



# **WESTCAM TECHNOLOGIES**

## Part Recognition System (PRS)



# YOUR ADVANTAGES

## Our systems for part detection

### Safe and reliable automation of your production processes



We complement your CAD / CAM process with a powerful automation solution, which dental components can assign error-free to the individual customer. This is done fully automatically by optical image acquisition and an image recognition software.

- ❑ **Automation** of identification of dental components like bridges and crowns, as well as aligners, bars, abutments, etc.
- ❑ **Process optimization** by elimination of personnel handling like preparation, inspection and packaging
- ❑ **Increased throughput** due to higher capacity utilization of the upstream machineries (For example: sintering furnaces, 3D printers, processing stations, shipping)
- ❑ **Increased efficiency** due to reduced time and reduced testing costs through autonomous monitoring
- ❑ **Direct system integration** to your ERP- or PPS
- ❑ **Accurate customer deliveries** due to the reliable recognition of the components
- ❑ **Exact evaluations and classification** of process parameters for traceability (eg: heating curves)

# OUR SOLUTIONS

## Our range

### Individual and versatile like your dental components

- **Standalone solution** Local recognition system - individually applicable
- **Network solution** Server-based solution with connectivity to multiple recognition systems
- **Automation solution** Modular, fully automated manufacturing solution including recognition systems, parts handling and packaging

**Reports** We are pleased to customize your reports according to your requirements

**ERP/PPS interface** An interface can be produced directly or via a neutral format for all common systems

## Your special requirements

Everyday life, there are often very specific situations. Talk to us - we will find a tailor-made solution for your individual requirements!

# PRINCIPLE OF OPERATION

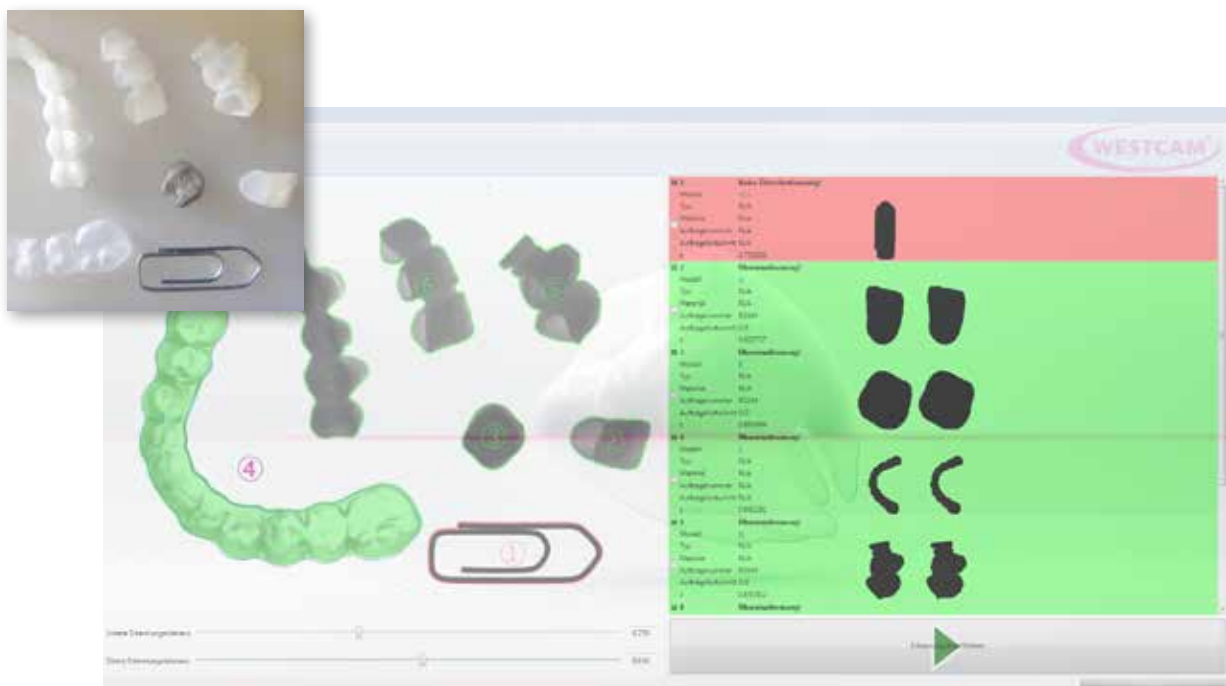
## Parts recognition via image processing

### The first automation solution for recognition of dental components

**„Who is who?“- that’s the question. Which product belongs to which customer?**

The WESTCAM system for dental products works simply and ingeniously: The system consists of an evaluation unit with camera system and lens. The pre-installed learning client teaches in the STL files of the dental components, which should be recognized. All required data were generated and stored in the defined database. The system matches your CAD data to the physical part in fractions of a second.

The dental components are inserted into the system. In a very short time, the components are identified and assigned to the right customer. Job-specific data were displayed immediately by the PRS software. For example, material, order number and number of parts per order. The system enables the simultaneous recognition of parts of an order or several different orders. If dental components are not detected or if they are foreign parts (such as a paperclip), they are marked with „no match“ in red signal color. These mismatched components can be removed from the manufacturing process or be checked again.



Our system allows a variety of protocols and reports. These can be created directly in the system or the data can be transferred to your ERP- or PPS system.

We are happy to adapt the reporting to your specific requirements.

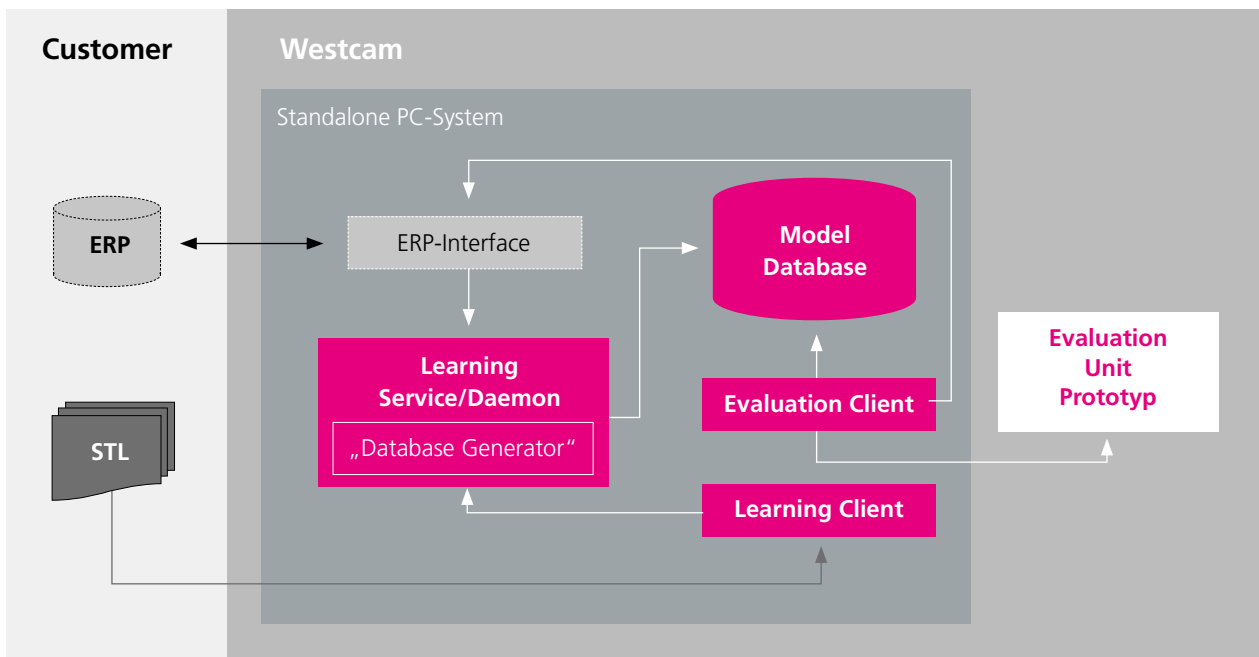
# CONFIGURATION LEVEL

## Part recognition System - PRS

### The right solution for your company

#### □ Standalone solution

The standalone solution includes an evaluation unit with camera system and lens as well as an industrial PC with pre-installed learning client. The identification process is carried out „in-line“ via the evaluation unit, in which the physical objects are manually inserted. The data will be matched via the recognition client with the stored data in the database. A match or disagreement according to the algorithm will be shown at the panel in a very short time.

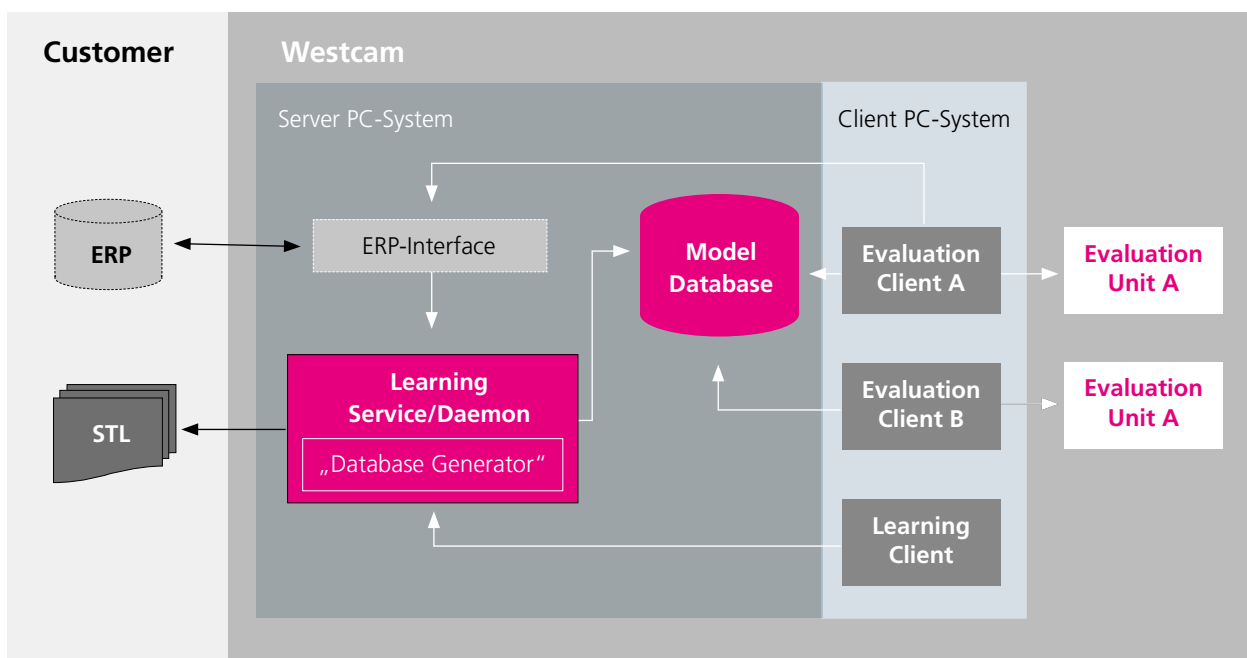


#### Local database

- Learning process takes place at the local PC system
- Connection of further PRS systems is not designed
- Local ERP interface

## □ Network-license

Via an ERP interface, the STL data as well as metadata can be retrieved directly from the online platform or the database. Several clients can be connected to the system at different workstations in the company. The clients work online, but independent of time, from the identification steps. After a successful identification, all data can be returned to the ERP- or PPS system. Thus, the data is always available for further processing centrally.

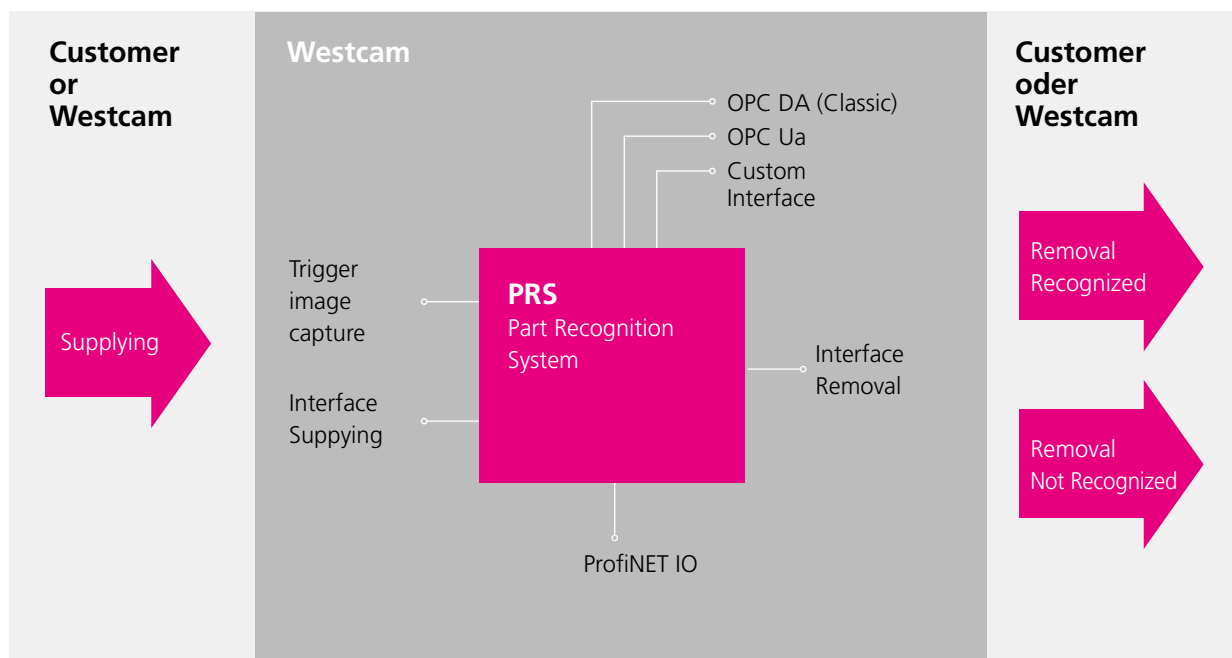


### Central database

- Learning process takes place centrally
- Connection of several PRS systems is possible
- Central ERP interface

## □ Automation solution

Due to our automation solution, the entire manufacturing process, including part recognition and component transportation, can be realized with almost no staff. Consistently high sorting quality and efficient output are guaranteed. The automation solution works similar to the network solution and is supplemented. The integration of the individual automation systems will be realized with interfaces at the software and hardware side.



## Central database

- Learning process takes place centrally
- Connection of several PRS systems is possible
- Central ERP interface
- Hardware & Software - Interfaces and adaptations to automation systems

# SUCCESSFUL PARTNERSHIP

## Our know how for you

**We optimize your manufacturing processes sustainably with our core competence image processing. You profit of our cooperation through**

- Efficient and short turnaround times
- Compact complete solutions
- Error-free recognition of your individual dental components such as bridges and crowns, as well as aligners, bars and abutments

## Contact us

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