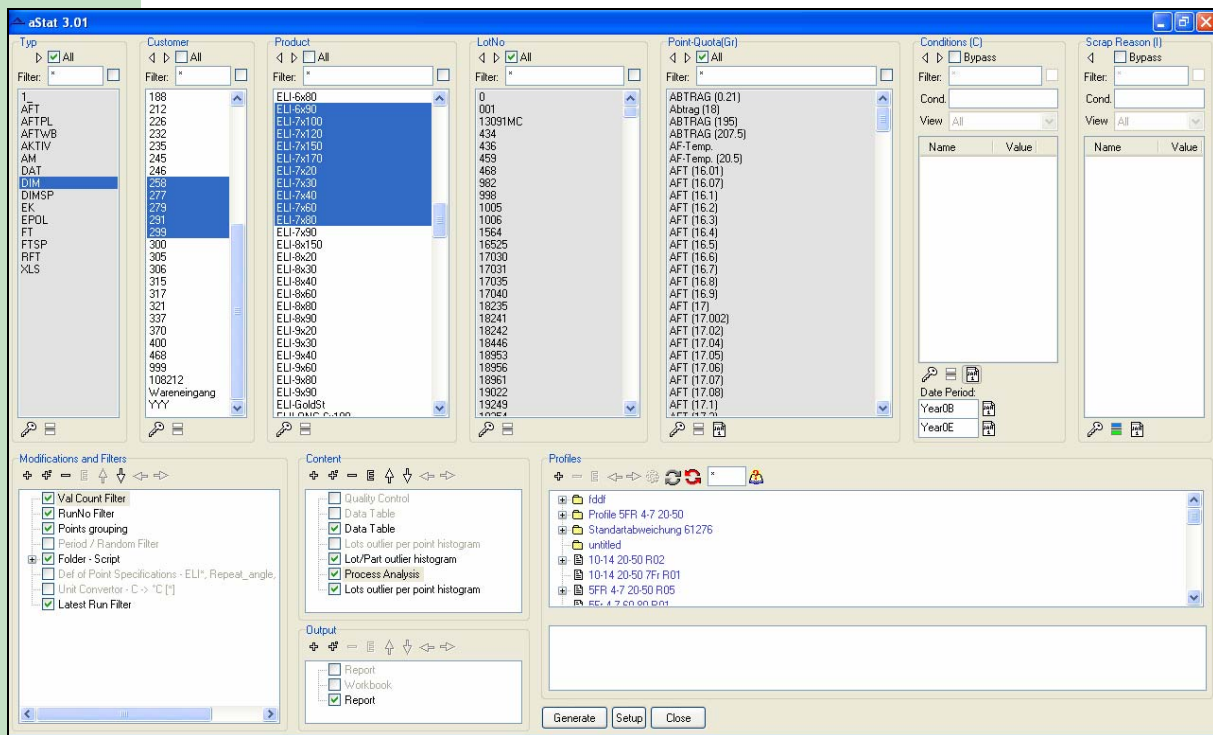


# aStat 3.0 SPC

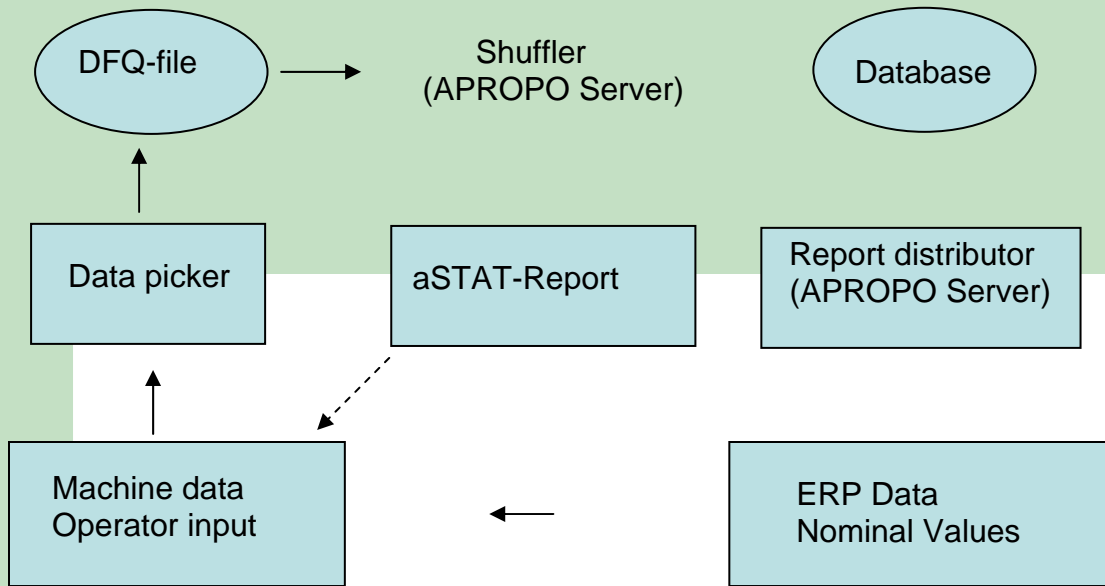
aStat 3.0 is a complete **Statistical Process Control System** for generating statistical reports using of **STATISTICA** (StatSoft Inc., USA). The user can pre-select the measurement and production informations by information columns in any order. Saving these pre selections with filter routines and report options into profiles allows report generation with only one mouse click. The selected STATISTICA reports (graphics and tables like outliers, process analysis, parameter distributions, etc.) are printed or saved into file types such as **Excel** or Adobe **PDF**.

aStat 3.0 can be extended with plug-ins for customer defined filter routines and report contents.

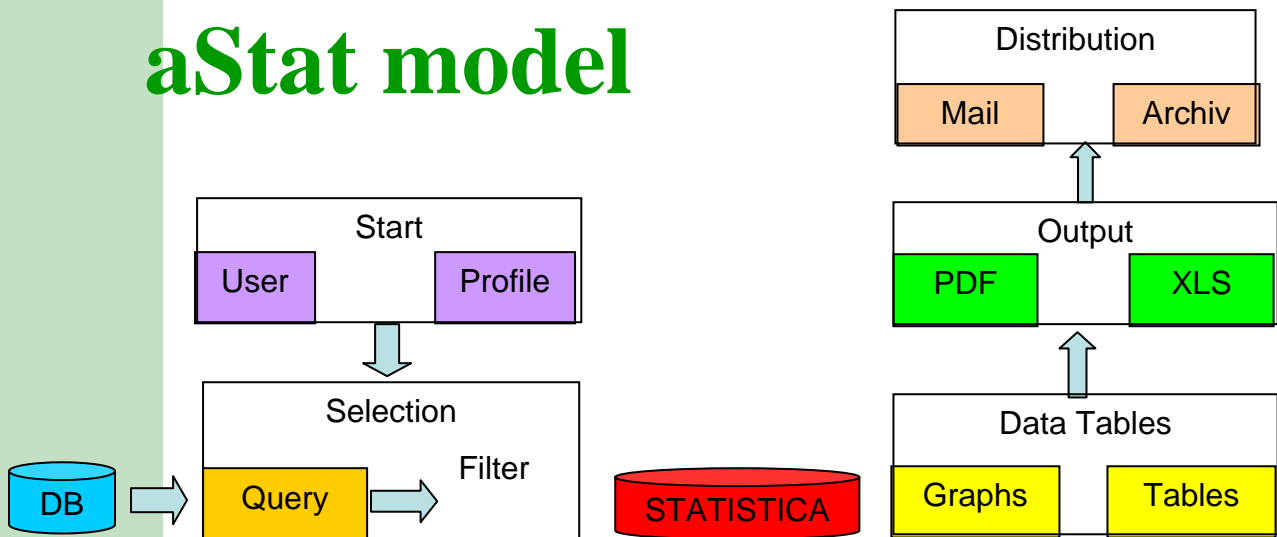


aStat 3.0: Data selection and report profiles

# Full Automatic SPC Schema



## aStat model

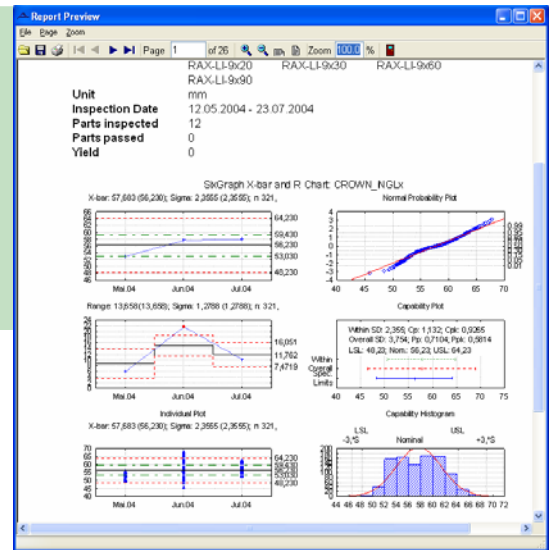


■ aStat 3.0 reports will be generated and distributed via emails automatically by the mean of the **APROPOReportServer**.

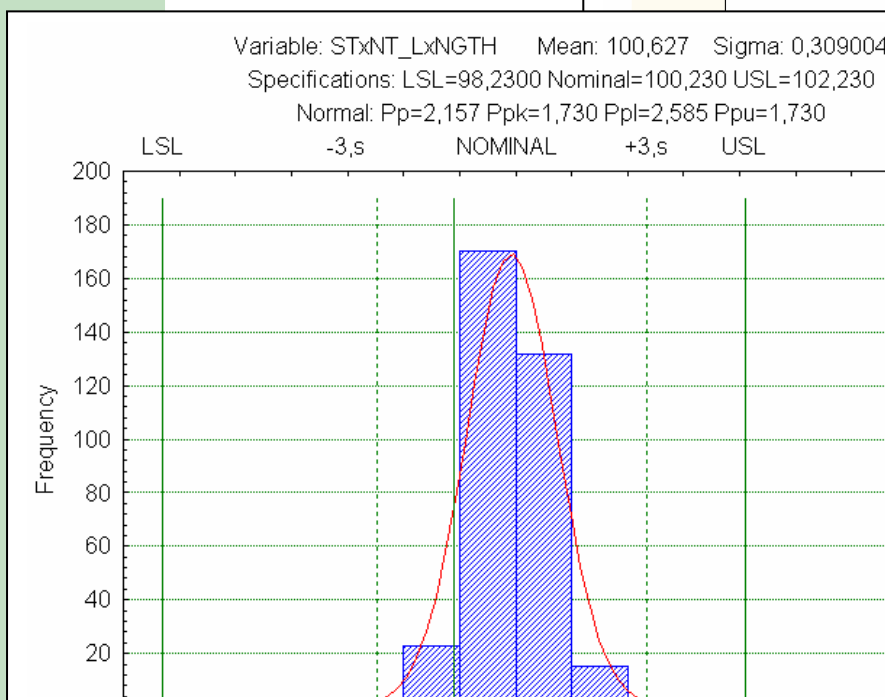
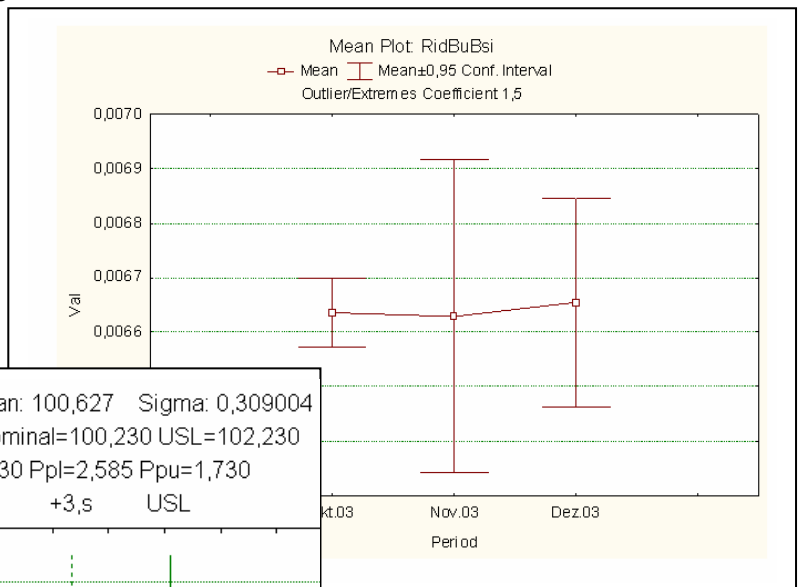
■ An AproSoft import tool can be configured to import the measurement and production data from any sources like **DFQ, XLS, databases**.

■ Manual production data entry for aStat evaluation is supported by APROPO and by **APROPOXLS for Excel**. In both cases the data sheet (also nominal data and tolerances) is prefilled from the database. After the entry data is saved and the Excel file is archived.

■ aStat 3.0 is a **FDA-validated** solution that has been selected as an example solution of StatSoft Inc.



Quality chart report



# APROPO

**APROPO** integrates Enterprise Resource Planning with the complete Manufacturing Execution System:

- Operating data in hierarchy lists with excellent overview.
- Production planning and administration via the productclass-product-technology-process link
- Revision, release and lock system for qualified products, technologies, and processes.
- Process, product class and product dependent nominal values, tolerances.
- Process, product class and product dependent bill of materials, tools, inspection devices, energy demands, plan times and production costs.
- The production processes are the main information units containing list of references, machine preconfigurations, documents, protocols, production parameters, production descriptions, todo's, Excel etc.
- Warehouse Management, CRM .
- Document Management System.
- Project Management System.

The screenshot displays the 'in Production' window with the following data:

Lot no.	LotSub	Product	Bad	Qty	Good	Qty_DELY_Bd	Qty
13				1			0
12			4	12			0
11			4	12	38		0
10			20	100	180		0
9			10	110			0
8				110			0
7				5			0
6				10			0
5			10	10	10		0
4			7	10	10		0
3			170	200	185		0
2			51	100	100		0
1			2	10	10		0

Pos. No.	STEP	NAME	Machine	Qty	Good	Bad
1	1	sawing			0	100
2	1	painting			0	100
3	1	assembling			0	100

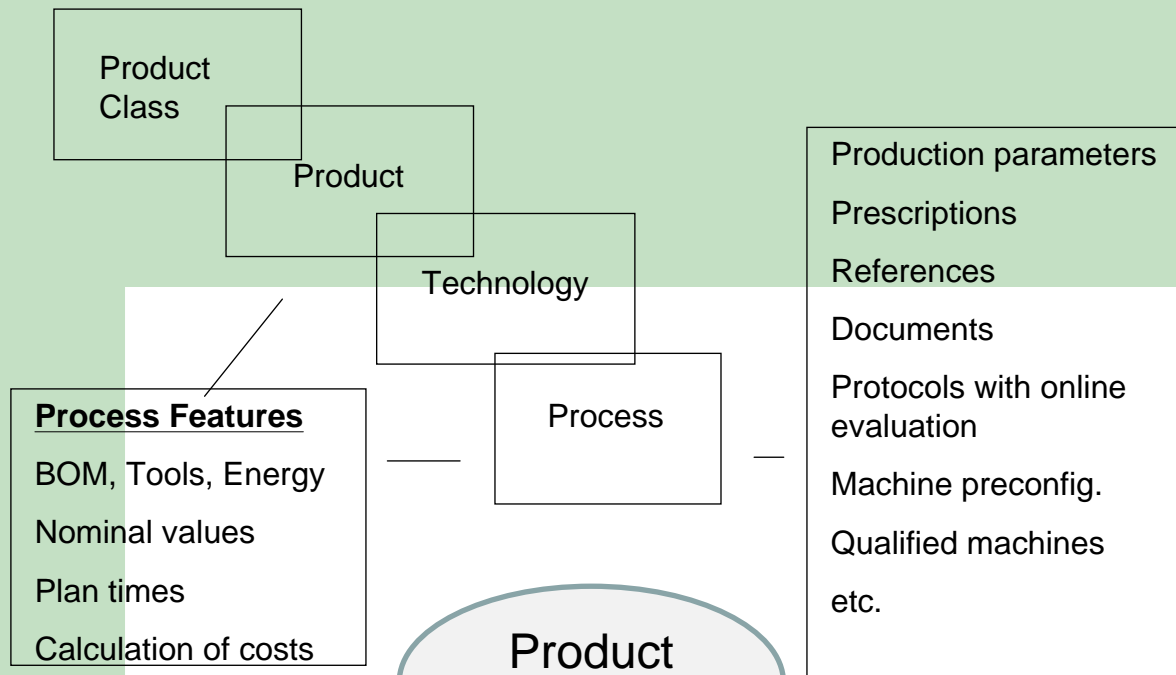
  

Machine	Good	Bad	date_create	Creat.by	Minutes	
saw 1	99	1	20.02.2007 1	DaJo	60	
saw 1		1	0	20.02.2007 1	PeBr	5

Callouts in the image:

- Lots with status color**: Points to the 'Bad' column in the Lot table, where rows 5, 6, and 7 have red, green, and light green backgrounds respectively.
- Processes**: Points to the 'Process' table below the main data.
- Production steps**: Points to the 'Manufacturing' table below the process table.

# Technology Model



**BOM for product class**

SerieNr	ArtNr	Produkt	RevNr
8000010	Bu407 60x130	Büroschrank 60x130	
8000009	Ki205 120x120	Kinderschnack Mod.205	

**BOM for product**

No.	Article No.	Serial No.	Qty	Qty_Multi	Unit	charge
1	Buche I		0,4	12	L.m	

**Technology**

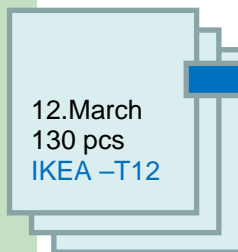
Attr	Technologie	Rev.
	bookshelf_white No 2	

**Process**

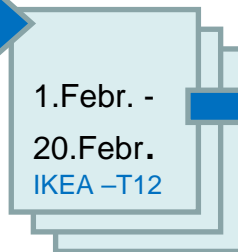
Pos.	Name
1	1 Sawing
2	1 painting
3	1 Sawing
4	1 painting
5	1 assembling
5	2 assembling
6	1 Sawing

# Deliveries and Production Plans in APROPO

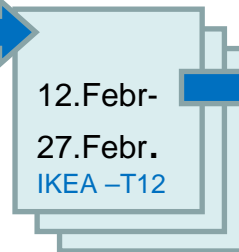
## Delivery plan



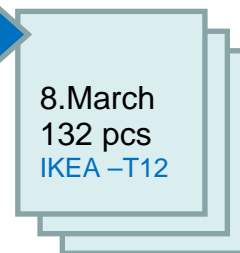
## Production plan



## Production



## Delivery



Planned deliveries

Delivery of products

Contract			Product			Delivery-Plan			Delivery		Bill of Delivery		
CTM	Date_start	Date_stc	Produ	Prod.Seriennr	Prod.Aitnr	D	Date	Qty_todo	Date	qty_brutto	Bill of Deliver	Pos. No.	Nr_dely
GG				8000013	261006000		21/06/2008	30		24/07/2007			
IKEA							21/05/2008	30					
Kübler	21/06/2007	21/06/21					21/04/2008	30					
Admedes							21/03/2008	30					
IKEA							21/02/2008	30					
Blade Mak	30/05/2007						21/01/2008						
IKEA	30/04/2007	24/04/21					21/12/2007						
PelletMen	28/05/2007	30/06/21					21/11/2007						

- Production plan  
- Production

# APROPO

## Production Planning till Manufacturing

**Fertigungsplan**

Schliessen [Icon] ?

Lieferpläne  
 Wochenpläne  
 Plan-Lots / Tag  
 Alle Plan-Lots  
 Auch Planlots mit Lots

Von: 03.12.2007  
 Bis: 09.12.2007  
 KW: 2007 49 KW

1.Schicht  
 2.Schicht  
 3.Schicht  
 ALLE

Zusatz

Sicht: Arbeitszeiten  
Aktionen: Planlot erstellen manuell

---

**Lieferpläne**

e + - 🔍 →

prod#ser	prod#atnr	Lieferung am	prod#name
▶ 8000016	TRIXI-232	08.12.2007	Kinderdrehstuhl

**Datum**

Dezember 2007

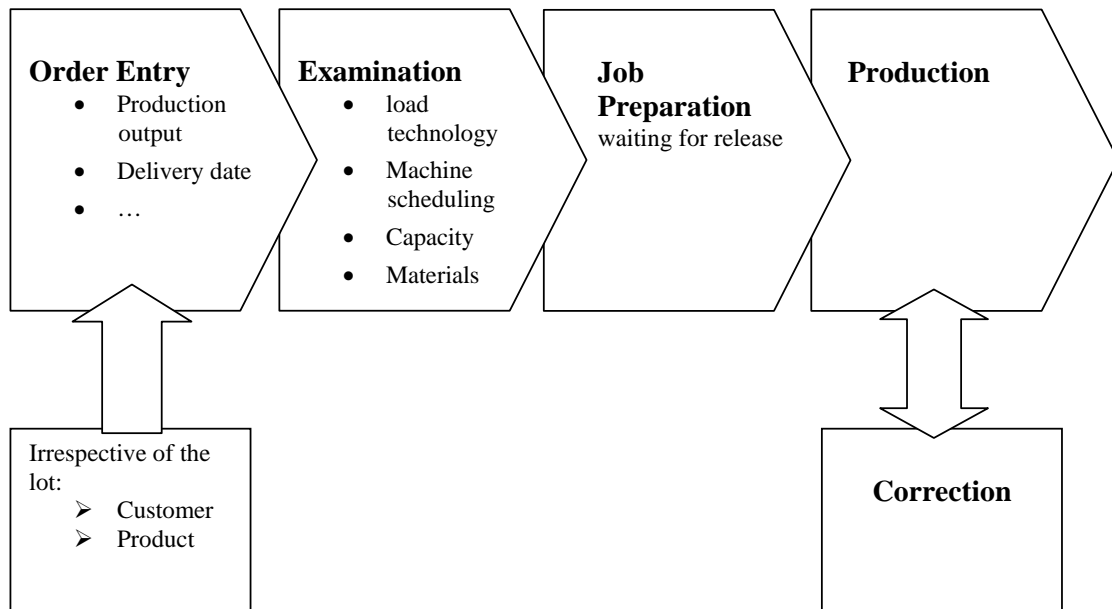
Mo	Di	Mi	Do	Fr	Sa	So
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Sa 1  So 16   
 So 2  Mo 17   
 Mo 3  Di 18   
 Di 4  Mi 19

**Plan-Lots**

e + - 🔍

Soll	name1	Prod_Start	shift	Re
12	Kinderdrehstuhl Trix	06.12.2007	1	
12	Kinderdrehstuhl Trix	05.12.2007	3	
12	Kinderdrehstuhl Trix	05.12.2007	1	
12	Kinderdrehstuhl Trix	05.12.2007	2	
12	Kinderdrehstuhl Trix	04.12.2007	1	
12	Kinderdrehstuhl Trix	04.12.2007	2	
12	Kinderdrehstuhl Trix	04.12.2007	3	
▶ 12	Kinderdrehstuhl Trix	03.12.2007	1	
12	Kinderdrehstuhl Trix	03.12.2007	3	





# Manufacturing in APROPO

Lot number: 22 Process: Preilen 2 Machine: M2 Product: HARIB

Exp. Qty: 22  
 Good: 22  
 Bad: 2

Broken: 1  
 Burned: 1  
 Rest: 0

Message: Power down  
 Standstill: Mach.rep. 12  
 Co-worker: Schmidt  
 Date: 03.06.2006 08:45:00  
 Start of production: 8 h. 45 min

Must: Docs, Parameter, Protocol, Material (all checked)  
 OK: [!], [!], [!], [!]

OK  
 Cancel  
 Early cancel  
 Reject  
 <translate>

Additional production informations

Production \ wood machining \ \ Sawing

ProcessMemo: saw one wooden board from 5m into 5 pieces of one meter

Parameter	Nominal	Minimum	Maximum	Unit
Length	985	980	990	mm
Focus	\$Focus.nom	\$Focus.min	\$Focus.max	mm

Protocol: Parts in mm Evaluation

Parts	in mm	Evaluation
1	980*1000	"OK=(#A1<12) and (#B > \$Temp.min)"
2	980*1000	

Buttons: OK, Cancel, Conf., Print

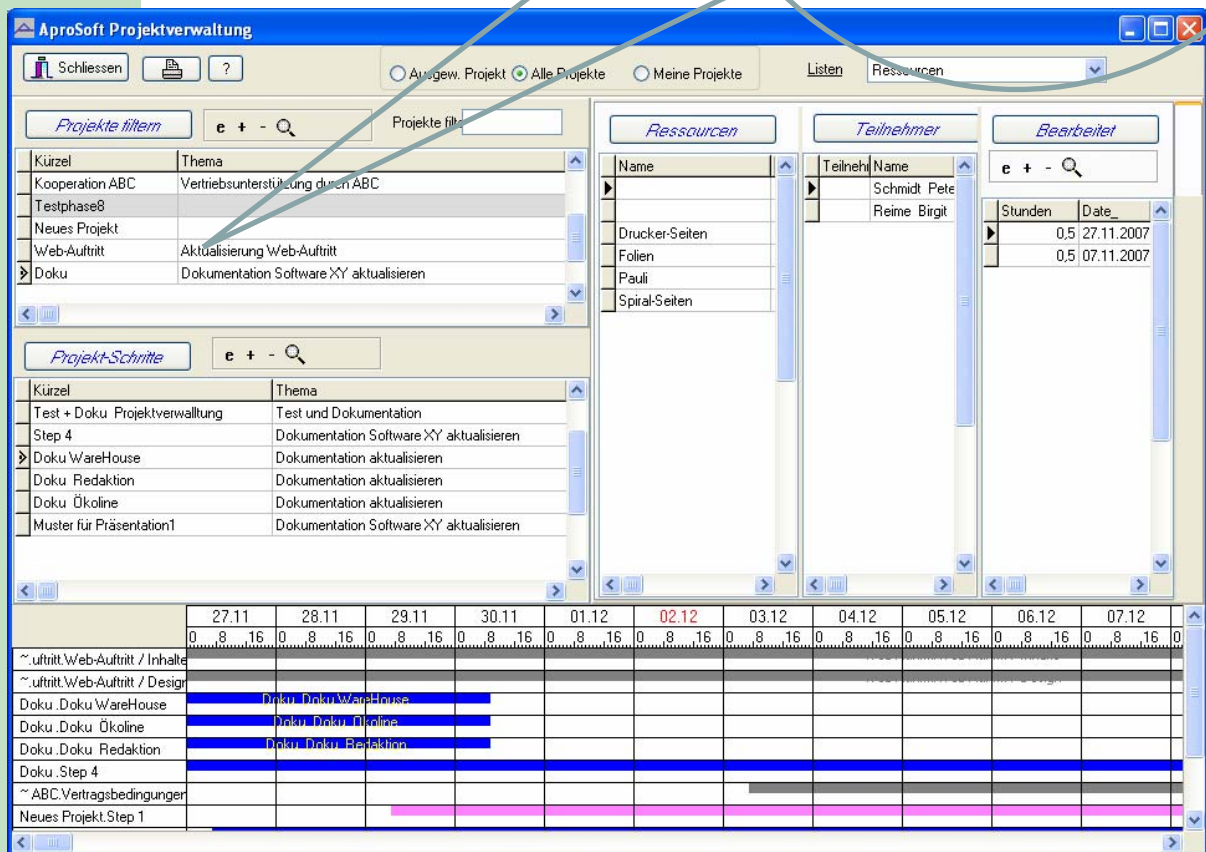
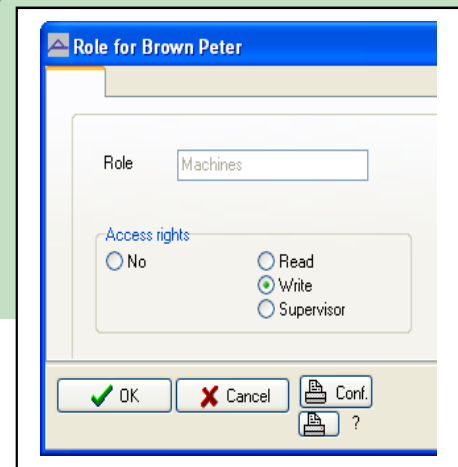


■ Innovative role-configuration concept:  
the access and read rights for lists and fields are defined by the supervisor

■ Multilingual, multicurrency, and barcode system

■ Change history for all data records

■ Status-, structure or hierarchy oriented, multi-dimensional lists



- Automatic, predefined and customer written statistics, reports, detail lists, search routines, and workflow-steps

**List Report Setup**

Report  
 Titel: Deliveries  
 Subtitel:  
 Title: Delivery  
 Landscape  
 Translate Me

Close Translate list Reset cols

Function: SUM performed with  
 Table: Delivery  
 Field: Qty\_todo  
 Grouped after:  
 Table: <None>  
 Field:

Design  
 Formats: <Supervisor>: Report EN.y  
 User: <Letzte, Eigene, Supervisor>  
 Preview XLS direct Options

Contract  
 CTM  
 Date\_start  
 Date\_stop  
 short  
 short\_ext  
 Qty\_todo  
 Sum

Product  
 Prod.Seriennr  
 Serial No.  
 Prod.Artnr

Plan deliveries  
 No\_Lot  
 Date  
 short  
 short\_ext  
 Qty\_todo  
 Sum  
 unit

Delivery  
 Date  
 short  
 short\_ext  
 done  
 serienr  
 Qty\_todo  
 qty\_brutto

Funktion F   
  Funktion F   
  Funktion F   
  Funktion F

Position 1  
 Font  
 Fontgröße 9  
 Fett  
 Unterstrichen  
 Kursiv  
 Prefix

view

Ökoline Budapest  
 Hősök tere 1-3

Kiszállási jelentés  
 Jelentés

Vevő	Deimler Benz AG	Cim Szerződés	
18.09.2007	Pellet		10 M.t
18.09.2007	Pellet		100 M.t
23.09.2007	Pell		10 M.t
02.10.2007	Bu407 60x130		2 pc.1pc
02.10.2007	Bu407 60x130		11 pc.1pc
05.10.2007	Pell		109 M.t

**Lot**

Grafik Daten Datenbank Direkt

Selection Focus

Thema: Lot quantities  
 X.-value: Time  
 X.-Step: Week

Finances  
 Order date  
 Dely.Date (rplan)  
 Archive date  
 Dely.Date (real)

Nom.  
 Good  
 Bad

Graph Table Filter Lot list DB-Liste

Preselected  
 Focus act.  
 Filter

close Excel Export Save Translate

Title Subtitel Result Bemerk.

Week	Soll	Good	Bad
X1-8KW.2007	110	100	51
X2-9KW.2007	24	20	9
X3-11KW.2007	210	195	180
X4-12KW.2007	110	10	0
X5-13KW.2007	38	24	8
X6-18KW.2007	180	100	20

# Additional Modules

## APROPO Organization

Organization related functions such as

- Complete financials: accounts, cost types, journals, control reports
- Capacity demands weekly for materials, machines and personnel
- File archiv
- Training administrator
- Currency calculator, VAT, transport units.
- Working time
- Project Manager

## APROPO Customer

Customer related functions such as

- Order, clearing, confirmation, invoice calculation, shipping
- Customer history
- Offers, product delivery plans
- Complaint administration

## APROPO Warehouse

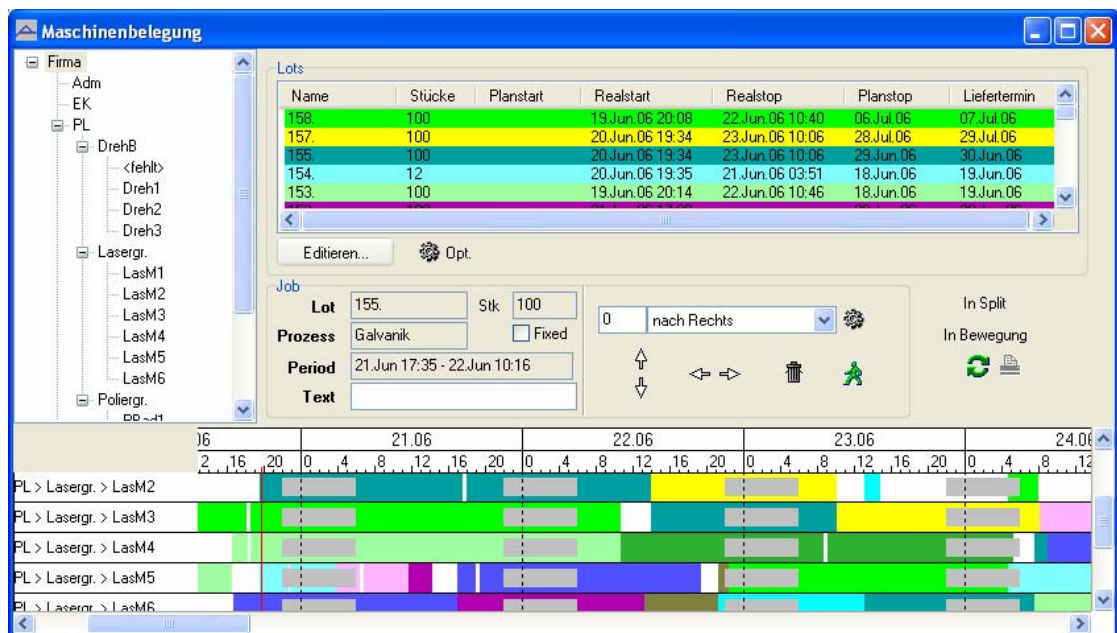
Warehouse organisation

- Order, delivery plan, incoming inspection
- Planing of material demands, bottleneck
- Storage strategies

# APROPO Cap

**APROPO Cap** generates automatic and interactive machine and personnel capacity planning with the following features:

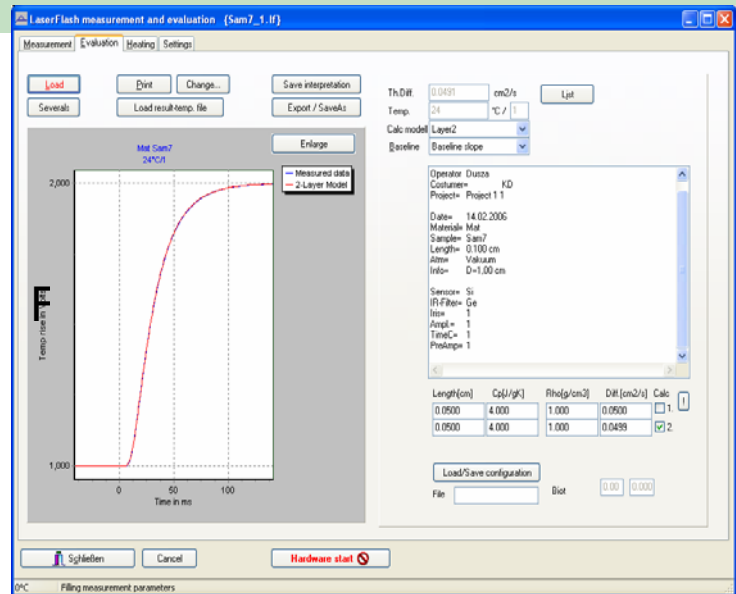
- Views of the planning status for lots, workshops, machine groups, machines and personnel.
- Interactive planning board with many comfortable mouse functions such as rescheduling of batch jobs in different machines with Drag 'n Drop
- Different display components such as Gantt diagrams, histogramms and line plots suitable for the different ressource types
- Forwards – backwards planning for standard machines or for qualified machines, numerous planning function
- APROPO Cap can adjust the plan automatically using messages (if comberbed with a Shop Floor messaging system)



# Technical, Scientific and Production Software

Full automatic Laserflash up to 1600 °C to determine thermal diffusivity

- Own general valid combi-models for heatloss and pulse correction
- Own solution for multilayered samples
- Automatic temperature control
- Setting of sensors, filters, amplifier



## Broad variety of production, measurement and scientific software

- FDA Part 11- compatible
- ERP-data connected (APROPO)
- Barcode scanner und chip card access
- Product dependent settings
- aStat 2.0-compatible
- Configurable by Supervisor