

AVEVA PI WORLD

Keeping your smart factory simple

Presented By: Benjamin Robert, INDEFF

AVEVA

AVEVA

ENDORSED
System
Integrator

Endorsed Operate



Benjamin Roberts
Technical Director
25 years experience

INDEFF Team

- Long experience with a lot of successful projects: multi-site, multi-country
- Dairy Experts, Food & Beverage, CPG
- Highly certified on AVEVA products
- Multiple Regions, 11 Offices, Act as One



INDEFF

AVEVA



Countless Parts.
One Flow.



Asset Performance
Management



Manufacturing
Execution Systems



Industrial
Automation

AVEVA
ENDORSED SI PARTNER

 **Dream Report**[®]
Ocean Data Systems
OEM PARTNER

 **Stratus**[®]
GOLD PARTNER



FOCUS

- ✓ Complexity ↗
- ✓ Demands ↗
- ✓ Implementation Window ↘

- ✓ Reuse of Base Code, Libraries, Templates
- ✓ Time spent on real challenges of the Project
- ✓ Easier Support
- ✓ Overall better end Result



KEEP YOUR SMART FACTORY SIMPLE



GOALS

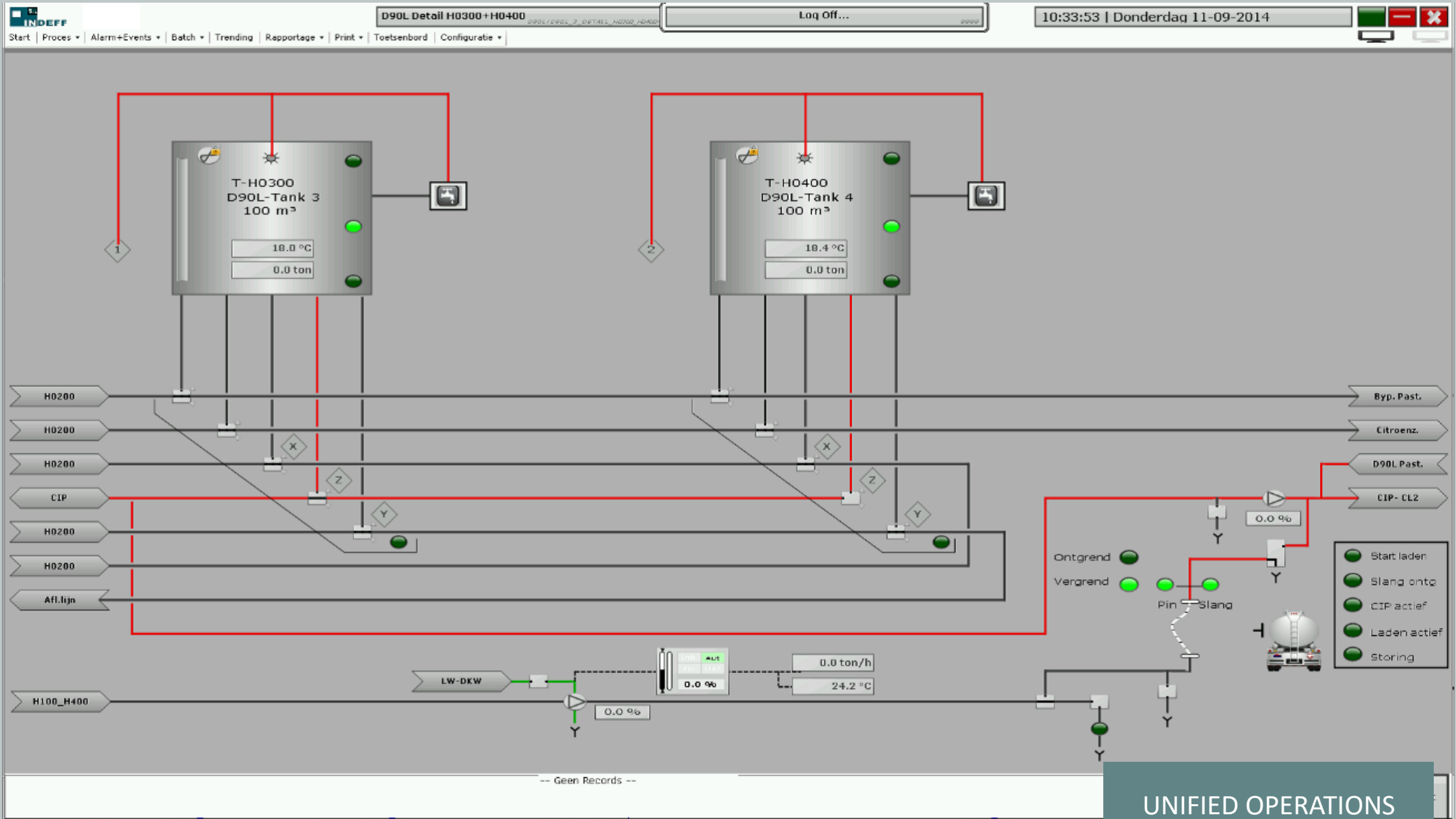
- ✓ Increase production flexibility
- ✓ Reducing production errors
- ✓ Eliminating paperwork and “double or triple” administration
- ✓ Get more insight in the process
- ✓ Implement a reliable solution without downtime

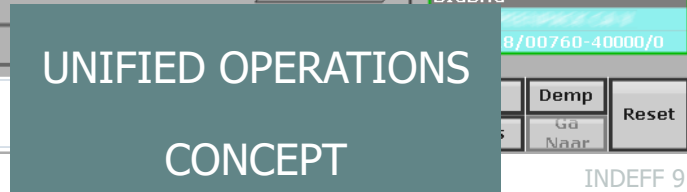
MULTINATIONAL

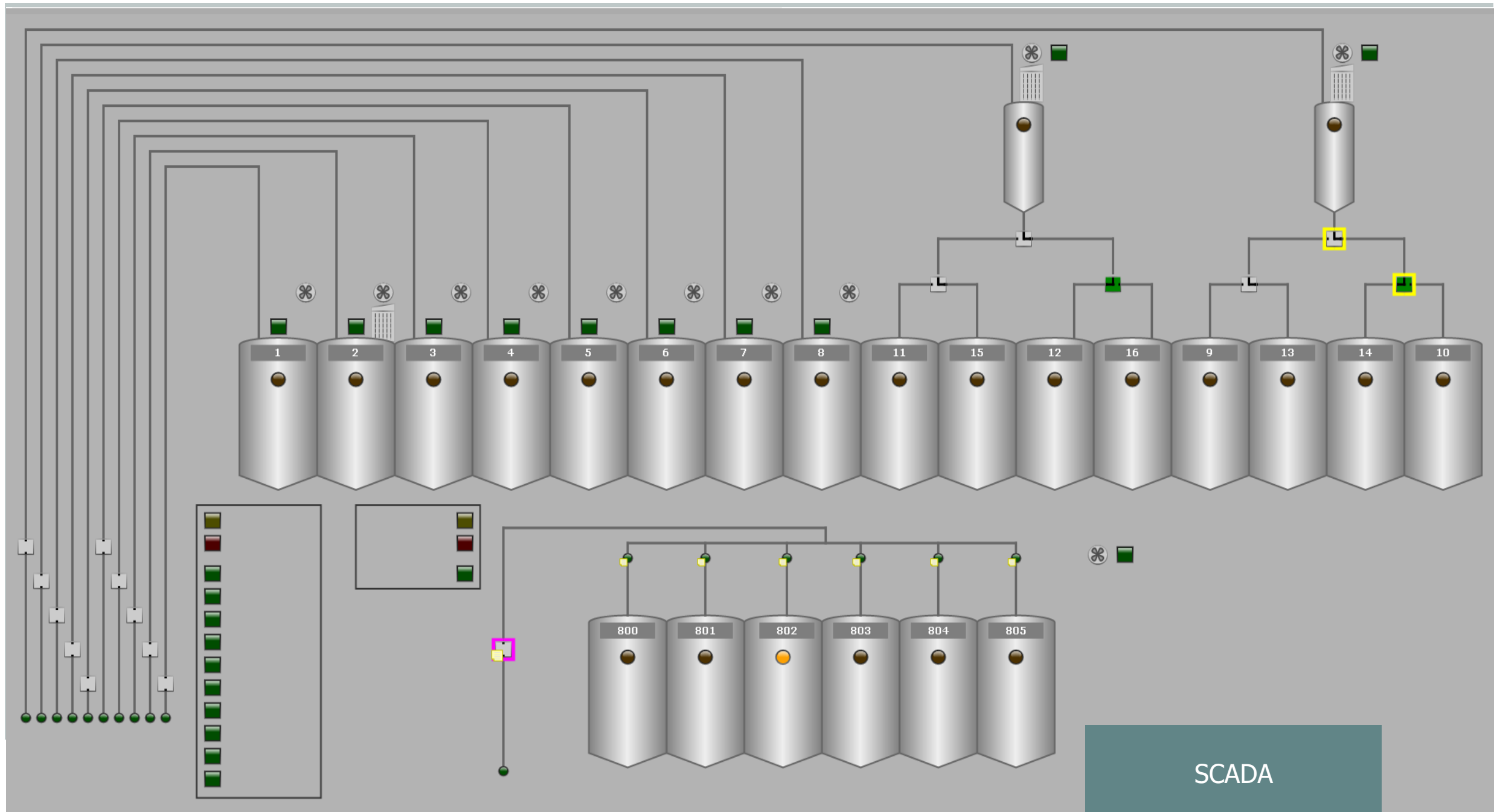
- ✓ IT / OT / Engineering is leading / is involved in the project
- ✓ Mostly an internal analysis is already done
- ✓ Clear scope by an URS / RFQ
- ✓ Having already done a software vendor selection, or standardized on AVEVA
- ✓ Having a MES program / roadmap

SME

- ✓ They know their core business in detail, and their processes are evident (for them)
- ✓ I will not pay for an analysis, they expect the SI knows their business as well
- ✓ Having no clue of the impact of their requirements, last minute changes,
- ✓ Looking for an 'Out of the box' solution with a maximum flexibility (like your new smartphone)
- ✓ MES what ? AVEVA, eeeuh ? What is that ?







Recepten

Product	Omschrijving	Process
98939	Ehrharta calycina	Mengen-ML1, Men
98939.BB1000	Silene inflata	Afvullen-BB
98939.Z25	Lewisia leeana	Afvullen-AFZ1, Afv
98940	Metrosideros waial	Afvullen-MC1, Men
98940.Z20	Cyrtandra elliptise	Afvullen-AFZ1, Afv
98941	Mycoglaena myric	Afvullen-MC1, Men
98941.Z25	Amsonia tharpai	
98942	Coprosma repens	Mengen-ML1, Men
98942.Z25	Gaylussacia bacca	
98943	Allium marvinii	Mengen-ML1, Men
98943.Z25	Lecania stigmatell	
98944	Gayophytum heter	Mengen-ML1, Men
98944.Z25	Lantana macropod	Afvullen-AFZ1, Afv
98945	Reynosia uncinata	Mengen-ML1, Men
98945.BB1000	Paspalum blodgett	Afvullen-BB
98945.Z25	Eriogonum thurber	Afvullen-AFZ1, Afv
98946	Leiodon latifolius	Mengen-ML2, Men
98946.BB1000	Orthothecium acu	Afvullen-BB
98946.BB400	Oligoneuron grand	Afvullen-BB
98946.Z20	Lomatium nevade	Afvullen-AFZ1, Afv
98947	Anthracotheicum f	Mengen-ML1, Men
98947.Z20	Sclerophora nivea	Afvullen-AFZ1, Afv
98948	Cheilanthes siliquo	Mengen-ML1, Men
98948.Z25	Pyrenopsis phyllisc	
98949	Sedum alboroseu	Mengen-ML1, Men
98949.Z20	Glaucium flavum	Afvullen-AFZ1, Afv
98950	Agave maculosa	Mengen-ML1, Men
98950.Z20	Scirpus supinus	Afvullen-AFZ1, Afv
98951	Keysseria lavandul	Afvullen-MC1, Men
98951.Z25	Cassia surattensis	
98952	Rhizocarpon obscu	Mengen-ML1, Men
98952.Z25	Festuca scoparia	Afvullen-AFZ1, Afv
98953	Lophosoria quadri	Mengen-ML1, Men
98953.Z25	Pteris vittata	Afvullen-AFZ1, Afv
98954	Limnorchis thurber	Mengen-ML1, Men
98954.BB1000	Eltroplectris acumi	Afvullen-BB

Versie

Versie	Versie Dat	Status	Voorkeu
1	23-10-17	DISABLED	<input type="checkbox"/>
1000	24-05-18	DISABLED	<input type="checkbox"/>
1001	24-05-18	DISABLED	<input type="checkbox"/>
2	05-12-18	DISABLED	<input type="checkbox"/>
3	05-12-18	ENABLED	<input checked="" type="checkbox"/>

BOM

BOM posit	Materiaal	Omschrij	Procentu	Eenheid
0	98946	Leiodon lat	1	KG
1	1008	Achillea im	0.274	KG
2	1011	Amerosed	0.025	KG
3	1115	Pritchardia	0.05	KG
4	1180	Diplazium	0.0015	KG
5	1193	Setaria ver	0.116	KG
6	1218	Tiniaria du	0.094	KG
7	1222	Lupinus le	0.05	KG
8	1223	Orthocarp	0.192	KG
9	1805	Cyphelium	0.0625	KG
10	1840	Casuarina	0.05	KG
11	1866	Lechea vill	0.05	KG
12	1902	Myriophyll	0.035	KG

Substituten

Rece	Om	Bo	B	OrigineelMa	Subs	Omschrij	Om	Ho	Sta
989	Leiod	100	12	80082	1193.	Kalanchoe	Poly	1	DISA
989	Leiod	100	13	80081	99353	Cyperus sa	Rhod	1	DISA
989	Leiod	2	2	1156	1249	Rhizocarpo	Grin	1	DISA
989	Leiod	3	9	1866	1867	Lechea vill	Sedu	1	ENA

Versie toevoegen

Zet als actieve versie

Bevestigen

Materiaal toevoegen

Materiaal verwijderen

Substitutie toevoegen...

Activeer

Desactiveer

Substitutie aanpassen...

Deblokkeer BOM versie

Blokkeer BOM versie

Recept Parameters

Parameter	Omschrijving	Waarde
PH_ME2_pMengTijd.P.BATCH.TME_MIX	Menger 2 Mengtijd (s)	300
PH_ME3_pMengTijd.P.BATCH.TME_MIX	Menger 3 Mengtijd (s)	300

Discharge sequence

Discharge materiaal	Materiaal
1222	1866

Recept toevoegen

Process link

Parameter aanpassen...

To

ADMINISTRATIVE FUNCTIONS
RECIPE MANAGEMENT

Productieorders

Auto Start Running

Orders

Friday, November 29, 2019

Order Reference	Type	Business Partner	Date	Amount	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00
PO123456	MTO	Customer X	29-11-19	7.000 kg										
BLO123456_1	Blending	Order	BL1											
BLO123456_1/0	Blending	Batch												
BLO123456_1/1	Blending	Batch												
BLO123456_1/2	Blending	Batch												
BLO123456_1/3	Blending	Batch												
PLO123456_1	Pelletizing	Order	PL1											
PLO123456_1/0	Pelletizing	Batch												
TLO123456_1	BulkLoading	Order	TL3											
TLO123456_1/0	BulkLoading	Batch												
PO123457	MTS	-	-	3.500 kg										
BLO123457_1	Blending	order	BL1											
BLO123457_1/0	Blending	Batch												
BLO123457_1/1	Blending	Batch												
BLO123457_1/2	Blending	Batch												
PO123458	MTO	Customer Y	29-11-19	15.000 kg										
BLO123458_1	Blending	order	BL1											
BLO123458_1/0	Blending	Batch												
BLO123458_1/1	Blending	Batch												
BLO123458_1/2	Blending	Batch												
BLO123458_1/3	Blending	Batch												
BLO123458_2	Blending	order	BL2											
BLO123458_2/0	Blending	Batch												
BLO123458_2/1	Blending	Batch												
PLO123458_1	Pelletizing	order	PL1											
PLO123458_1/0	Pelletizing	Batch												
TLO123458_1	BulkLoading	Order	TL5											
TLO123458_1/0	BulkLoading	Batch												

Refresh

Herberekenen

Starten

Annuleer

Herbereken batch aub

Details

Developer

Omschrijving

1 Warning(s), 0 Error(s)

Werkorder wordt ingedeeld

Hoeveelheid nodig voor materiaal 1006: 175.6

Materiaal 1006 doseren op WegenWE1 vanuit UN_SILO_16 (Eriophyllum wallacei)

Hoeveelheid nodig voor materiaal 1032: 3.2

Materiaal 1032 doseren op WegenWE5 vanuit UN_SILO_514 (Isopterygium tenerum)

Hoeveelheid nodig voor materiaal 1047: 4

Materiaal 1047 doseren op WegenWE4 vanuit UN_SILO_402 (Sidastrum Baker)

Hoeveelheid nodig voor materiaal 1086: 0.8

Materiaal 1086 doseren op WegenWE4 vanuit UN_SILO_411 (Gilia aliquanta)

Hoeveelheid nodig voor materiaal 1148: 68.4

Materiaal 1148 doseren op WegenWE2 vanuit UN_SILO_5 (Biatorella hypophaea)

Hoeveelheid nodig voor materiaal 1150: 26.8

Materiaal 1150 doseren op WegenWE2 vanuit UN_SILO_6 (Canavalia lineata)

Hoeveelheid nodig voor materiaal 1164: 80

Materiaal 1164 doseren op WegenWE2 vanuit UN_SILO_13 (Homalothecium megaptilum)

Hoeveelheid nodig voor materiaal 1167: 25.6

Materiaal 1167 doseren op WegenWE2 vanuit UN_SILO_9 (Hedyotis littoralis)

Hoeveelheid nodig voor materiaal 1180: 0.8

Materiaal 1180 doseren op WegenWE5 vanuit UN_SILO_509 (Philadelphus cordifolius)

Hoeveelheid nodig voor materiaal 1205: 1.6

Materiaal 1205 doseren op WegenWE5 vanuit UN_SILO_506 (Arabis gracilipes)

Hoeveelheid nodig voor materiaal 1930: 1.2

Materiaal 1930 doseren op WegenWE5 vanuit UN_SILO_503 (Pottia intermedia)

Hoeveelheid nodig voor materiaal 1931: 1.6

Materiaal 1931 doseren op WegenWE4 vanuit UN_SILO_401 (Coryphantha strobiliformis)

Hoeveelheid nodig voor materiaal 1932: 4.8

Materiaal 1932 doseren op WegenWE3 vanuit UN_SILO_304 (Mahonia sonnei)

Logging

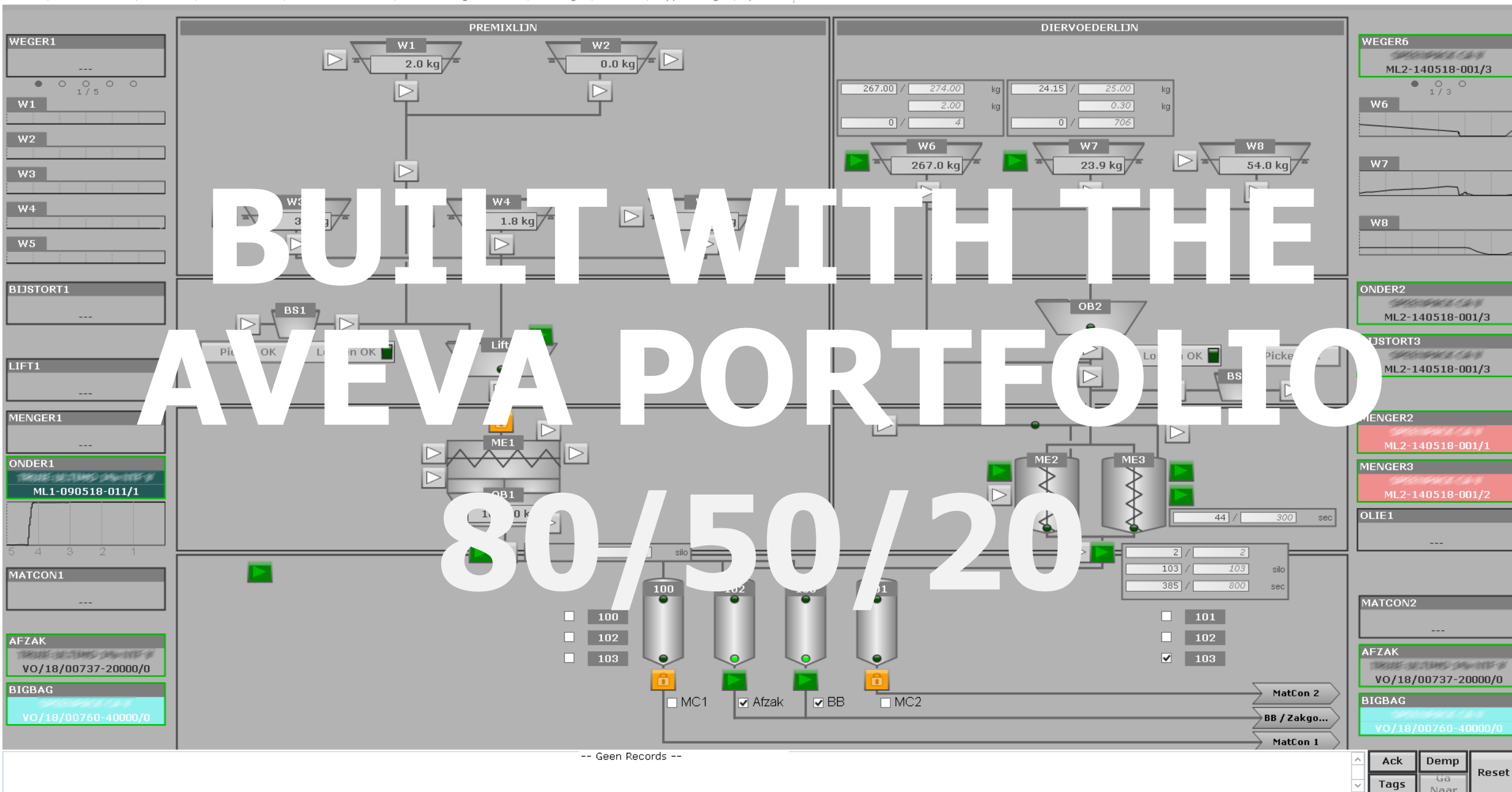
Doseringen

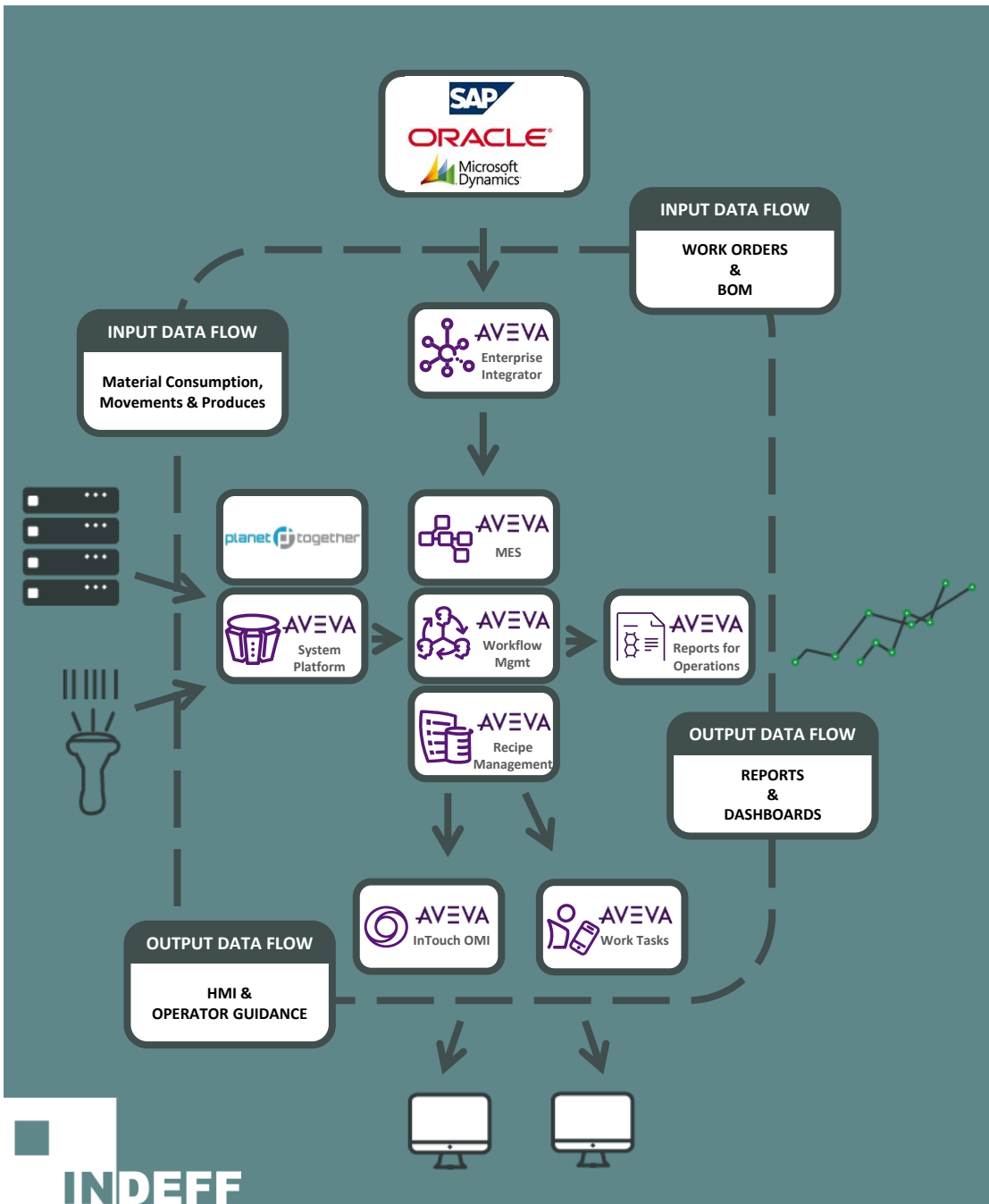
Parameters

Materiaal Planning

ORDER MANAGEMENT

Windows





SOLUTION CONCEPT

- ✓ Administrative Functions
 - ✓ Scheduling / Order Management
 - ✓ Production Executions / Follow Up
 - ✓ Reporting / Analysis
 - ✓ Labelling
-
- ✓ Multiple device types
- Unified Operation Concept

ERP Integration

MES – Core

Std Delivery:

- Ready for Tracking and Tracing
- Article/ Recipe Management
- Order Management with:
 - Detailed logging
 - Addition Follow-up
 - Picking (preparation workflow)
- Inventory / material planning
- Parameter Management

Options:

- Full Traceability (reporting)
- Audit Trail
- OEE
- Sample Management
- Labelling
- Live Recalculation
- Contamination Management
- Substitution Management
- Expedition: Truck/trip mgmt.

Reporting

Dashboards

Client

Scanner

APM

- Asset Management
- Inventory Management
- Preventive maintenance
- Corrective maintenance
- Intervention management
- Asset performance monitoring
- Condition based Monitoring

PLC – Process Automation

INDEFF CASE : BIVIT TAKING THE LONG VIEW

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RESULTS

- ✓ Functionalities become standard procedure
- ✓ Improved insight
- ✓ Flexibility
- ✓ Smoother Implementation

INDEFF CASE : BIVIT TAKING THE LONG VIEW

2 MONTHS AFTER GO LIVE – PRODUCTION VOLUME RECORD

- ✓ Optimization order workflow
- ✓ Optimization stock management
- ✓ More production with the same employees
- ✓ More production with the same assets

80/20

RESULTS FOR INDEFF

- ✓ This solution is now our standard approach
- ✓ Implementation in Dairy, Feed, and Special Chemicals
- ✓ Thailand, Belgium, Netherlands, France, and the US
- ✓ SME or Multinationals !
- ✓ 80% of the “general” requirements are covered
- ✓ 20% additional coding is needed – AVEVA portfolio
- ✓ **Ready for acceptance in 50 days**



**KEEP YOUR SMART
FACTORY SIMPLE**

1/2

MY TWO CENTS



WHAT IS NEEDED TO MAKE YOUR NEXT INTEGRATION
A SUCCESS IN TODAY'S FAST EVOLVING LANDSCAPE

MY TWO CENTS

WHAT YOU CAN DO

✓ Know what you want

MY TWO CENTS

WHAT YOU CAN DO

- ✓ Know what you want
- ✓ Stick to the Portfolio



MY TWO CENTS

WHAT YOU CAN DO

- ✓ Know what you want
- ✓ Stick to the Portfolio
- ✓ Total Cost of Ownership



MY TWO CENTS

WHAT YOU CAN DO

- ✓ Know what you want
- ✓ Stick to the Portfolio
- ✓ Total Cost of Ownership
- ✓ Step by Step



MY TWO CENTS

WHAT YOU CAN DO

- ✓ Know what you want
- ✓ Stick to the Portfolio
- ✓ Total Cost of Ownership
- ✓ Step by Step
- ✓ Allow Time for Adoption



MY TWO CENTS

WHAT YOU CAN DO

- ✓ Know what you want
- ✓ Stick to the Portfolio
- ✓ Total Cost of Ownership
- ✓ Step by Step
- ✓ Allow Time for Adoption
- ✓ Commitment

WHAT SI'S CAN DO

✓ Be a Partner

MY TWO CENTS

WHAT SI'S CAN DO

- ✓ Be a Partner
- ✓ Stick to the Portfolio

MY TWO CENTS

WHAT SI'S CAN DO

- ✓ Be a Partner
- ✓ Stick to the Portfolio
- ✓ Step by Step

MY TWO CENTS

IN CLOSING

**THINK BIG
START SMALL
SCALE FAST**

The AVEVA portfolio has you covered
Take it Step by Step
Iterative approach by working model

