



Complying to the General food law

with Proficy Plant Applications

Depron BV is an innovative producer of foamed plastic trays for food packaging. The extensive product program offers a broad range of possibilities for the individual product presentation of fresh foods like meat, poultry, fish, cheese, vegetables and fruit.

THE CHALLENGE

The General Food Law enforces producers and suppliers of food to put a system in place that enables the traceability of ingredients. As a main supplier to the food-industry Depron BV started searching for a system that could help them with this regulation and facilitated other manufacturing requirements at the same time. Better visibility into the production process by automatic

“Proficy Plant Applications provides us not only on-line traceability, but also integrated quality and efficiency measurements.”

Paul Daniëls, Manager Maintenance and Support,
Depron BV, The Netherlands

capturing of progress and quality indicators were the main drivers to start searching for a manufacturing execution system. From a shortlist of 4 suppliers Proficy Plant Applications was chosen for the unique concept of separating raw historian data from interpreted information.

RECORDING BASED ON EVENTS

With a large installed base of CIMPLICITY based human machine

interfaces at the production lines, Depron BV wanted to extend this layer rather than replacing or having to restructure it. By placing local CIMPLICITY data collectors at the SCADA nodes, it was fairly easy to capture all relevant production data into one centralised Historian database. From this historian database, events were defined that indicated the start of a production order, or the downtime of a piece of equipment. At these events the Plant Applications system is triggered to transform data into valuable information.

SYNCHRONIZING PRODUCT SPECIFICATIONS

At Depron BV SAP is used to generate the master planning and assign bill-of-materials to individual production orders. After a detailed scheduling process, these orders are downloaded to Proficy Plant Applications. Within Plant Applications the orders are assigned to the available production lines from where the queues can be monitored within



ALARM OVERZICHT **TIC.26.L** **LAAG ALARM ZONE 26 STORING** **NORMAL** GR000004.cim
 06:027
 06:25:03 18 Aug 2006

Productieverantwoording DIEPTREK Afdeling Ingeleid : Feijen F.

Inloggen **OEE** Order/charge Orderoverzicht **Kwaliteit** Standaard Verzamelscherm 2

Productieorder nr	92889	Artikel nr	9001579	Omschrijving	STS 24 50 420 ZK YEL 107U BAR	Datum start	14 aug 2006
Geplande hoeveelheid	488 zakken	Gemaakte hoeveelheid	0 zakken	Nog te maken	488 zakken		
Afmeting	178*138*50	Voorraad omzak	(830*100*1600 mm)	Doos	n.v.t.		
Spec. nummer	S 04	Buisfolie	80816	Filter	n.v.t.		
Aantal per verpakking	420	Pallet	n.v.t.	Binnenzak	n.v.t.		
Folie	7016	S325/42 LL GEE 107U TS 146 kg		Charge	35542		
Bodemdikte min	2.7	Bodemdikte max	4.0	Wanddikte min	3.4	Wateropname min (30 min.)	n.v.t.

Verpakkingswijze gereed product

Stanglengte (mm)	1200 (1070)	Teller afname op.	35	Aantal per pallet	36
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Bijzonderheden: Folie opwerken

Specs

Detail van huidige order **ORDER STARTEN**

Volgende orders **Verders**

Productieorder nummer	Artikelnummer	Omschrijving	Geplande hoeveelheid	Folie	Opmerkingen
92889	9001579	STS 24 50 420 ZK YEL 107U BAR	488	7016	Folie opwerken
92891	9001999	STS 24 50 420 ZK GRN 358U BAR	150	7018	Folie opwerken
92934	9001578	STS 24 40 480 ZK YEL 107U BAR	850	7008	Folie opwerken
92935	9001627	STS 17 40 400 ZK GRN 341U BAR	1350	7041	Folie opwerken
93000	9001722	S70.30 NL DRY 360 ZK YEL 107U	350	6096	Folie opwerken meer verkocht wk 31
93001	9001704	S70.30 NL DRY 360 ZK WHT FS	200	6256	Folie opwerken
93002	9001847	S70.30 NL 320 ZK WHT ED2	200	6043	Folie opwerken
93003	9C20063	S86(1 1/2) 600 ZK WHT	1800	6209	Folie opwerken (let op versheid folie)
93004	9C20062	S86(1 1/2) 600 ZK BLK 3U2X	1800	6216	Folie opwerken
Ombouw do	0	0	0	0	0

the schedule overview. These queues are pushed forward to SCADA screens, from where the orders can be started.

ONE INTEGRATED USER INTERFACE

The main reason the system was accepted quite rapidly by operators was that the user interface was fully integrated into the existing HMI-screens at the production lines. From there operators can select a production order, view the required

bill-of-materials, start the order, book the usage of materials, get the recipe parameters and monitor production progress. In the background Proficy Plant Applications is recording the necessary information for traceability, quality and efficiency. This information is then used for reporting and automated bookings back toward SAP.

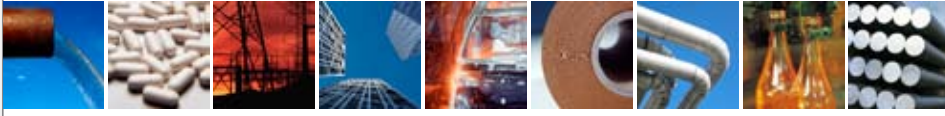
AUTOMATED OEE MEASUREMENTS

By recording the machine downtime, speed and quality the calculation

of the Overall Equipment Effectiveness (OEE) could also be fully automated. The performance is measured against a budget indicator which can be product or even equipment dependent. Management has chosen to force operators to fill in the reason for a downtime or waste event, before being able to restart the line. With predefined categories of reasons the downtime or waste-reason can quickly be selected from the screen. The OEE is con-

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tinuously calculated per production order, showing potential differences between product type, recipe settings or shifts. A detailed analysis of the reasons can be executed from the web-based reporting portal by any authorized personnel.

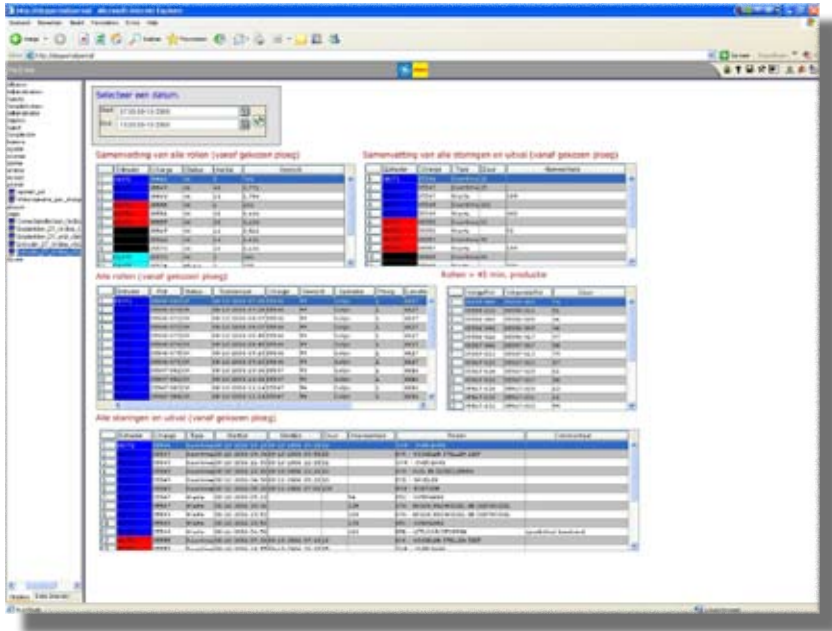
INCREASING INVENTORY ACCURACY

The installation of Proficy Plant Applications allows Depron BV to search for materials consumed instantly for reasons of traceability as defined by the General Food Law. By recording the quantities consumed also the inventory can be adjusted automatically. The consumption of materials used to be recorded in SAP by method of backflushing, often resulting in enormous differences in

inventory. With automatic reporting back of material consumption the accuracy of inventory listing will go up significantly.

PLATFORM FOR CONTINUOUS IMPROVEMENT

Depron BV has chosen to implement the system by themselves, which meant they had to follow a learning curve but at the end internal knowledge and expertise was built up to maintain and support the system. With the ease of creating new reports now, a platform has been created that can and will be used in the future for continuous improvement of the production process.



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SUMMARY

COMPANY

Depron BV, The Netherlands

SOLUTIONS

Production Management

- Tracing & Tracing
- Efficiency Monitoring
- Quality Data Collection
- SAP interfacing

PRODUCTS

- Proficy Plant Applications
- Proficy Historian

BENEFITS

- Compliance to General Food Law
- More accurate inventory listing
- Improved quality
- Improved Overall Equipment Efficiency
- Paperless production environment