Turns and max turn
are measured using our patented camera technology with the chassis center line of the vehicle as reference.

Enabled by the unique rolling method, toe and camber measurements may be taken while the vehicle is in driving position. No lifting of the axles with run-out compensation is required, alternatively the system can also be operated with standard run-out procedure.

Wireless technology is used for transmitting data between measuring units and the computer. The computer software guides the user through the measuring process and prints out measurement reports of values, before and after alignment.
The JOSAM cam-aligner wheel alignment system uses the centerline principle to determine the position of axles and individual wheels in relation to the centerline of the vehicle. The system is designed to measure commercial vehicles such as trucks, trailers, buses and light commercial vehicles. Thanks to the scalability of the system it is also possible to obtain functions for:
- ACC (Adaptive Cruise Control) alignment
- Frame check
- Quick diagnose

Measurement principle and scalability

Wireless communication between the camera and the PC software

This measurement is based on a single continuous movement of the wheels, from a straight ahead position to maximum left, via maximum right and back to the starting position.

During this procedure the built-in gyroscope and inclinometer are constantly transmitting data to the computer, which calculates the caster, KPI and turn angles in different wheel positions. The entire process can be carried out in a matter of minutes.

Measuring caster, KPI and turn angles

Why wheel alignment?

By measuring and adjusting wheel angles on a vehicle, fuel costs and tire wear are reduced. At the same time comfort, security and running characteristics are improved. This leads to a better economy and environment for everyone. It also means that the vehicle travels on the highway without taking up as much space as an incorrectly aligned vehicle would.
The measuring is carried out as the vehicle stands on the floor, followed by rolling the vehicle so that the wheels turn half a turn and the cameras automatically take the readings. This method allows the camera system to measure before, during and after rolling, without the need for any run-out compensation. Toe and camber values will be displayed automatically and adjustments can be made if needed.

The axle offset value together with out of square is also presented as a result of the measurement.

By adding two more wheel adapters two axles can be rolled and measured simultaneously.

The rolling method

Representative:

Manufacturer: