

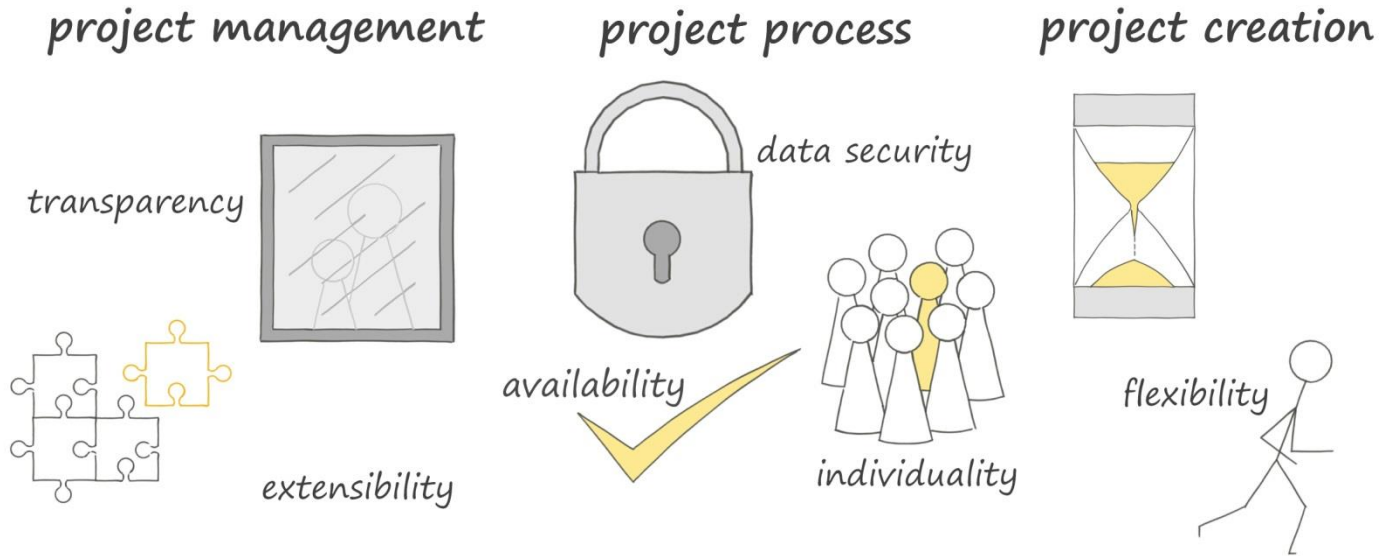
GraphPic
SCADA System

Ingenious Engineering

Requirements and Features

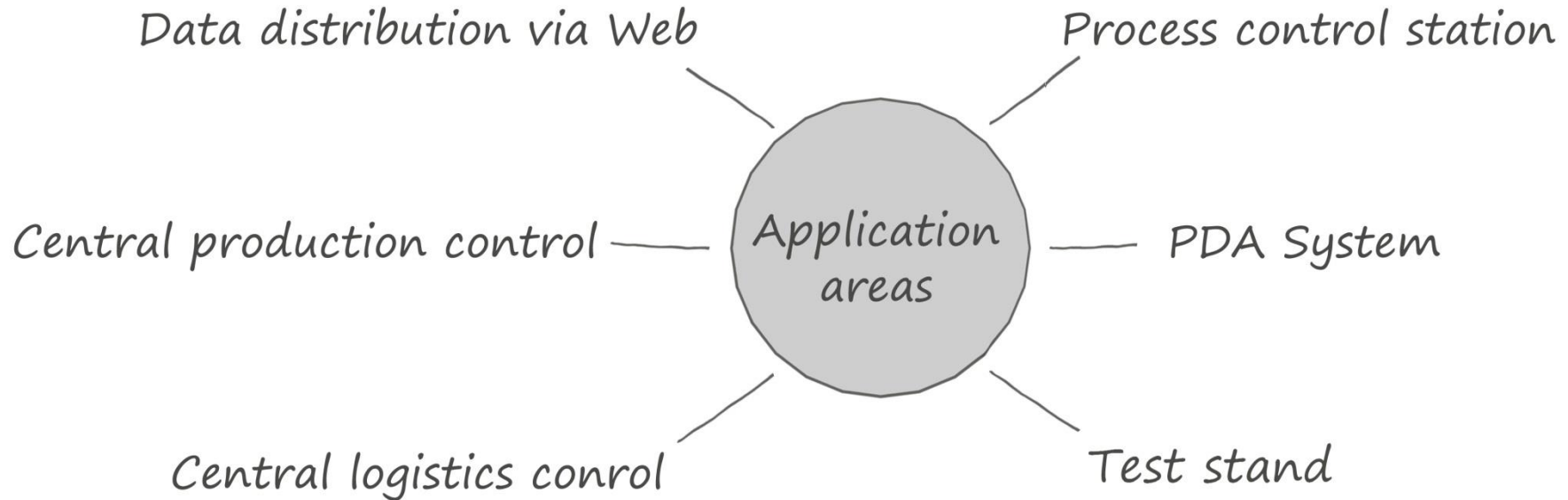
It is not only the function of a SCADA-system to provide the usual performances, but also to generally provide assistance for an efficient working.

⇒ *High efficiency* during each phase of the project via perfected architecture:



Applications

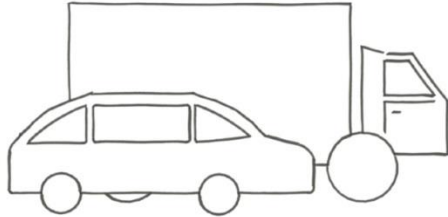
Depending on the main task, GraphPic is in use for most different areas of application:



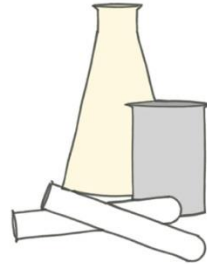
Sample Projects

GraphPic is industry-independent.

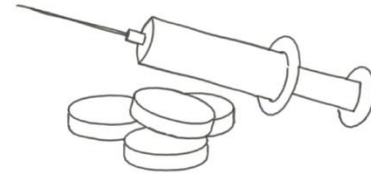
Automotive Industry & Supplier



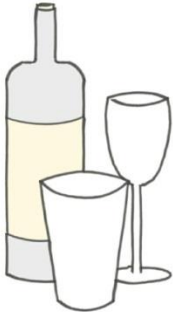
Chemical Industry



Pharmacy



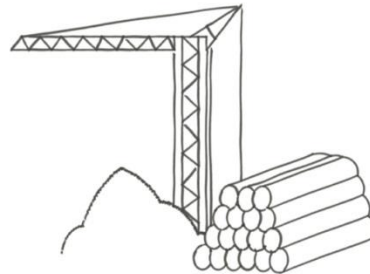
Beverage Industry



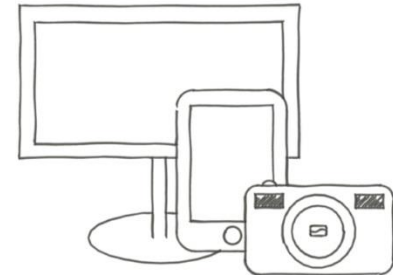
Green Technology



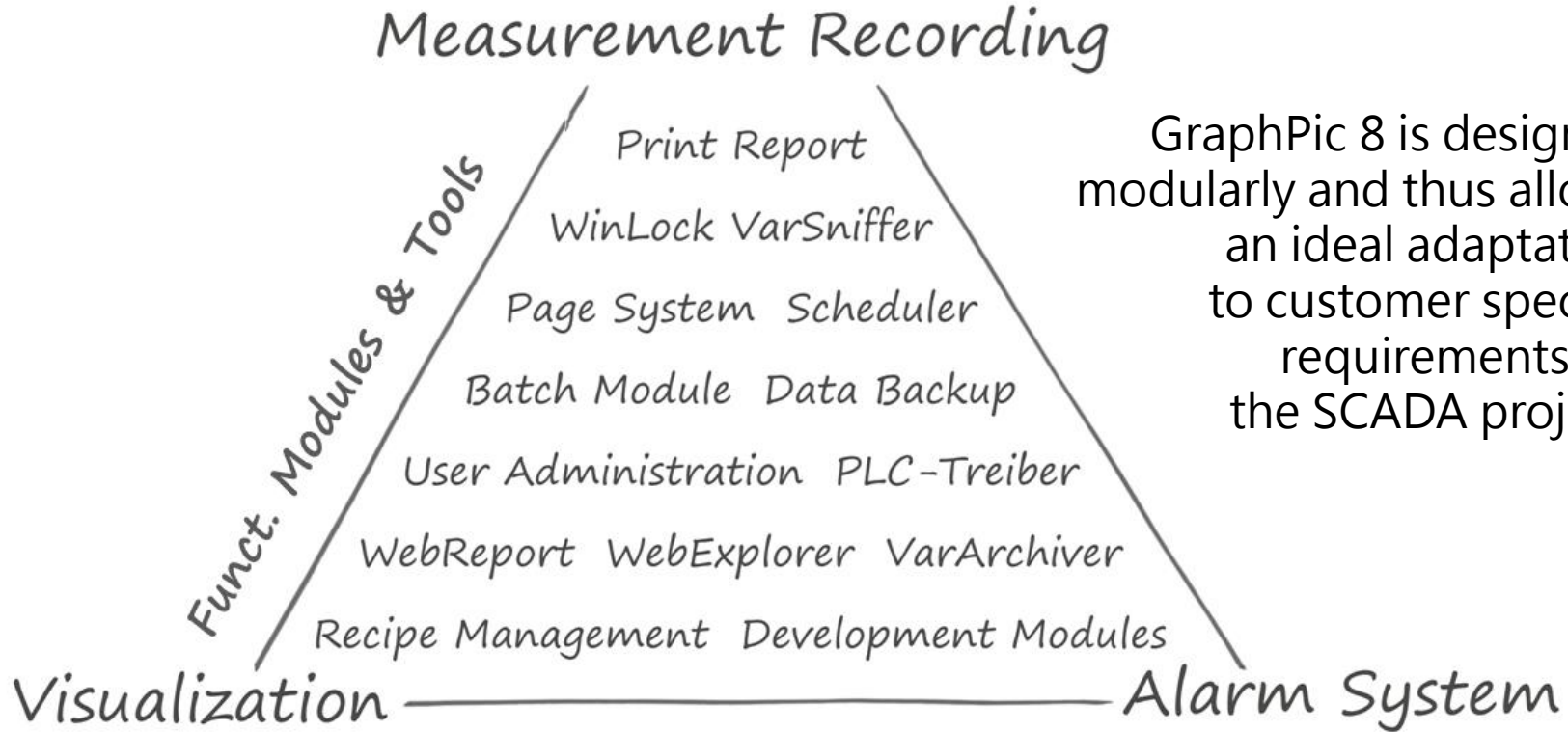
Building Materials Industry



Media Technology

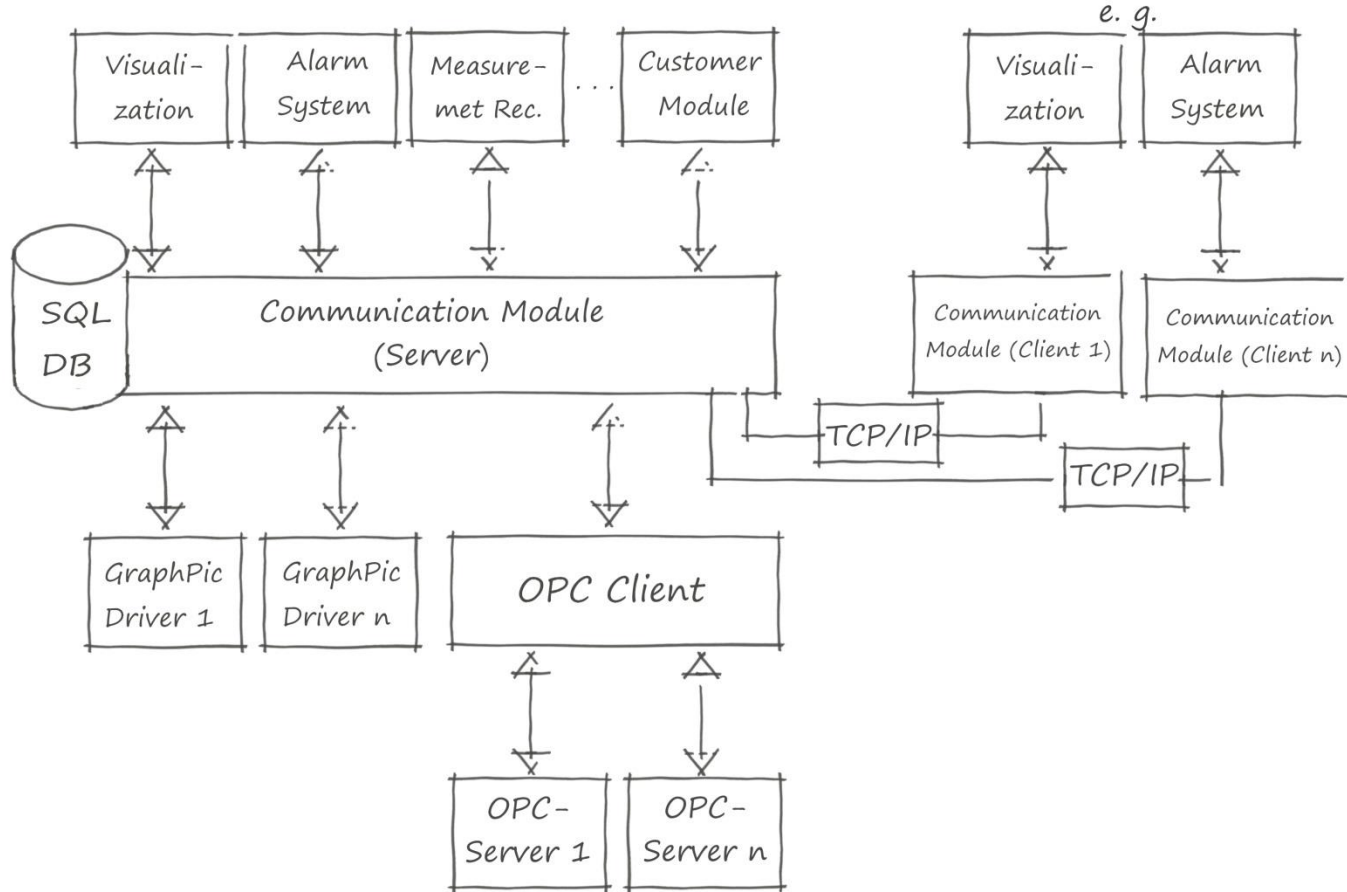


Modular Structure



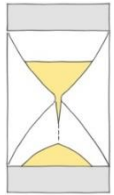
GraphPic 8 is designed modularly and thus allows an ideal adaptation to customer specific requirements for the SCADA project.

Architecture



Visualization

The visualization allows a graphical operation and navigation of the projected surfaces and displays variables and process images.



enormous time saving during project planning via real object orientation



detailed analysis of script processing via realtime debugging

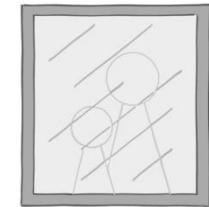


flexible software control through extensive script performance

perfectly suited for international application due to multi-lingual possibility of project planning (e.g. Russian, Chinese)



clear structure and easy system maintenance through integrated version management

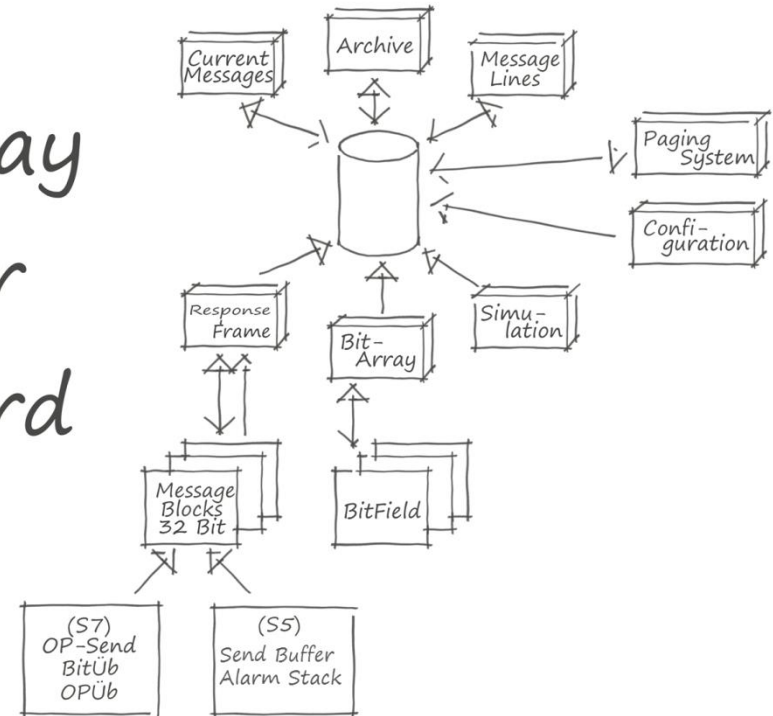


Alarm System

Displays current messages and archives these in the SQL-DB.

- logging messages and statistics
- significant messages through displaying the report reasons and online-support for the occurring problems
- easy text maintenance through import functions
- high machine availability through detailed analysis via filter operations, tables and charts
- exact calculation of downtime periods via defined work hours scheme
- fast reaction time possible through effective paging transfer of e.g. problems via voice

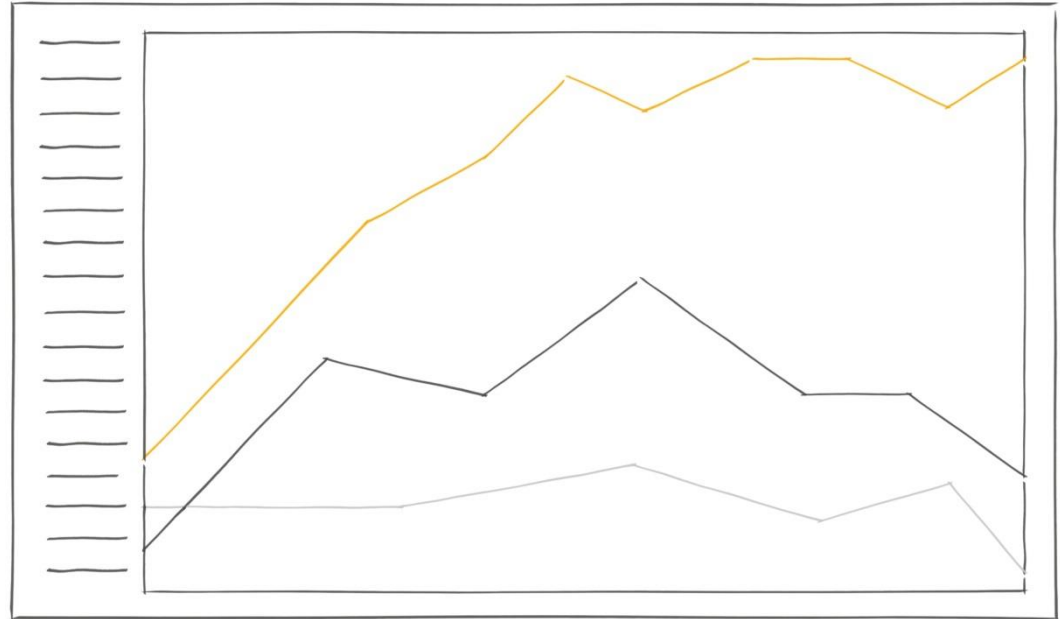
Display
Enter
Record



Measurement Recording

Displaying trend charts as well as archiving measured values, both are realized through the module measurement recording.

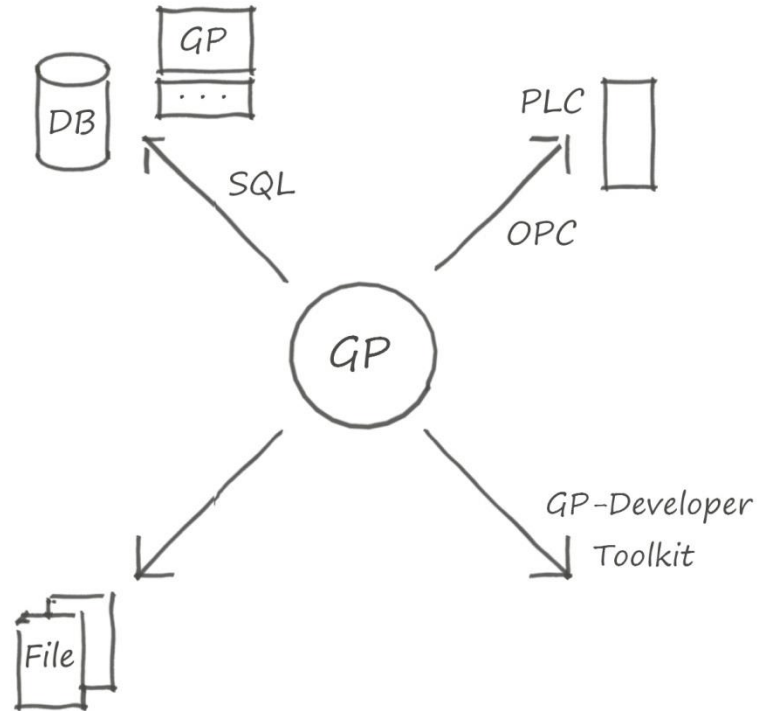
- detailed display via continuous zoom- and scroll functions
- ideal adjustment of the trend chart via automatic scaling of the axis
- creating individual layouts incl. Several trends
- different filling- and export functions for the measured data



Data-Coupling and Data Management

Data-coupling is done via special driver units for most different driver units. A SQL-database is available for data storage.

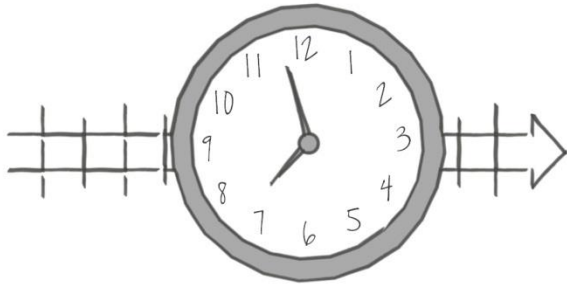
- all common interfaces for the communication to PLCs or serial couplings
- flexible data connection via OPC interface
- data management and -handling through memory driver via local variables
- comfortable processing of variables via import and export functions
- recording and maintaining of data via MS SQL server incl. Comfortable DB management



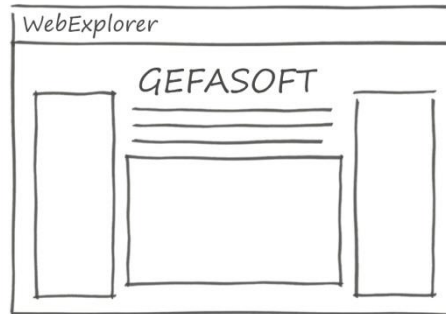
Additional Modules

A large number of additional modules extend the functionality of GraphPic 8:

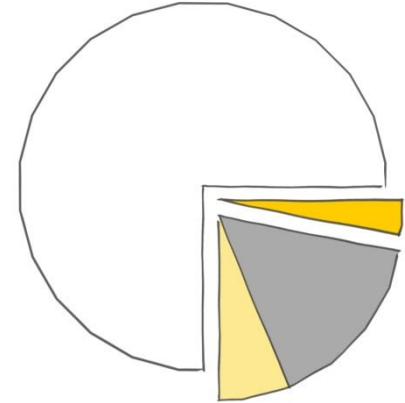
scheduler- or time-controlled
switching commands /
processes



WebExplorer to integrate
html-based functions



print and web reports for
logging and for statistical
analysis



Features

With GraphPic 8, the GEFASOFT GmbH presents a fully developed product, which benefits from *more than 20 years of experience* in SCADA systems. Continuous further development, integration of customers requirements (.net, SQL-DB) characterize this product:

Efficiency – Flexibility – Price-Performance

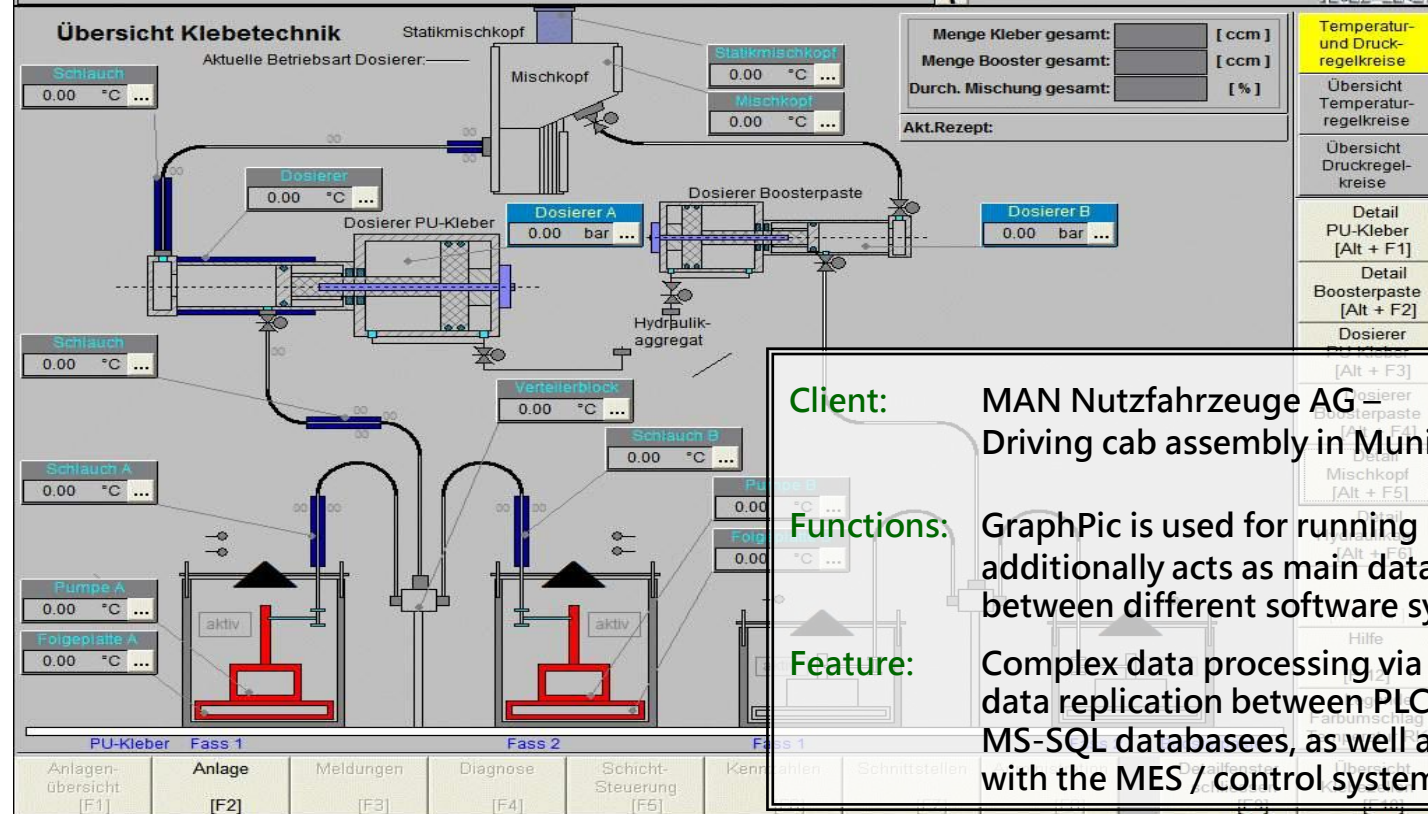
- standardization through real object-orientation (up to 60% time saving)
- transparency of the visualization application through versioning tools and central library
- easy project extension through modular design and open programming interface ("Developer Toolkit")
- unlimited amount of variables

Automotive Industry and Supplier

LOGIN Niemand Niemand Server 28.02.2006 9:20:00
 Verb. SPS 1 Verb. SPS 3
 Verb. SPS 2

Übersicht Klebetechnik

Aktuelle Betriebsart Dosierer:



Schlauch 0.00 °C ...
 Schlauch 0.00 °C ...
 Schlauch A 0.00 °C ...
 Schlauch B 0.00 °C ...
 Pumpe A 0.00 °C ...
 Folgeplatte A 0.00 °C ...
 Statikmischkopf
 Mischkopf
 Dosierer 0.00 °C ...
 Dosierer PU-Kleber
 Dosierer A 0.00 bar ...
 Dosierer Boosterpaste
 Dosierer B 0.00 bar ...
 Verteilerblock 0.00 °C ...
 Pu... B 0.00 °C ...
 Folg... 0.00 °C ...
 Hydraulik-aggregat

Menge Kleber gesamt: [ccm]
 Menge Booster gesamt: [ccm]
 Durch. Mischung gesamt: [%]
 Akt.Rezept:

Temperatur- und Druckregelkreise
 Übersicht Temperaturregelkreise
 Übersicht Druckregelkreise
 Detail PU-Kleber [Alt + F1]
 Detail Boosterpaste [Alt + F2]
 Dosierer [Alt + F3]

PU-Kleber Fass 1 Fass 2 Fass 1
 Anlagen-übersicht [F1] Anlage [F2] Meldungen [F3] Diagnose [F4] Schicht-Steuerung [F5] Kennlinien Schnittstellen

Client:

MAN Nutzfahrzeuge AG
Driving cab assembly in Munich

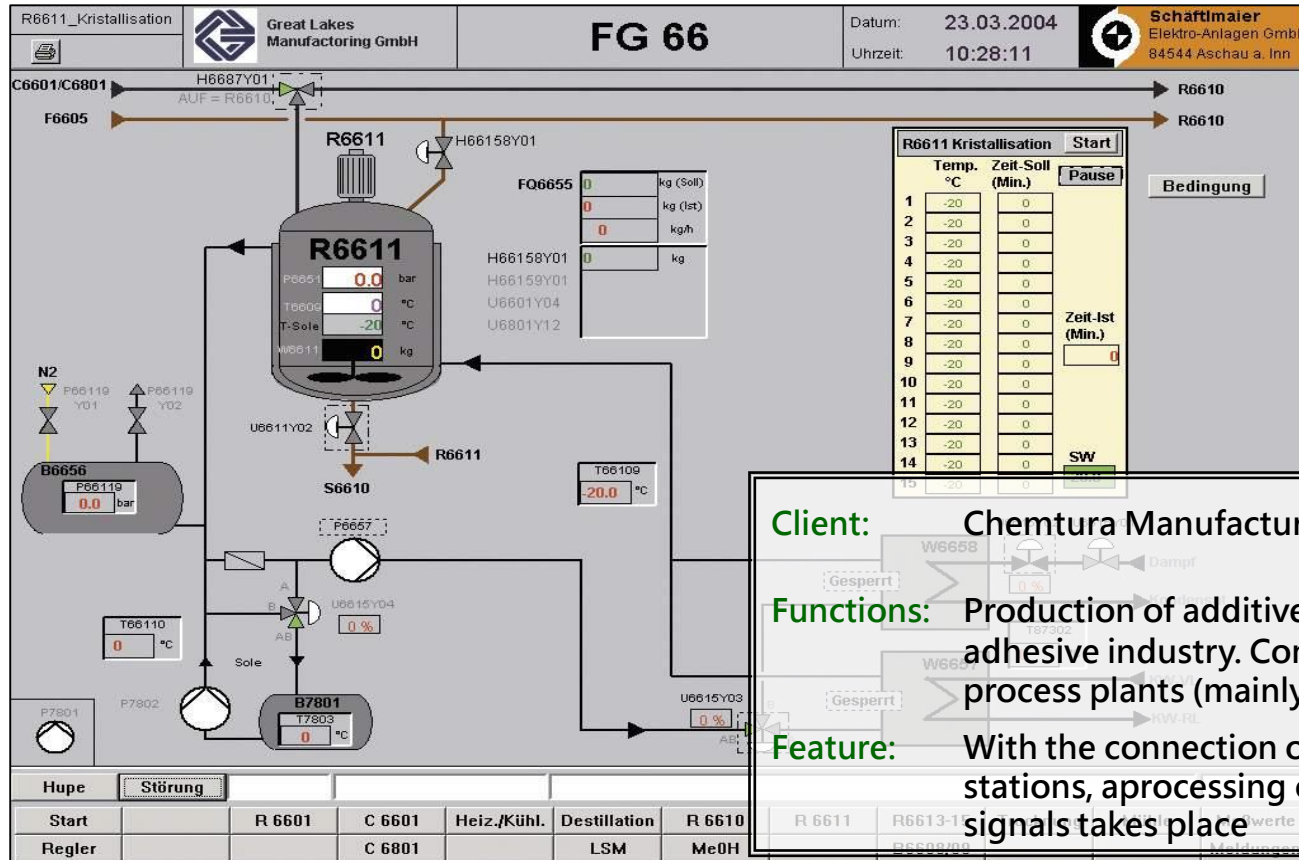
Functions:

GraphPic is used for running machines and additionally acts as main data interface between different software systems

Feature:

Complex data processing via scripts for data replication between PLCs, Oracle and MS-SQL databases, as well as communication with the MES / control system Legato

Chemical Industry



- Client:** Chemtura Manufacturing GmbH – Waldkraiburg
- Functions:** Production of additives for plastics, rubber and adhesive industry. Controlling and monitoring of process plants (mainly EX operation)
- Feature:** With the connection of 5 plants via 18 control stations, a processing of more than 5.000 signals takes place

Datei Meldung Ansicht Debug Hilfe						
Aktuell Archiv						
Komment	Gehend	Bereich	Text	Stoergrund	Quitziert	
06.03.2009 10:02:43	06.03.2009 13:44:19	651 Bereich 22 -INFO	Meld. 148: TOC > 200ppB VE-Wasser R001 Geb.651 für R140/141 Geb.651	Nur erweiterter Störgrund: Abschaltur	06.03.2009 17:52:1	
06.03.2009 10:02:43	06.03.2009 13:44:19	651 Bereich 24 - INFO	Meld. 148: TOC > 200ppB VE-Wasser R001 Geb.651 für R160 Geb. 651	Nur erweiterter Störgrund: Abschaltur	06.03.2009 17:52:1	
06.03.2009 10:02:44	06.03.2009 13:44:19	652 Bereich 2 - INFO	Meld. 143:VE-Wasser LF>1.3 ys/cm Geb.651 R.001	Wartungstest:	06.03.2009 11:29:4	
06.03.2009 10:02:45	06.03.2009 13:44:19	652 Bereich 2 (R102a/R102b)	Meld. 143:VE-Wasser LF>1.3 ys/cm Geb.651 R.001 für KS-Labor R102 G	Wartungstest:	06.03.2009 11:32:0	
06.03.2009 10:02:45	06.03.2009 13:44:19	651 Bereich 22 -INFO	Meld. 143:VE-Wasser LF>1.3 ys/cm Geb.651 R.001 für R140/141 Geb.651	Wartungstest:	06.03.2009 11:31:3	
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06.03.2009 13:44:24	06.03.2009 14:31:36	651 Bereich 22 -INFO	Meld. 148: TOC > 200ppB VE-Wasser R001 Geb.651	Nur erweiterter Störgrund: Abschaltur	06.03.2009 17:47:4	
06.03.2009 13:44:24	06.03.2009 14:31:36	652 Bereich 2 (R102a/R102b)	Meld. 148: TOC > 200ppB VE-Wasser R001 Geb.651 für KS-Labor R102	Nur erweiterter Störgrund: Abschaltur	06.03.2009 17:50:0	
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06.03.2009 13:44:25	06.03.2009 14:31:36	651 Bereich 24 - INFO	Meld. 148: TOC > 200ppB VE-Wasser R001 Geb.651 für R160 Geb. 651	Nur erweiterter Störgrund: Abschaltur	06.03.2009 17:50:2	
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06.03.2009 13:44:26	06.03.2009 14:31:36	651 Bereich 22 -INFO	Meld. 143:VE-Wasser LF>1.3 ys/cm Geb.651 R.001 für R140/141 Geb.651	Nur erweiterter Störgrund: Abschaltur	06.03.2009 17:46:4	
06.03.2009 13:44:26	06.03.2009 14:31:36	651 Bereich 24 - INFO	Meld. 143:VE-Wasser LF>1.3 ys/cm Geb.651 R.001 für R160 Geb. 651	Nur erweiterter Störgrund: Abschaltur	06.03.2009 17:46:5	

Bearbeitungshinweis
Während der normalen Arbeitszeit:
Mitarbeiter der Prozesstechnik 2 verständigen.

Ausserhalb der normalen Arbeitszeit:
Mitarbeiter der Energieversorgung versucht den Schaden zu beheben,
falls erforderlich wird die Bereitschaft Prozesstechnik 2 verständigt.
(Diese entscheidet ob der Betreiber informiert wird)

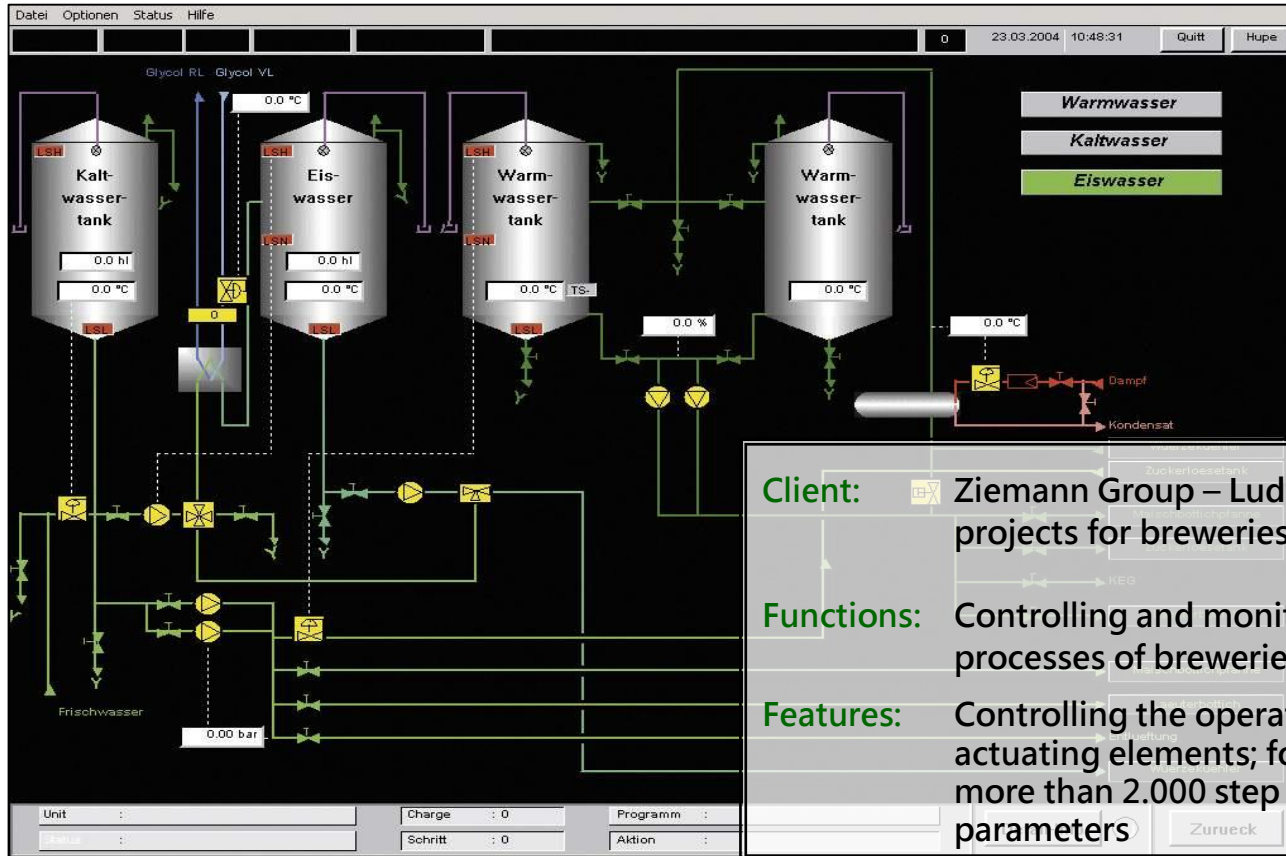
Quitieren (F1) Kommentar (F2) Aktuell (F3) Archiv (F4)

Client: Roche Diagnostics GmbH – Werk Penzberg

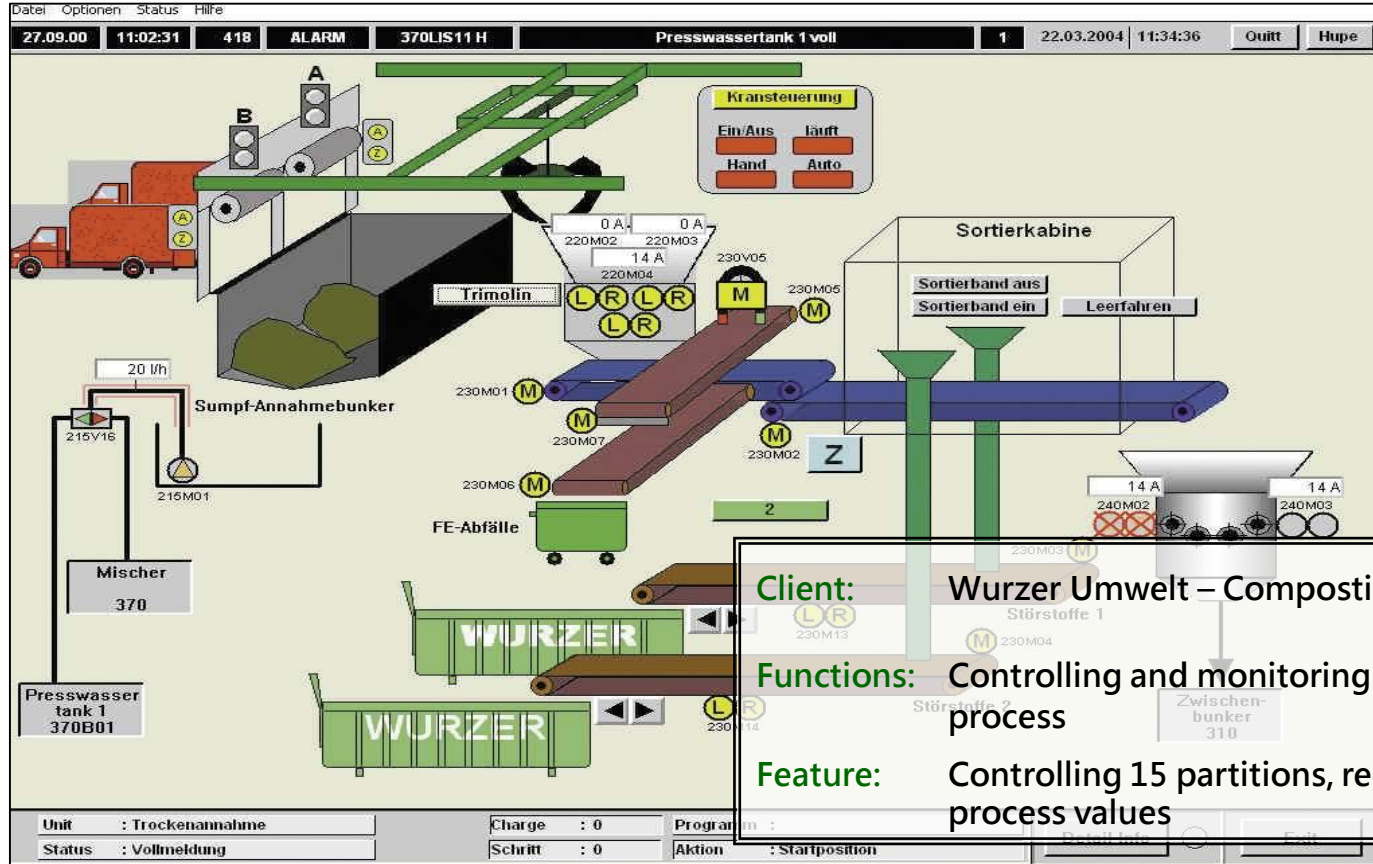
Functions: Validated operator alarm system for recording and archiving highly significant system problems

Feature: Monitoring of 2.000 signals in 8 buildings with 32 control stations

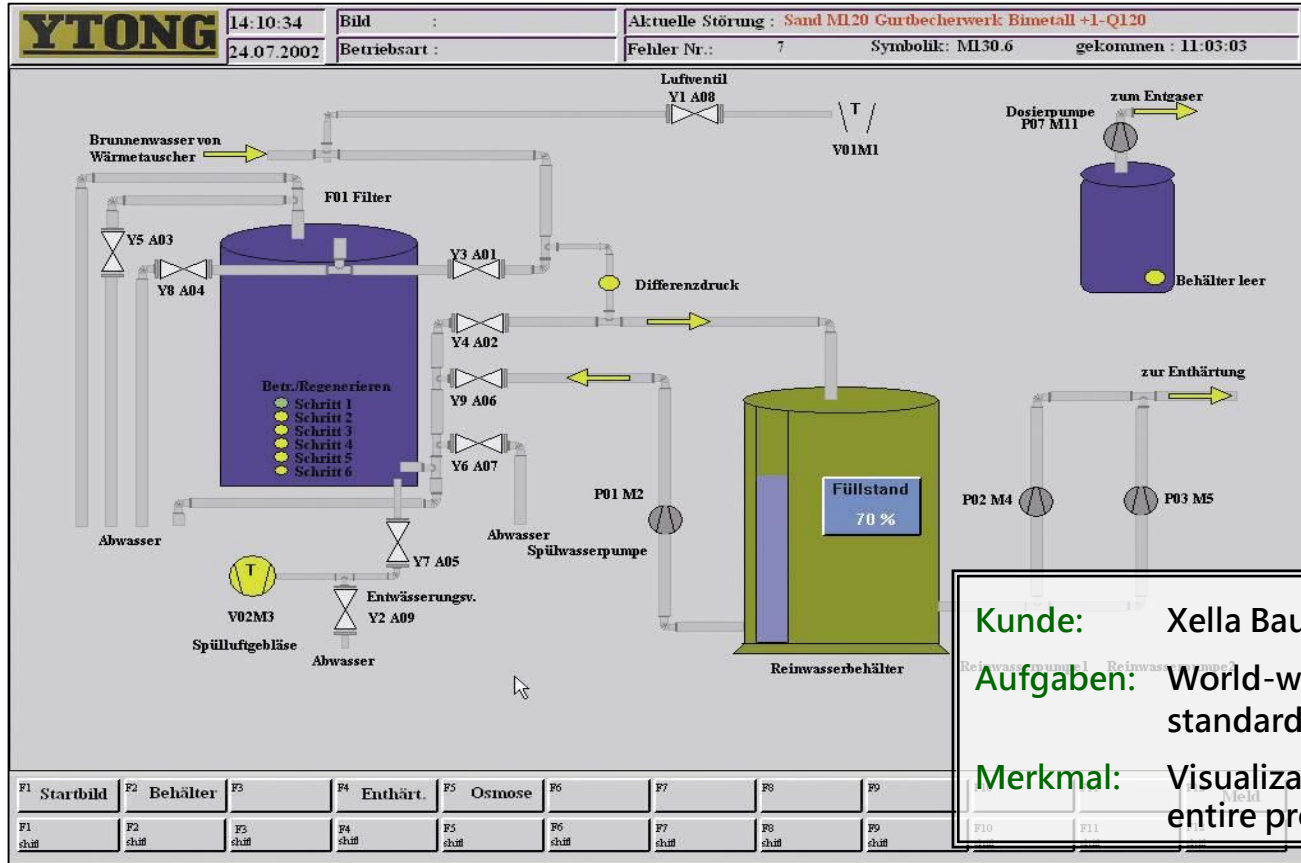
Beverage Industry



Green Technology



Building Materials Industry



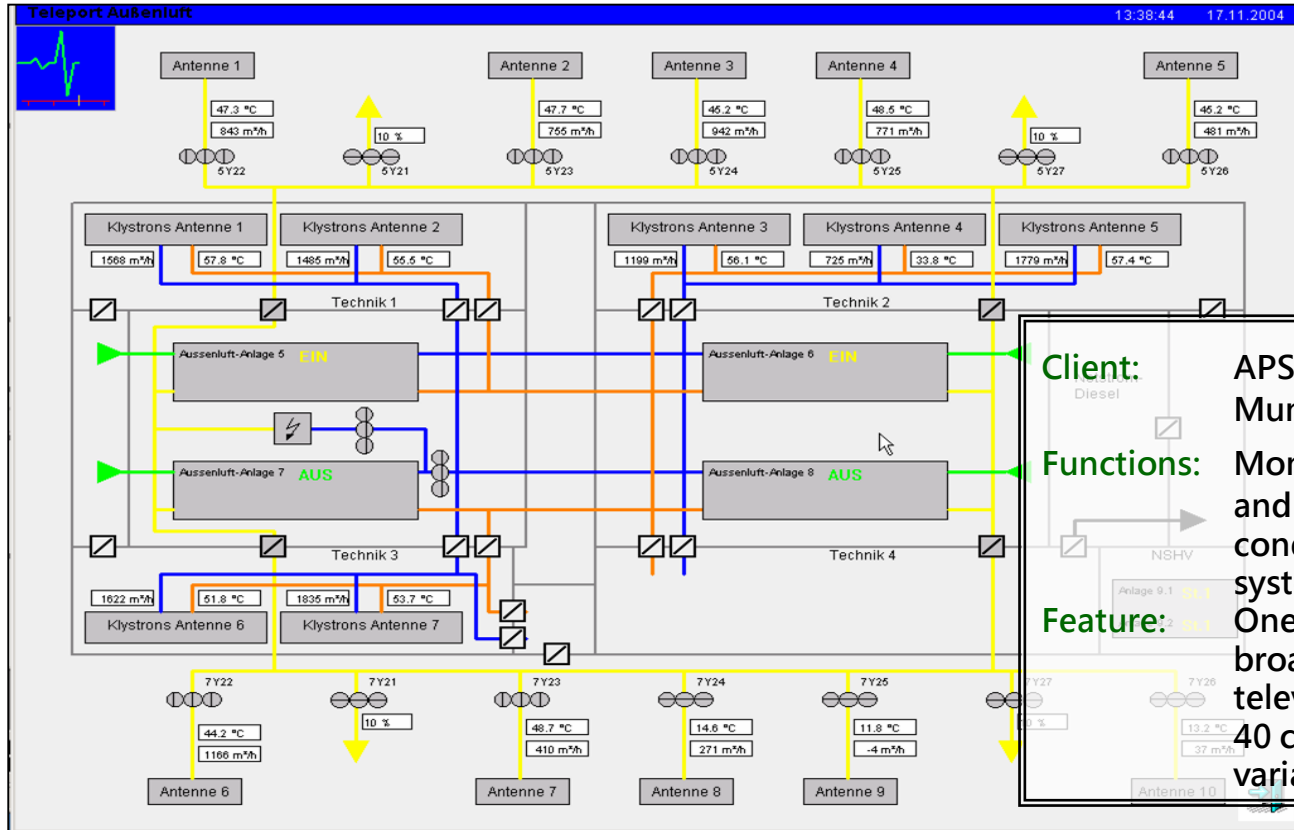
Kunde: Xella Baustoffe GmbH

Aufgaben: World-wide visualization standard in more than 20 plants

Merkm: Visualization and control of the entire production

F1 Startbild	F2 Behälter	F3	F4 Enthärt.	F5 Osmose	F6	F7	F8	F9
F10	F11	F12	F13	F14	F15	F16	F17	F18

Media Technology



Client: APS-ASTRA Platform – Munich
 Diesel

Functions: Monitoring the bus system and PLCs; control of air conditioning and ventilation systems (GLT)

Feature: One of the latest European broadcast center; editing and televising of sound and vision; 40 couplings (S7/S5); 3.500 variables via 25.000 messages

**Thank You for
Your attention.**