

PULP AND PAPER

Order Management

ABB Ability™ Manufacturing Execution System for pulp and paper

Order Backlog

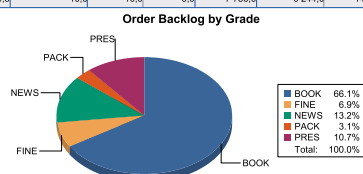
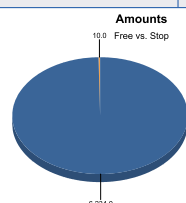
Machine Group: PM1
Exmill: 06/12/2021 - 06/12/2021

Grouping:

By Month
By Grade

Month: 12.2021

Grade		Free Ordered			Free to Produce			Stop Ordered			Stop to Produce			Tot. Ordered			Total to Produce		
		Grammage	Mass	Duration	Mass	Duration		Mass	Duration		Mass	Duration		Mass	Duration		Mass	Duration	
PACK	YYY	60 - 80	223.0	196.5	0.8	0.0		0.0	0.0	0.0	223.0	196.5	0.8						
FINE	Fine paper	70 - 80	894.1	429.8	1.2	0.0		0.0	0.0	0.0	894.1	429.8	1.2						
NEWS	News print	40 - 52	822.4	822.4	1.6	0.0		0.0	0.0	0.0	822.4	822.4	1.6						
PRES	Press paper	45 - 60	852.0	669.2	1.4	0.0		0.0	0.0	0.0	852.0	669.2	1.4						
BOOK	Book paper	50 - 60	5 245.2	4 116.1	9.9	10.0		10.0	10.0	0.0	5 255.2	4 126.1	9.9						
			7 746.6	6 234.0	14.8	10.0		10.0	10.0	0.0	7 756.6	6 244.0	14.8						



Report Total	Free Ordered			Free to Produce			Stop Ordered			Stop to Produce			Tot. Ordered			Total to Produce		
	Mass	Mass	Duration	Mass	Mass	Duration	Mass	Mass	Duration	Mass	Mass	Duration	Mass	Mass	Duration	Mass	Mass	Duration
	7 746.6	6 234.0	14.8	10.0	10.0	0.0	7 756.6	6 244.0	14.8									

Streamlining the pulp and paper order entry flow

Orders are the lifeblood of any paper mill, providing cash flow and profits. But handling orders and invoicing is often a complicated, challenging and sometimes confusing task when there can be thousands of combinations and permutations of customers, paper grades, grammages, formats, order sizes and many other variables.

The Order Management module within ABB Ability™ MES simplifies these tasks since it is truly designed for pulp and paper sales. This makes the applications easy to learn and use for pulp and paper sales, with no unnecessary fields and features that generic solutions contain. All order entry and invoicing functions for end-customer products are covered, thus streamlining these tasks and simplifying order entry flow and tracking.

The software performs multiple checks to ensure the entered orders can be delivered on time. It also reports on the status of ordered, planned, produced, delivered and invoiced orders. Sales or mill personnel only need to enter the minimum information, since all pricing and production planning are handled by the system.

Order Management simplifies sales order entry and invoicing tasks for efficient paper product production. Order Management consists of several applications and sales-related extensions that can be implemented separately or together with other modules from ABB Ability™ Manufacturing Execution System for pulp and paper, forming a powerful system to streamline order handling, invoicing and reporting.

Features

- Handles sales order entry, invoicing and reporting
- Fully compatible with other MES modules, based on common foundation data, meaning no redundant data entry
- Order entry of pulp, roll, sheet or tissue
- Order entry for customer sales, internal stock or rework orders
- Manages and maintains company profiles, including customer specific sales data, price profiles, adjustment registers and consignee defaults
- Automatically checks availability and capacity to promise orders for desired delivery dates or can propose earliest possible delivery date for orders
- Easily checks status of ordered, planned, produced, delivered and invoiced orders, and also in-warehouse quantities
- Sales plan follow-up and customer complaints analysis using advanced reporting from MES Decision support
- Calculate packaging material requirement for orders
- Manual or automatic invoicing based on deliveries
- Invoice correction or reversal, if needed
- All sales documents (order confirmation, invoice, packing list) are prepared, with multi-language support and can be distributed automatically



Benefits

- Ensures that the entered orders can be delivered on time in full quantity
- Provides full, real-time and realistic visibility into critical production planning, production tracking, delivery planning, warehousing and shipping data
- Minimizes order deviations
- Streamlines fulfillment and service functions so they are easy to understand, and fast and intuitive to use
- Simplifies process for mill staff
- Less room for errors, confusion and frustration leading to an increased customer satisfaction
- Better insight on inventory levels in multiple locations to meet customer demands and maintain stock levels
- No need to build any integration layer between sales and MES systems, saving the mill money and time

How Order Management works

The customer sales “order” is the basic processing unit in the Order Management system, representing a request to manufacture and/or ship mill production. Each order is given a unique code to be used as a reference throughout the system. Each manufactured roll or package must be associated with such a code, although rolls or packages can be transferred and assigned to different order codes. Every order must contain at least one order item (i.e. order

position). The order item contains specific information on a product, quantity, price and optional rebates or discounts that should be manufactured and/or shipped under the order. A single order may be associated with many order items. The order header ties order items together and contains common sales information for every order item, such as customer details, payment terms, etc.

1. Order entry

An order (pulp, roll, sheet, or tissue) is entered into Order Management, with default values defined in advance to make order entry fast and reliable. Orders typically come into Order Management in two ways:

A. **Confirmed orders** are entered by mill sales or other authorized personnel, and an order confirmation is sent to the customer.

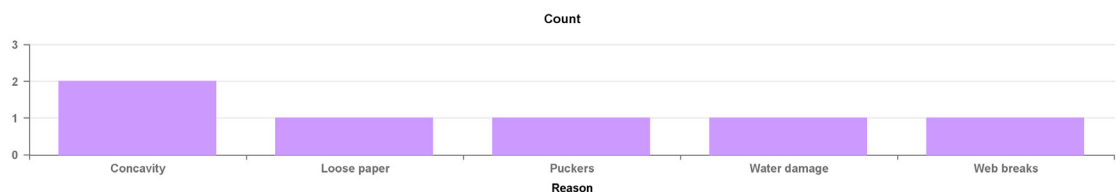
B. **Internal mill orders** are entered by the production planner or generated automatically by the Production Planning or Production Management modules. These orders can be side orders for better trims or production of standard products into stock.

Order Management also has applications to show the status of ordered, planned, produced, delivered, invoiced and in-warehouse quantities of each order item. Upon entering an order, two checks are done to ensure that they can be delivered to end users on time.

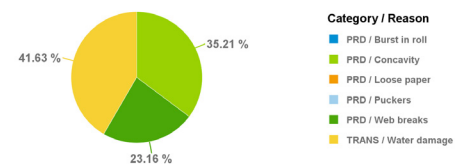
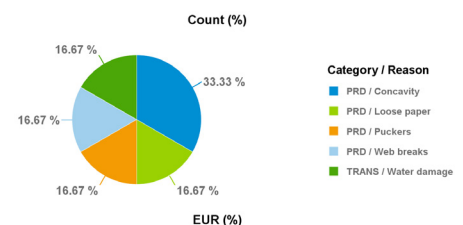
- ATP – Available to Promise (from stock)
- CTP – Capacity to Promise

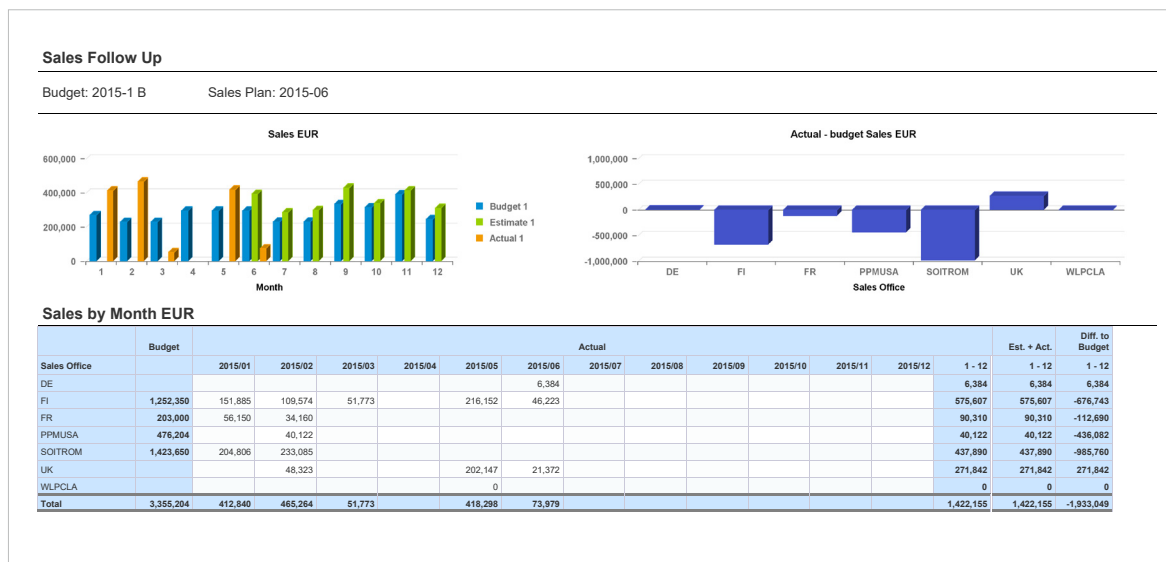
Customer complaints analysis report example

Complaints by Reason



Category	Root Cause	Reason	Reason Name	Count	%	Credited EUR	%
PRD	Drying section	C007	Puckers	1	16.67	0.00	0.00
	Drying section	C009	Concavity	2	33.33	5,155.98	35.21
	Press section	C003	Web breaks	1	16.67	3,390.75	23.16
	Winder	C010	Loose paper	1	16.67	0.00	0.00
PRD				5	83.33	8,546.73	58.37
Category	Root Cause	Reason	Reason Name	Count	%	Credited EUR	%
TRANS		T004	Water damage	1	16.67	6,095.89	41.63
TRANS				1	16.67	6,095.89	41.63
			Grand Total	6	100.00	14,642.62	100.00





2. Invoicing

- **Proforma invoices** document the value of goods but do not ask for payment. This is a delivery document for customs, which can be printed before and after loading.
- **Standard invoices** are based on delivered goods. They relate to one or several orders with the same customer, consignee, currency, and general terms.
- **Credit notes:** After the final document is printed, the document data cannot be changed anymore. If something was wrong in the original invoice, the correction must be made by entering an additional invoice or a credit note

3. Reporting

Order Management provides a set of standard reports. These can be used as a base for final customer-specific reports. Standard reports may include:

- Order confirmation
- Standard invoice
- Proforma invoice
- Credit note
- Invoice packing list

Reports can be run to the computer display or to the printer or they can be requested in the background (periodically or by request). Order Management also contains an automated document delivery system.

More comprehensive reports are done in the Decision Support System (DS), which also provides tools for end-users to build and construct their own reports.

About ABB Ability™ Manufacturing Execution System

Based on almost four decades of experience in supplying information technology to the pulp and paper industry, ABB Ability™ MES consists of integrated enterprise software modules that bring together business and manufacturing information to help paper-makers make better decisions based on the financial impacts of production choices. Mills benefit from shared common, or foundation, data across all ABB Ability™ MES for Pulp and Paper solutions, which enables quicker, more efficient configuration of MES applications.