DATA LEAP™ Production Data Management.

SOFTWARE FOR PROCESS-ORIENTED PRODUCTION MANAGEMENT IN THE FACTORY OF TOMORROW.

DATA LEAP™ - Optimised production processes.

Get an overview with ease.

What is modern production data management?

Intelligent and smooth processes form the basis of forward-looking production.

Production data management as an integrated system is a response to the new demands placed on information management in production.

Secure your competitive advantages with:
- efficient administration,
- unlimited flexibility,
- an increasing range of options,
- absolute schedule reliability,
- short delivery times.

DATA LEAP™ is the new generation of production data management. Production processes are monitored, controlled and optimised in real time through a direct connection to automated production.

To achieve this, DATA LEAP™ creates IT links between the production elements in the overall operating process, such as
- production data reporting,
- machine data reporting and
- quality management data.

DATA LEAP™ connects all processes that have a direct impact on the production process.

As a complete modular system, DATA LEAP™ performs the required functions of mediation and communication between the levels within the business. It links the long-term considerations of the business management (ERP system) with the real-time views at the production and automation level.

This means that DATA LEAP™ can also enhance the future competitiveness of the business by optimising the overall technical processing of orders.

Which data sources are linked?

DATA LEAP™ visualises and controls the reporting process for production, machine and product data.

DATA LEAP™ is equipped with intelligent interfaces to enable communication within all kinds of corporate structures. This allows seamless integration into individual IT landscapes whilst guaranteeing data transparency.
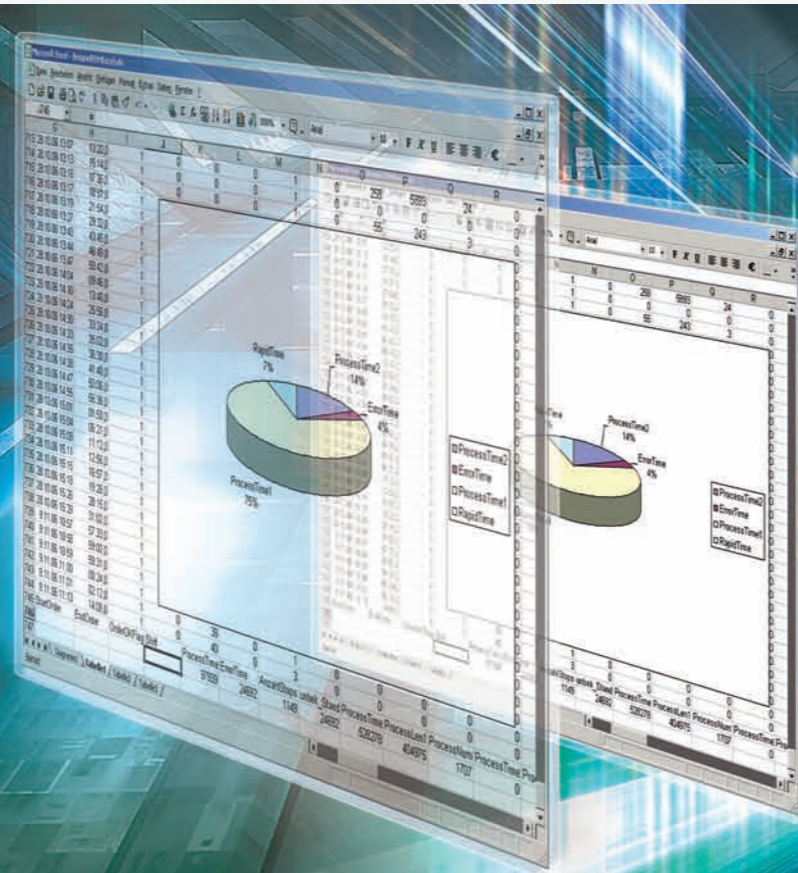
Electronic links are created between the data in the departments affected by production.
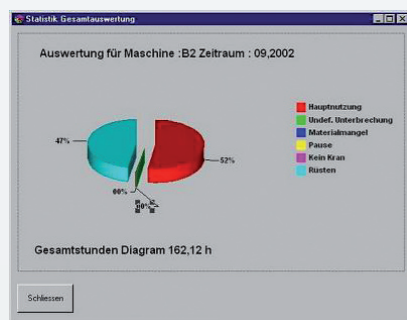
DATA LEAP™ - Transparent processes.

Show data fast.

DATA LEAP™ helps you to manage your cross-linked production data more efficiently and analyse them more easily. Work more economically with a transparent view of your production.

How will I see my data?

DATA LEAP™ provides an insight into your production.

The technical infrastructure is shown in application-oriented panels through a wide range of interfaces.

These flexible connections to ERP, PPS and nesting systems such as COLUMBUS™, make it possible to evaluate structured data in a database using an Excel or XML document.

Configurable front ends allow for specific views of the process data areas involved.

These include:
* job status,
* stock withdrawals by production,
* malfunctions.

Based on reliable data and a comprehensive data rights management system, this makes it quite simple to locate potential for optimising process procedures.

Among other things, these automated standard evaluations offer you an insight into:
* job processing,
* process times, paths and starts,
* downtimes.

DATA LEAP™ lays the foundation for increasing your productivity.

What is a module?

DATA LEAP™ is compatible with your individual method of production. A variety of modules for a variety of tasks.

Unlike systems designed with a fixed structure, DATA LEAP™ is made up of clearly defined modules. These can be combined to the customer's specifications, depending on how production is organised. These self-contained functional modules open up the data world behind machines and processes, enabling you to produce more quickly.
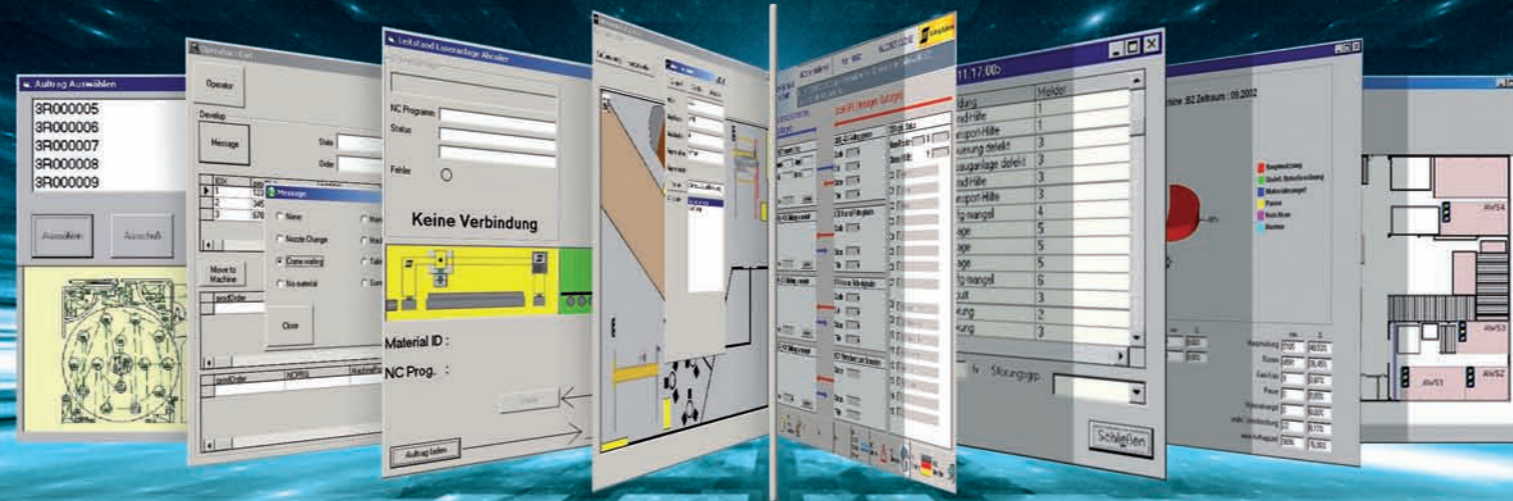
In the process, the module acts as a window on your production system.

The following aspects can be viewed in the modules, either in real time or as a summary:
* control,
* tracking,
* recording,
* reporting.

DATA LEAP™ - The module collection.

Profitable solutions made to measure.

The DATA LEAP™ modules

Important components for measuring and controlling process activities. Gain direct influence over quality in your production.

2 DATA LEAP™ DataAccess
(External system connection)
Visualisation of production data from connected elements and feedback of product-related data for working process optimisation, integrated operator interface on all machines/workstations. Job-related product information displayed directly on the unit.

4 DATA LEAP™ Database
(Data management)
All the data required for the specific production process from work planning and production are provided in a structured form in an open database (job shop, steel construction, shipbuilding).

6 DATA LEAP™ Workshop View
(Graphical viewing interface)
Automatically updated visualisation of all machines/workstations connected to DATA LEAP™ with detailed display including technology data, operating conditions and job/production schedules

8 DATA LEAP™ Statistics
(Statistical evaluation)
Standardised software for the evaluation-aiding display and statistical analysis of the customer-specific production database as a foundation for quality optimisation in reporting.

10 DATA LEAP™ Auto Control
(Production automation)
Modern control station technology for the optimised, synchronous production process with direct implementation of all planning data and integration of different controls, machines and peripheral units into a continuous production chain.

1 DATA LEAP™ DDE/OPC Client
(Data acquisition)
Fully automated database-supported acquisition of all production-related data from ESAB machines (log file, XML, CSV file).

3 DATA LEAP™ Nesting Interface
(Nesting system connection)
Interface for manufacturer-independent connection of DATA LEAP™ to COLUMBUS™ and other nesting systems.

5 DATA LEAP™ ERP Interface
(Planning system)
Connection to customers' ERP systems. Allows bi-directional data exchange, for example with the Jobs, Parts or Materials elements.

7 DATA LEAP™ Event Control
(Reporting system)
The malfunction database is where all the non job-related standing times and downtimes of the connected workstations are recorded and prepared for the reporting system.

9 DATA LEAP™ Job Cycle
(Detailed job planning)
Flexible tool for sequencing in production and automatic control of execution on ESAB machines prepared for the purpose.

11 DATA LEAP™ Maintenance
(Maintenance management)
The collection of wear and consumption data and the documentation of maintenance measures make it possible to plan for maintenance management.

DATA LEAP™ - The intelligent building block principle.

Grow with your tasks.

There is a choice of three preconfigured module packages for your requirements:
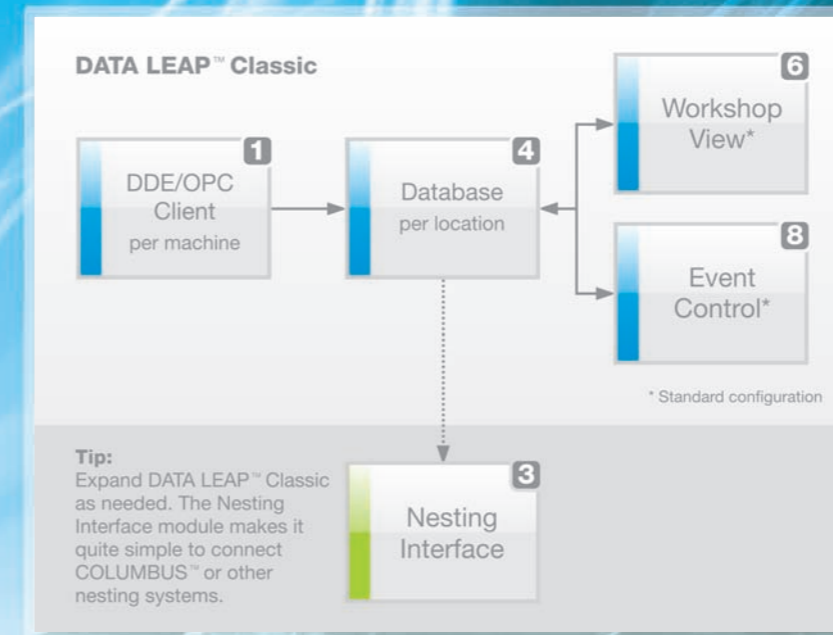**DATA LEAP™ Light**
DATA LEAP™ Classic
DATA LEAP™ Premium

DATA LEAP™ Classic

1 DDE/OPC Client per machine

4 Database per location

6 Workshop View*

8 Event Control*

* Standard configuration

Tip:
Expand DATA LEAP™ Classic as needed. The Nesting Interface module makes it quite simple to connect COLUMBUS™ or other nesting systems.
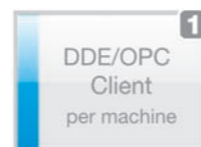
3 Nesting Interface

DATA LEAP™ Light

Your convenient introduction to the networked factory with modern production data management.

DATA LEAP™ Light presents the basic functions and components in a smart packaged solution. Manage your production to high quality standards on the basis of structured data and information supporting decisions to optimise production.

In the process, DATA LEAP™ Light concentrates on pure machine data reporting with the DDE/OPC Client and provides information for daily processing in a CSV or XML file.

DATA LEAP™ Light

1 DDE/OPC Client per machine

DATA LEAP™ Light module:
1 DDE/OPC Client

DATA LEAP™ Classic

Powerful tools for forward-looking digital information management in production.

With its combination of modules, DATA LEAP™ Classic covers the full scope of machine data reporting, including classified database storage and decision-aiding analysis and evaluation options.

The options for connection to COLUMBUS™ mean that jobs in processing can be directly enriched with nesting information. The included

DATA LEAP™ Workshop View module offers you a transparent graphical and tabular visualisation of the factory workshop in addition to the job and process history.
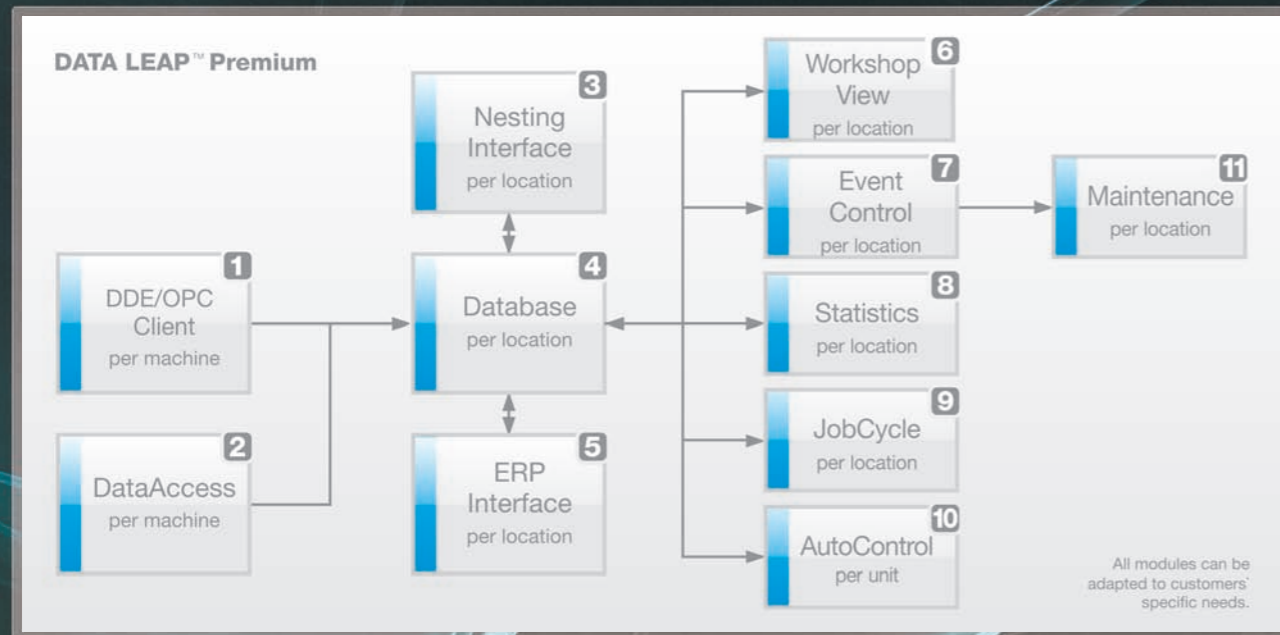
With the data consistently disclosed by the DATA LEAP™ interfaces, you can easily create your own connections or adapted applications with full access to the DATA LEAP™ database, thus individualising your production data management.

DATA LEAP™ Classic modules:
1 DDE/OPC Client
4 Database
6 Workshop View
8 Event Control

DATA LEAP™ - Workflow automation.

Exploit all the options.

DATA LEAP™ Premium

1 DDE/OPC Client per machine	**3** Nesting Interface per location
2 DataAccess per machine	**4** Database per location
	5 ERP Interface per location

6 Workshop View per location
7 Event Control per location
8 Statistics per location
9 JobCycle per location
10 AutoControl per unit
11 Maintenance per location

All modules can be adapted to customers' specific needs.

DATA LEAP™ Premium advantages:

➡ Integration of customer-specific interfaces to external systems.

➡ Individual combination from the DATA LEAP™ module range.

➡ Maximises automation gains with intelligent control station technologies.

DATA LEAP™ Premium

**Your complete system for maximum economy.
Take advantage of full access to all information.**

DATA LEAP™ Premium is your freely configurable premium solution for the greatest transparency and flexibility in production-optimising data management.

As part of the individual adaptation of DATA LEAP™, your ESAB team compiles your ideal combination from the full range of modules. The selection is based on your needs as well as state-of-the-art approaches drawn from automation research and process optimisation.

With high-performance interfaces to other manufacturers' units within your production structure and to your process-integrated ERP and nesting system, it is possible to implement fully networked control and analysis structures matching your requirements. DATA LEAP™ Premium supports comprehensive automation options in production with intelligent control station technology for the complete production cell.

DATA LEAP™ Premium modules:
1 DDE/OPC Client
2 DataAccess
3 Nesting Interface
4 Database
5 ERP Interface
6 Workshop View
7 Event Control
8 Statistics
9 JobCycle
10 AutoControl
11 Maintenance

Your DATA LEAP™ options at a glance.

Compare our module combinations in terms of your individual requirements.

The three DATA LEAP™ packages have been configured for you on the basis of typical DATA LEAP™ applications at leading national and international production plants. On the strength of our long years of experience, we offer you the ideal solution for your demanding requirements.

DATA LEAP™	Light	Classic	Premium*
Machine data reporting	•	•	•
Log file and data reporting	•	•	•
Excel export (CSV)		•	•
XML export	•	•	•
Database (MS-SQL Server)		•	•
Graphical viewing interface		•	•
Malfunction database		•	•
Connection to COLUMBUS™		★	•
Connection to other nesting systems		★	•
Reporting system			•
External machine connection			•
ERP system connection			•
Detailed job planning			•
Control station			•

▨ either/or // ★ charge for expansion // * customer-specific version

ESAB CUTTING SYSTEMS.

Your partner in cutting.

All the highlights at a glance:

- Open interfaces to ERP, PPS and nesting systems
- Individual customer solutions thanks to modular structure
- Optimal integration of ESAB cutting machines and easy adjustment to external machines

- Leading software standards for high investment security
- Transparent production thanks to application-specific analysis interfaces
- Graphical and tabular visualisation of working processes

- Provision of standard evaluations for continuous information management
- Intelligent automation and immediate fault correction thanks to simple control processes

Training and service

- Customer-specific training on site by arrangement
- Regular training courses at the ESAB Technology Centre
- Free support hotline

Delivery format

Installation CD, handbook

Operating system

Microsoft Windows® XP 32Bit
Microsoft Windows® Vista* 32Bit
Microsoft Windows® Server 2000
Microsoft Windows® Server 2003

* Only in conjunction with DATA LEAP™ OPC-Client

Windows® is a registered trademark of Microsoft Corporation.

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