AKRAPOVIČ

About the company

Presence

Distributing our products in over 80 countries

The company

ESTABLISHED IN:	**1991**
COMPANY'S HEADQUARTERS, R&D, Foundry, Toolshop:	**Ivančna Gorica – 13.000 m²**
MANUFACTURING:	**Črnomelj - 25.000 m²**
EMPLOYEES:	**900+** employees

New Facility Črnomelj

- Manufactoring is united under one roof
- Start of production summer 2015
- The heart of our car, moto and carbon production

- More than 20.000 new sq m of modern, high-end facility
- Manufactoring hall with over half a km of main transport lanes
- 600 employees

Our story

AKRAPOVIČ 25 YEARS

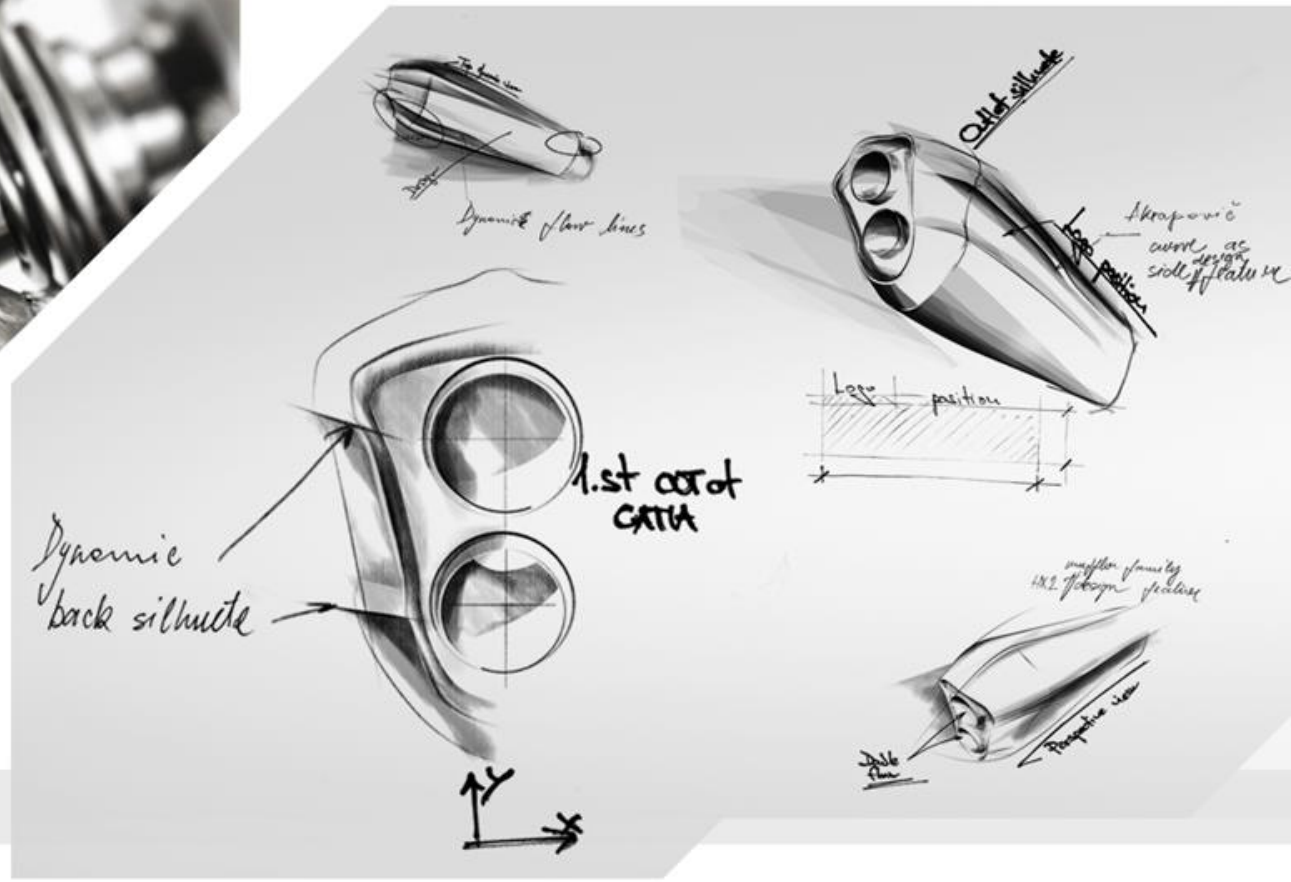
The tracks and 25 years of dedication to excellence – two key ingredients in our success story.

Milestones

2014
Introduction of the new motorcycle muffler generation.

2015
Akrapovič Launches Its New Standard in Ultra-light Exhaust Systems.

2015
Introduction of the new innovative ultra light car exhaust system.



Ultra light exhauts systems, exhaust innovation solutions, further TI materials

Product portfolio

Motorcycle Program – Evolution Line

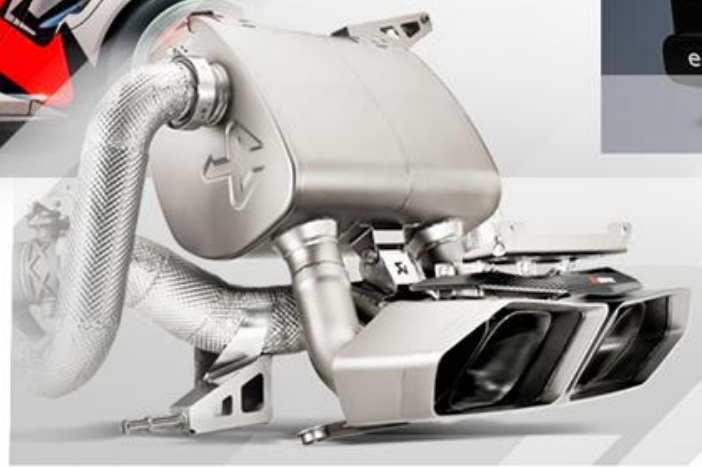
Motorcycle
exhaust systems

Car exhaust system

Titanium and inconel
casted parts

Composites as parts
of exhaust systems

CAR: OEM - AFT - Racing



100 World Champions

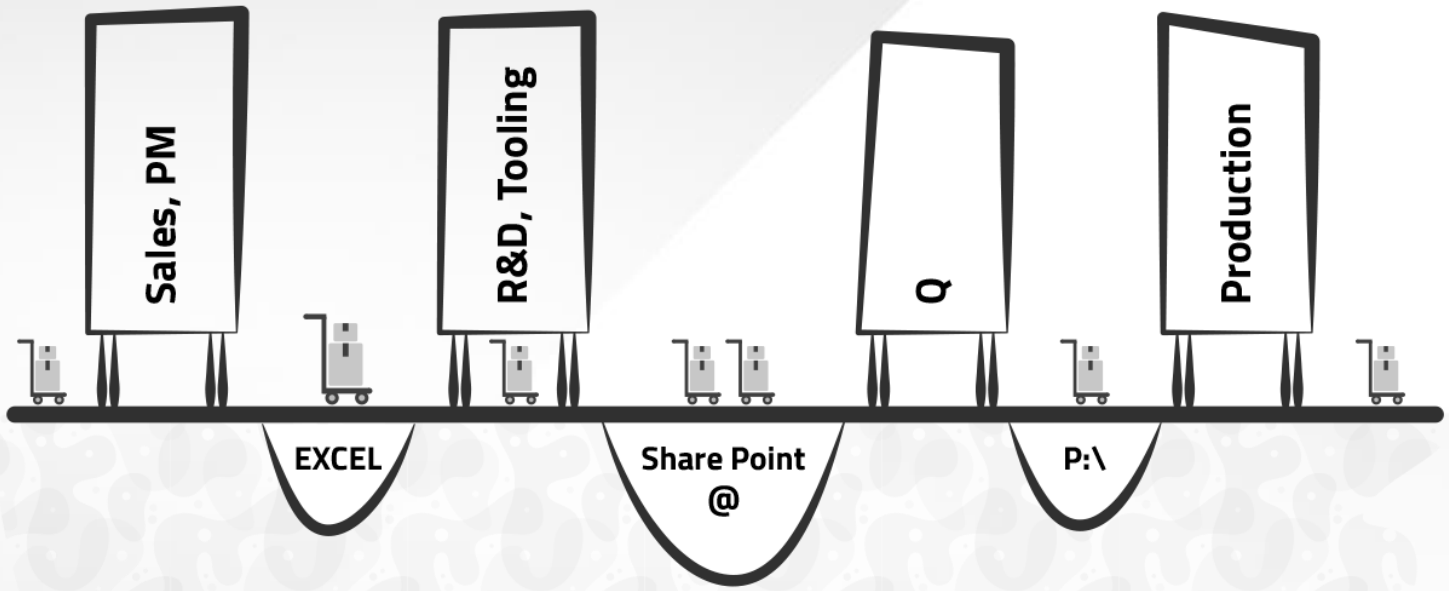
Ryan Dungey - 101st World Champion

Colin Edwards - 1st World Champion

Akrapovič
IT Architecture

Starting IT landscape situation

- SAP ERP is our core system for finance, sales and distribution, logistics, production planning, EDI
- CREO, CATIA
- WindChill
- Excel plays major role
- Microsoft Project
- Microsoft Dynamics CRM
- SharePoint lists
- Shared Folders
- HR system
- B2B custom development

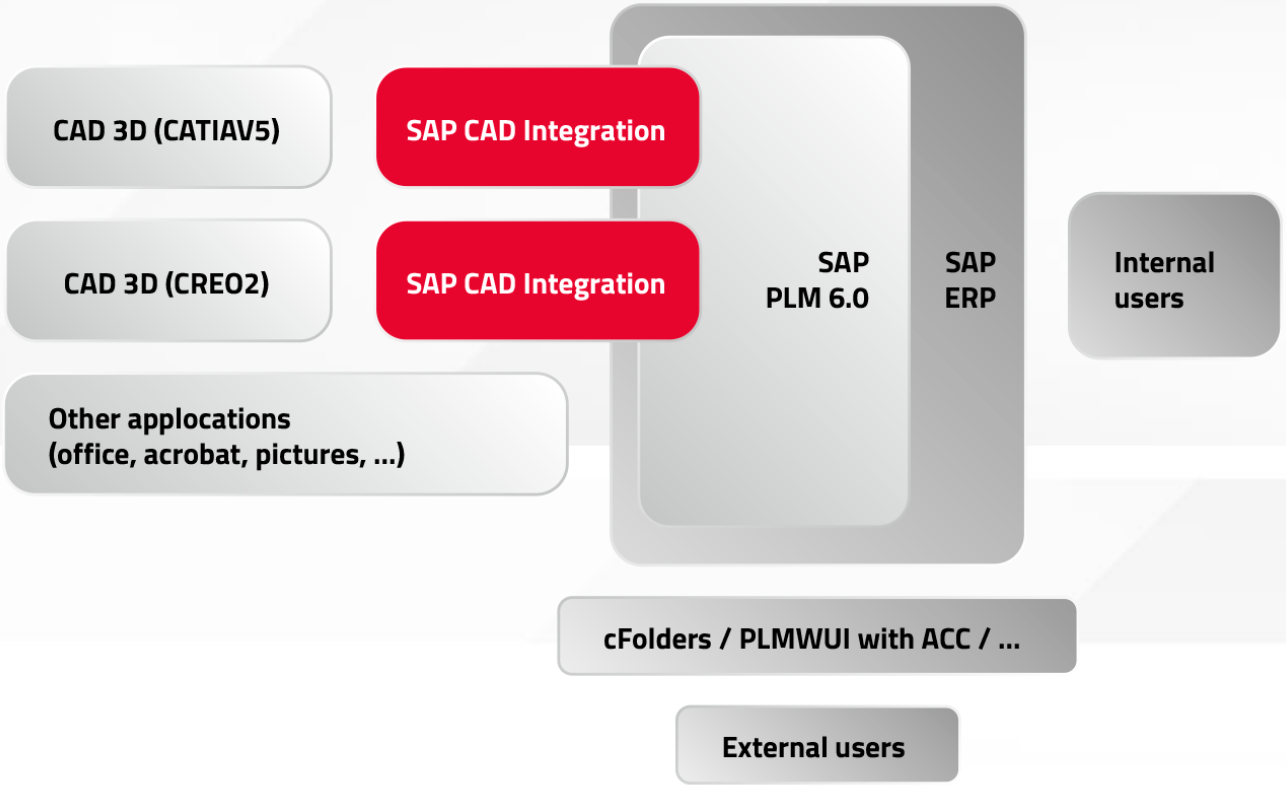


Systems are not connected
Difficult maintenance, diversity of different technologies
License cost

What we need is manageable and well connected IT system

Contemplating our future IT architecture

First idea was to use SAP for everything. CAD integration, Project Management, Document management system, Different workflows



Proof of concept was needed, so we decided for investment into SAP CAD integration pilot services

As alternative we have downloaded free Aras Innovator 10.0 and with the help of documentation, Forum and Just Ask Innovator started to build our initial test environment

Already during pilot test phase we started to realize negative effect to be depended on external resources

With excellent flexibility combined with full feature list and lower TCO Aras was on the end clear winner.

Roadmap for our future IT architecture

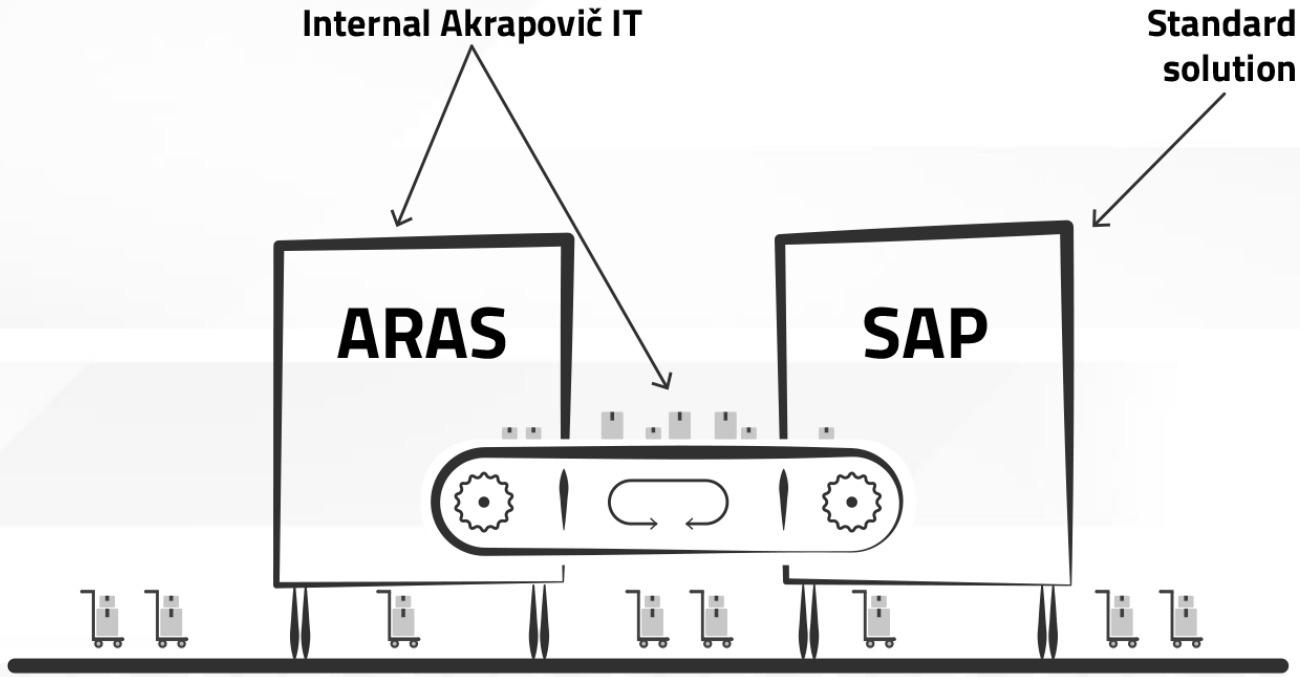
Our new IT system has to be well connected into single enterprise IT solution regardless of different building blocks we might use. There is no single solution which could optimally serve all our needs. Flexibility and cost effectiveness is something we are always looking for, it is imperative.

Final solution is based on Aras and SAP which are well connected into single IT landscape

Internal customization knowledge is needed for ultimate flexibility.

Aras is based on standard IT technologies such as C#, JavaScript, Dojo, XML, T-SQL.

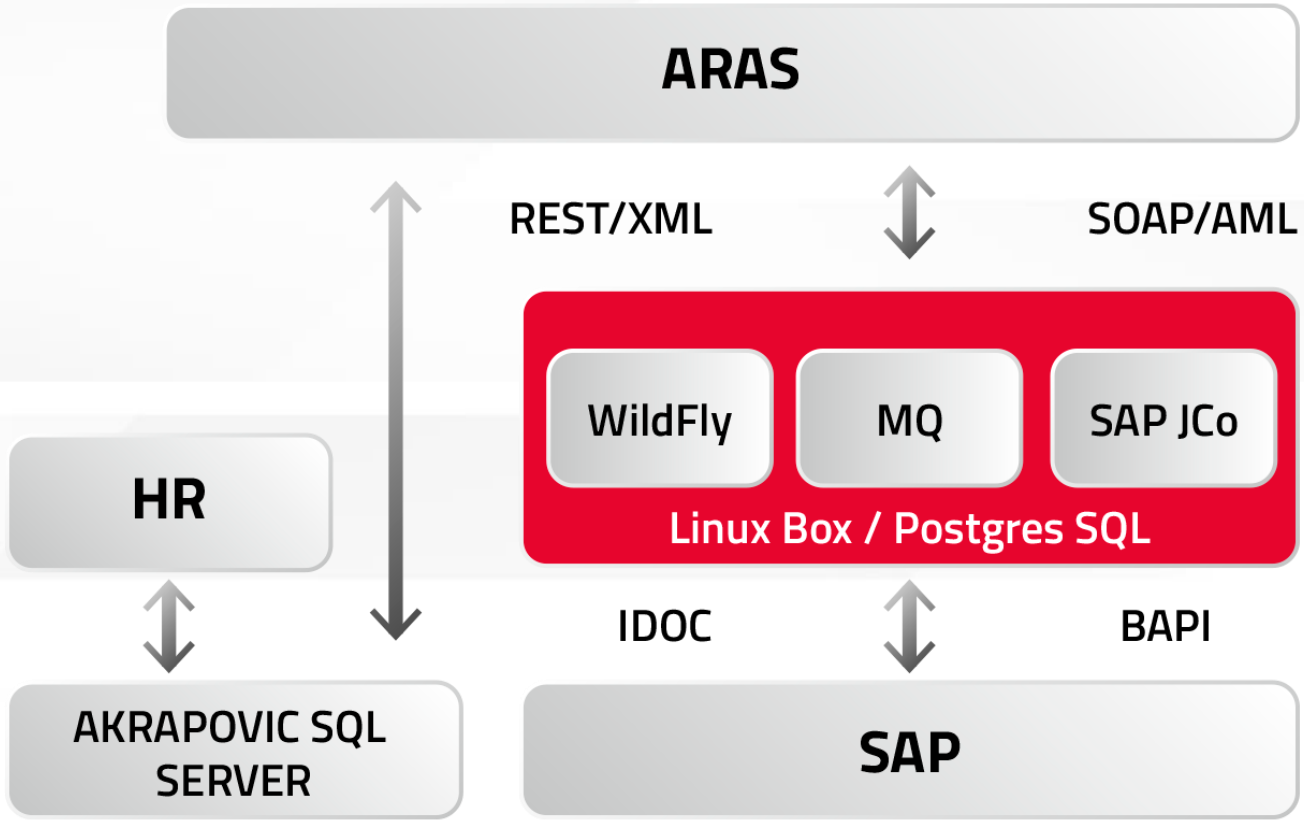
To customize SAP you need specific knowledge, ABAP, and a lot of expertise.



ARAS / SAP integration layer

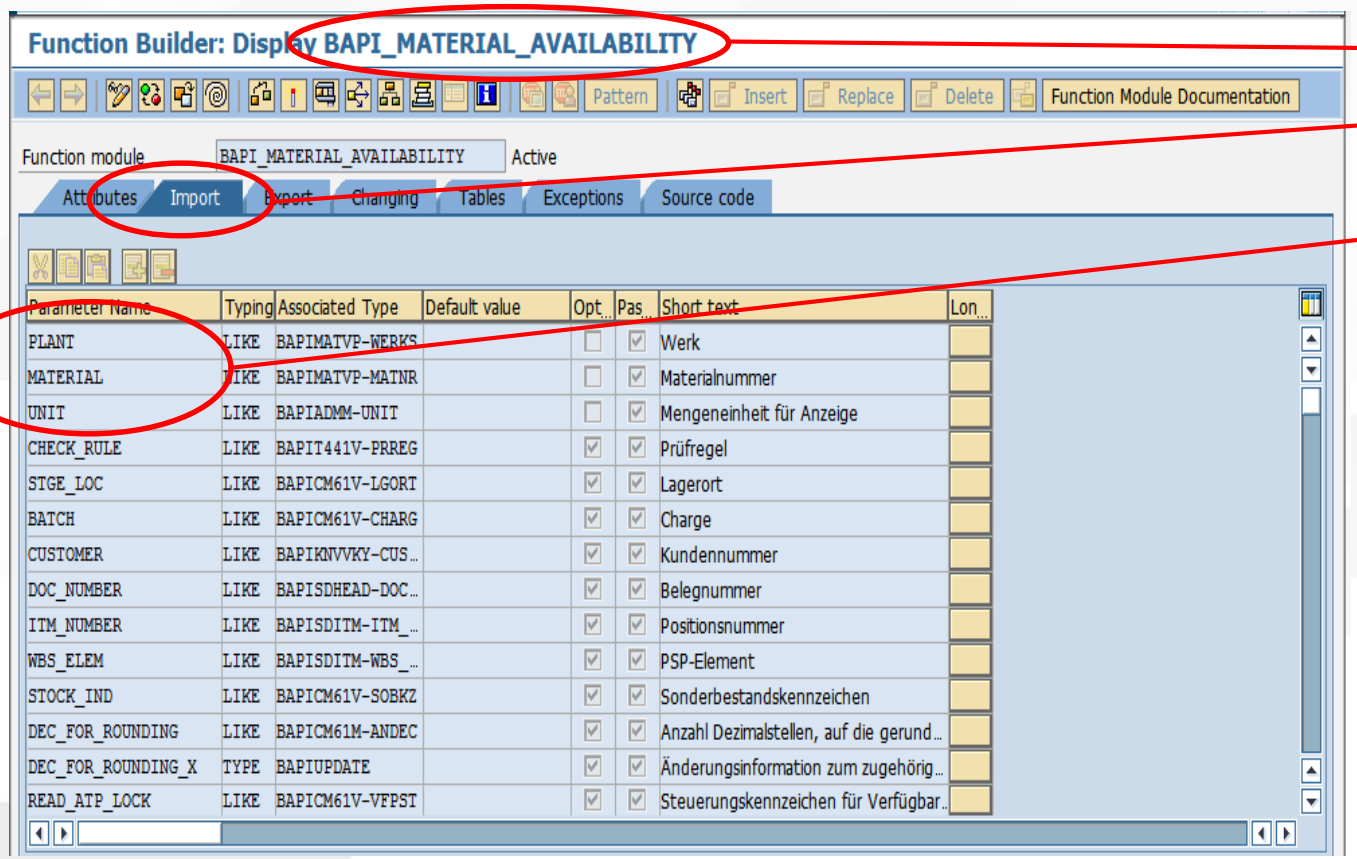
Our first task was internal development of integration layer and after this was done, we had implemented real time integration for different SAP objects.

- Open source technology, no license cost
- Core SAP without expensive NetWeaver
- Highly flexible and universal design which requires minimum integration effort regardless of integration needed



SAP function call

Communication principle between Aras and SAP is very natural for both sides. Payload is XML via REST call. Aras can directly call SAP Functions and receive response back in real time.

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SAP / ARAS Master data synchronisation

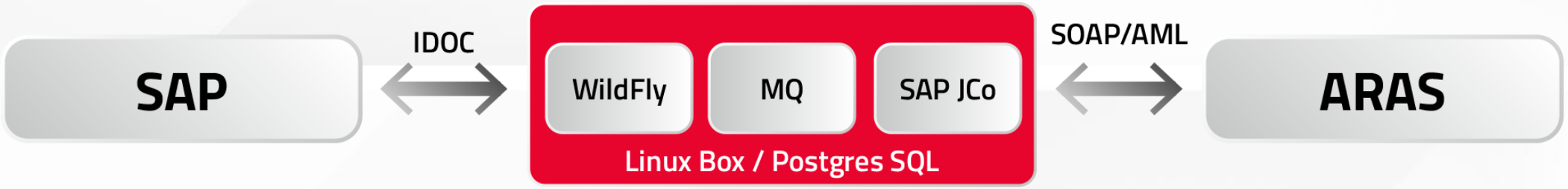
Standard SAP functionality ALE is used to synchronize Master data between SAP and ARAS.

In case of change of master data, SAP triggers communication.

IDOC is translated into XML

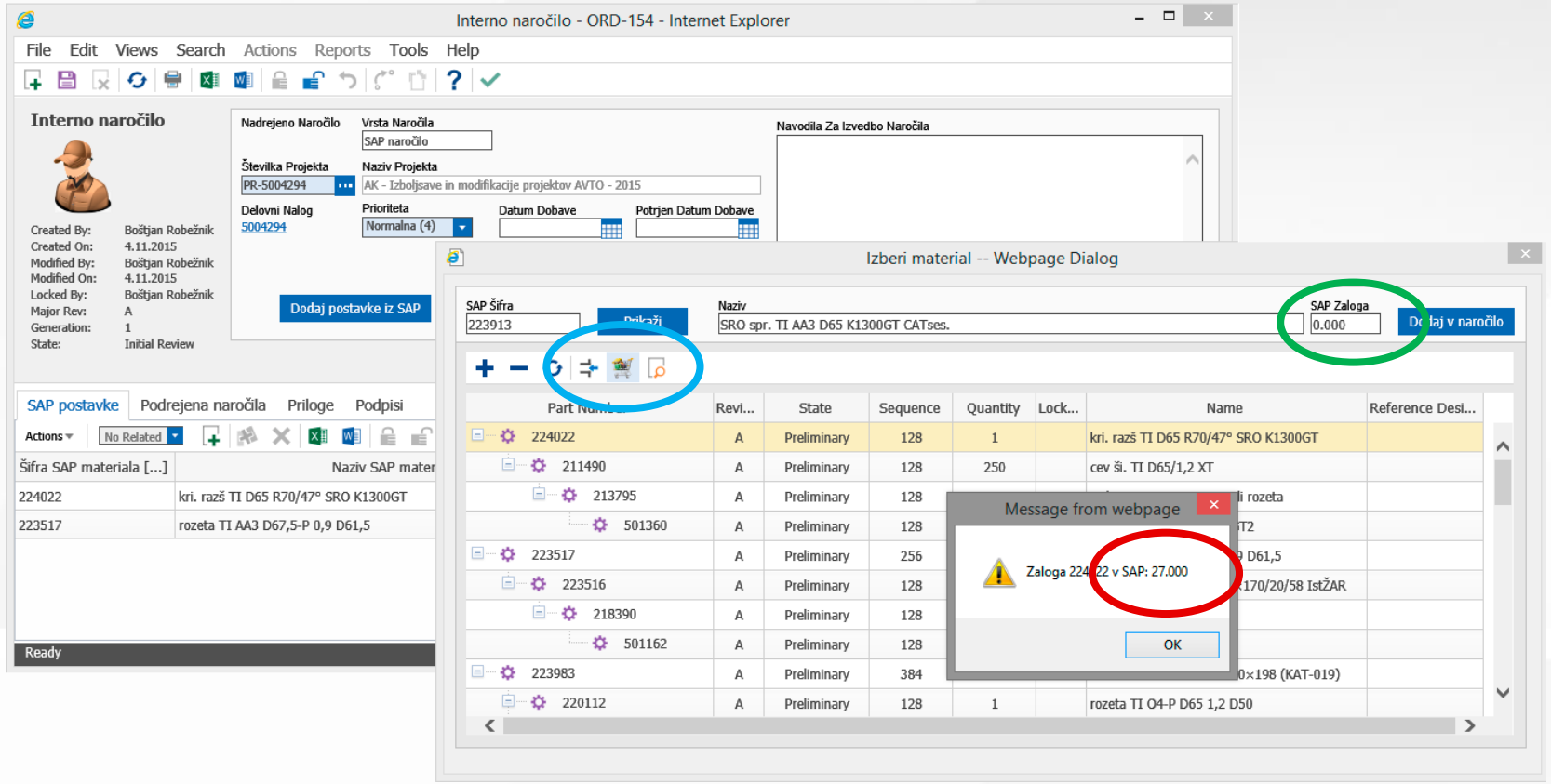
XML is translated into AML

Aras SOAP call with AML payload

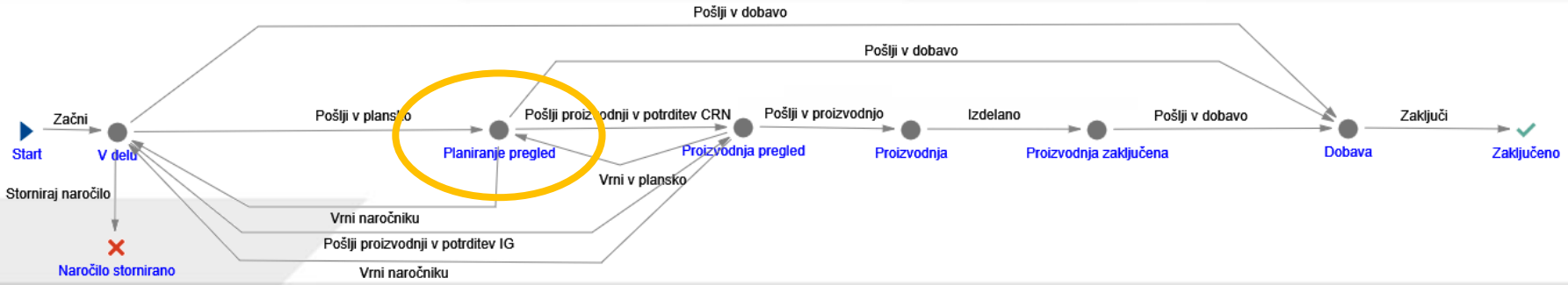


SAP Material	Customers	Internal Orders	HR Organization
SAP Material BOM	Vendors	B2B Orders	ASN, Invoices, Banks

ARAS / SAP Integration in praxis

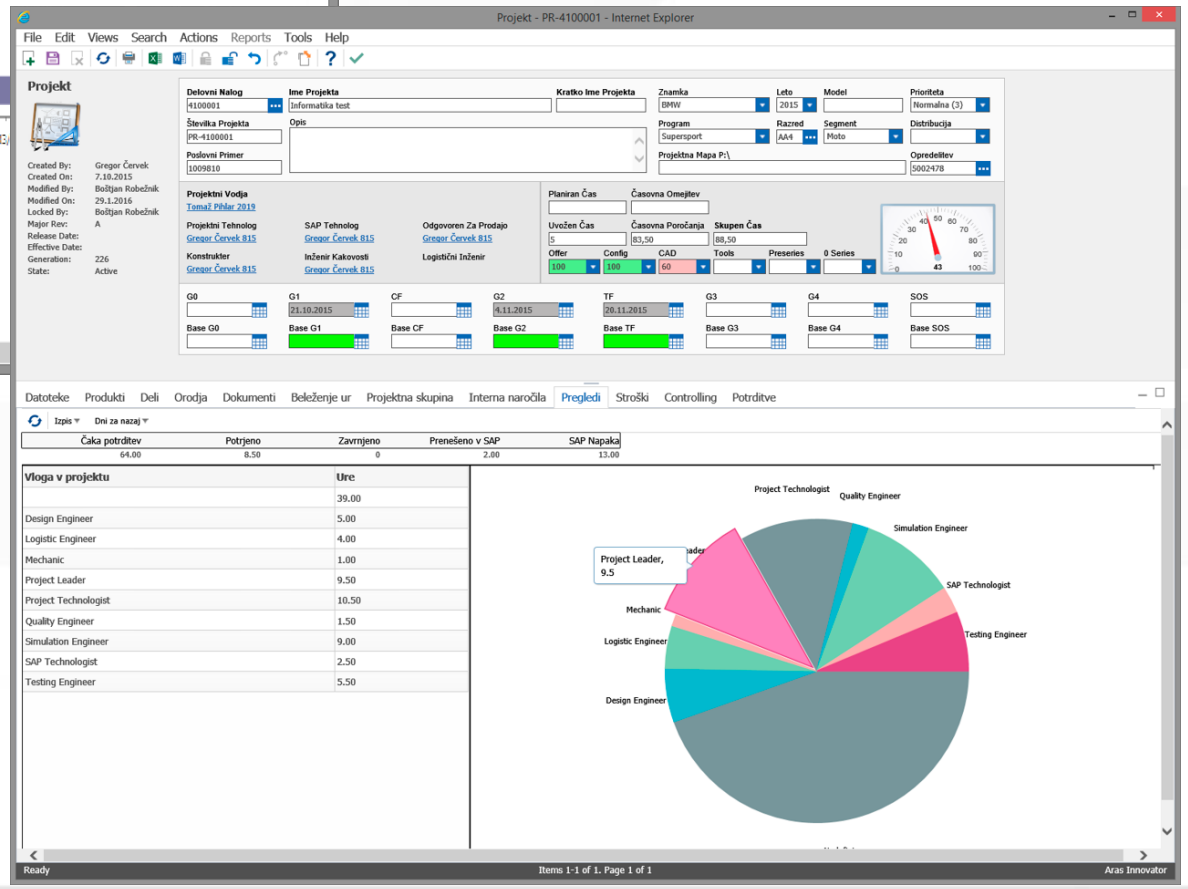


- We use standard Aras BOM selector to select Parts to shopping basket.
- Parts and BOM are synchronized with SAP in real time - mBOM
- Real time Part quantity check in SAP stock



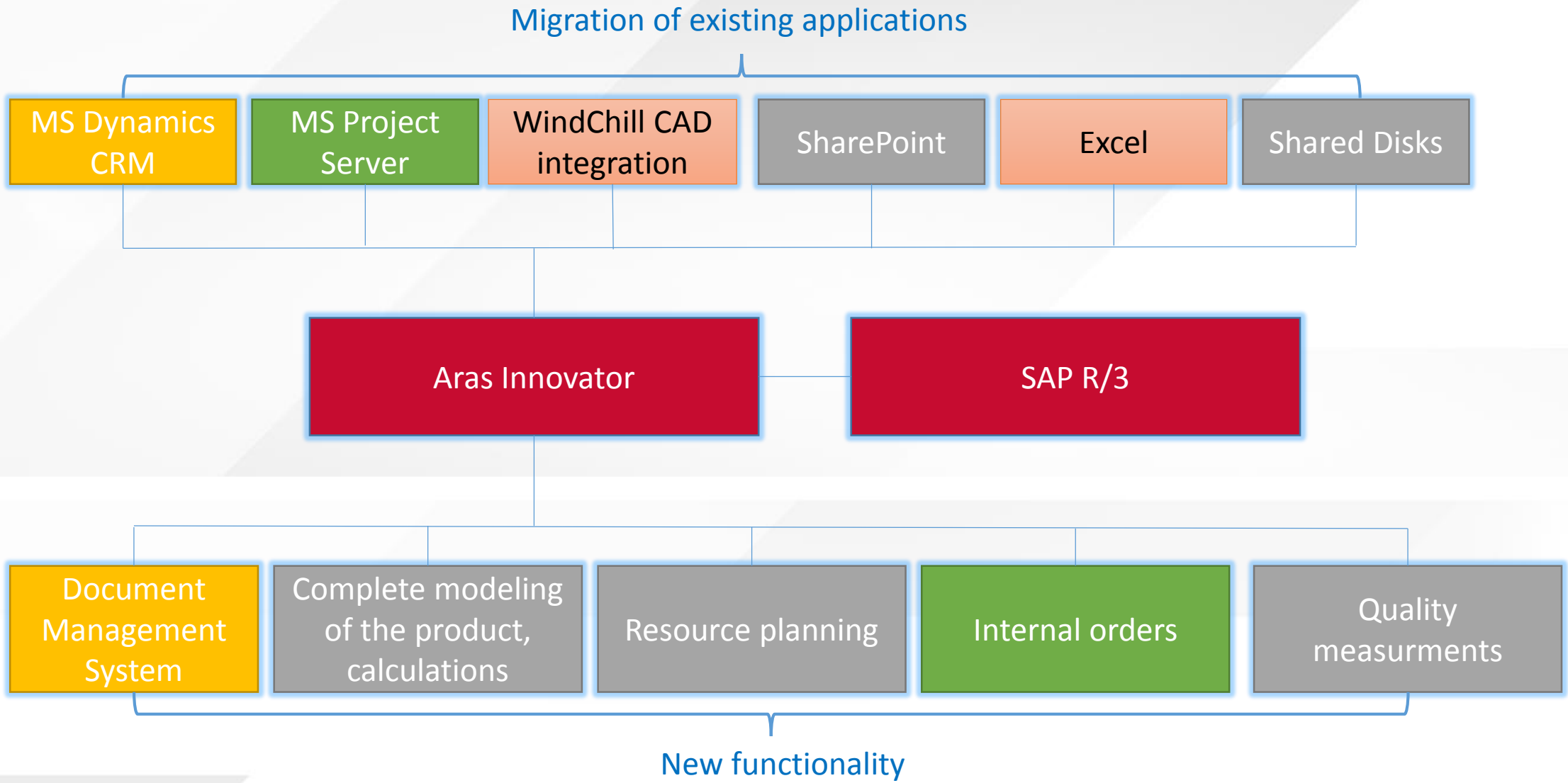
Dynamic workflow routing which is based on real time SAP stock quantity for every part in shopping basket

- Dynamic DOJO charts for better user experience.
- Clicking the chart directly opens related Item In a same way as with Grid



Forms enriched with different DOJO components for better user experience.

What we plan to migrate



Strategic vision

Strategic vision - Product development

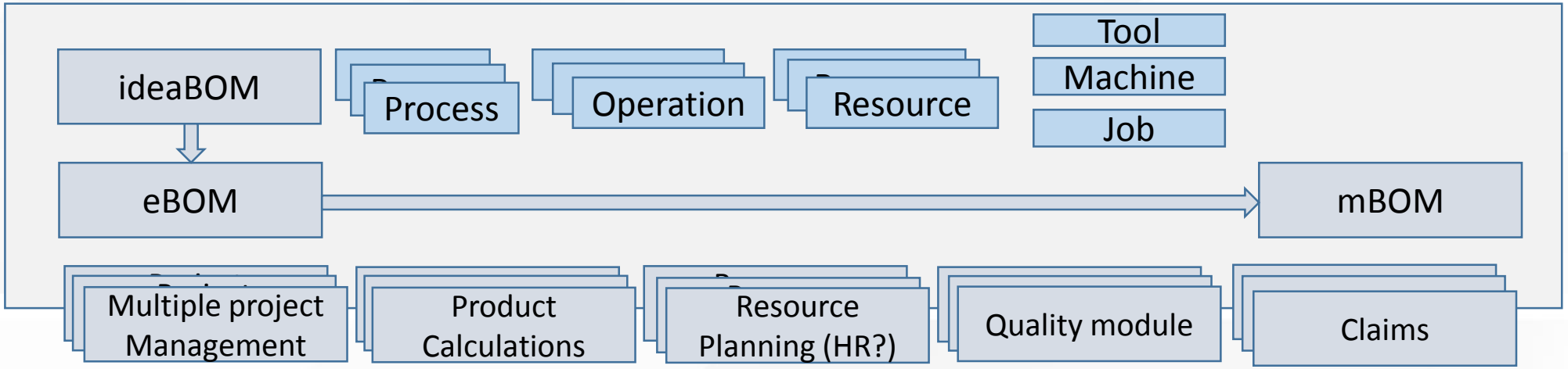
PLM aras

CAD Integration

Office Connector

Technical documentation

CRM



SAP

Finance

Sales & Distribution

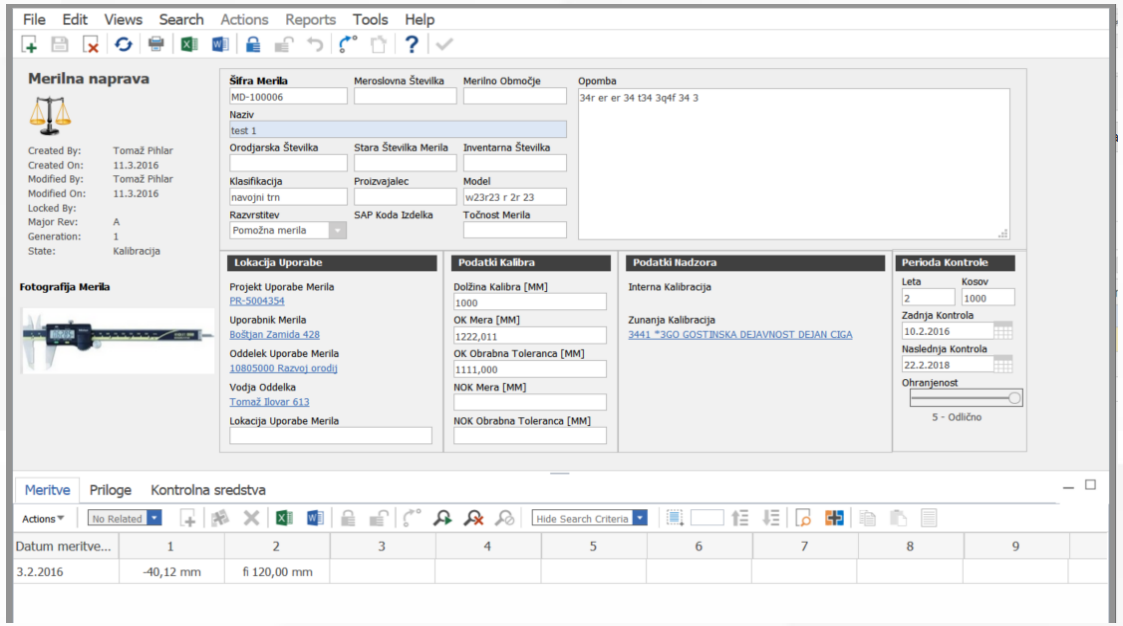
Production Planning

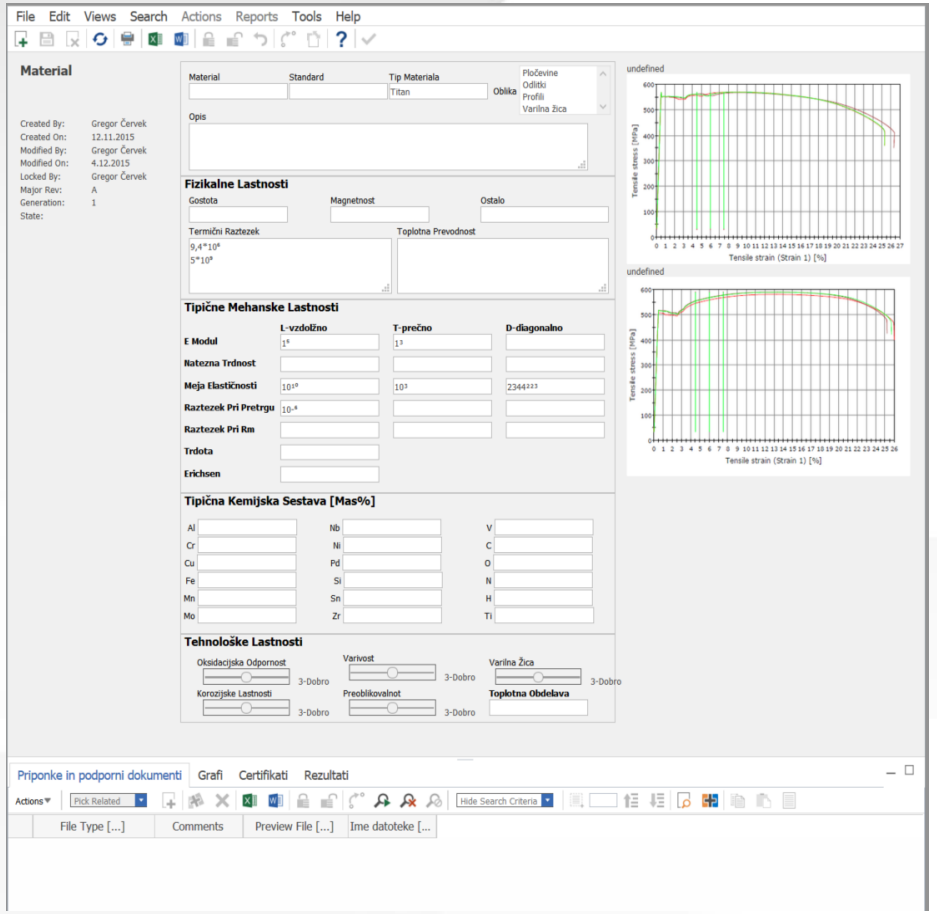
SCM

Controlling

Strategic vision – Variety of non PLM functions

- Platform we are able to customize by ourselves means better TTM, TCO and agility of the company on the long term.
- Aras support represent excellent value in the whole Aras license package





Finance | Sales & Distribution | Production Planning | SCM | Controlling

Final takeaways

- "The Unmistakable Sound of Akrapovič" (Exhaust system is art for us)
- Aras Innovator together with well connected SAP ERP means manageable, well connected and future proof IT system.
- Because of flexibility and single seat cost difference we tend to use more Aras and less SAP.
- Greater flexibility because of Aras unique business model.

The best product, the biggest smile