



FORKLIFT CONTROL SYSTEM

Drive smart
– Save hard!





The **iFD GmbH** plans, develops and realizes software systems worldwide for automated and manual fields of intralogistics. The range of products and services consists of the following:

- › **Warehouse Management**
- › **Material Flow Control Systems**
- › **Forklift Control Systems**
- › **Commissioning Solutions**
- › **Simulations**
- › **Individual Software Solutions**
- › **Service and Support**

iFD GmbH is owning an independent research and development department. This is an important requirement to be able to guarantee a permanent innovation and advancement process in all software systems and add-on components.

Since the founding of the company in 1990 iFD realized over 300 cross-industry projects.

A steady development and active research, as well as a targeted improvement of concepts and products are a guarantee for success for adapted software systems. These software systems represent the ideal logistic solution for a multitude of national and international customers.

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TRANSPORTATION-MANAGEMENT

> Generation of Transport Orders

- Adaptive Interfaces
- Manual Entry via Self-Learning Dialogue Systems
- Automated Generation in Reaction to Signals, Cycles and Events

> Real Time Assignment to the Equipment

- Optimal Utilization
- Reduction of Lead Times

> Traceability and Tracking

SLS works in real time

Processing the „correct“ order in every moment – real time assignment of the SLS makes it possible. The result is an optimal utilization of all forklifts, which no longer requires an area allocation.

SLS saves time

The system permanently provides propositions for consolidating and sequence planning. Because of the combination of transports, search and empty runs are reduced as well as travel distances.

SLS adapts

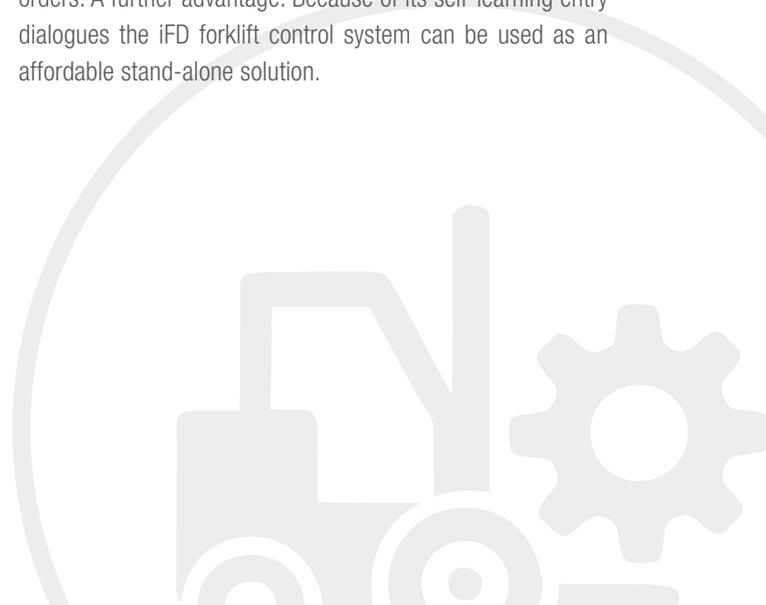
The SLS is geared to your transportation processes. The permanent generation of efficient transport orders stems from this perfect interaction, which enable an appropriate supply of goods.

SLS works simultaneously

The SLS succeeds in the simultaneous processing of several order types with individual process sequences. Additionally the software recognizes blocked or misplaced pallets and defines on basis of this information alternative transport routes.

SLS is capable of learning

Profit from easy to use dialogues, which facilitate the entry of orders. A further advantage: Because of its self-learning entry dialogues the iFD forklift control system can be used as an affordable stand-alone solution.





DYNAMIC PRIORITIZATION

- Real Time Prioritization of every Transport Order
- Integrated Time and Process Controlled Priority Management
- Combination of Movement Strategies
- Flexible Control of Priorities, Keeping within Cut Off Times and Shortening of Lead Times

SLS weights options

What is important in this very moment? In which order must the forklift runs take place? The SLS operates by means of the priority principle. Thus priorities of orders and processes are reconciled and conflicts eliminated.

SLS keeps an eye on the equipment

The route optimized scheduling and matching reduces the maintenance costs of the equipment. Additionally an integrated maintenance management provides appropriate servicing.





BUSINESS INTELLIGENCE

- › Elicitation of Key Performance Indicators on Measuring Points
- › Real Time Reports on a Dashboard or Mobile Device
- › Permanent Analysis of Trends

SLS identifies potentials

Key performance indicators are the precondition for transparent analysis and improvement of business processes. With the aid of comprehensive statistical assessments the system can generate the KPIs and therefore provide substantial data for internal management reports.

SLS is swift

More than one million orders can be prioritized online in a matter of seconds. Due to an integrated match code filter the operator is easily able to quickly find the right data.

SLS is mobile

The smartphone is essential! Here again the SLS is technologically up-to-date. With the SLS monitoring is possible via smartphone, which for example allows proactive planning and faster reaction times.





ROUTING & TRACEABILITY

- › Forklift Tracking and -tracing
- › Avoidance of Empty Runs and Search Times
- › Display of Performance Data, Disorders and Workloads
- › Integrated Driving Assistance and Navigation System

SLS navigates

A 3-dimensional display of the transportation network makes it possible. With this digital aid, the forklift operator can easily select paths and spend less time searching.

SLS takes the shortest route

Firstly the system calculates an optimal sequence of the transports and hence identifies the shortest route. Secondly the live displayed transfer transports reduce the amount of empty runs.

SLS is flexible

Using the graphical editor the transportation network can be independently edited in the data management. Layout changes therefore do not cause subsequent costs and the user can adjust the system quickly.





PROCESS RELIABILITY

- › Monitoring of all Picking and Unloading Steps via Scan, RFID or Geo-Localization
- › Securing of the Execution Sequence
- › Transmission of Data in Real-Time to Primary Systems
- › Shipment Processing in Six-Sigma Quality

SLS establishes reliability

The automated reading of activities, the integrated real-time interfaces to other resource systems, as well as shipment processing within quality standards lead to excellent process reliability.

Additionally the easy and intuitive operation of the SLS contributes to declining error rates and shortening of times needed for work steps.





SIMULATION AND OPTIMIZATION

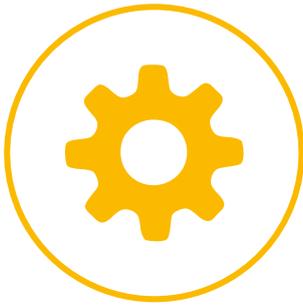
- › Analyzation of the Fleet Structure
- › Determination of Optimal Weighting Indexes via Self-Optimizing Simulation Runs
- › Determination of the Ideal Forklift Count
- › Display of Transportation Procedures and Processes, Benefit: Quantification of Different Alternatives, Demonstration of Potentials
- › Simulation Aided Control and Supervision of Capacity Utilization, Throughput and Deadlines
- › Process Analyses and Focus on Problems



SLS optimizes

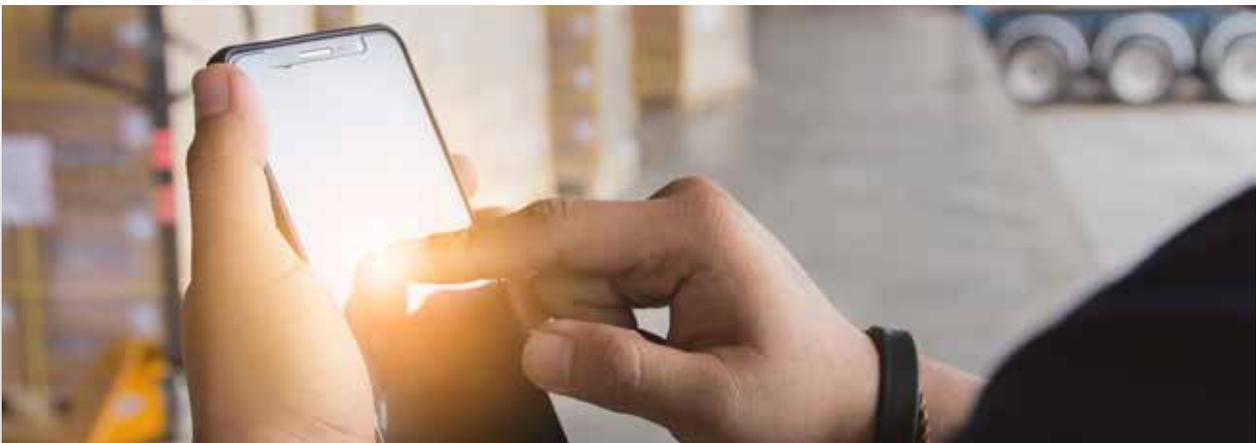
A simulation illustrates processes in optimal conditions. By implementing the best practice simulation your profitability is going to increase. Using a web-based application initial data is combined with the aid of routing and processing strategies. Every simulation result points out saving

potentials. The simulation model calculates the optimal number of fork lifts. Complex processes and fleet analysis are implemented in the model as well. Simultaneously the gained findings provide information about how strategies in the system can be designed.



SUPPLEMENTARY MODULES

- › Monitoring via Smartphone
 - possibility for proactive planning
 - guarantees fast reaction times
- › Needs-Oriented Fleet Control, Benefit: Efficient Assignment of all Vehicles due to Balancing of Different Load Conditions
- › Integrated Route Manager, Benefit: Presentation, Optimization and Adjustment of the Route Network



Furthermore contribute other **SLS-components** to a higher order-related capacity utilization of your company. For example the intelligent resource management which provides an efficient management of the forklift fleet. Even as an instrument of increasing operational motivation – because the **SLS** records the data of all forklift drivers. Our experience and evaluations show that by using the **iFD Forklift Control System** your logistics costs can be reduced by up to 30%.

Modules:

- › Tugger Train
- › Control of Semi-Automatic Systems
- › Trailer Management
- › Stock and Warehouse Management



CUSTOMER'S OPINIONS

„Continuous improvement of the material flow. One of the reasons is the forklift control system by iFD GmbH.“

Thomas Ganzmann

Department Leader
Inbound Logistics,
Siemens-Gerätewerk Amberg

„We have taken a conscious decision for iFD GmbH. iFD is a regional provider which competently realizes our requests. Eurofoam Sachsen operates Just-in-Time. Therefore it is especially important to continuously utilize our production machines order related. We can manage this with the forklift control system by iFD GmbH. Additionally the SLS provides a steady but constantly changing material supply with high flexibility. At the same time we could reduce production and provision costs with this system.“

Uta Heinzinger

Product Manager
Eurofoam Deutschland GmbH,
Schaumstoffe Werk Sachsen

„For us the main approach was to process reliably organize the transport of internal goods and to remove the personality of the individual driver to guarantee a delivery of the goods in a timely manner.“

Jürgen Schaper

Production Manager
Stamping Workshop,
Siemens AG Nürnberg

„A decisive factor for us was the flexibility of iFD GmbH to develop a forklift control system which is tailored exactly to our processes and which additionally stands out with a good ratio of price and performance. Furthermore iFD GmbH presented itself as a competent and cooperative partner regarding the selection of forklift terminals.“

Hermann Schätzlein

Leader Materials Management and Logistics,
Koenig&Bauer AG

Why choose iFD?

Our customers invest their time and money. It is our duty to provide them in return with the highest possible profit in the logistics process by improving their performance. We think customer and solution oriented and respond – thanks to modern development platforms – quick and creative to new challenges. Benefit from our cross-sector know-how which we successfully apply worldwide and continuously broaden for more than 20 years and in more than 300 projects.





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