

**Neadvance**

**Neadvance develops intelligent computer vision systems applied to quality control and automation of industrial processes. The knowledge and experience gained in modernising various industrial sectors, medical imaging and smart cities, enable Neadvance to make its solutions available in nine countries and three continents.**

Neadvance intelligent systems include 2D and 3D dimensional and position analysis; colour and texture identification, measurement and recognition; character

and pattern reading; defect detection and classification and robot guidance in several industrial processes.

**ACTIVITY SECTORS**



**INDUSTRY**



**AUTOMOTIVE**



**AGRIBUSINESS**



**SMART CITIES**



**MEDICAL IMAGING**

**THE ADDED VALUE OF NEADVANCE PRODUCTS**

- Flexibility and robustness
- Durability. The products meet the customers' needs and evolve according to new challenges presented
- Possibility of acquiring more knowledge and control over the production processes, improving relevant actions
- Proprietary application library
- Constantly developing software with the latest innovations in the sector
- Strong connection with knowledge clusters
- Sound knowledge of production / shop floor processes
- Compatibility with multiple hardware of different technologies
- With a single Neadvance solution it is possible to integrate and coordinate several functions simultaneously, overcoming time and space constraints in the optimisation of production processes.

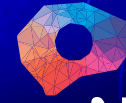
**PORTUGAL**  
 Parq. Ind. Celeirós 2ª Fase  
 Lugar de Gaião - Lotes 5/6  
 4705-025 Avelada, Braga  
 +351 253 145 430  
 info@neadvance.com

**MALAYSIA**  
 B-05-07, Krystal Point 303, Level 5  
 Jalan Sultan Azlan Shah  
 11900 Bayan Lepas, Penang  
 + 60 4-609 2106  
 info@neadvance.com

**GERMANY**  
 Cologne/Hamburg  
  
 +49 32 213 222 153  
 sales.de@neadvance.com

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

# ROBOT GUIDANCE FOR WHEEL MOUNTING



Neadvance

## Industry 4.0 is transforming production processes in a fast pace.

In the automotive industry, clogged assembly lines are converting themselves in modular and highly adaptable lines. Robot vision guidance systems are therefore essential, as they capture accurate three-dimensional information in short time, providing the desired flexibility and adaptability to robots, and reducing substantially the physical effort of operators.



### DESCRIPTION

The system guides the robot's griper to mount wheels in automobiles using high-resolution 2D and 3D cameras and innovative image processing algorithms. The system is fully calibrated and can evaluate, measure and check all the components for proper wheel placement:

- Detection of wheels on transport trolleys;
- 3D detection and calculation of the position of the wheel;
- 3D detection and calculation of front and rear hub position;
- Calculation of the robot's trajectories.

### FEATURES

- Cycle time: 3 seconds per acquisition
- System optical resolution: 5M Pixels
- Measurement resolution: 0.1 mm/pixel
- Inspection Area (LxW): 250X200 mm
- System dimension (LxWxH): 50X500x300 mm
- Accommodates to the productive process variations
- System integrated with the client's production line
- Industry 4.0 Ready

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