

Introducing Japan's leading production scheduler

# Asprova APS

APS (Advanced Planning and Scheduling) System With Network Support

**Lean Manufacturing Solution**

# Company profile

- Established in 1994 as Japan's first production scheduling software company
- Overseas subsidiary offices
  - Asprova Shanghai (Shanghai, China)
  - Asprova Korea (Seoul, Korea)
  - Asprova AG (Frankfurt, Germany)
  - Asprova USA (Georgia, USA)
  - Asprova Asia (Malaysia)

# Implementation results

- 1,454 units deployed as of July 2010
  - 1207 within Japan
  - 247 internationally
- No.1 production scheduler in Japan with domestic market share of 48.8%  
(Fuji Keizai, November 2009)

# Catering to diverse requirements

Implemented across a wide range of both discrete and process industries

Electric / electronic	LEDs; connectors; solder less terminals; microprocessors; printed circuit boards; silicon wafers; air conditioner cases (plastic molding); speakers; ceramics; watches; semiconductors; lead frames; CD-ROMs; CD-R / DVD / CD-ROM drives; electric wire; LCDs; stereos; photo masks; WF cables; sockets; mobile phones; connectors for mobile-phones; IC packages; aluminum ...
Automotive	Engine parts; doors; chassis; interior (plastic molding); metal molds; shock absorbers; vehicle inspections; pipes; tubes; engines; cranes; rubber; aircraft parts; test bodies; brake parts; high-pressure hose; seat fabrics; wire rope; transmissions; camshafts; crankshafts; cases; wire harnesses; motorcycles; bicycles...
Machinery	Looms; kitchen appliances; machine tool; agricultural machinery; industrial machinery; optical instruments; light fixtures; air conditioners; heating appliances; plastic parts for office equipment; control computers; material handling equipment; power transmission equipment; power-driven hand tools; internal combustion engines; in-line instrumentation systems; wafer visual sewing machine parts...
Metal	Drills; screws; cannons; wire; plumbing fixtures; guard rails; pipes; magnet wire; steel; sheet metal parts; fence; metal bridge parts; blades; connecting rods; nuts; industrial precious metal products; drawing alloys; aluminum for beverage cans; blades for cutting machines; gears; metal springs; timer parts; precision gears; aluminum foil; sheet copper; ship plates; drawn copper products; specialty steel products; cutting tool tips; lubricating oil packaging; beverage cans; magnets...
Non-metal	Corks; packaging; textiles; paper; shipping blocks; camera films; rubber products; ABS resin; UV ink; gravure ink; printing of packing materials; coated abrasives; resin hose; coating materials; dental materials; film sheets; ceramic base for electronic parts; tiles; firebricks; new ceramics; catalysts; paper clay...
Consumer goods	Fermented soybeans; detergent; flour; plastic bags; plastic food containers; plastic models; office goods; fishing reels; microwave dinners; magnets; wood processing; socks; cans; cosmetics; rubber stamps; ballpoint pens; shampoo; shopping bags; cardboard; home exterior products; drinking water; entranceways; under floor storage units; fixture components; shoes; toy parts; necklaces; stockings...
Medical	Medical products; test drugs; medical equipment; laboratory testing reagents; granulated powder; pills...
Chemical	Adhesives; plastic; asphalt; silicon; motor oil; polyethylene; polypropylene; molding materials; rubber; fluorine chemical products; polyvinyl chloride; polyvinyl chloride paste...

# Companies implementing Asprova

**TOYOTA**

**BRIDGESTONE**



**TOPPAN**

**HITACHI**

**SHARP**

**DENSO**



**HONDA**

**CASIO**



**FUJIFILM**

**Pentel**

**MITSUBISHI**  
*Changes for the Better*

**Canon**

**TOSHIBA**  
Leading Innovation

**SONY**

**SEKISUI**

**AsahiKASEI**

# Our Global Support Network is ready for you!

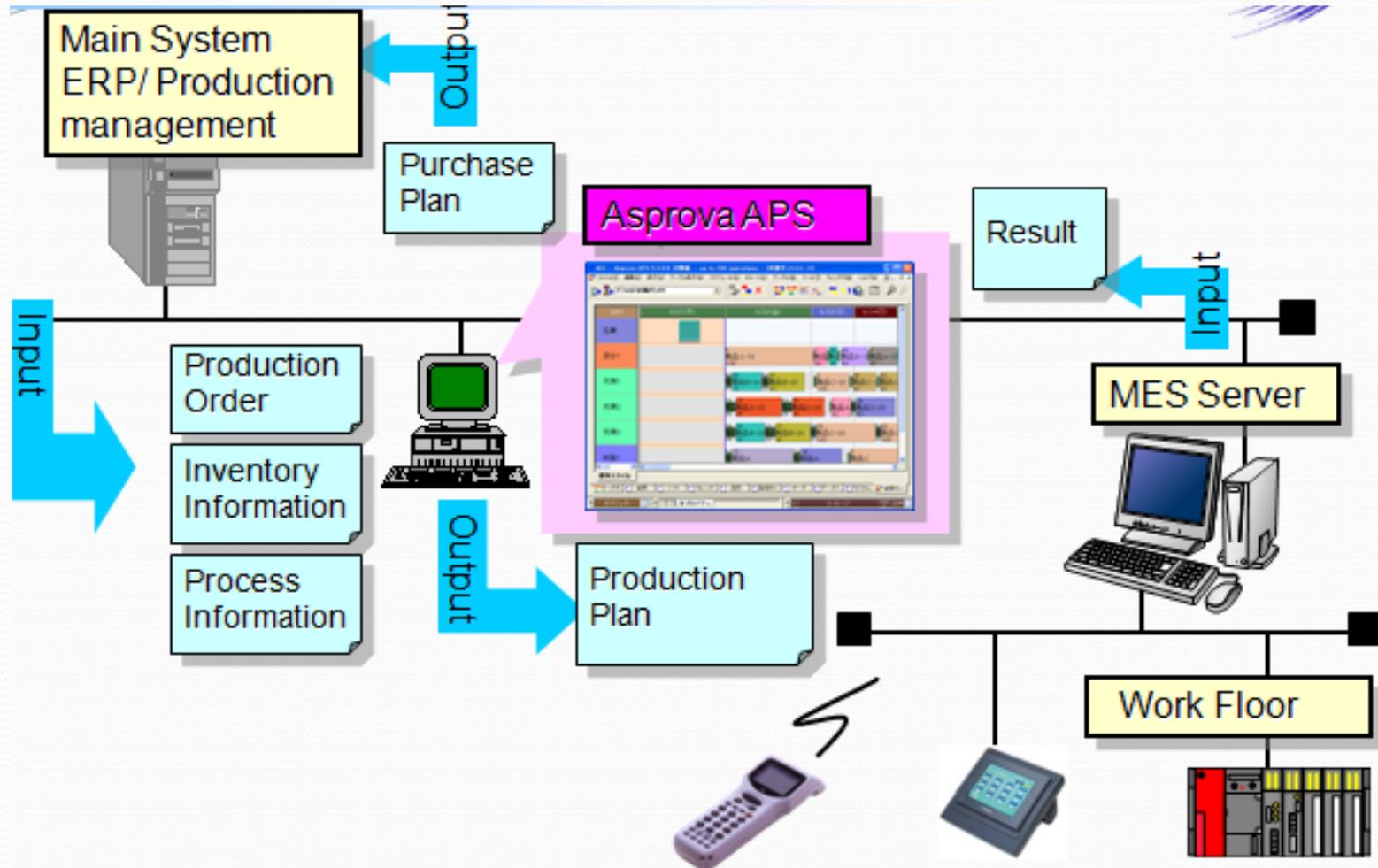
Asprova is already in use at over 1,400 sites worldwide and is supported by our international network of licensed partners throughout Asia, Europe and America. Asprova is available in numerous languages including English, German, Spanish, Portuguese, Japanese, Korean, Thai, Chinese (simplified, traditional), Polish and Czech.



**Supported in 18 countries through global resale partners**

**Available in 10 languages - English, German, Spanish, Japanese, Chinese (simplified, traditional), Korean, Portuguese, Thai, Polish**

# Positioning in production control



# Merits of implementing Asprova

Ultra High-speed Scheduling

Graphical Visualization

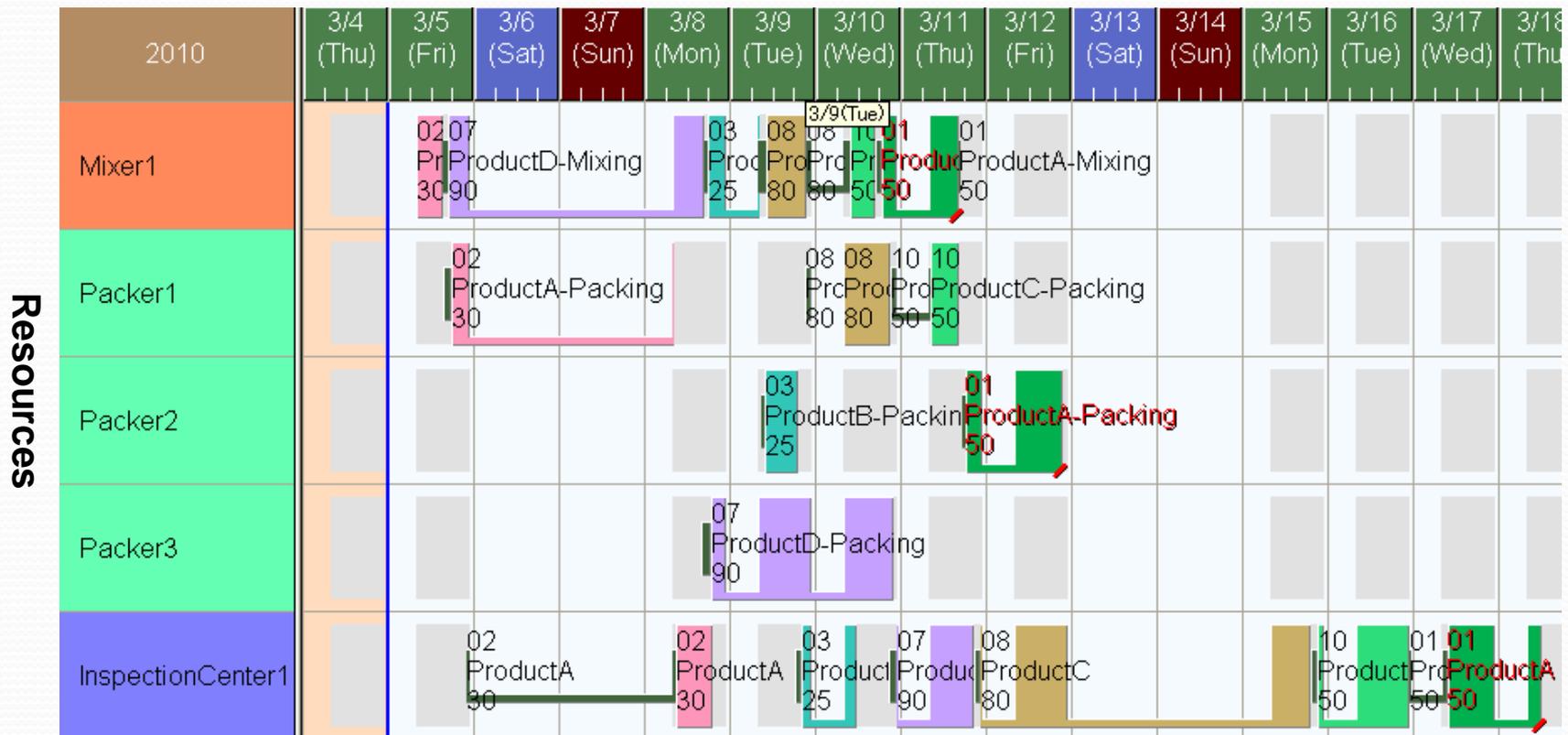
Shorten lead-times

Reduce inventory

Easy confirmation of projected due dates

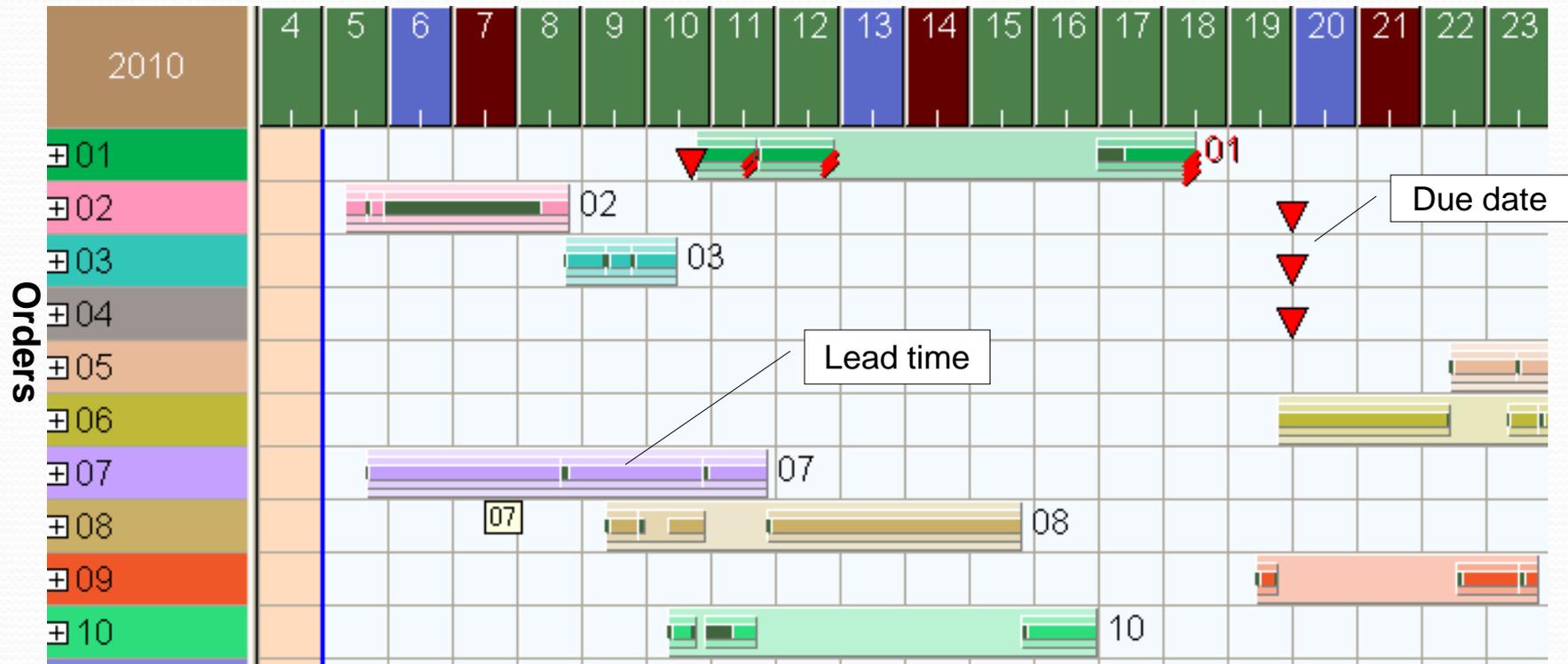
Accurate quoting of finish times

# Main functions - Resource Gantt



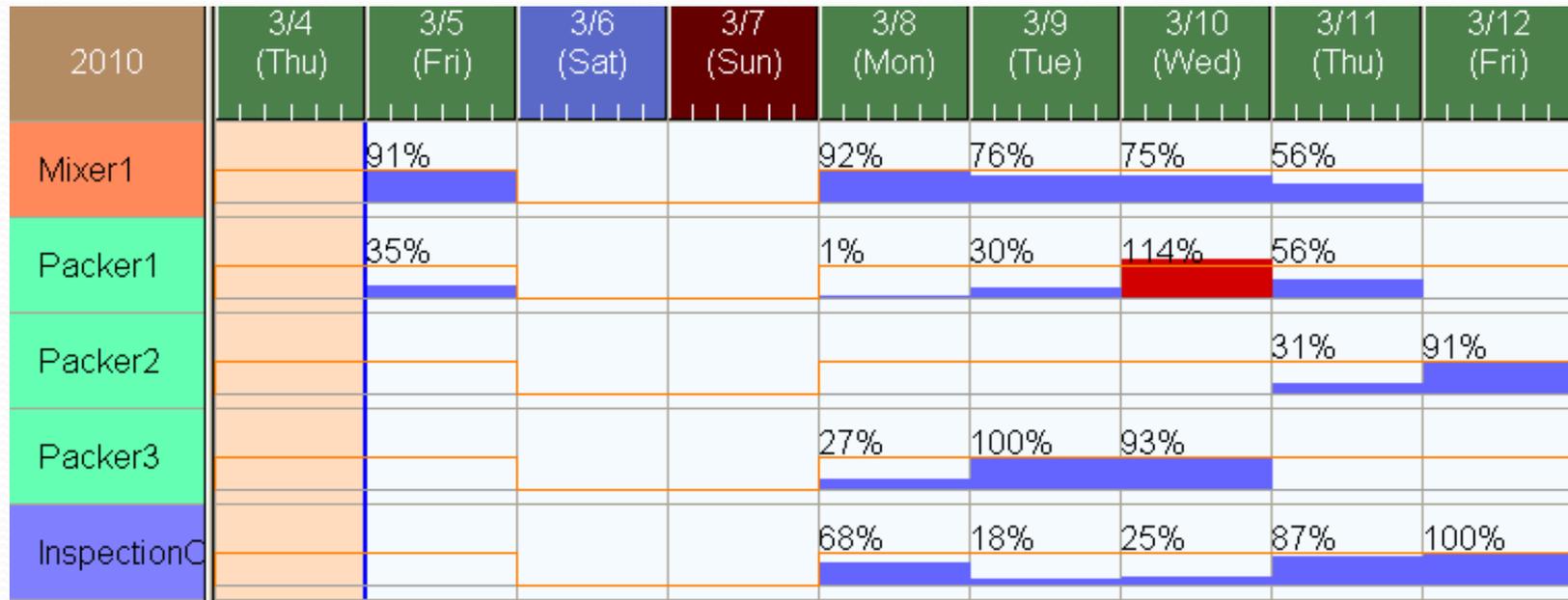
- Shows an overview of the tasks each machine or worker will carry out
- Production schedule is created according to resource capacity and availability
- Jobs can be adjusted by dragging with the mouse

# Main functions - Order Gantt



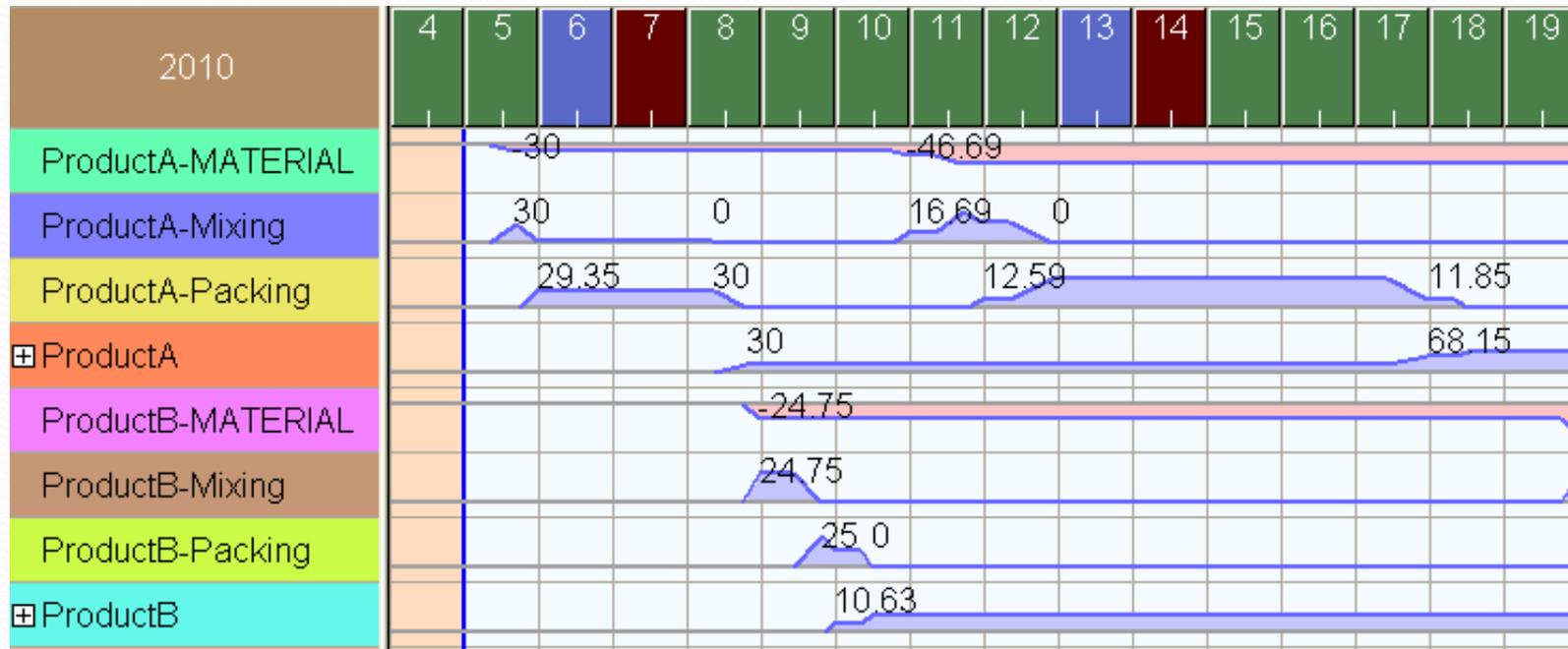
- Shows an overview of all orders in one chart
- Start/finish times, due dates of orders are easily visible
- Rows can be expanded to view individual operations and tasks

# Main functions - Load Graph



- Displays the load of all resources
- Rows can be drilled down to view the associated orders
- Data can be exported to spreadsheet

# Main functions - Inventory Graph



- Displays the fluctuations in inventory for all items
- The effects of scheduling can be seen in advance
- Data can be exported to spreadsheet

# Connection with external systems

The screenshot shows a window titled "Order Field Mapping" with two columns of fields. The left column is titled "Code" and contains "Internal Properties" (row 1) and a list of fields from row 2 to 11. The right column is titled "Code" and contains "External Fields" (row 1) and a list of fields from row 2 to 11. Lines connect the fields between the two columns, indicating a mapping. Two callout boxes at the bottom point to the left and right columns, labeled "Asprova field" and "External field" respectively.

Code	Field Name	Code	Field Name
1	Internal Properties	1	External Fields
2	Order code	2	Code
3	Order type	3	ItemCode
4	Item code	4	LET
5	EST	5	CustomerCode
6	LET	6	Qty
7	Order quantity	7	Priority
8	Priority	8	PlantCode
9	Customer code	9	Version
10	Display color	10	Color
11	Version	11	ProductionFactor

Import/export data by visually connecting fields

**SAP® Certified**  
Integration with SAP Applications  
SAP AG

**ORACLE®**

Microsoft Dynamics AX  
Microsoft Corporation

**QAD**  
Our Passion. Your Advantage.  
QAD Inc.

**IFS**  
IFS Corporation

Built on  
 **IBM** | express advantage®  
offerings  
IBM Corporation

# Asprova main modules

## **Asprova MS (Manufacturing Scheduler)**

Creates schedules at high speed, provides numerous advanced features including dynamic setups, time constraints between processes, pegging between orders (N-to-N, 1-to-1, inventory+1-to-1), inventory expiry dates, pegging conditions.

## **Asprova MS Light**

Core features of Asprova MS at reduced price. Fulfills the scheduling requirements of over 1200 factories.

By adding features as necessary through option packages, the functionality of the light edition can be extended up to that of Asprova MS.

# Asprova operating environment

- OS: Windows Server 2008/2003/2000  
Windows 7/ Vista/ XP/ 2000
- CPU: Pentium4 or greater, 32 bit or 64 bit (x64)
- Memory: 1Gb or greater (depends on volume of data)
- Hard disk: 300 Mb or greater