

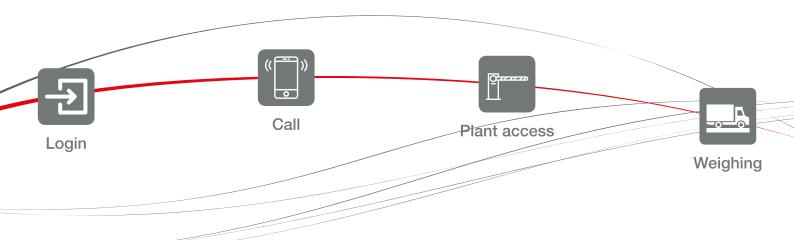
# YOUR CENTRAL THREAD

#### Heading for more efficiency

Yard management, plant logistics, or dispatch automation solutions - the OAS AG combines experience gained over decades with profound process knowhow, all aiming at optimisation of industrial processes beyond industrial borders.

In addition to analysis, planning, and control services, our range of products also includes software applications and self-service logistic terminals, which provide for an optimum flow of materials and goods transported by lorry, train, or sea.





### PROMPT CAPACITY GROWTH

Our yard management solutions optimise the logistic flows and reduce in-plant residence and door-to-door times to increase capacities while using the same amount of resources or even reduce this.

#### COMPLETE TRANSPARENCY

The entire process, starting with login, through loading or unloading, and ending up with leaving of the plant becomes transparent and is documented in its entirety with time stamps and photographs irrespective of whether the process steps have taken place in an automated or in a manual way.





#### **INDUSTRIAL EXPERIENCE**

- Construction chemistry / building materials
- Chemistry
- Power generation
- Feeding stuff
- Beverages
- Plastics and rubber
- Bulk transport terminals
- Food stuff and luxury food
- Paper and paperboard
- Renewable energy
- Steel
- Environmental technology
- Cement / lime / plaster



Loading / unloading



Control



**Documentation** 



Exit

### FINANCIALLY REWARDING INVESTMENT

It is easy to integrate system components, such as truck scales, loading and unloading points, and logistic terminals. Interfaces to higher- or same-level systems (ERP, TSM, LVS) allow for a continuous data flow.

## CUSTOMER-ORIENTED QUALITY REQUIREMENTS

To meet the quality requirements, both – hardware and software – are by OAS AG. Our high-quality logistic terminals are designed for a long service life and thanks to their modular design, they provide for flexibility in the adjustment to future requirements.



The driver uses the logistic terminal to log in the plant logistics system. This considerably reduces the workload of own personnel. Moreover, language barriers are overcome and a connection to the business transaction is established (e.g. barcode brought along on the order document or a mobile device).

Anyone involved in the plant will be informed automatically about the login and can act accordingly.



#### **AVAILABILITY**

The driver uses a logistic terminal to independently log in – this allows 24/7 operation without additional personnel.

#### MULTILINGUAL VERSION

The user interfaces are available in several languages represented to the driver by national flags icons s/he can select.

#### SAFETY

Dialogues are adjusted individually to the requirements of the operating company. Pictures and graphics, e.g. safety instructions, are developed and delivered by the operating party and automatically implemented in the screen menus before start-up. The driver is guided safely through the system by single-step operation.

#### CONTROL

The driver gets an identifier (circulation slip with barcode, ident card, pager) to be guided through the process. The plant logistic system permanently informs the driver of the next step. Deviance is detected and entails corresponding instructions.









The call function calls the driver logged in to approach the site and the target indicated. Either the personnel sends the call instruction manually or the system sends it automatically controlled by resources to meet the current demand.

The driver gets the call via an information board, via the pager handed out during login, or on the mobile phone by SMS – at any location and promptly or with time to handle as required. This allows for additional external buffer areas.

#### **ADVANTAGES & FUNCTIONS**

#### **ORGANISATION**

The operating party dictates the access time. The driver waits in the vehicle and safely for the call. Tailbacks in the plant are prevented and the driver can use the waiting time to have a rest.

#### AT SCALE

It is not the driver who decides on the order of transactions but the company using the current rate of utilisation as a basis.



The driver approaches the barrier at the entrance to the plant and uses the identifier to open it. Rapid and reliable processing reduces tailbacks at this point.

#### **ADVANTAGES & FUNCTIONS**

#### **EASY**

Easy and rapid processing at the barrier. No tailbacks. No need for own personnel.

#### SAFE

Checking the transaction automatically ensures that only authorised vehicles may enter the plant.





For processes with weighing, the driver uses the identifier on the logistic terminal to start weighing automatically. Here, the plant logistic system respects all aspects required by the Standards and Measures Law.

#### **ADVANTAGES & FUNCTIONS**

#### **RELIABLE**

Weighing allows for all aspects of the Standards and Measures Law. Sensors, side boundaries, camera systems, and – if required – devices detecting the registration numbers document the transaction and make it safe.

#### **TIMESAVING**

The driver handles weighing all by self-service. S/he uses the identifier, weighing is released automatically; other operating steps are not required.

#### **AVAILABILITY**

The scales are operating 24/7 – no need for own personnel.

#### RELIABILITY

The resulting weight can be used at other points, e.g. the loading point or for calculation of the load. This prevents overload and underload.



### **LOADING / UNLOADING**



#### **ADVANTAGES & FUNCTIONS**

#### **RELIABLE**

The identifier brought along allows for correct assignment to the transaction and loading of the correct cargo.

#### SHORT RESIDENCE TIME

The demand-meeting call reduces the residence time because all preliminary work has been completed already. Loading or unloading can start at once.

#### UTILISATION

Start and end of loading / unloading get time stamps. This allows an analysis of the utilisation and more qualified statements to the forwarder.

Loading or unloading of general cargo is effected by corresponding personnel. The time stamp at the start / end can be entered manually or transmitted by other systems (e.g. LVS). This acknowledgment enables the next step.





Integration of automated loading and unloading points. At the loading/unloading point, the driver independently undertakes loading of e.g. bulk material. Existing sensors, scales, flow meters, etc. are integrated.



#### **ADVANTAGES & FUNCTIONS**

#### LINK

Connection to the existing control system via I/O or common industrial bus interfaces.

#### **USER-FRIENDLY**

Multilingual user interface with icons to allow for rapid and accurate handling.

#### **RELIABLE**

Verification of material and loading point. Should the driver select a wrong loading point, s/he gets an automatic information about the correct loading point. In case of manually supported processes, the four-eyes principle including a personified confirmation by the employee is implemented.

## DOCUMENTATION

The output of simple delivery notes up to complex delivery dockets is effected on accordingly designed logistic terminals featuring a signing function.

#### **ADVANTAGES & FUNCTIONS**

#### ON THE SPOT

No manual output required. Own personnel becomes relieved. Availability beyond office hours.

#### ALL-AROUND AVAILABILITY

The logistic terminal is integrated in the route through the plant. This avoids superfluous travel and parking times.







The driver approaches the barrier at the exit of the plant and uses the identifier to open it. Rapid and reliable processing reduces tailbacks at this point too.

#### **ADVANTAGES & FUNCTIONS**

#### FASY

Easy handling out of the vehicle allows for rapid transaction.

#### SAFE

Checking the transaction automatically ensures that only authorised vehicles may leave the plant. To this end, the sequence chain has to be complete.













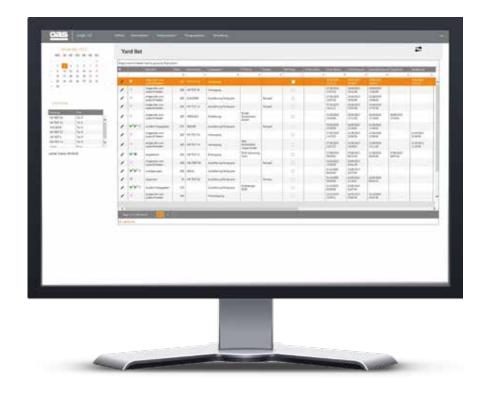


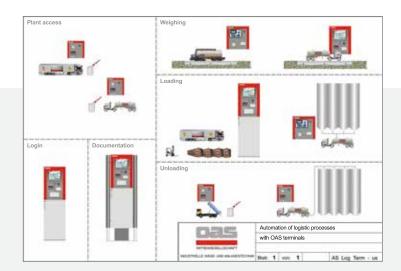
# SOFTWARE LOGIS AS COMPLETION

#### Through individuality and networking

#### **FEATURES**

- Control of complex logistic processes
- Self-service and serviced operation in any combination
- Variable definition of contracts, calls, and transactions
- Multi-item feature
- Flexible master data records
- Optimum and flexible use of the resources available
- Data communication with third-party systems (ERP, TSM, LVS)
- Operation through standard browser
- Performant SQL database (MS SQL®/Oracle®)
- Connection and control of logistic terminals
- Scalable from in-plant areas over an entire plant up to a group of plants





# LOGISTIC TERMINALS

#### Rugged design



Development and construction of the logistic terminals is effected on the premises of OAS AG and is based on our treasure trove of experience in this business segment gained over 25 years.

Our logistic terminals provide for a rugged design and a long service life.

The terminals are adjusted to a variety of tasks. Each type of terminal is based on a modular design and can be adjusted to your individual requirements.

The man-machine interface always is a touch screen. The multilingual dialogues are simple and configured in a comprehensible manner. Where possible, icons and graphics are used instead of dialogues.



- Flexible identification through e.g. barcodes (mobile device, paper), ident card, pager
- Document output by standard printers featuring an output tray
- Label output by receipt printers featuring an output tray
- Document scanner to scan documents brought along
- Hand-out and collection of pagers
- Signing function
- Integration of biometry
- Integrated cameras

















### **OAS AG**

#### Your partner you can rely on

Cooperative, targeted, and committed - in this way the OAS AG has established its range of services on the market in over 35 years.

Whether industry-sector-specific equipment for the batch-oriented manufacturing industry, process engineering production lines, process and production control technologies, calibratable truck scales and waggon weighbridges featuring automated solutions, or the implementation of plant logistics systems we offer everything from a single source.

#### Scope of performances by OAS:



Counselling



Project engineering



Manufacturing



Assembly & commissioning



**Training** 



After-sales service

Error and omission excepted. Subject to technical changes without notice. Figures and performance characteristics may deviate. The requested performance characteristics are binding only if expressly stipulated in a signed contract. All product names may be trademarks or product names of OAS AG or of any other company acting as a subcontractor, the use of which by third parties to serve their purposes could injure the owners rights.



#### **OAS AG**

TechnologiePark Bremen Caroline-Herschel-Straße 1 D-28359 Bremen Fon +49 421 2206-0 Fax +49 421 2206-100

Niederlassung Augsburg Diedorfer Straße 5 D-86154 Augsburg Fon +49 821 49005-0 Fax +49 821 49005-10

Niederlassung Berlin Meeraner Straße 1 D-12681 Berlin Fon +49 30 916009-0 Fax +49 30 916009-30

Niederlassung West Frauenlobstraße 84 D-44805 Bochum Fon +49 234 51649-53 Fax +49 234 51649-54

info@oas.de www.oas.de