

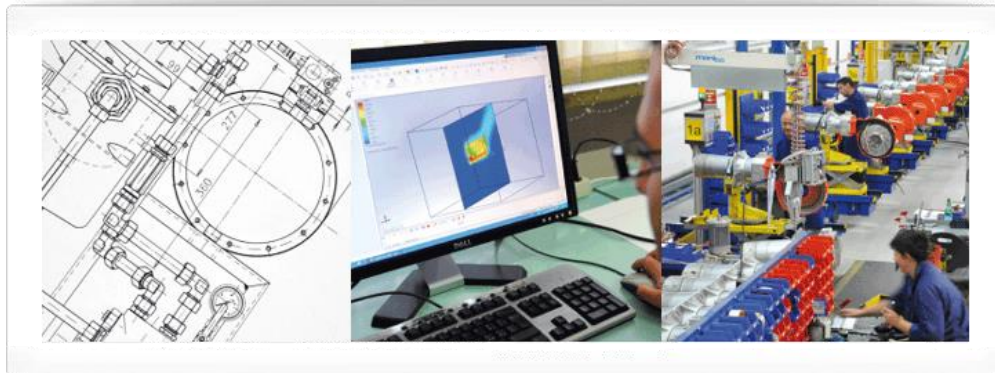
Out of the technical department

The Aras PLM implementation in Baltur, Italy

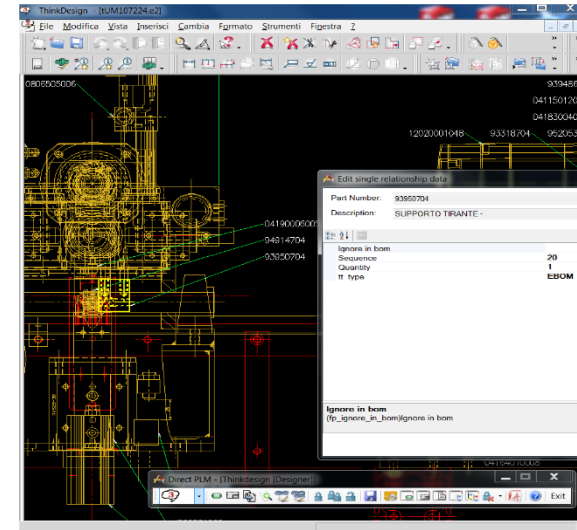
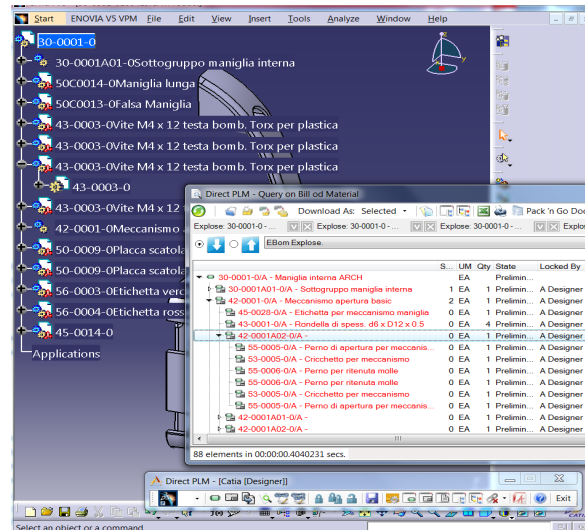
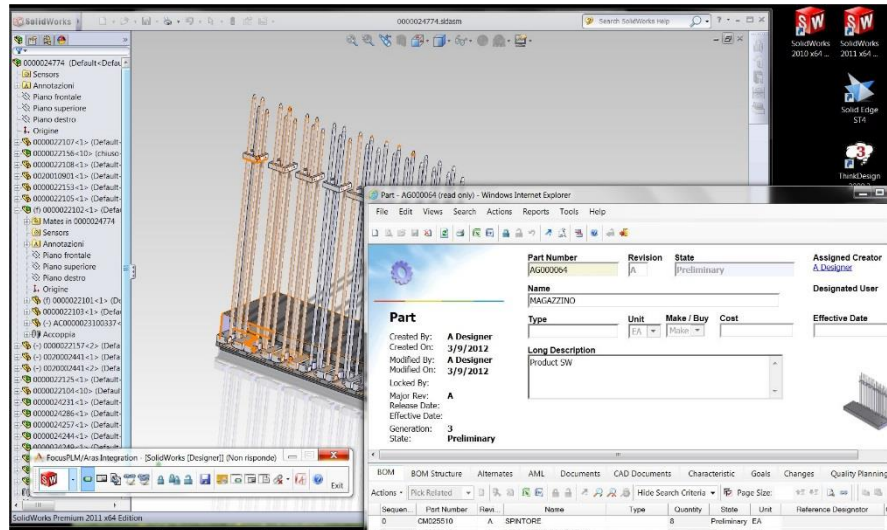
Virgilio Sisti – CAD/PLM manager Baltur s.p.a.

Sergio Salsedo – CEO Focus PLM s.r.l. salsedo@focusplm.it

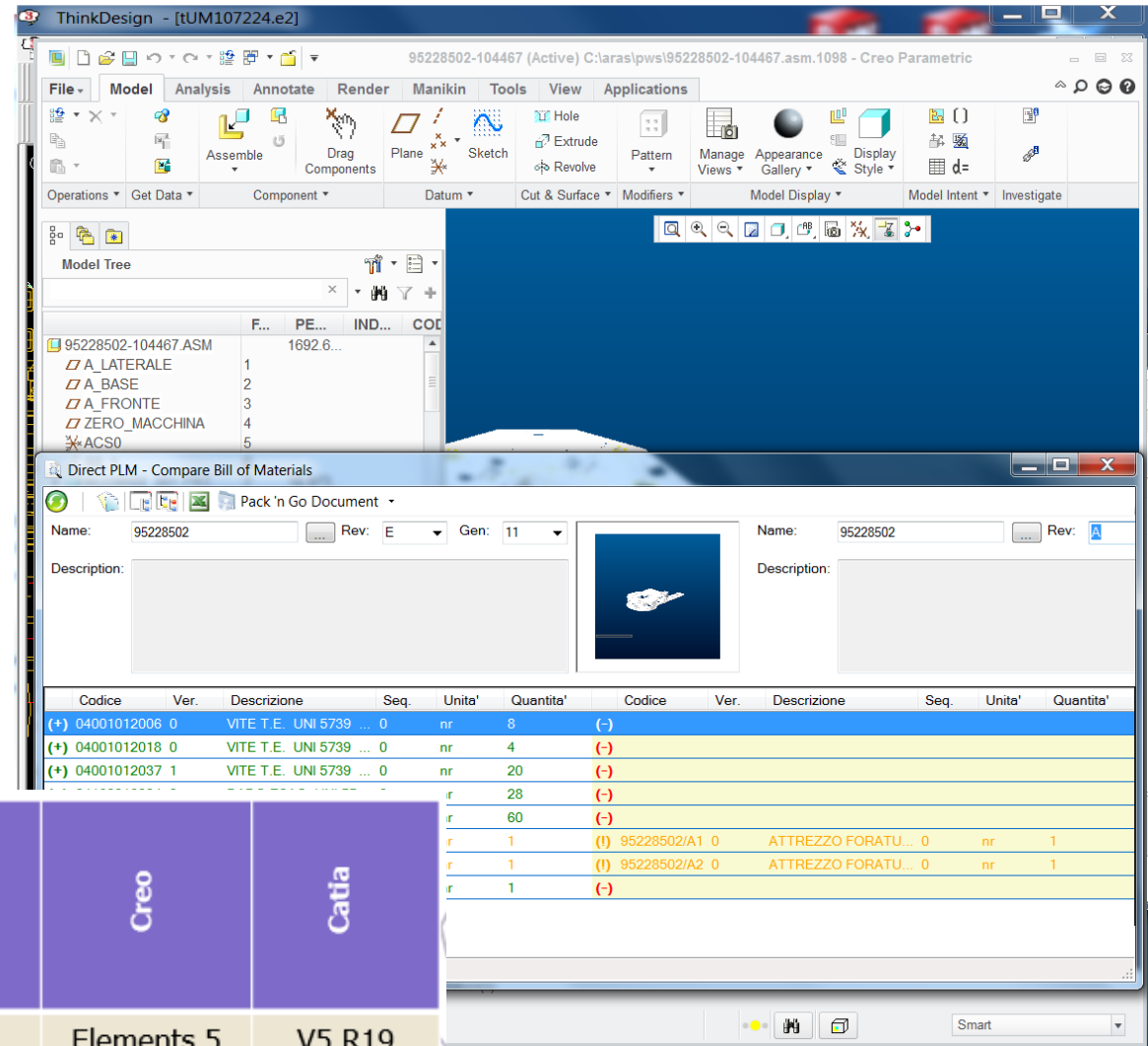
- Baltur is a leading company in the heating, ventilation and air conditioning (HVAC) market, located in Cento, Italy, with a more than 60-year long history
- Baltur's critical success factors are a strong focus on technology and innovation, and a broad range of high-quality, customizable products
- The company is organized around key internal competences (R&D, Quality, Product development) and relies upon an integrated network of external suppliers
- *Lean thinking* is applied both in production and in product definition



- Focus PLM is an Aras Gold Certified partner since 2011
- Based in Ferrara, Italy, delivers PLM implementations in Italy and other European countries
- Deep understanding of manufacturing industry processes and needs
- Develops and distributes thru the Aras network a full set of Aras/CAD connectors



- Solidworks
- Solid Edge
- Autocad
- Inventor
- thinkdesign
- Catia V5
- Creo Parametric, Creo Elements 5.0



	SolidWorks	Solid Edge	thinkdesign	Inventor	Autocad	Creo	Catia
Supported versions	2010 2011 2012 2013 2014	SE V20 ST2 to ST6	2009.3 and later	2012 2013 2014	2010 2011 2012 2013 2014	Elements 5 Parametric 1 Parametric 2	V5 R19 V5 R20 V5 R21

- At the end of 2011 Baltur decided to replace its legacy PDM with a real, enterprise-wide PLM
- Main selection criteria: functional coverage, ease of integration with other systems, support to extended enterprise (supply chain), investment profile
- At the same time Baltur decided to change their CAD system
- Software selection was supported by ***Politecnico di Milano***
- Very deep market analysis, complete functional analysis, lot of visits to real installations...

Offerta tecnologica: soluzioni analizzate

Vendor	PDM/PLM	Categoria prodotto
Engeeniring	Rule designer	PDM
Celestica	Celestica PDM	PDM
Autodesk	Vault Workgroup Professional /Product stream 2010	PDM
Dassault Systemes	Enterprise PDM	PDM
Progetto CAD (anche partner)	Documenta	PDM
NuVentures	PDMLynx	PDM
Siemens	Teamcenter express	cPDM
Dassault Systemes	Enovia v6	PLM
ARAS (Open Source)	Aras PLM Innovator	PLM
PTC	Windchill	PLM
Pdexpert PLM	PDXpert PLM	PLM
Softech	Product Center	PLM
SAP	MySAP PLM	PLM
Infor	Infor PLM 8	PLM

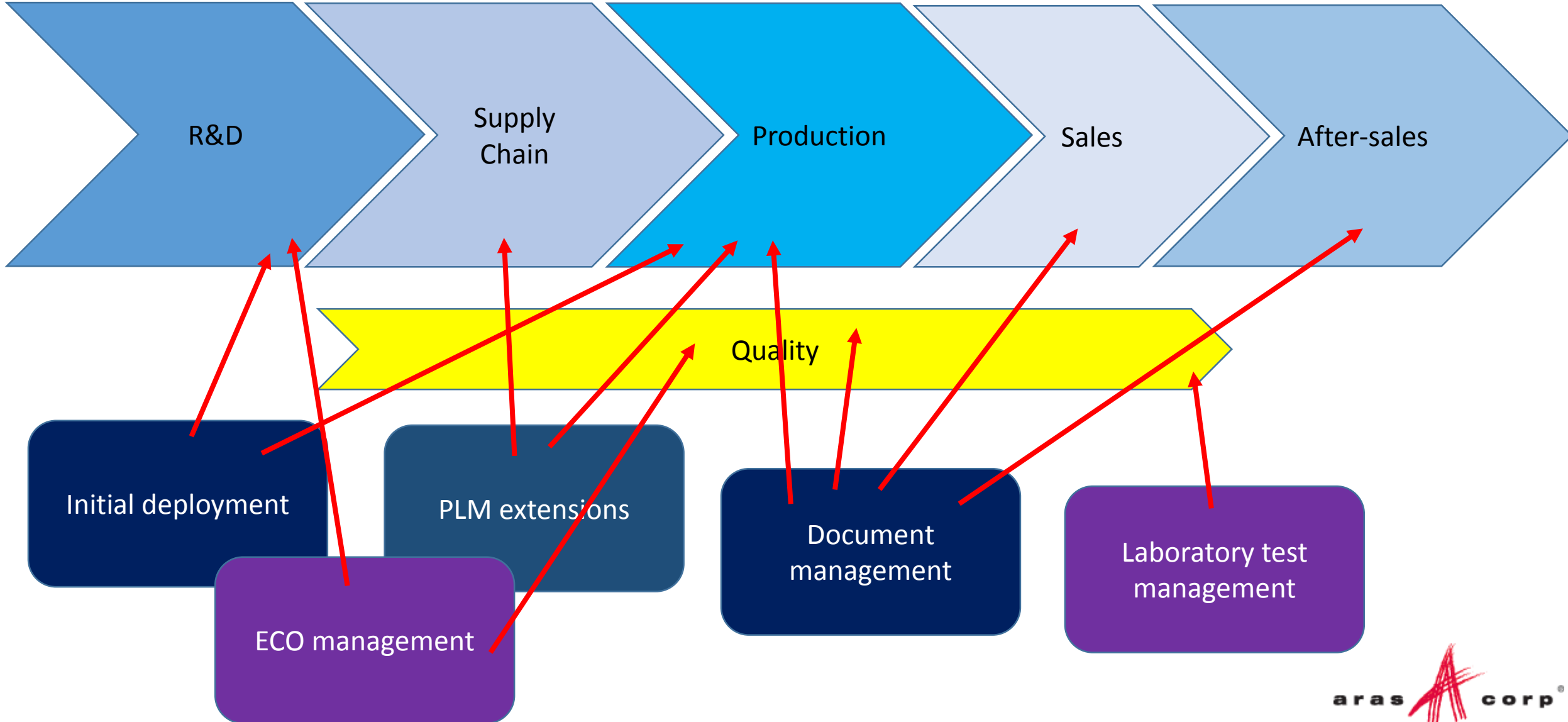
Offerta tecnologica analizzata: sintesi della valutazione

- Posizionamento qualitativo dei prodotti valutati



- At the end of 2011, Aras selected over competitors
- SolidWorks selected as new CAD
- Winning points for Aras were completeness of solution, openness, flexibility
- Competitive costs, favorable investment profile
- CAD neutrality was a plus (no CAD/PLM lock-in)
- Unique proposal as far as CAD replacement was concerned:
 - no massive conversion
 - keep using legacy CAD for consultation and evolutive maintenance of existing products
 - design new products with new CAD

- Initial deployment (CAD/PDM replacement) – begin 2012
- PLM extensions – mid 2012
 - Supply chain management
 - Product tag generation
 - MBOM management
- Technical department extension – end 2012
 - SolidWorks Toolbox integration
- IGE-XAO ECAD integration – mid 2013
- Document management – end 2013
- ECO management – begin 2014
- Migration to Aras 10 – mid 2014
- Laboratory test management – mid 2014



- Full conversion of legacy database (part and document data, BOMs, all revisions)
- Multi-CAD support (SolidWorks, thinkdesign) thru Focus PLM connectors
- Automatic PDF generation and update
- Bi-directional integration with ERP (Infor)
- No CAD data conversion. Legacy CAD data imported in Aras “as is”, can be accessed via connectors for consultation and evolutivity maintenance
- Same graphic user interface for both CAD’s

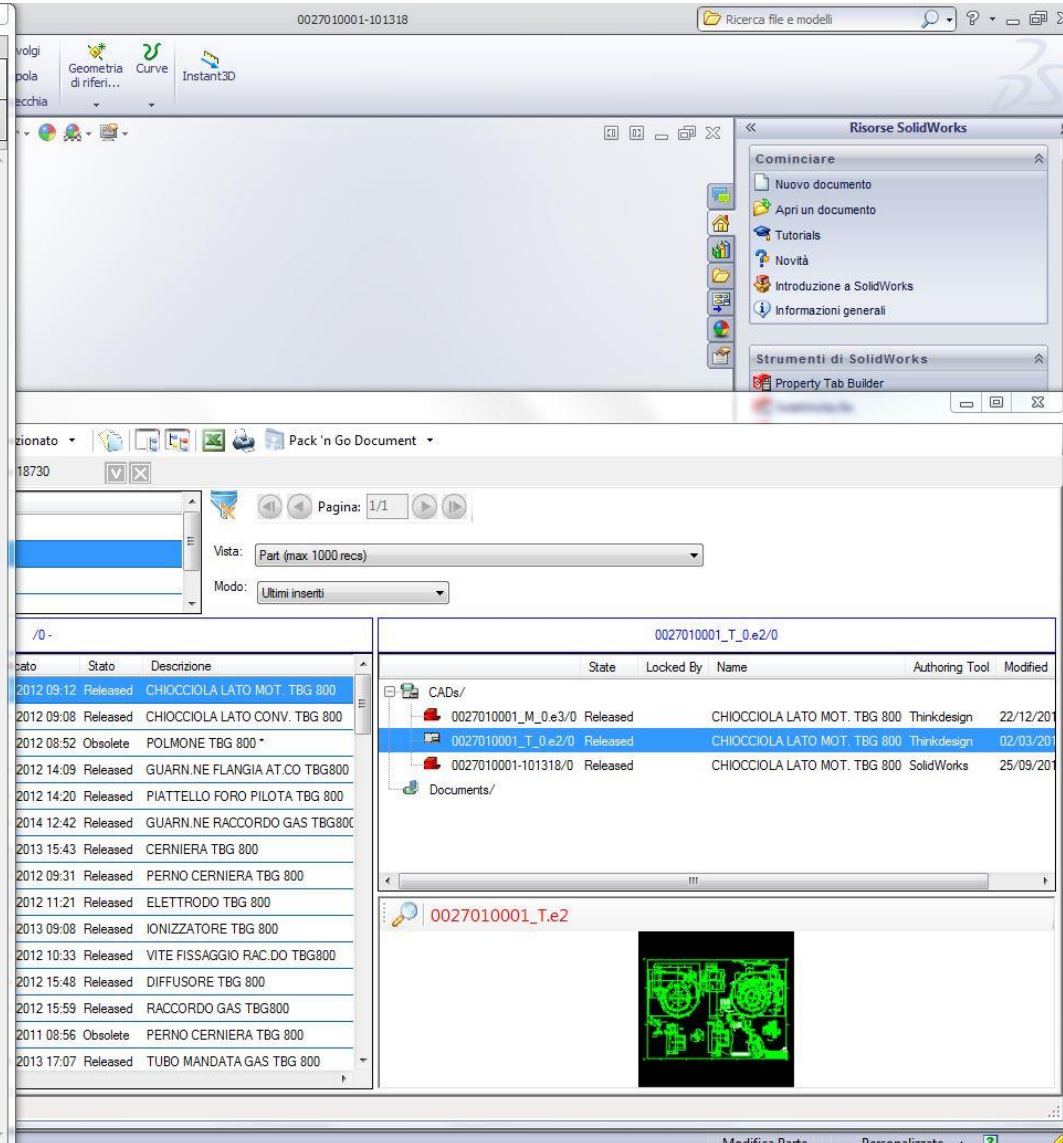
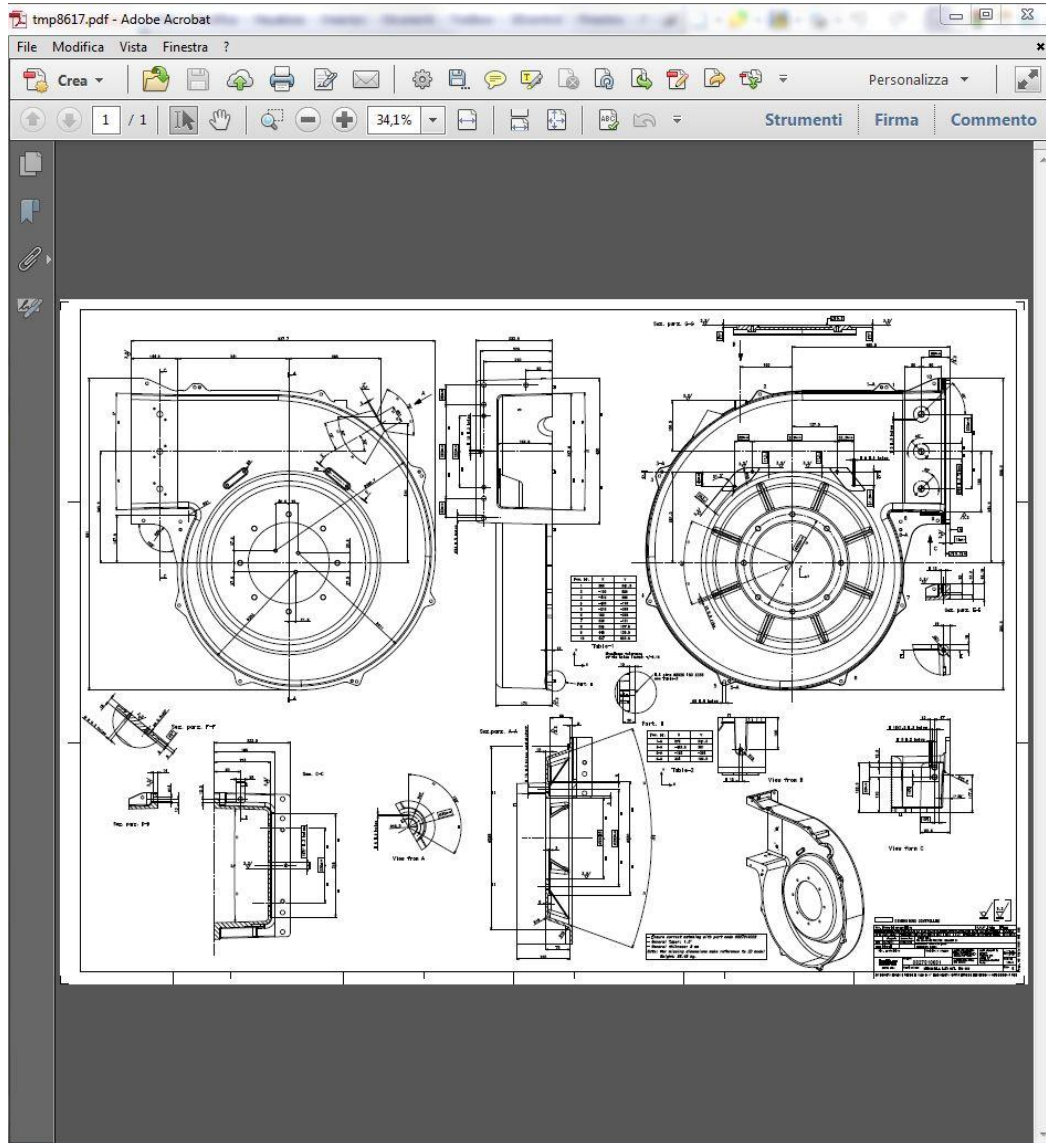
The screenshot displays the SolidWorks CAD environment. The main workspace shows a 3D model of a green mechanical component. The left-hand side contains the Feature Tree, listing various features like 'Sensori', 'Annotazioni', and 'Corpi solidi(5)'. The top of the window features a ribbon with various toolbars and a search bar. Two blue callout boxes are overlaid on the image: one labeled 'Part' pointing to the 'Risorsa SolidWorks' panel, and another labeled 'Related (multi) CAD data' pointing to the 'Direct PLM - Vista sulle parti' window.

Direct PLM - Vista sulle parti

Filtro	Operatore	Valore
Number	Circa	002701*
Name	Circa	
Description	Circa	
State	=	

Codice	Rev	Data	Modificato	Stato	Descrizione
0027010001	0	14/06/2011 02:00	02/03/2012 09:12	Released	CHIOCCIOLA LATO MOT. TBG 800
0027010002	0	14/06/2011 02:00	02/03/2012 09:08	Released	CHIOCCIOLA LATO CONV. TBG 800
0027010003	2	07/03/2012 01:00	08/03/2012 08:52	Obsolete	POLMONE TBG 800 *
0027010004	0	18/07/2011 02:00	10/10/2012 14:09	Released	GUARN.NE FLANGIA AT.CO TBG800
0027010005	1	02/03/2012 01:00	10/10/2012 14:20	Released	PIATTELLO FORO PILOTA TBG 800
0027010006	1	21/05/2014 12:42	21/05/2014 12:42	Released	GUARN.NE RACCORDO GAS TBG800
0027010007	1	04/03/2013 10:47	15/03/2013 15:43	Released	CERNIERA TBG 800
0027010008	1	06/02/2012 01:00	27/12/2012 09:31	Released	PERNO CERNIERA TBG 800
0027010009	0	15/11/2011 01:00	20/12/2012 11:21	Released	ELETTRODO TBG 800
0027010010	0		08/03/2013 09:08	Released	IONIZZATORE TBG 800
0027010011	1	01/08/2011 02:00	27/12/2012 10:33	Released	VITE FISSAGGIO RAC.DO TBG800
0027010012	1	28/02/2011 01:00	10/10/2012 15:48	Released	DIFFUSORE TBG 800
0027010013	0	26/01/2012 01:00	10/10/2012 15:59	Released	RACCORDO GAS TBG800
0027010014	0	24/11/2011 01:00	25/11/2011 08:56	Obsolete	PERNO CERNIERA TBG 800
0027010015	4	01/08/2013 17:07	01/08/2013 17:07	Released	TUBO MANDATA GAS TBG 800

CADs/	State	Locked By	Name	Authoring Tool	Modified
0027010001_M_0.e3/0	Released		CHIOCCIOLA LATO MOT. TBG 800	Thinkdesign	22/12/2011
0027010001_T_0.e2/0	Released		CHIOCCIOLA LATO MOT. TBG 800	Thinkdesign	02/03/2012
0027010001-101318/0	Released		CHIOCCIOLA LATO MOT. TBG 800	SolidWorks	25/09/2012



File Modifica Visualizza Inserisci Strumenti Toolbox 3Dcontrol Finestra ? 67220010-04199 * Ricerca file e modelli

Modifica componente Inserisci componenti Accoppia Ripetizione del ... Smart Fasteners Sposta componente Mostra componenti nascosti Funzioni di ass... Geometria di riferi... Nuovo studio di movimento Distinta materiali Vista esp...

Assieme Layout Schizzo Valutare Prodotti Office

67220010-04199 (Default<Stato di visualizz...)

- Sensori
- Annotazioni
- Piano frontale
- Piano superiore
- Piano destro
- Origine
- (+) 0006110420-04197 <1> (Default<Sta...
- (+) 0027010063-101302 <1> (Default<cl...
- Accoppiamenti in 67220010-04199
- Sensori
- Annotazioni
- LEGA EN AB 45000 (ex SGAICu3* UNI:7...
- Piano frontale
- Piano superiore
- Piano destro
- Origine
- Importato6
- Superficie-Importato1
- Spessore1
- Superficie-Importato2
- Spessore2
- Superficie-Importato3
- Spessore3
- Sformo1
- Taglio-Estrusione1
- Taglio-Estrusione2
- Taglio-Estrusione3
- Taglio-Estrusione4
- Taglio-Estrusione5
- Piano1
- Piano2
- Taglio-Estrusione6
- Piano3
- Piano4
- Taglio-Estrusione7
- Piano5
- Taglio-Estrusione8
- Piano6
- Piano7
- Taglio-Estrusione9
- Piano8
- Estrusione-Estrusione1
- Estrusione-Estrusione2

File di versione precedente
Questo file sarà convertito al salvataggio.

Risorse SolidWorks

Cominciare

- Nuovo do...
- Apri un d...
- Tutorials
- Novità
- Introduzi...
- Informazi...

Hierarchical EBOM

Direct PLM - Vista sulla distinta base

Esplora: 67220010 - (CDesc) [v] [x]

EBom Explode.

	Seq	UM	Qty	State
67220010/0 - TBG 800ME	N			Release
30178/- VITE TE 6X12 UNI5739/Z	0	NR	6	Release
0027010051/- TARG.ADES. BALTUR TBG800	0	NR	1	Release
0027010038/- ANELLO CONV.RE ARIA TBG800	0	NR	1	Release
30213/- ROSETTA M 8 UNI6592/7,4X16	0	NR	12	Release
5063/- VITE TE 8X35 UNI5739/Z	0	NR	4	Release
23092/- VITE TE 5X8 UNI5739/Z	0	NR	4	Release
0027010037/- FLANGIA SOP.TO ANELLO CONVOGL.	0	NR	1	Release
30467/- GOLFARE MASCHIO M12 UNI2947/Z	0	NR	3	Release
0027010040/- STAFFA ANTER. QUADRO TBG800	0	NR	1	Supers...
0027010047/- AS.CHIOCCIOLA TBG 800 *	0	NR	1	Obsolet...
30612/- RONDELLA D.E. M 8 DIN6798-A	1	NR	20	Release
4908/- DADO M 8 UNI5588/Z	2	NR	10	Release
5159/- VITE TE 8X45 UNI5739/Z	3	NR	10	Release
0027010001/- CHIOCCIOLA LATO MOT. TBG 800	4	NR	1	Release
0027010002/- CHIOCCIOLA LATO CONV. TBG 800	5	NR	1	Release
30467/- GOLFARE MASCHIO M12 UNI2947/Z	0	NR	3	Release

421 elementi in 00:00:02.0452045 sec.

67220010_M/0

67220010_T/0 Released

67220010-04199/0 Released

67220010-100119/0 Released

Documents/

0002993398/2 In Change

TBG 800 ME 50Hz rev.4.pdf/A

67220010_M.e3

Related (multi) CAD data

Related non-CAD data

Servizi di abt

Servizi di abbonamento

Suggerimento del giorno

Parte - 0030090098 (sola lettura) - Windows Internet Explorer

File Edita Viste Cerca Azioni Rapporti Strumenti Aiuto

Stato Particolare: 0 - Finito
Classificazione: Meccanici
Tipo Famiglia: 030 - Caldaie
Tipo Prodotto: 09 - ACCESSORI BATTERIE SUPER GENIO
Part Number: 0030090098
Rev: 0
Stato PDM: Released
Descr. Breve: STAFFA X SCHEDA OPENTHERM
U.Mis: NR
Valido Dal: []
Make / Buy: Buy
Conto Lav.: []
Linked ECO: []
Fornitore: 00023114 TECNOLASER S.R.L.
Descr. Modifica: PRIMA EMISSIONE
ECO: []
CAD Model: []
CAD Drawing: Restrizione
Peso CAD (Netto): 0
Creato Da: Michele Ferioli
Creato Il: 12/12/2013 11:18:17
Modificato Da: []

Trasmissione nuovo disegno per lavorazione - Messaggio (Testo normale)

Da: XDisegniFornitori
A: stelvio.rocchi@tecnolaser.com
Cc: XDisegniFornitori
Oggetto: Trasmissione nuovo disegno per lavorazione
Inviato: martedì 23/09/2014 16:47

ATTENZIONE: QUESTA E' UNA MAIL AUTOMATICA.

0030090098/0 - STAFFA X SCHEDA OPENTHERM is now in state Released.

Vogliate prendere atto del nuovo disegno e provvedere all'aggiornamento dei nostri disegni in vostro possesso. L'introduzione delle modifiche si intende immediata quindi dalla prima fornitura effettuata dalla data presente. N.B. Ordini in corso di lavorazione, che riportano un indice di revisione precedente il presente invio, saranno da concordare con il nostro Uff. Tecnico.

Questo messaggio, con gli eventuali allegati, contiene informazioni riservate. Chiunque lo ricevesse pur non essendone il destinatario è pregato di avvisare al più presto il mittente, via e-mail, di cancellarlo dal proprio sistema e di non copiarlo, diffonderne il contenuto o utilizzarlo in alcun modo. This email and any files transmitted with it are confidential. If you are not the intended recipient of this email, please notify the sender by return e-mail and delete it from your system immediately; you should not copy, disclose or use either it or its attachments in any way whatsoever.

CAD Documents BOM BOM Structure Documents Changes Pr

Codice Documento	Revisi..	File Preview [...]	File in formata..	Descr. Breve	Stato
0030090098-105773				faccia O.T.	Released

Preferred supplier

Automatic mail sent at release

The screenshot displays the Infor LN Web UI interface. On the left, a 'Targhetta prodotto' form is visible, showing classification details for 'Bruciatori' (Burners) with code 67220010. The main window shows a navigation tree on the left and a data table on the right. A yellow arrow points from the 'Dati Tecnici Etichette' menu item in the tree to the corresponding table.

File	Modifica	Visualizza	Strumenti	Specifico	Guida in linea
Codice	Revisione PDM	Tipo Prodotto Finito	Data Approvazione	Codice	
67220010					
67220010	7	Bruciatori	20140312121559		

- Manuals
- Spare parts
- Technical instructions
- Certification data
- Validation forms...

- Implementation replaced an ad-hoc system based on Lotus-Notes

Aras Innovator - Windows Internet Explorer

aras INNOVATOR® ORA LOCALE mercoledì 15 ottobre 2014 16:47

File Modifica Visualizza Ricerca Azioni Reports Strumenti Aiuto

Simple Search 2000 Current

Codice Documento	Revisi..	Description	Release Date [...]	Stato
0006150000	0	MANUALE COLLEGGIO RAMPE E RETI GAS	27/09/2013 10:13:17	Released
0006150008	0	SCHEDA SULLA PERICOLOSITA DELLE SOSTANZE	17/09/2013 15:00:04	Released
0006150009	0	ELENCO RAMPE GAS	30/09/2013 13:53:44	Released

http://plm.baltur.cento.local/InnovatorServer/vault/vaultserver.aspx?dbName=ArasBaltur&fileId=E - Windows Internet Exp...

IT EN ZH SCHEMA TECNICA

SOSTITUZIONE CAMMA MECCANICA MODULATORE TBG 1100 MC
REPLACEMENT MECHANICAL CAM MODULATOR TBG 1100 MC
 更换TBG 1100 MC机械凸轮比例调节部件

Ready Virgilio Sisti plm.baltur.cento.local ArasBaltur Entita 1-24 di 24. Pagin... Messages: 1 16:47

- Operational since January 1st 2014
- 280 ECOs handled
- 240 PRs

PR - PR-00000215 (sola lettura) - Windows Internet Explorer

File Edita Viste Cerca Azioni Rapporti Strumenti Aiuto

PR

PR Number: PR-00000215
Titolo: Inserire n. 2 fori Ø 5,5 a 10 mm tra loro
Stato: Closed

Descrizione Del Problema
In linea non riescono a montare lo spessore staffa elettrodi sul tubo mandata gas cod. 0012120053 a causa della mancanza dei 2 fori Ø 5,5.
Dettaglio con i richiedenti di inserire n. 2 fori Ø 5,5 a 10.

Descrizione Della Priorita'
Priorita'
 1
 2
 3
 4

Creato Da: Matteo Neri
Creato Il: 18/09/2014
Modificato Da: Virgilio Sisti
Modificato Il: 29/09/2014
Impegnato Da:

Codice Parte: [57237](#)
Creato Da: [Matteo Neri](#)
Owner PR:

Azioni Finali Intraprese

Files

Actions Create Related

File Name	Sequence
Richiesta di modifica cod. 57237.msg	1

Ready Entita 1-1 di 1. Pagina 1 di 1 Aras Innovator

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Prova Num.	143GAS		BRUCIATORE:			CALDAIA:			COMBUSTIBILE:					
2	Cliente	BALTUR		Modello	Genio tecnic 30		Modello	Genio Tecnic TS 30B		Combustib	G20				
3	N.Ric.Prova			Codice			Tipo	TS 30B		PCalSup	37,78				
4	Data Inizio	30/07/98		Costruttore	Baltur		Costruttore	BALTUR		PCalSupU	MJ/m3				
5	Operatore			PotenzMin	18,5		Caldaia			PCalInf	34,02				
6				PotenzMa:	34,6		PotMax			PCalInfUM	MJ/m3				
7				Note1	bruciatore modulante		PotMin			CO2Max					
8				Note2			PResa			Wobbe	45,67				
9				Note3			Rend			Densita					
10				Note4			Pcc			DensUM					
11							PLimite			DensTemp					
12							PMax100			Viscosita	0,555				
13							PMin60			ViscosUM					
14							PMin30			ViscosTemp					
15							Gender	21334		Zolfo					
16										K1					
17										A1					
18										B					
19										A					
20										CoeffCO					
21										CoeffNOx					
22										CoeffHC					
23										CoeffSO					
24															
25															
26															
27															
28															
29															
30															

Implementation replaced and in-house application

- Project definition and follow up managed by Baltur CAD/PLM manager
- A designer involved (part-time) in internal support to users
- Required internal effort evaluated in approx. 2 x 10% on the average
- Implementation and enhancements carried out by Focus PLM
- Migration to Aras 10 seamless, switch-over during a week-end

- Aras lived up to Baltur expectations
- The right system to ensure an incremental transition from PDM to full-fledged enterprise PLM
- More and more company processes are being moved into the PLM
- Data redundancy and dispersion greatly reduced
- No additional costs when features are added
- Still a lot of potential for future expansions

Q&A

Thanks!!!