Out of the technical department

The Aras PLM implementation in Baltur, Italy

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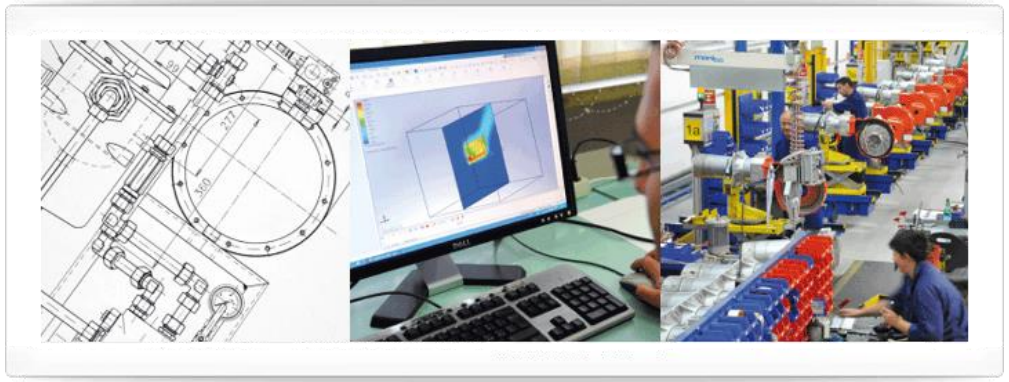
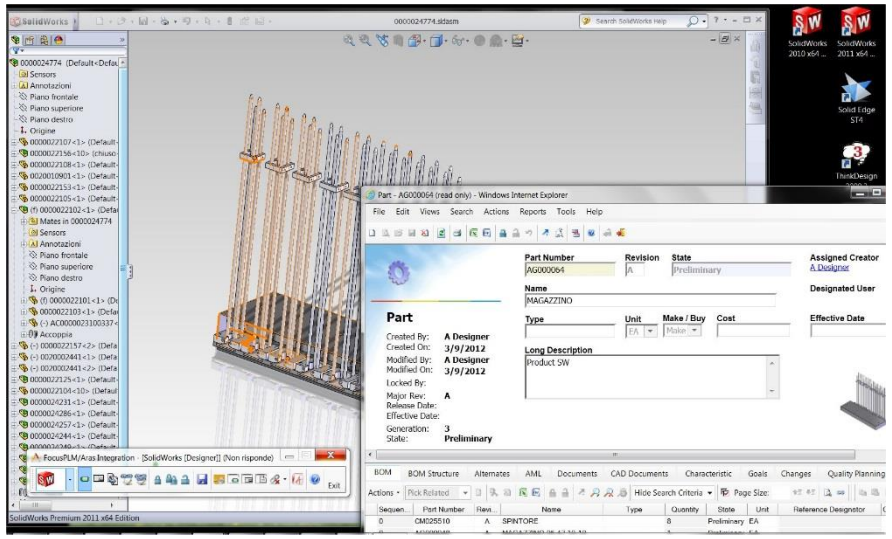
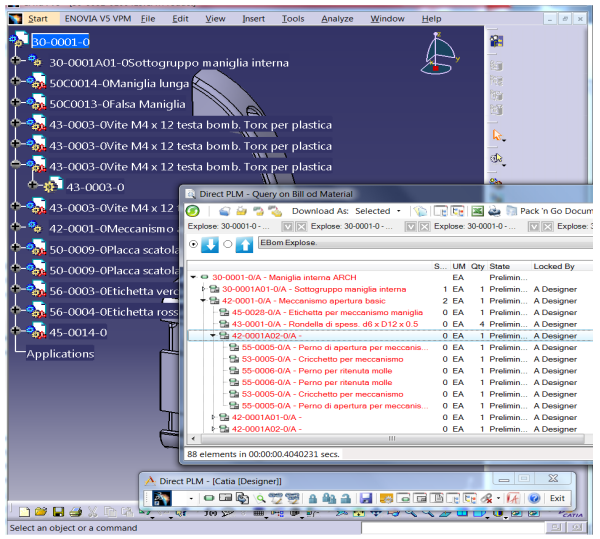
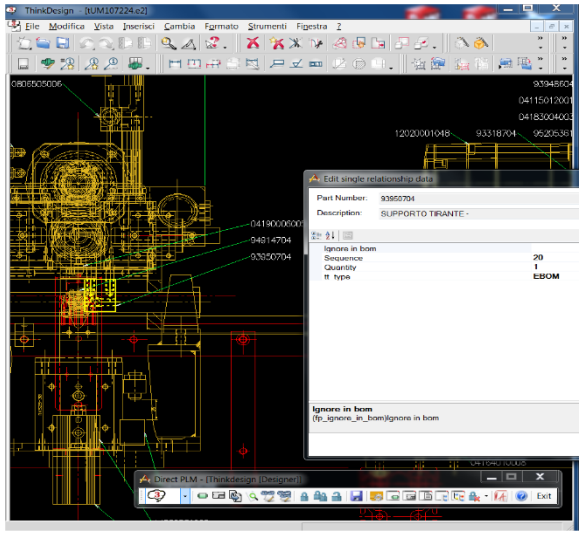
- Baltur is a leading company in the heating, ventilation and air conditioning (HVAC) market, located in Cento, Italy, with a more than 60-year long history
- Baltur's critical success factors are a strong focus on technology and innovation, and a broad range of high-quality, customizable products
- 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



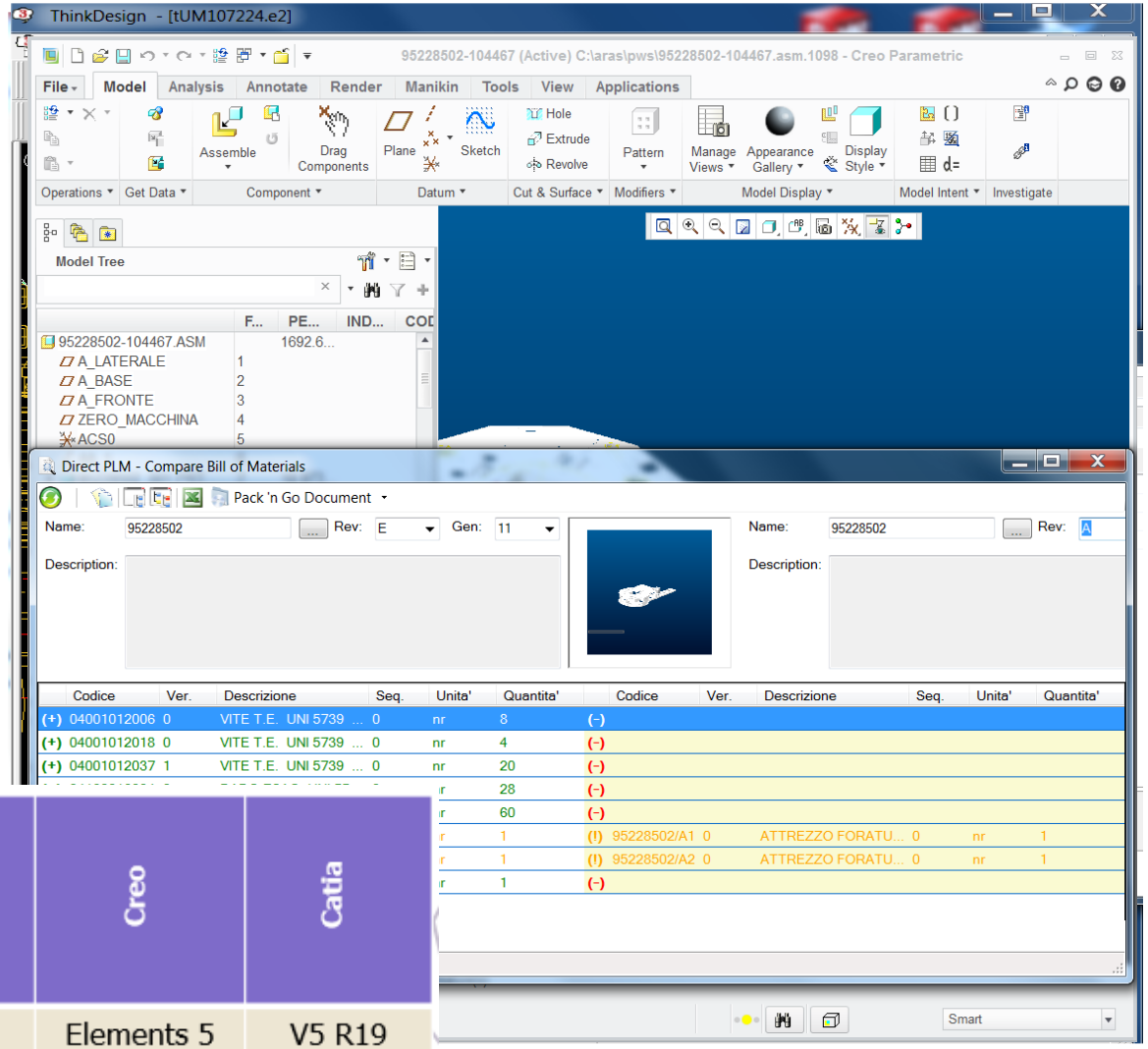




aras corp

CAD coverage

- 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

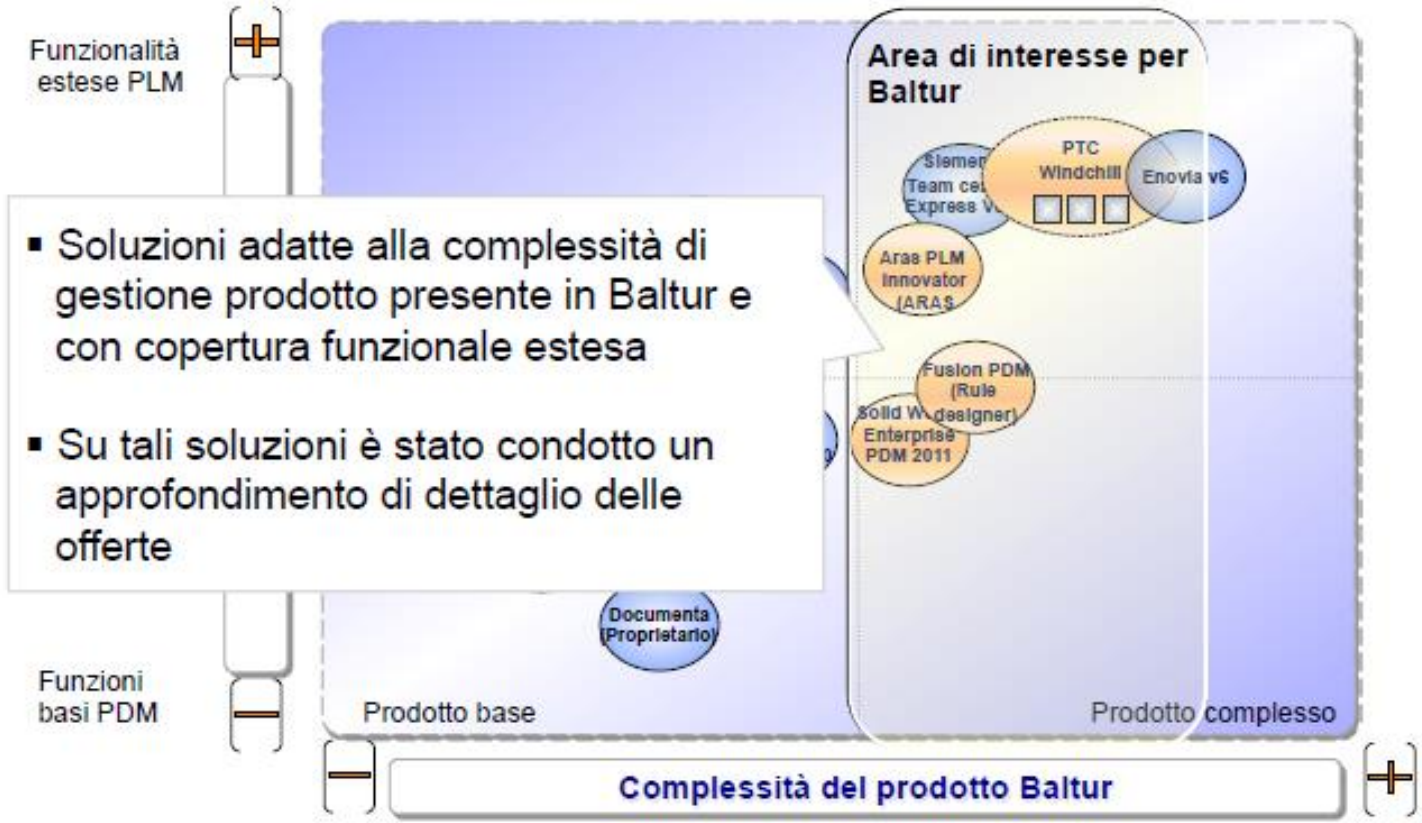
- At the end of 2011 Baltur decided to replace its legacy PDM with a real, enterprise-wide PLM
- Main selection criteria: functional coverage, ease of integration with other systems, support to extended enterprise (supply chain), investment profile
- At the same time Baltur decided to change their CAD 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
Pdxpert PLM	PDXpert PLM	PLM
Softech	Product Center	PLM
SAP	MySAP PLM	PLM
Infor	Infor PLM 8	PLM

Offerta tecnologica analizzata: sintesi della valutazione

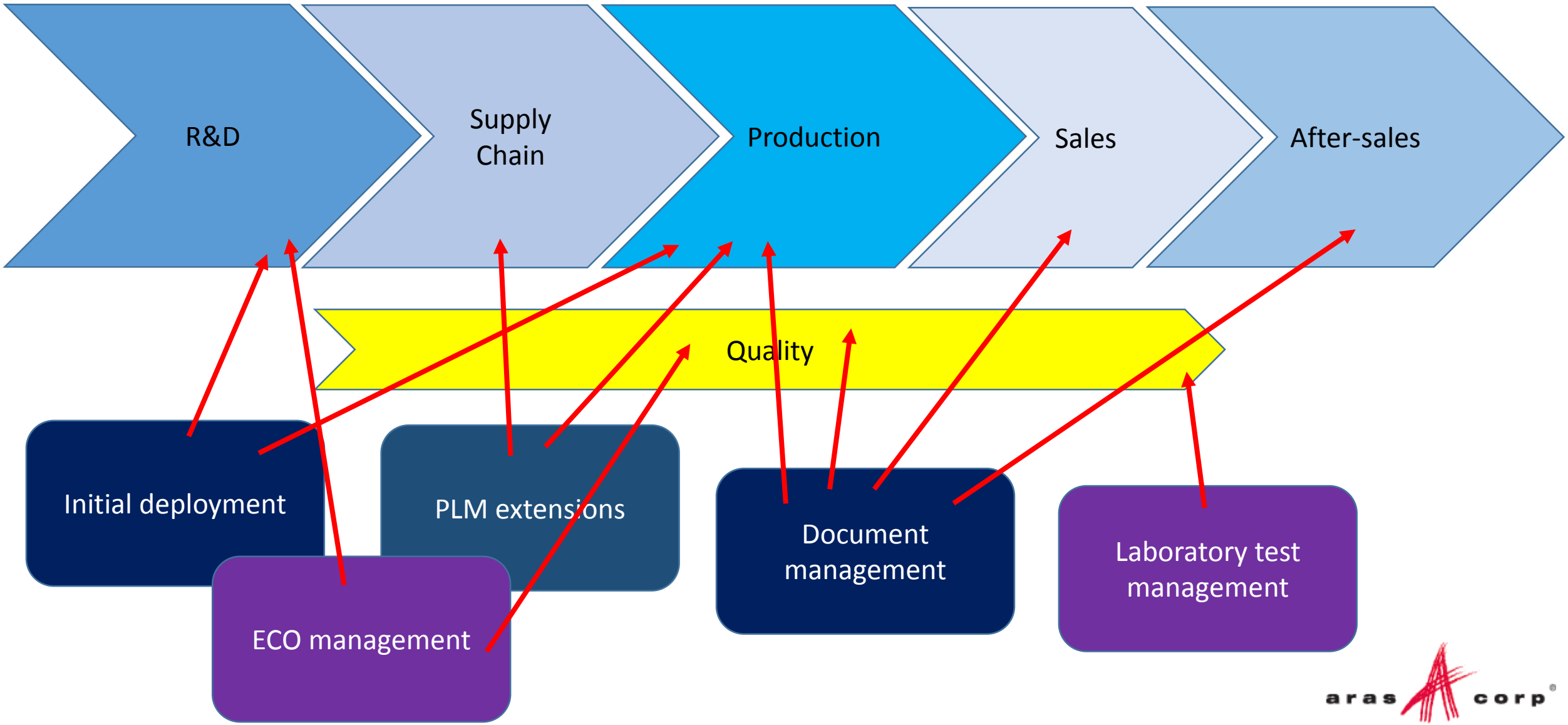
- Posizionamento qualitativo dei prodotti valutati



- Soluzioni adatte alla complessità di gestione prodotto presente in Baltur e con copertura funzionale estesa
- Su tali soluzioni è stato condotto un approfondimento di dettaglio delle offerte

- 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

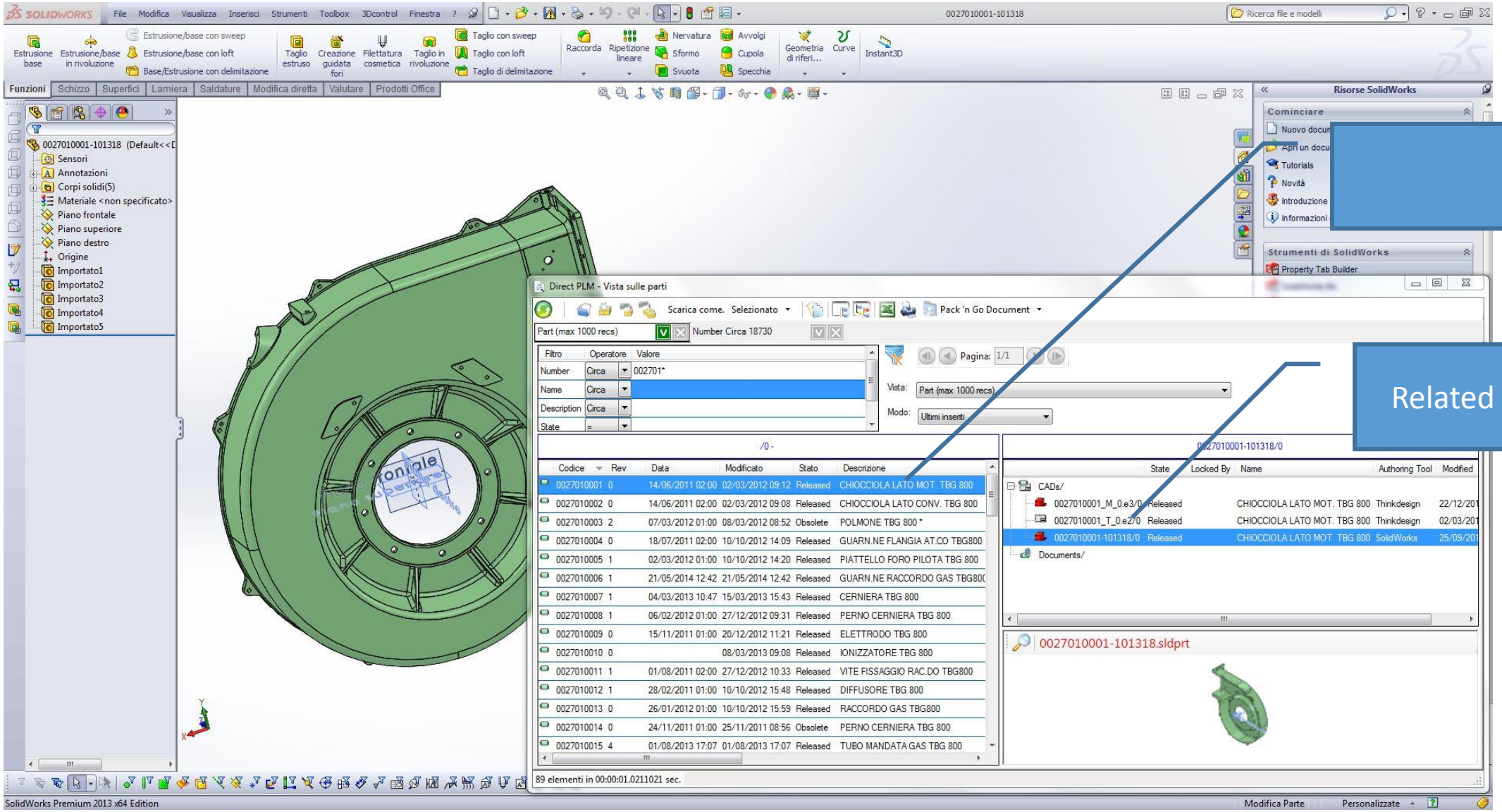
- Initial deployment (CAD/PDM replacement) – begin 2012
- PLM extensions – mid 2012
  - Supply chain management
  - Product tag generation
  - MBOM management
- Technical department extension – end 2012
  - SolidWorks Toolbox integration
- IGE-XAO ECAD integration – mid 2013
- Document management – end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


R&D
Supply Chain
Production
Sales
After-sales
Quality
Initial deployment
PLM extensions
Document management
Laboratory test management
ECO management

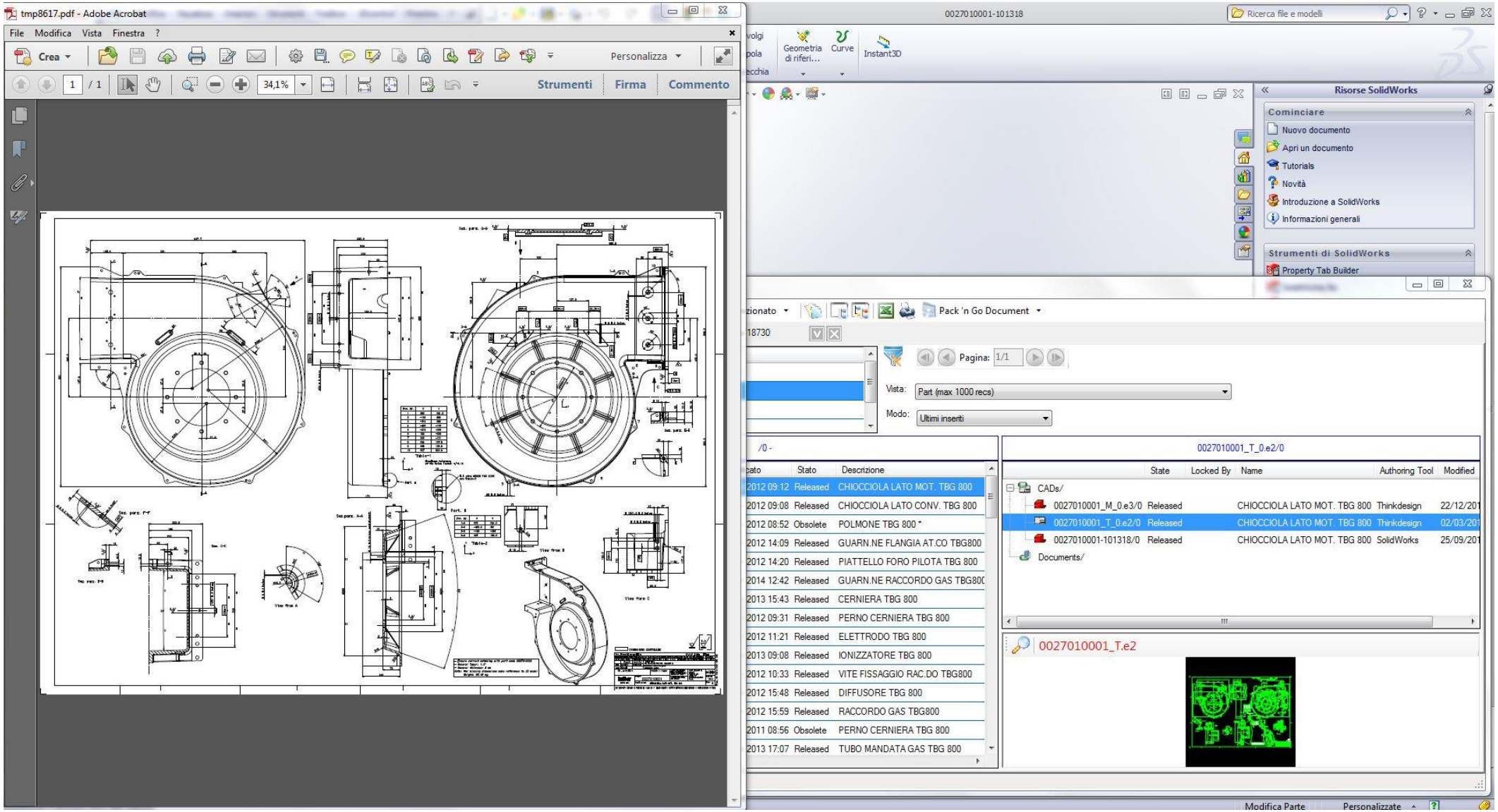
Initial deployment

- 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

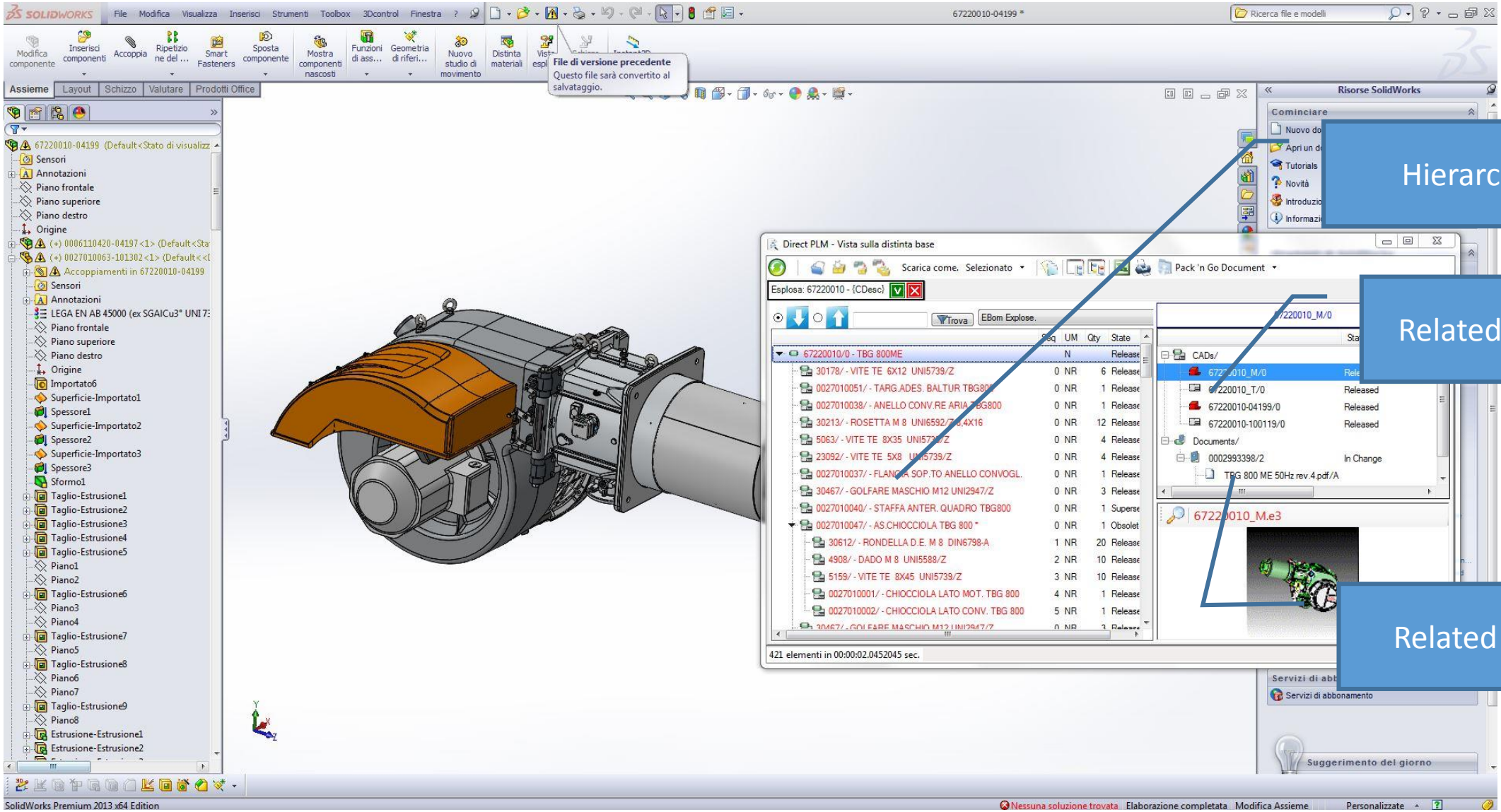
CAD integration



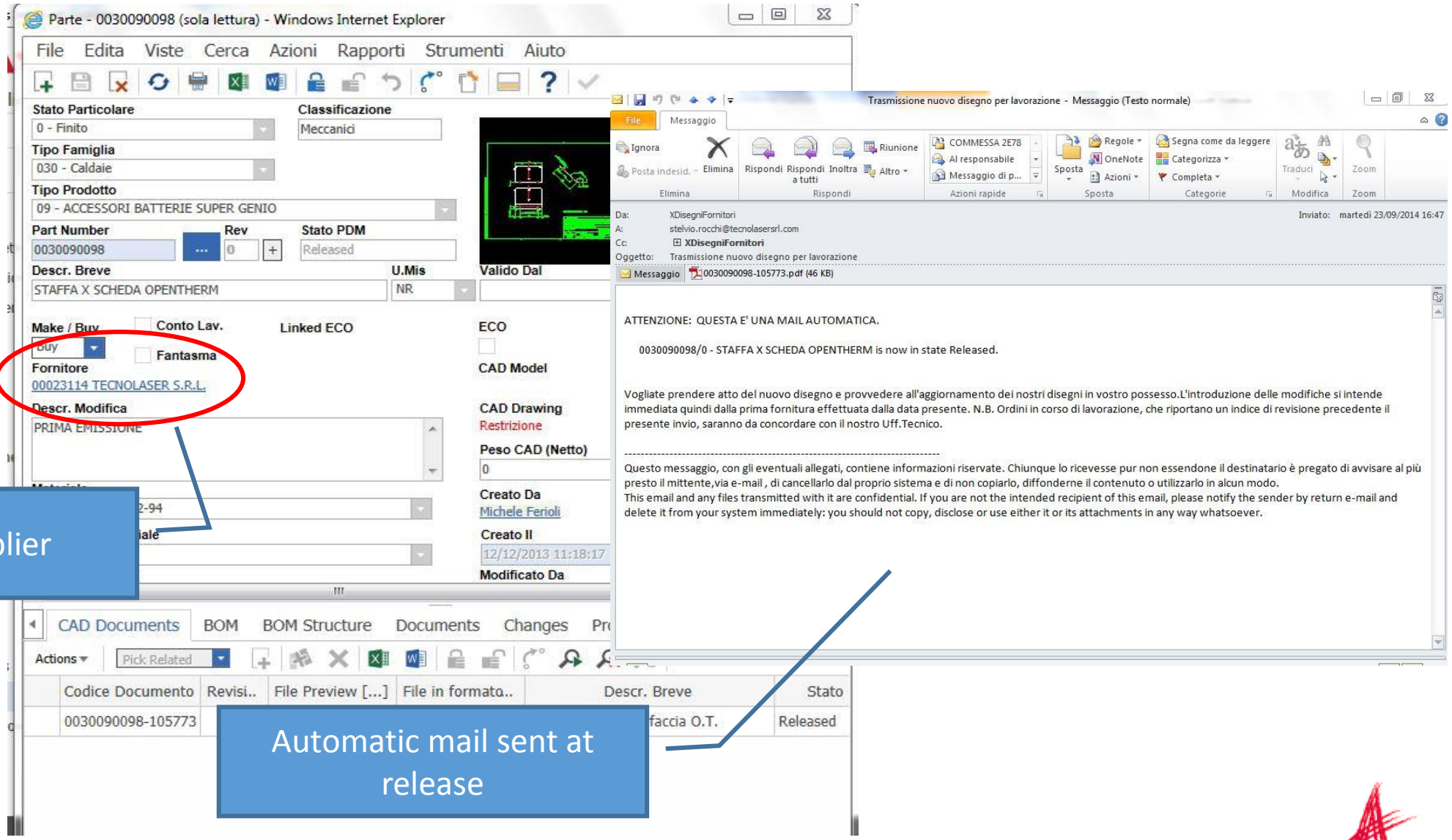
CAD integration



CAD integration



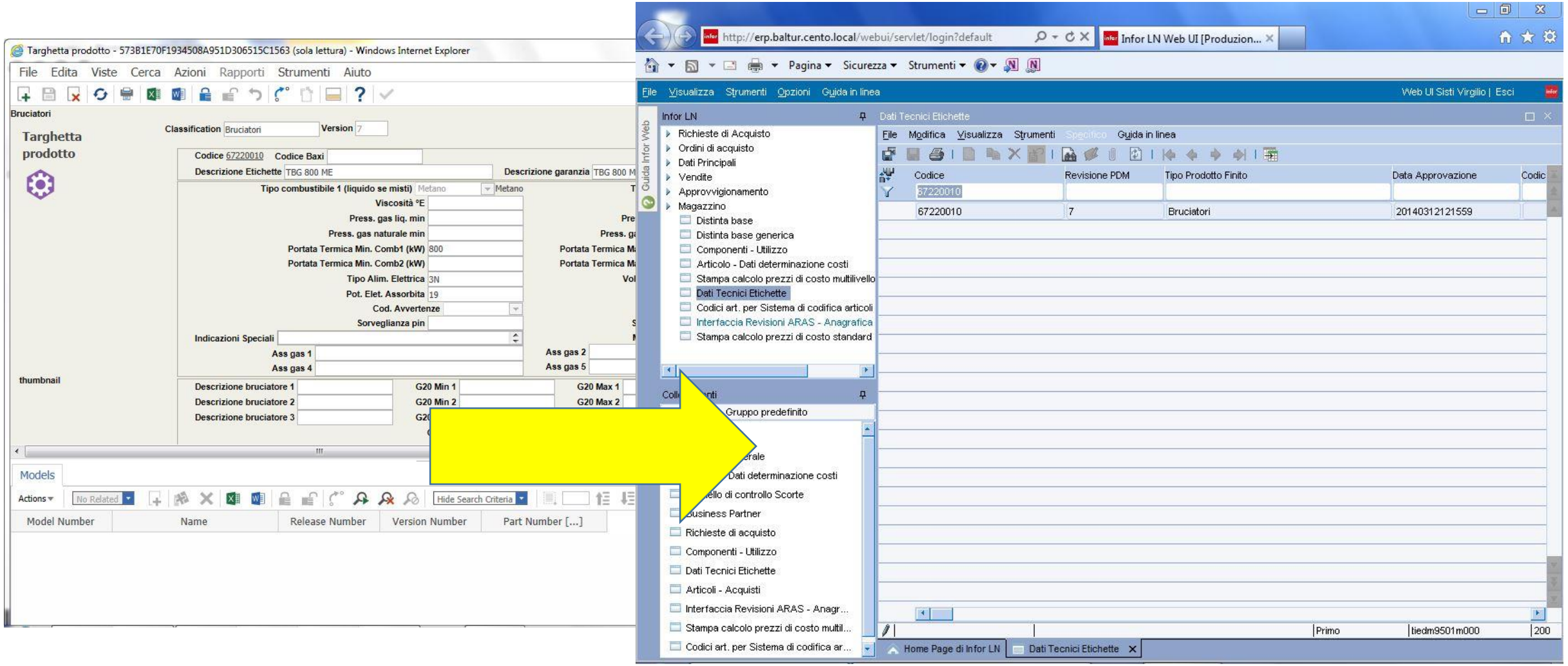
Supply chain management



Preferred supplier

Automatic mail sent at release

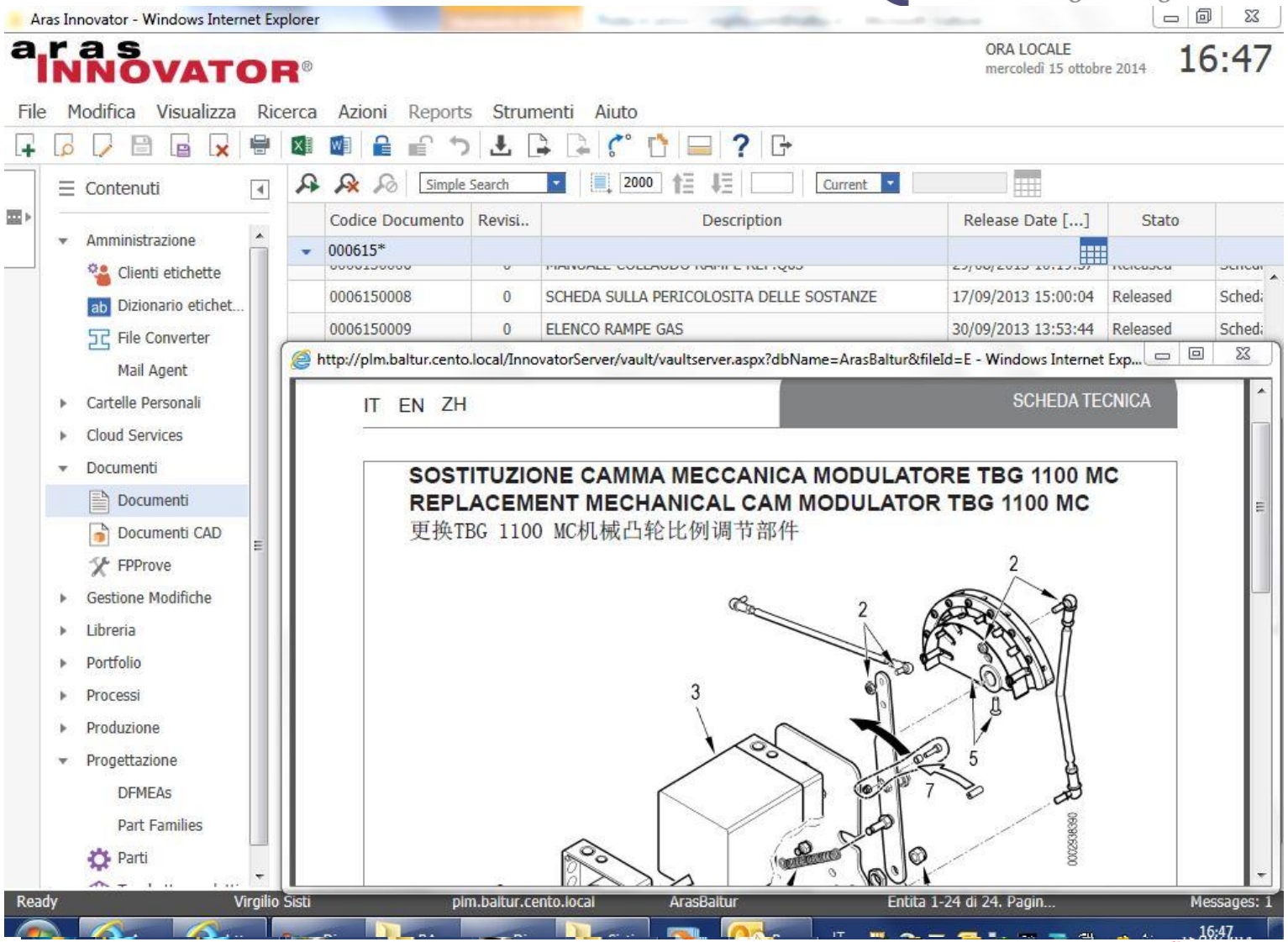
Product tag generation



Document management

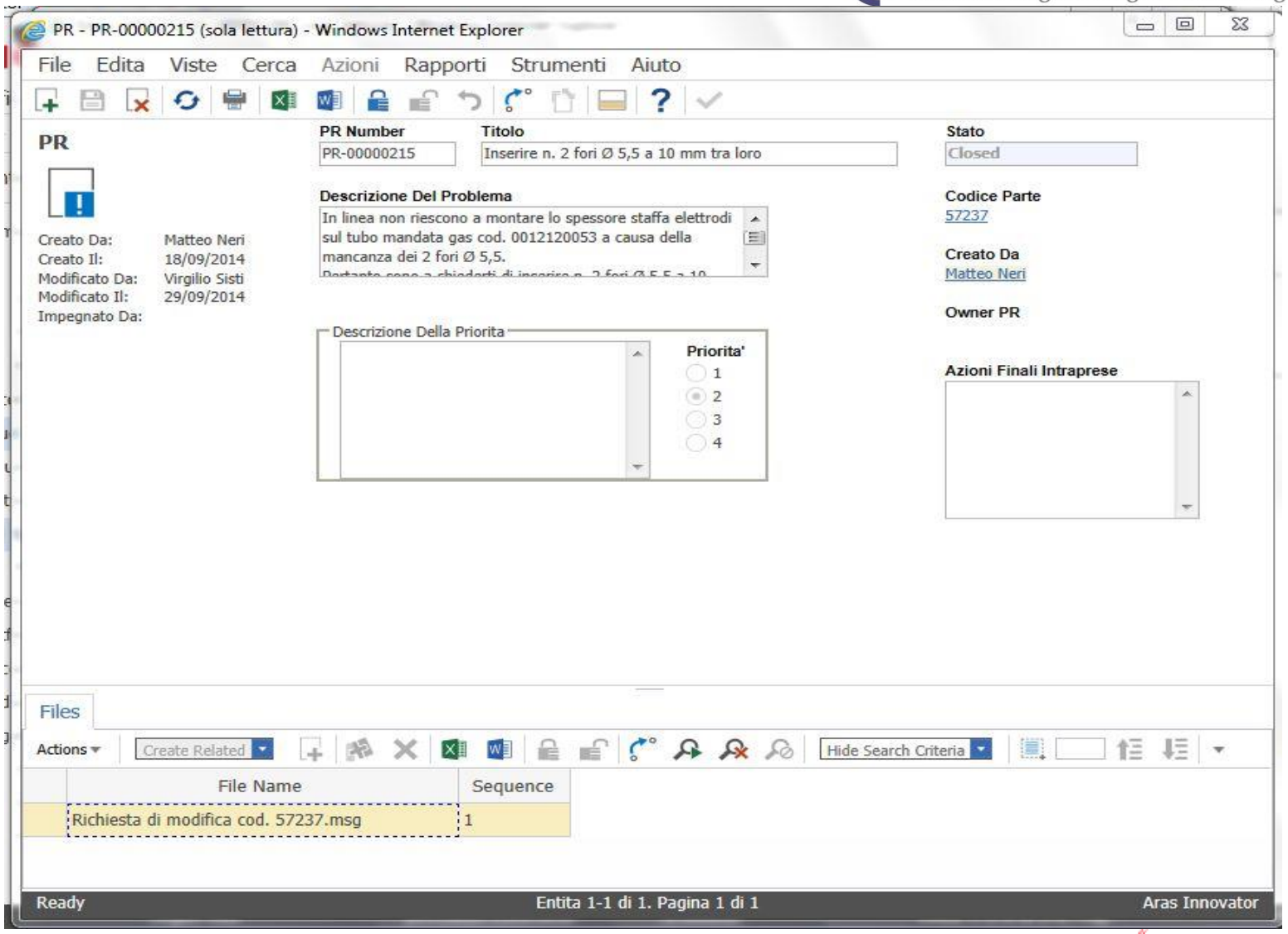
- Manuals
- Spare parts
- Technical instructions
- Certification data
- Validation forms…

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

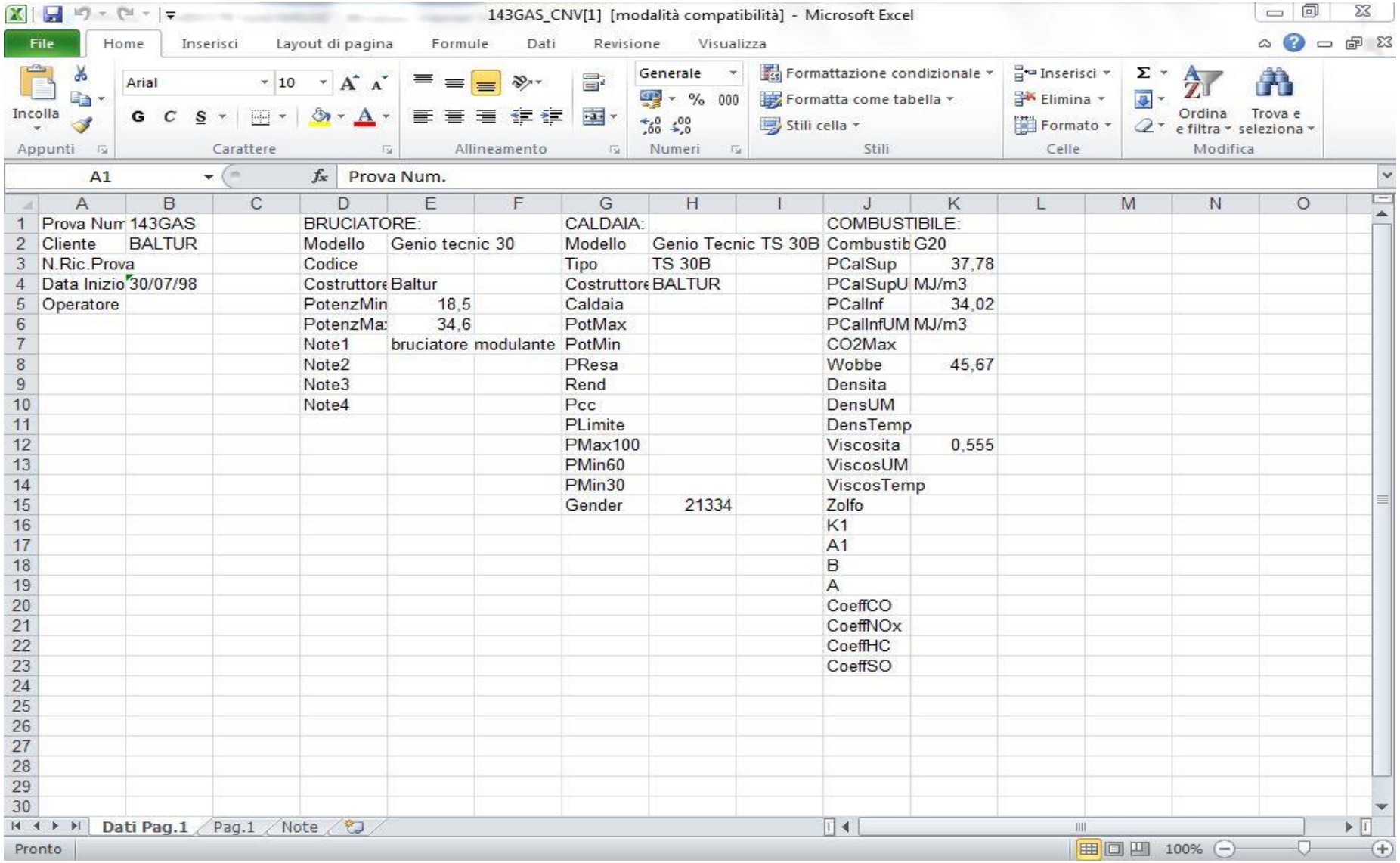


ECO

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



Laboratory test management



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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					
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14							PMin30			ViscosTemp					
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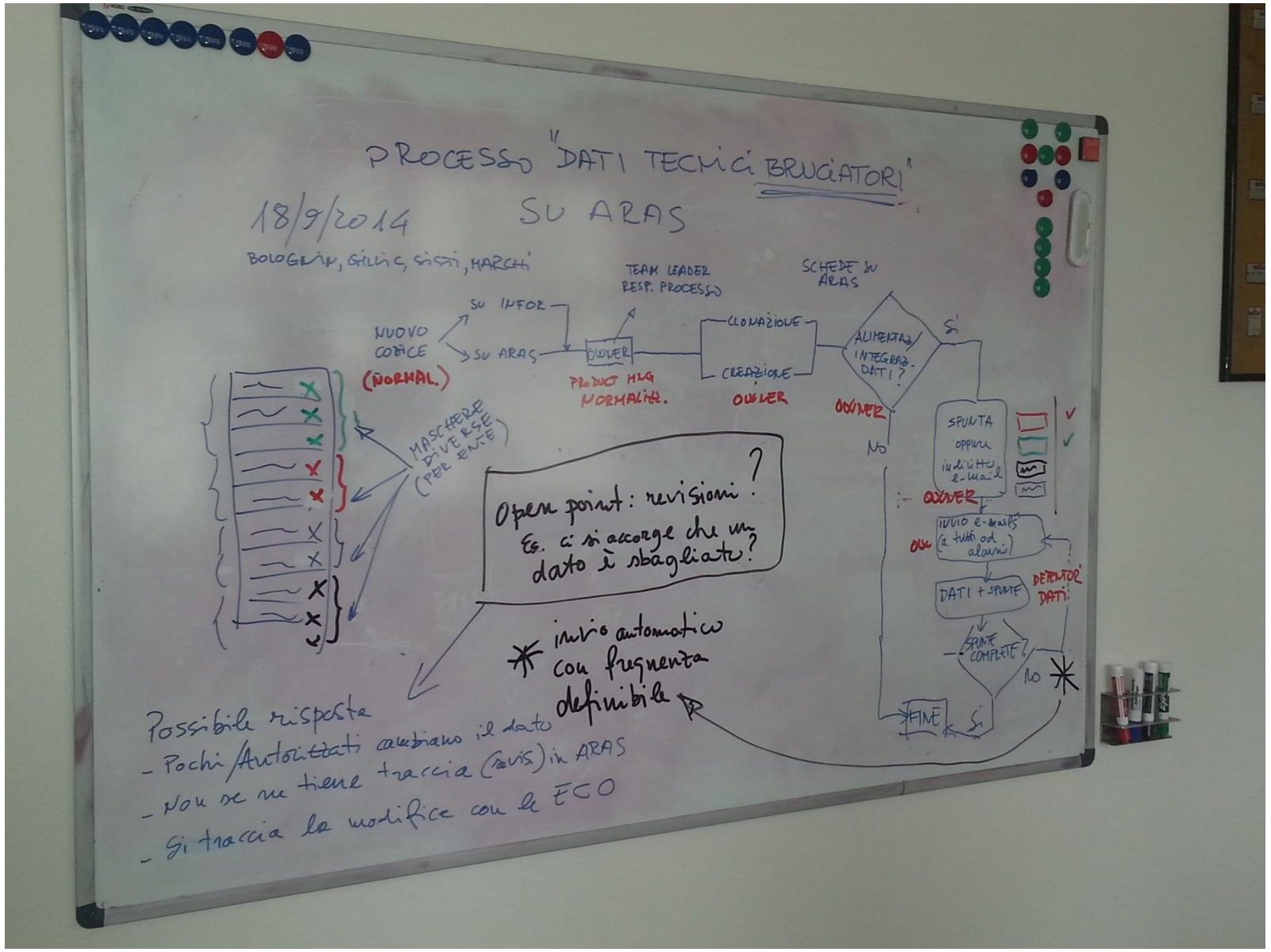
Implementation replaced and in-house application

Yet more to come....



- Now designing centralization of all company technical data
- Considering management of quality documents

Project information

- 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

Conclusions

- 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!!!