



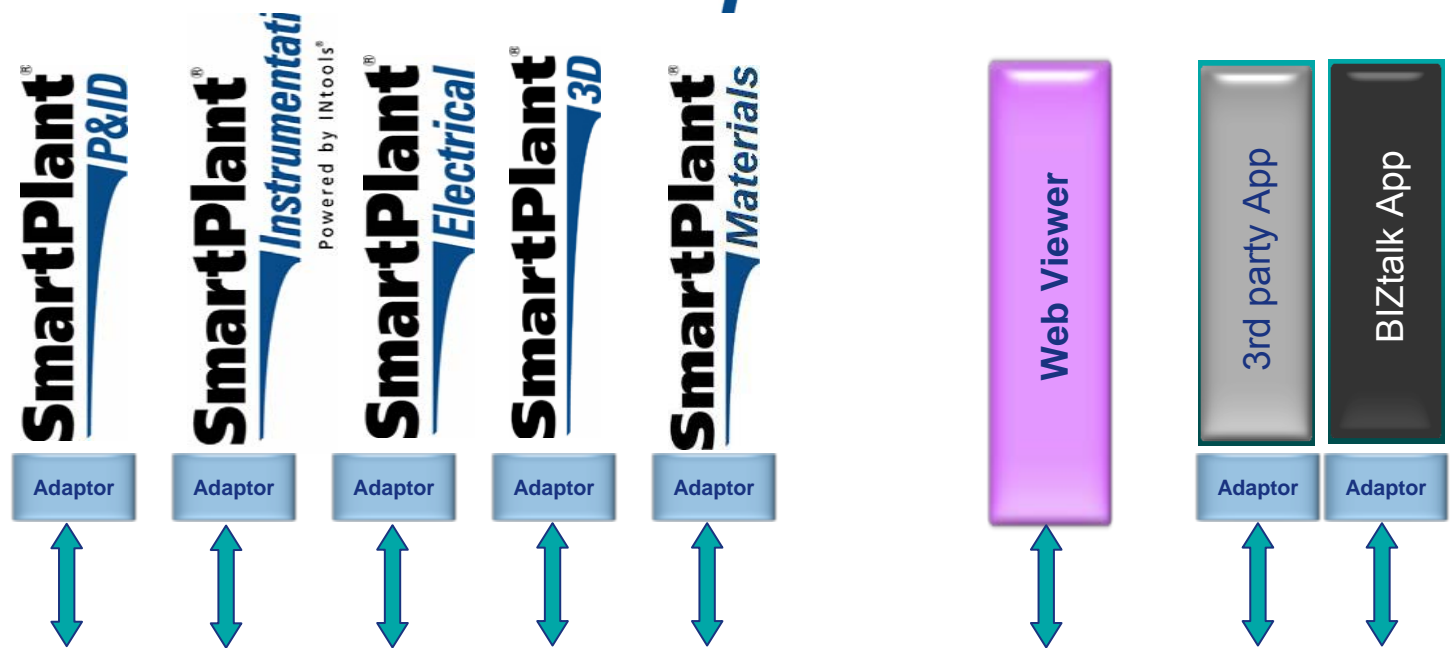
Bayer MaterialScience

Intergraph tools usage

The “hands-on” experience
of the PMPO project

Antwerp, 16.09.2009

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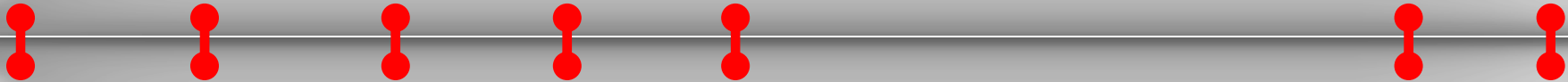
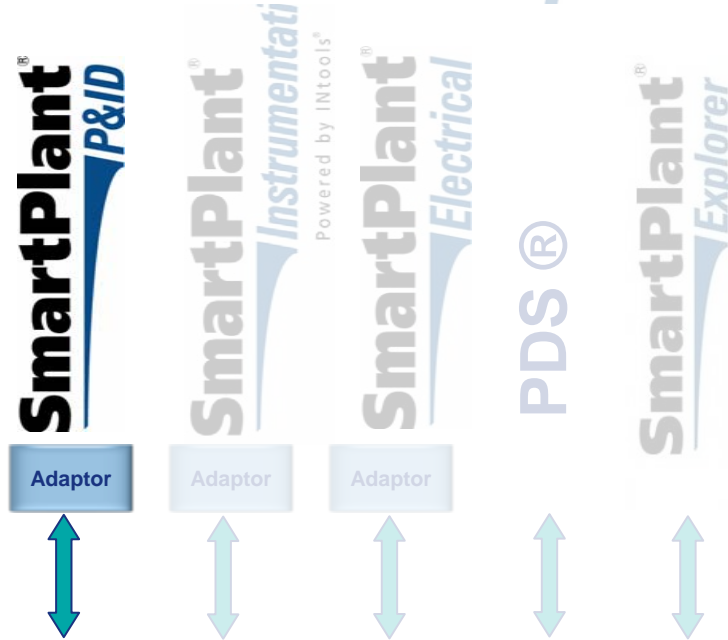


SmartPlant[®] Foundation

- *Integration platform (Hub)*
- *Repository for documents & data*
- *Document & data management*
- *Object Identification*
- *Authorizations, Workflows*
- *History / Versioning / Revision control*
- *Handover*

ERP or plant maintenance system

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Graphic Report: "View Drawing" of Item Type: Equipment "ANTPETX-A371-AW03-RA010" for Drawing "413416" in

Properties
ANTPETX-A371-AW03-RA010 - Equipment: Vessel

Alphabetic | **Categorized** | blanks

- Identification**
- Miscellaneous**

Class-No	B04126
Drawing No of Manufacturer	413546
Equipment-No	2_88749
Fabrication-No	9038
Remark	BAM
- Physical**

Insulation Thk	120
Insulation Thk Source	User
Material	P265GH//St.35.8
Techn. Data 1	D=1600 mm
Techn. Data 2	H/L=2400 mm
Techn. Data 3	V=4 m ³
- Process**

Oper Press Range	-1/6/-1/10
Oper Temp Range	-10/200/-10/250
- Responsibility**
- Status**

Construction Status	New
---------------------	-----

RA010

LR17.22010-50-10BD1



- SPPID is the master for:
 - AKZ level 1 to 3
 - Functional location for all items, including loops
 - All equipment and process data
 - All piping data (dimensional and product fluid codes)

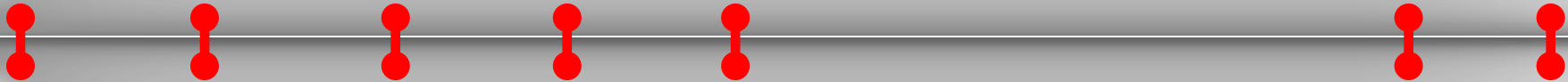
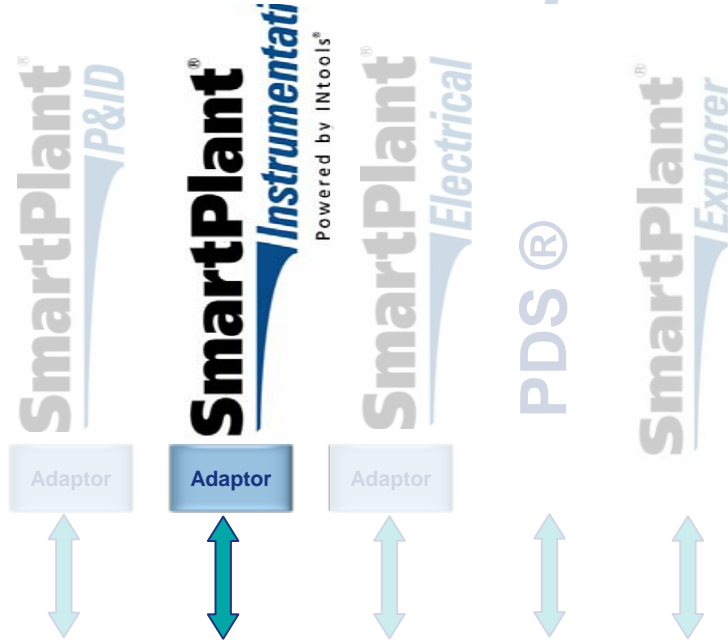
- Ability to navigate in the P&ID

- Property driven view on P&ID

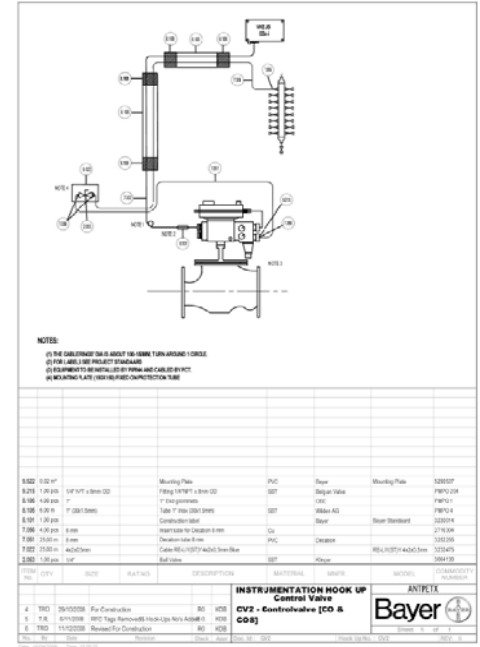
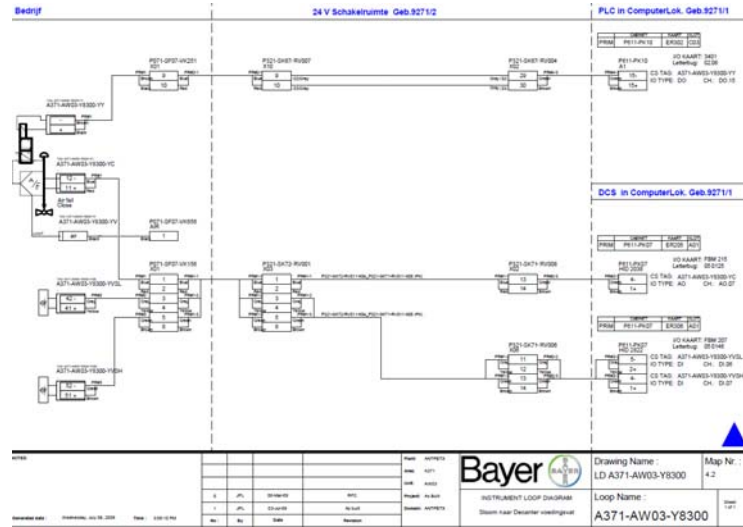
- Updatable Excel reports

- Automated PDF generation

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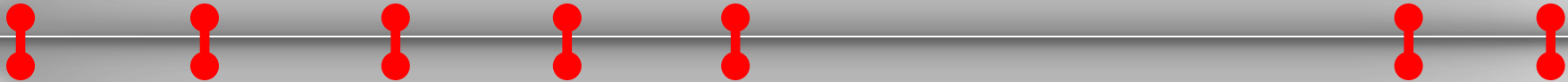
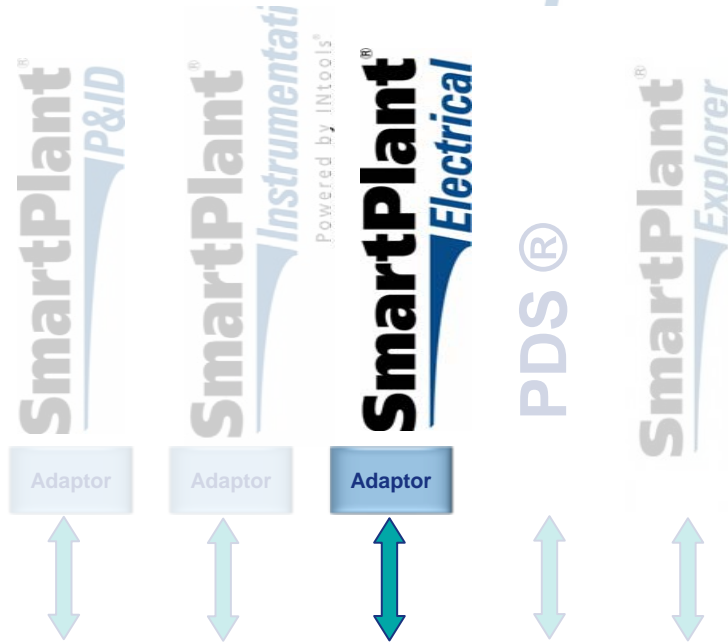


GENERAL	1 Plant Tag Number	ANTPETK ERTA-A370-Y881-YPC			
	2 Service	N2 to S, Park Unloading 1			
	3 P&ID No.	Dist Tag Number	412420		
	4 Area Classification	Location	Bedrijf		
PIPING	5 Certification / Approval Required				
	6 Equipment No.				
	7				
	8 Line No.	Line Schedule	Internal Diameter	ES14-A0034-R004-00012-25-08D-1130x105	
	9 Line Size				
	10 Pipe Material			MATERIAL NOT LISTED	
	11				
	12 Fluid Name	Fluid State	00012 Nitrogen	Gas/Vapor	
	13				
	14				
PROCESS CONDITIONS	15 Flow	Minimum	Normal	Maximum	Units
	16 Temperature	15	50		°C
	17 Pressure	2	20		bar
	18 Pressure Drop	2	2		bar
	19 Viscosity	3000	1000		mPa.s
	20 Density / Specific Gravity / Molecular Mass	20			
CALC RESULTS	21 Shut Off CP				
	22				
	23 Valve Body Type	Single Seat Globe			
	24 Flare Coefficient C _v	N/A			
	25 Manufacturer	Model / Part No.	2412		
	26 Body Type				
	27 Body Size	Trim Size	Flare Size	Stroke	Units
	28 Rated Cv	Characteristics	3	min	120 mm
	29 End Connection & Rating	Body Material	Phys 2412 1.0019		
	30 Bonnet Type	Material	25 1.0019		
BODY AND TRIM	31 Flow Action To	Open			
	32 Opening	No. of Parts	Shut		
	33 Trim Type	Material	Shut		
	34 Plug Ball Disk Material	1.4071			
	35 Seal/O-ring Material	1.4071			
	36 Leakage Class				
	37 Face Face Dist	Stem Material	102 mm		
	38 Packing Type/Material	Gasket Material	PTFE/Conglate		
	39 Max. Flow for Installed Trim				
	40				
ACTUATOR/PILOT	41 Pilot Type	Diaphragm			
	42 Pilot Model	Pilot Size	2412		
	43 Pilot Supply to Pilot	Nitrogen			
	44 Self Connection	External Connection	G 3/8		
	45 Coils/Material	Spring Material	SUS304/17-7		
	46 Spring Range	Spring Color	5 - 30 mbar		
OPTIONS	47 Set Point				
	48 Action on Pressure Rise	Accuracy	Close		
	49				
	50 Flow Regulator	Line Orifice	N/A		
PURCHASE	51 Hoisting Vent	Internal Relief	N/A		
	52				
Notes	53 Manufacturer	Model Series	Samson 81-53		
	54 Detailed Model	41-53			
	55 Purchase Order No.	Specification No.	412004179		
	56 Vendor	Material Charge No.	Samson-81-53-V		



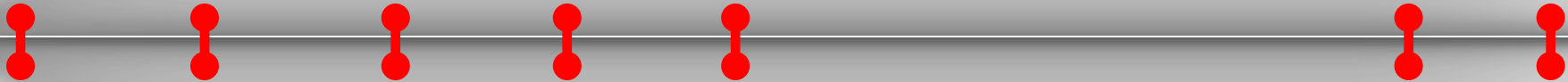
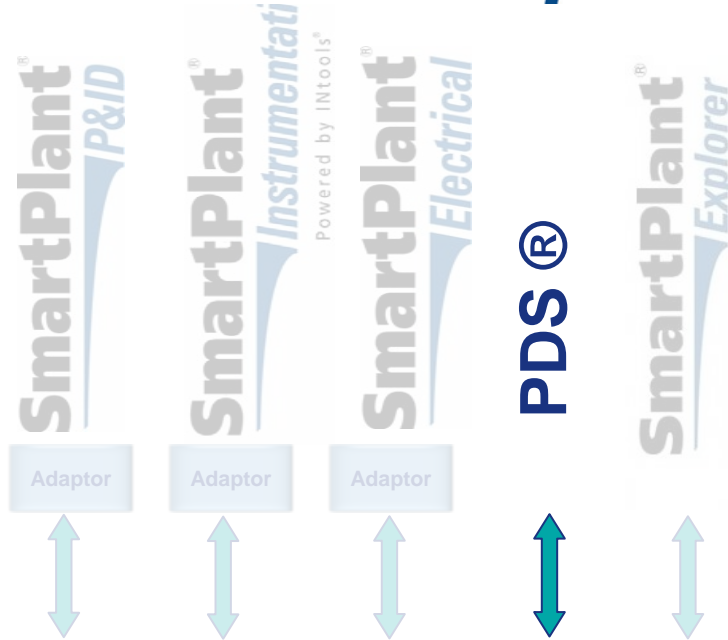
- Schematics are pure database reports
- Instrument specs, wiring schematic and reports, mounting typicals
- Loop and tag import from SPPID as late as possible in project execution
- Hook-up drawings with bill of materials generation

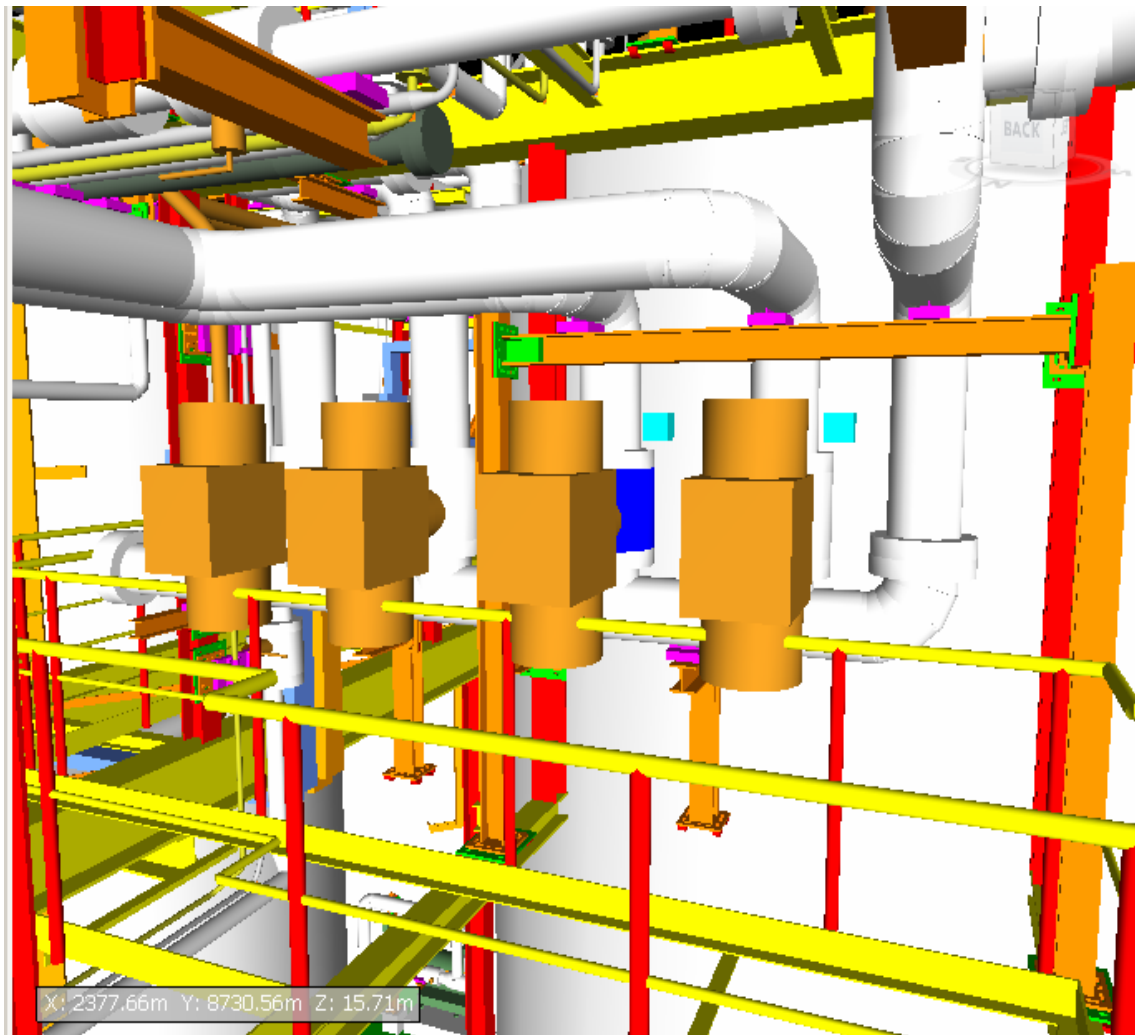
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- Interface SPI ↔ SPEL
- Single line diagrams (SLD), load calculation and load list, motor schematics, various reports
- Cable drum assignment

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Selection Tree

- V974-TA74-Y9705
- V974-TA74-Y9706
- V974-TA74-Y9707
- V974-TA74-Y9708
- V974-TA74-Y9709
- V974-TA74-Y9710
- V974-TA74-Y9711
- V974-TA74-Y9712
- V974-TA74-Y9713
- V974-TA74-Y9714
- V974-TA74-Y9715
- V974-TA74-Y9718
- V974-TA74-Y9719
- V974-TA74-Y9720

Standard Compact Properties

Properties

Item DMRS PDS Component Data Material

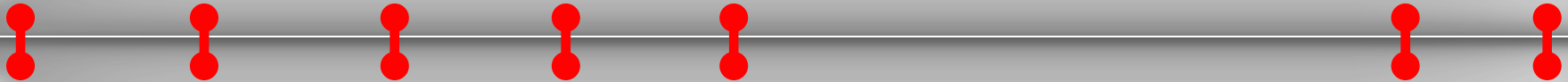
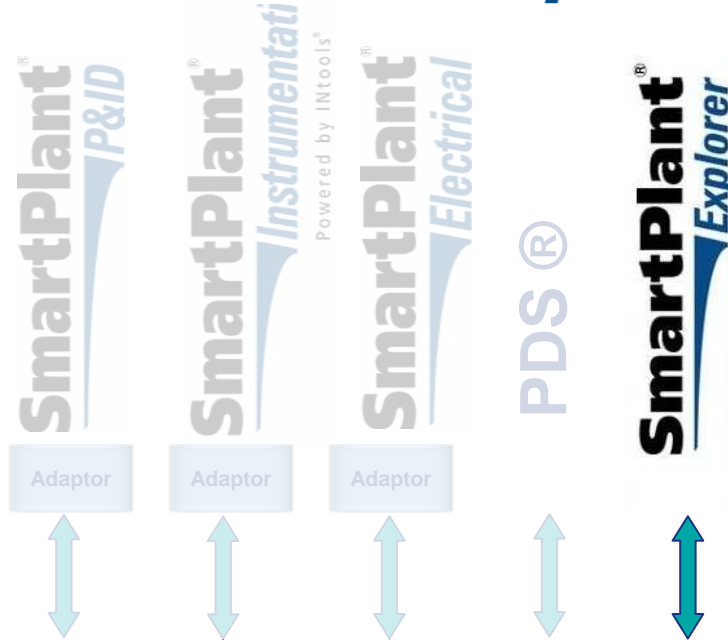
Property	Value
Tag no	V974-TA74-Y9713
NPD	150MM 150MM
Prep	V (21) Form CV (21) Form C
Sch/thk	NREQD NREQD
Press set pt	0
Line no	V974TA74LR049.85300-150MM-25BD100NL
Line id	PETX-V974-TA74-LR049-23
P&ID	413417
Approval Status	freigegeben zur Baustelle
Nor oper press	3 bar
Nor oper temp	20 degC
Steam out temp	0 degC
Heat tracing	E

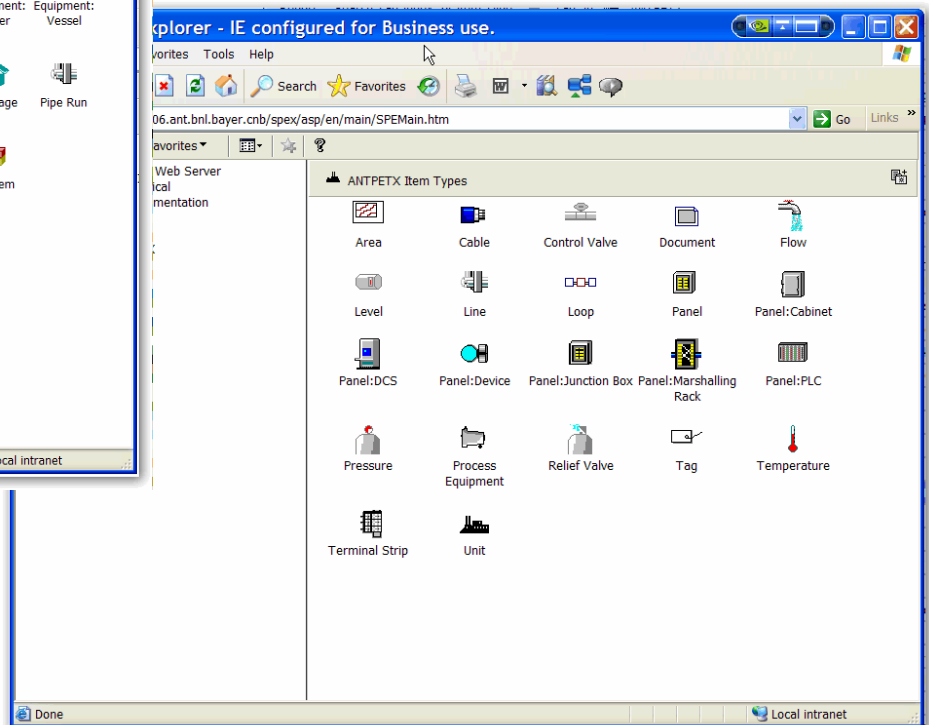
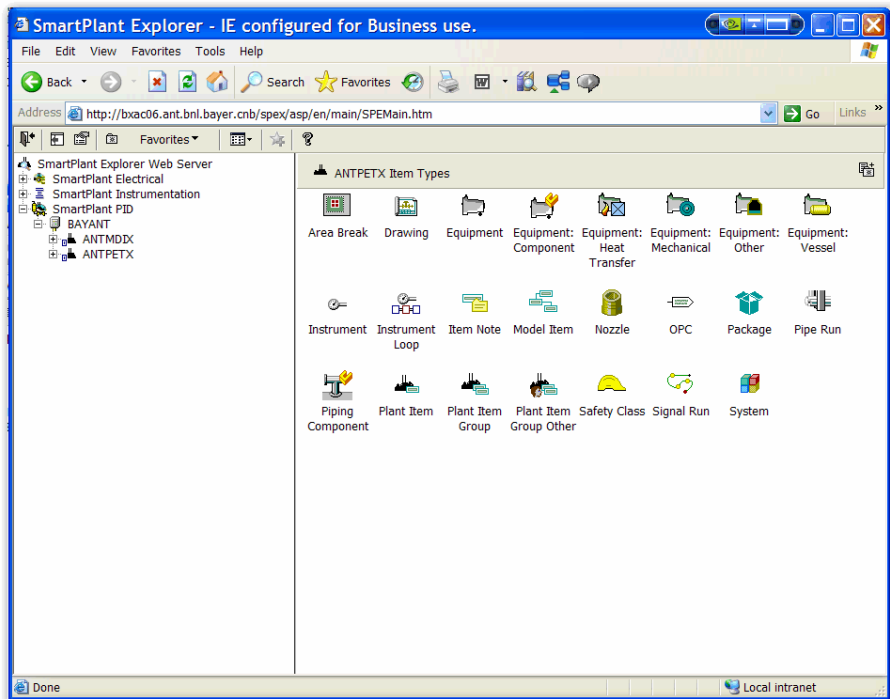
PDS ®

- Concurrent Engineering Antwerpen – BTS Germany – Contractor
- Use of the model 3D coordinates to estimate cable lengths
- Distribution of the model
 - Automatic overnight conversion from PDS to NavisWorks
 - Available to all using free and easy software
 - Including Tag and Line Data

Autodesk
NavisWorks® Freedom
The free viewer for NWD & 3D DWF files

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Equipment "ANTPETX-A371-AW03-RA010" for B...

ANTPETX-A371-AW03-RA010 - Equipment: Vessel

Alphabetic Categorized blan

Identification

Construction Plan Group 08_PMPO_Klaar 01-03-2009

Description Decanter voedingsvat

Documentum Link <http://bxai03.ant.bnl.bayer.cmb.8080/webtop/dri/objectId/0bc...>

Equip Class Vessel Equipment

Equip Subclass Vertical Drums

Equip Type Dished Bottom

Identification letters RA - Vessel with an Agitator

Webtop - IE configured for Business use.

File Edit View Favorites Tools Help

Address <http://bxai03.ant.bnl.bayer.cmb.8080/webtop/component/dri/objectId=0b001112810d0714&Reload=1252925710080>

SEARCH: [] Go [ADVANCED...]

Probleem met Documentum?
Bel 3000 of mail naar BE-Documentum

07 Technische uitrusting en gebouwen

- 07.01 Technische uitrusting
 - 07.01.01 Overzichtslijsten
 - 07.01.02 Uitrusting
 - 07.01.02.01 Apparaten
 - A371-AW03-RA010
 - Bestelling
 - Bestelspecificatie
 - Bijkomende info
 - Herstellingen, veranderingen
 - Inspectieverslagen
 - Jobkaarten
 - Tekeningen, stuklijsten
 - 150 more folders...
 - 07.01.02.02 Pompen
 - 07.01.02.03 Compressoren en ventiel.
 - 07.01.02.04 Roerders
 - 07.01.02.05 Filters
 - 07.01.02.06 Machines en transport...

FILE EDIT VIEW DOCUMENT

Cabinets PJJ-Antwerpen Polyeter 07 Technische uitrusting en gebouwen A371-AW03-RA010

Thumbnails

Name	Icon
Bestelling	[Icon]
Bestelspecificatie	[Icon]
Bijkomende info	[Icon]
Herstellingen, veranderingen	[Icon]
Inspectieverslagen	[Icon]
Jobkaarten	[Icon]
Tekeningen, stuklijsten	[Icon]
SmartPlant Explorer Link to A371...	[Icon]

Process area A371

Safety Relevant True

Short ItemTag Y8300

Sig Point 5 Description OH

Sig Point 6 Description OL

SP_Instrumentation_Link http://bxac06.ant.bnl.bayer.cmb/WCmain_ASP?WCI=GetReportByName&project=ANTPETX&plant=ANTAW03-Y8300&reportuid=RADSLOOP&profile=database

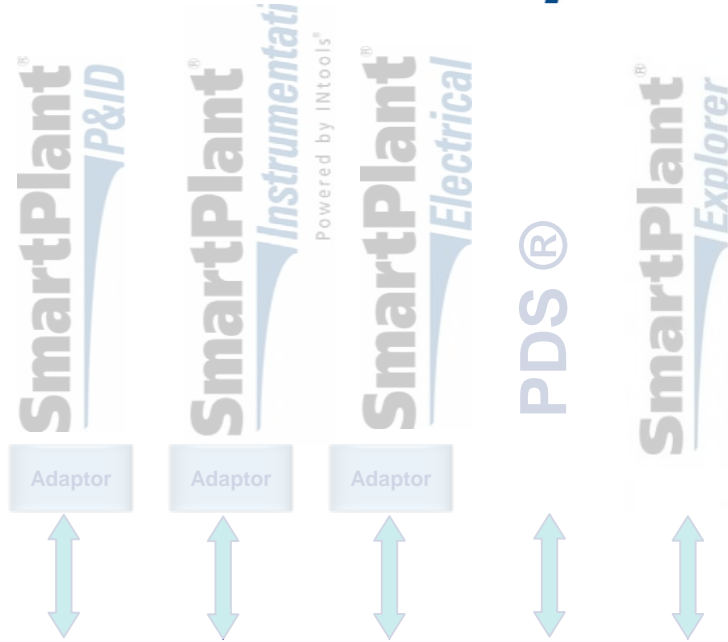
Subprocess AW03

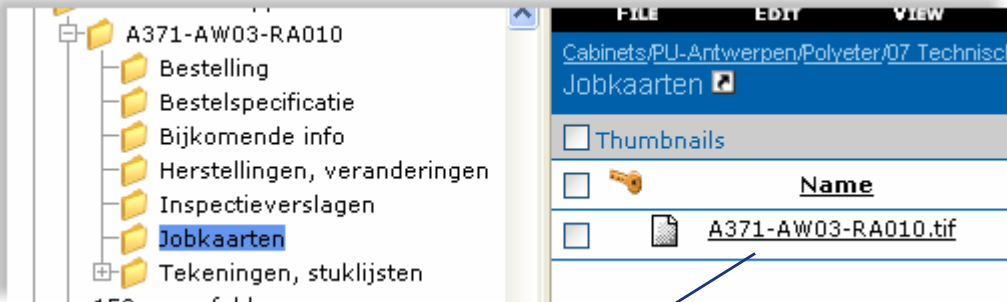
Tag Seq No 8300

Link to SPI
specsheat as PDF

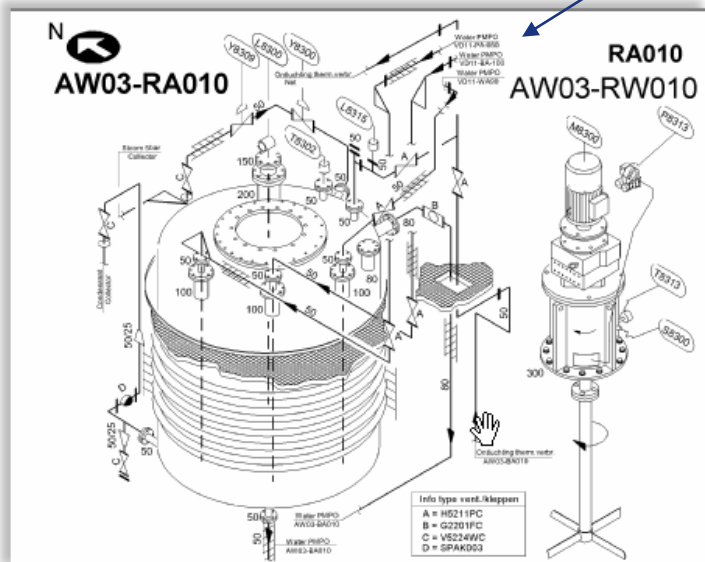
- Reports, reports, reports ...
- No software installation on client pc
- Viewing and reporting tool for plant maintenance, managers, operators, ...
- Easy-to-use web application

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AKZ as keyword for advanced search options



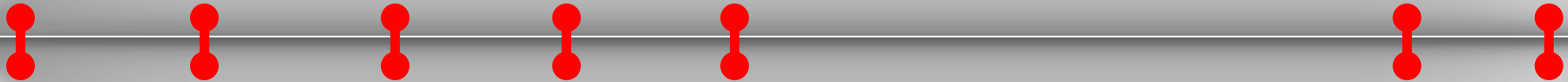
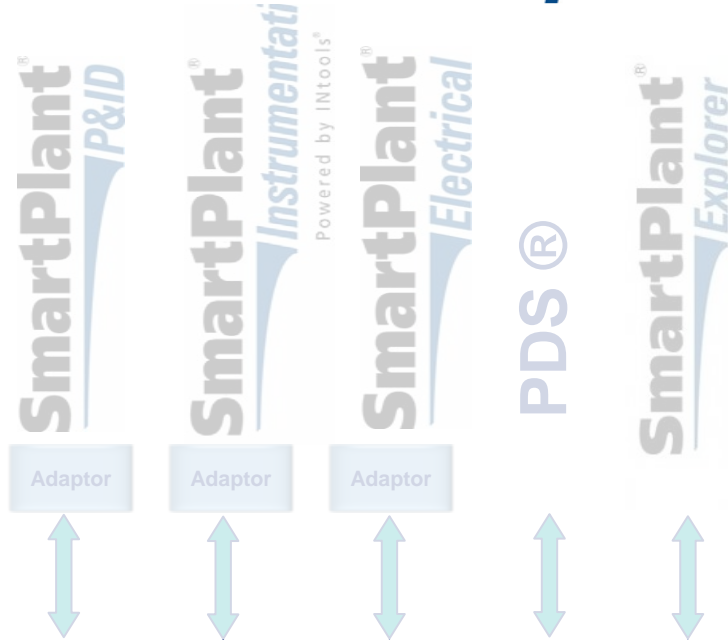
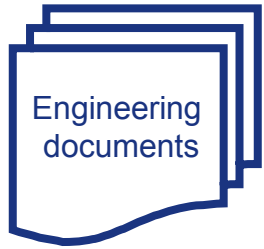
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 Type: tekening
 Format: tiff

Info
Tek
Details
Papier
Permissions
History

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 Title : Staalnamekoeler TAR
 Subject : Jobkaart
 Keywords : A092-DA10-BA520
 Authors :
 Full Content Size : 30192
 Owner Name : Van Den Broeck Edward (anbke)
 Version Label : 1.0, CURRENT
 Lock Date :

- BMS-Standard management system for as-built documentation
- Folder structure
- Connection with SAP possible

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Engineering documents (Excel)

- Gathering data from various databases for various reasons:
 - Reporting
 - Comparison
 - Data integrity checks
 - Database updates

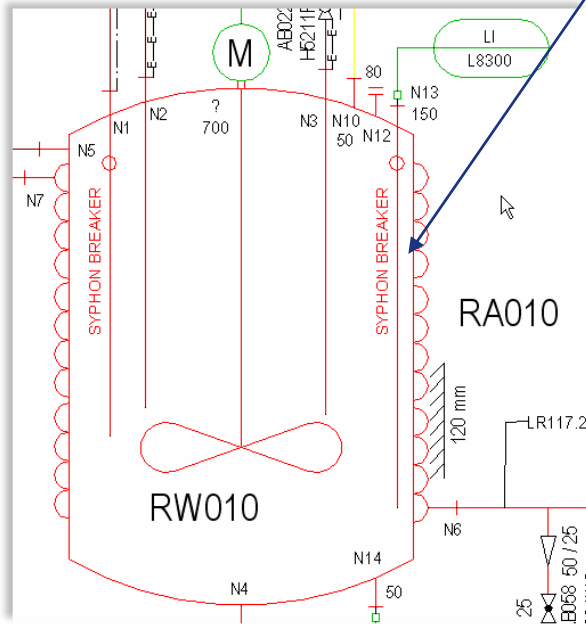
	A	B	C	D	E	F	G	H
1	ITEMTAG	EQP_TYPE	ID	SEQ	ALT_ITEMTAG	OMSCHRIJVING	PID_NR	TECHN_GEG_1
38	A371-AW03-RA010	Dished Bottom	RA	10		Decanter voedingsvat	413416	D=1600 mm
39	A371-AW03-RW010	Propeller agitator	RW	10		Roerder decanter voedingsvat	413416	n=173 1/min
40	A371-AW03-WA050	Spiral heat exchanger	WA	50		Verwarmer AW3 stripper	413465	D= 640 mm
41	A371-AW03-WA060	Column, general	WA	60		Condensator AW3 stripper	413465	D=273 mm
42	E092-ER21-BA020	Column, general	BA	20	ANTPET1-23/1.06	Condensaattank 9288	413471	
43	E092-ER21-PA020	Other Pump	PA	20	ANTPET1-23/7.03	Condensaatpomp 9288	413471	C=20 m³/h
44	E092-ER30-BA010	Dished Bottom	BA	10	ANTPET1-16/1.01	Koeltorenwatertank	P228043	D=1800 mm

SQL query 'refresh on open Excel'

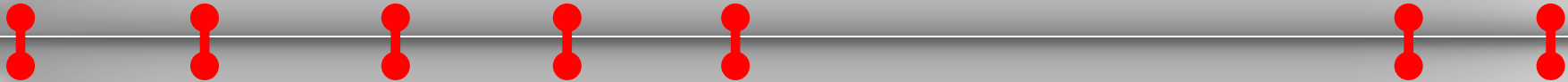
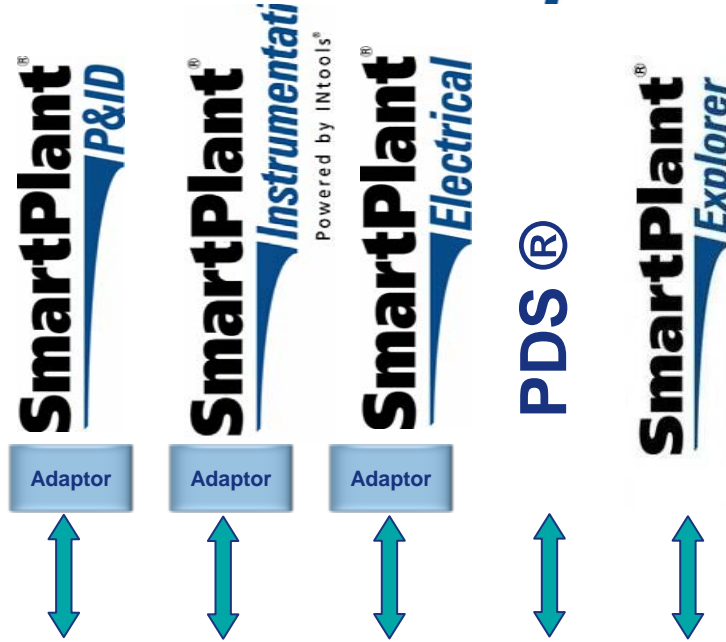
Engineering documents (Excel)

- Object links (URL) in Excel

	A	U	V	W
1	ITEMTAG	ISOLAT	SP_EXPLORER_LINK	Documentum_Link
38	A371-AW03-RA010	120	Link to A371-AW03-RA010	A371-AW03-RA010 in Documentum
39	A371-AW03-RW010		Link to A371-AW03-RW010	A371-AW03-RW010 in Documentum
40	A371-AW03-WA050		Link to A371-AW03-WA050	A371-AW03-WA050 in Documentum



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Thank you for your attention

