



PIM in the Commercial Vehicles Aftermarket

Efficiently maintain complex data, utilize it in multiple ways

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Ralf Schroll, Andreas Santner

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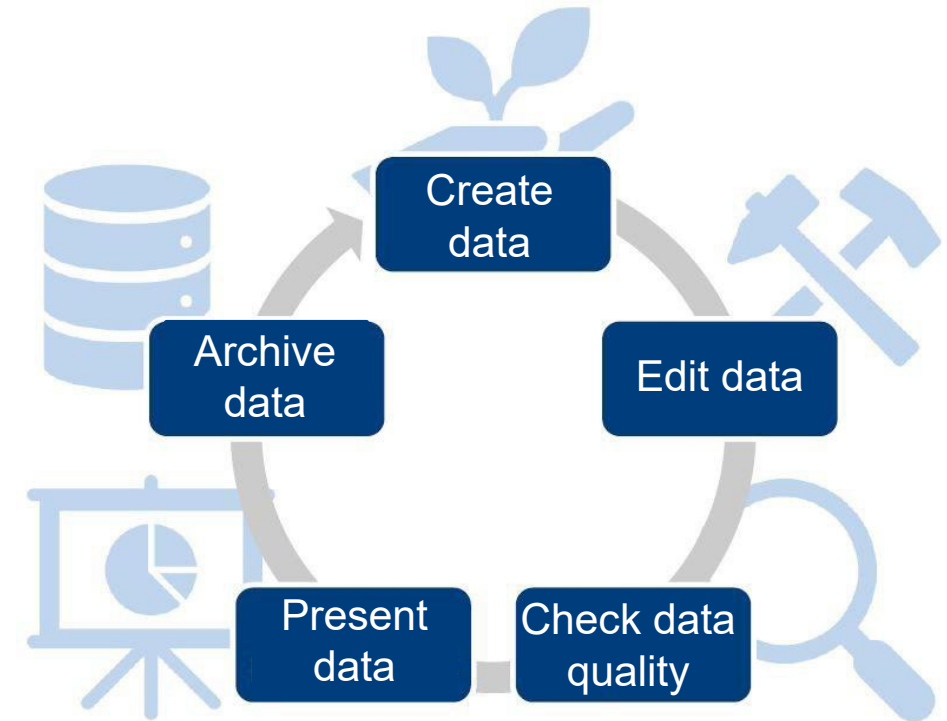
BPW Aftermarket Group - a brief overview

- ▶ **Commercial vehicle parts trading network** provides a reliable and fast supply of spare parts for trucks and trailers throughout Europe.
- ▶ more than 170 subsidiaries in 19 countries
- ▶ **Product portfolio:**
 - Original spare parts from all relevant commercial vehicle manufacturers
 - Fair value solutions for repairing older vehicles



Incentive for a PIM system at BPW

- **Consistent, centralized data maintenance;**
previously distributed across multiple systems
 - saves time (data only needs to be maintained once)
 - better data quality and fewer data errors
(all data checked in one central system)
- **All ETGs can share the data**
and add their own ETG products
- **Export product data from PIM for**
 - own new online store
 - dealer portals such as TecDoc and Topmotive
 - the ERP system (PIM is leading for product data)



Maintain data once and use it several times with PIM

Why choose the ANTEROS PIM system by INCONY?

- **PIM tender** with lists of questions, presentations by several vendors and selection process with long and short list
- **Proof-of-concept project** with INCONY and another vendor with own test system and own tests for data import (TecDoc, EXCEL, CSV), data maintenance in PIM, quality reports, data exports
- The best PIM for us was ANTEROS by INCONY; reasons:

INCONY's experience:

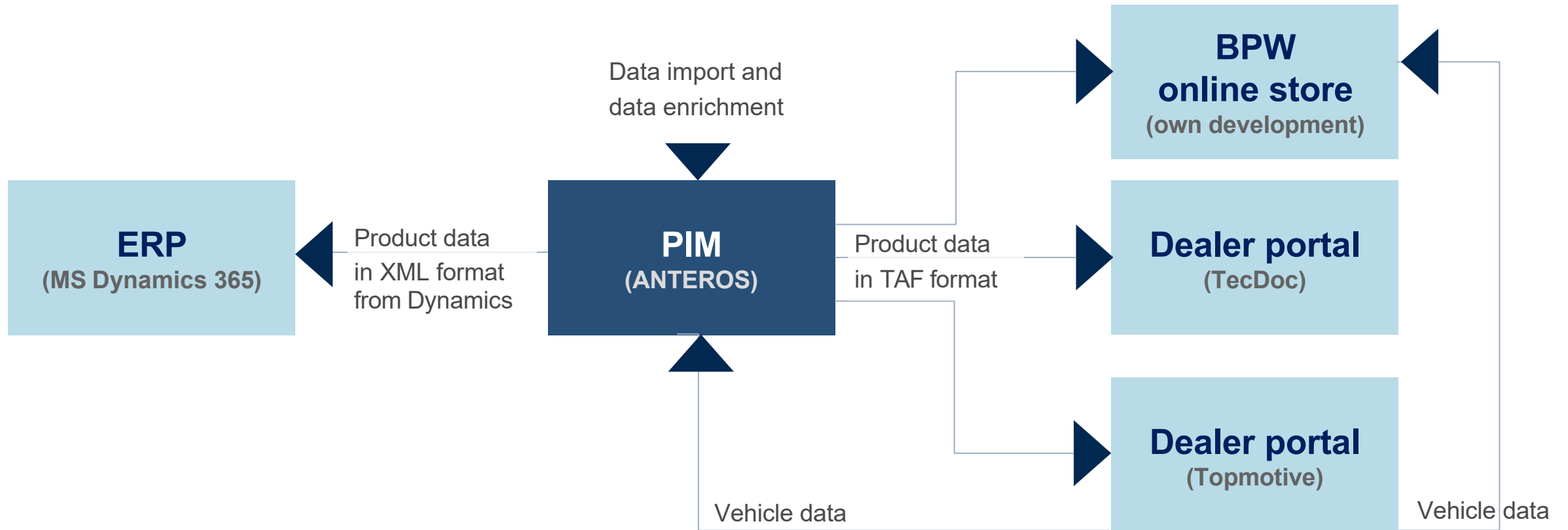
- Many years of experience with companies in the automotive industry
- Profound experience with TecDoc
- Good references and positive Feedback

Scope and quality of INCONY's ANTEROS software

- Flexible data model: TecDoc plus own extensions
- Modern and intuitive user interface
- Extensive functions in the standard package
- Configurability
- Expandability, scalability
- Multi-client capable, multi-brand capable, ...



The ANTEROS PIM system and its interfaces at BPW



➤ Creating a new product in the PIM - ANTEROS is master

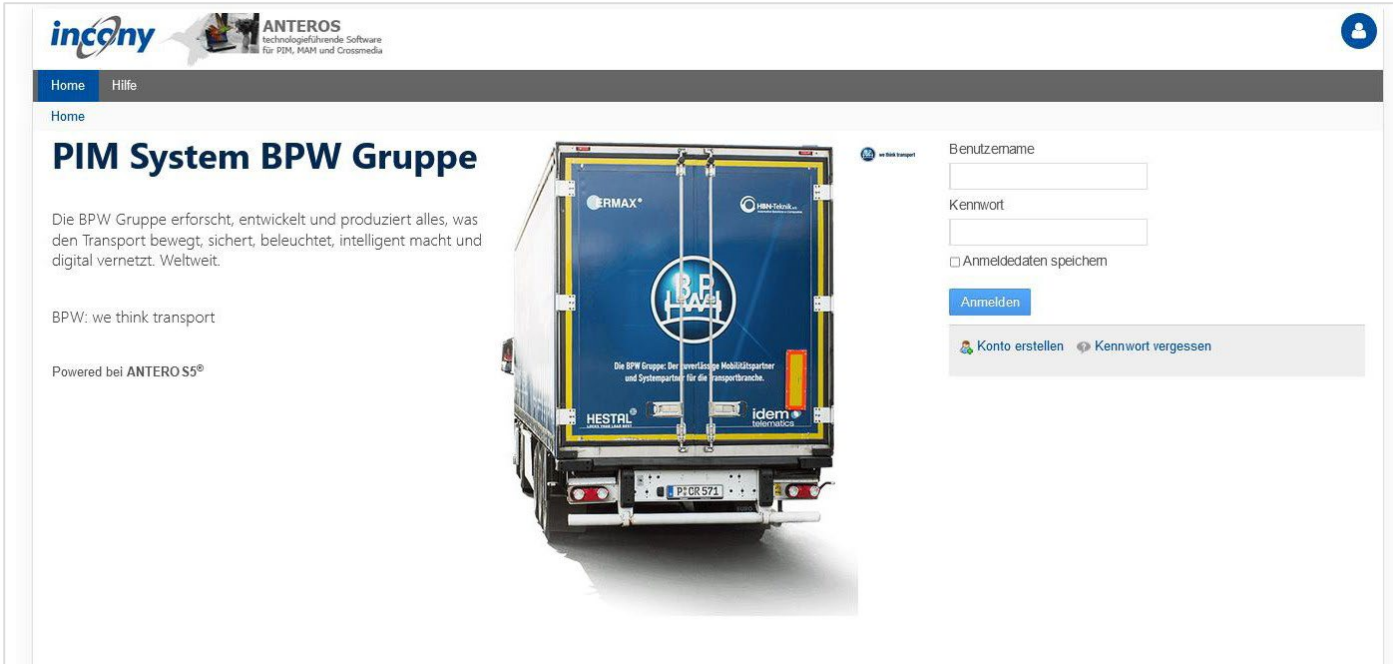
- a 10-digit unique ID is automatically generated in ANTEROS
- numeration according to a system specified by BPW

➤ Creating new product types

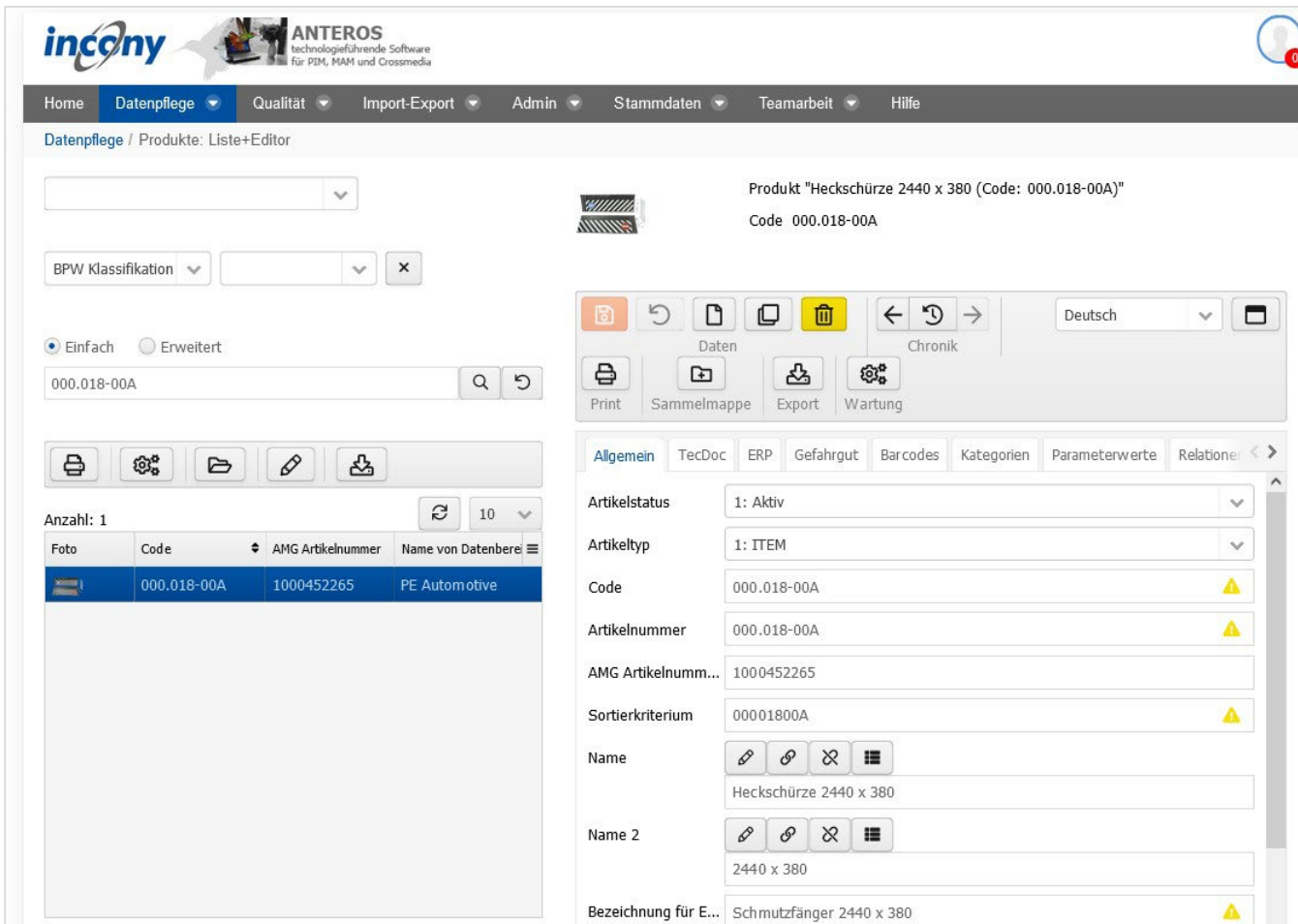
- Supplier article imported (TecDoc,...);
Supplier article number is imported, BPW article number is generated, data is checked and, specifically, supplemented with ERP-relevant data
- Products for own brands are entered into ANTEROS, data is improved step by step
- Initial and one-time import of own products from old product database

➤ In total currently approx. **700.000 products in PIM**, up to one million planned





- Access is completely **web-based**, normal web browser for access from BPW headquarters, national company, home office
- **Access** via login + password
- **User roles and rights** determine which functions the user can see/use
- **Encryption** of data (security)



The screenshot shows the ANTEROS software interface for product data maintenance. The top navigation bar includes links for Home, Datenpflege, Qualität, Import-Export, Admin, Stammdaten, Teamarbeit, and Hilfe. The main header displays the product name "Heckschürze 2440 x 380 (Code: 000.018-00A)" and its code "000.018-00A". The interface is divided into several sections: a left sidebar with a search bar and a list of products, a central area with a product overview and a list of related products, and a right panel with a detailed form for editing product data. The form includes fields for Artikelstatus, Artikeltyp, Code, Artikelnummer, AMG Artikelnumm..., Sortierkriterium, Name, Name 2, and Bezeichnung für E... (Bezeichnung für Ersatzteil). The form also features a tabbed interface with tabs for Allgemein, TecDoc, ERP, Gefahrgut, Barcodes, Kategorien, Parameterwerte, and Relationen. The left sidebar shows a list of products with columns for Foto, Code, AMG Artikelnummer, and Name von Datenberei. The central area displays a list of products with columns for Foto, Code, AMG Artikelnummer, and Name von Datenberei. The right panel contains a detailed form for editing product data, including fields for Artikelstatus, Artikeltyp, Code, Artikelnummer, AMG Artikelnumm..., Sortierkriterium, Name, Name 2, and Bezeichnung für E... (Bezeichnung für Ersatzteil). The form also features a tabbed interface with tabs for Allgemein, TecDoc, ERP, Gefahrgut, Barcodes, Kategorien, Parameterwerte, and Relationen.

Maintain product data in different tabs:

- **General:** name, description,...
- **ERP:** Customs tariff number, VPE, dimensions, weight,...
- **TecDoc:** Generic article, matching vehicles, cross references
- **Categories** e.g. for Topmotive
- **Parameter values**, such as installation side, length, width
- **Hazardous goods:** such as hazardous goods class, water hazard
- **Relations:** Accessories, spare part, spare article, deposit article, supplier, ...
- **Media:** pictures, drawings, documents, videos

Data can be easily and efficiently maintained in ANTEROS.




ANTEROS
 technologieführende Software
 für PIM, MAM und Crossmedia

[Home](#)
[Datenpflege](#)
[Qualität](#)
[Import-Export](#)
[Admin](#)
[Stammdaten](#)
[Teamarbeit](#)
[Hilfe](#)

Datenpflege / Produkte: Liste+Editor

(4) BPW; BESKO DE; Besko DK, Besko A

MARKENAUWAHL

OBJEKT INFO-BEREICH

BPW Klassifikation

X

KATEGORIEAUWAHL

Einfach

Erweitert

OBJEKT-SUCHE

Q

OBJEKT-LISTE







Anzahl: 6.924

AMG Artikelnummer	Name	Name von Produkttyp	Name von
1000533712	Splintbolzen		BESKO DE
1000533713	Dichtring		BESKO DE
1000533714	Schelle		BESKO DE
1000533715	Sechskantmutter		BESKO DE
1000533716	Schraube		BESKO DE
1000533717	Schraube		BESKO DE
1000533718	Einsatz Filter		BESKO DE
1000533719	DRAHTSEIL 6mm VA		BESKO DE
1000533720	SPANNSCHLOß M1...		BESKO DE







Daten

Chronik

Print

Deutsch

Sammelmappe

Export

Wartung

ProduktEDITOR

Noch nichts geladen, bitte Datenobjekt wählen oder neu erstellen.

Allgemein

Kategorien

Parameterwerte

Relationen

Medien

Publikationen

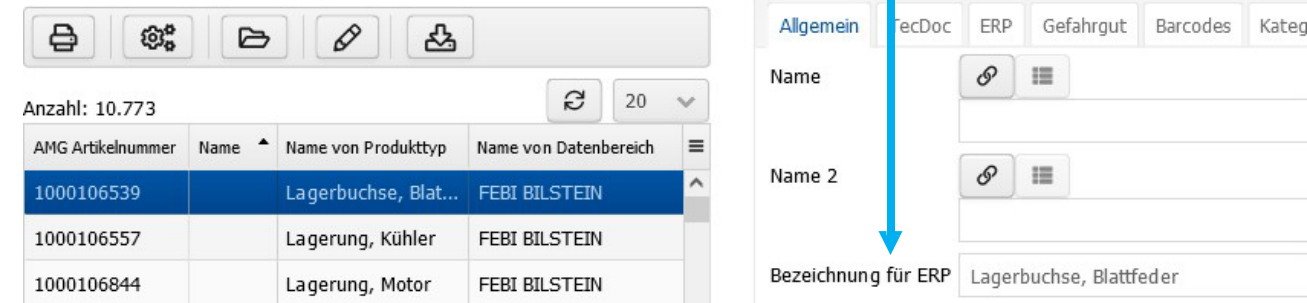
Fahrzeug-Verkn.

ETGs can maintain their own products:

- **BPW items:** for all ETGs
- **ETG products:** for specific country assortments, e.g. Besko

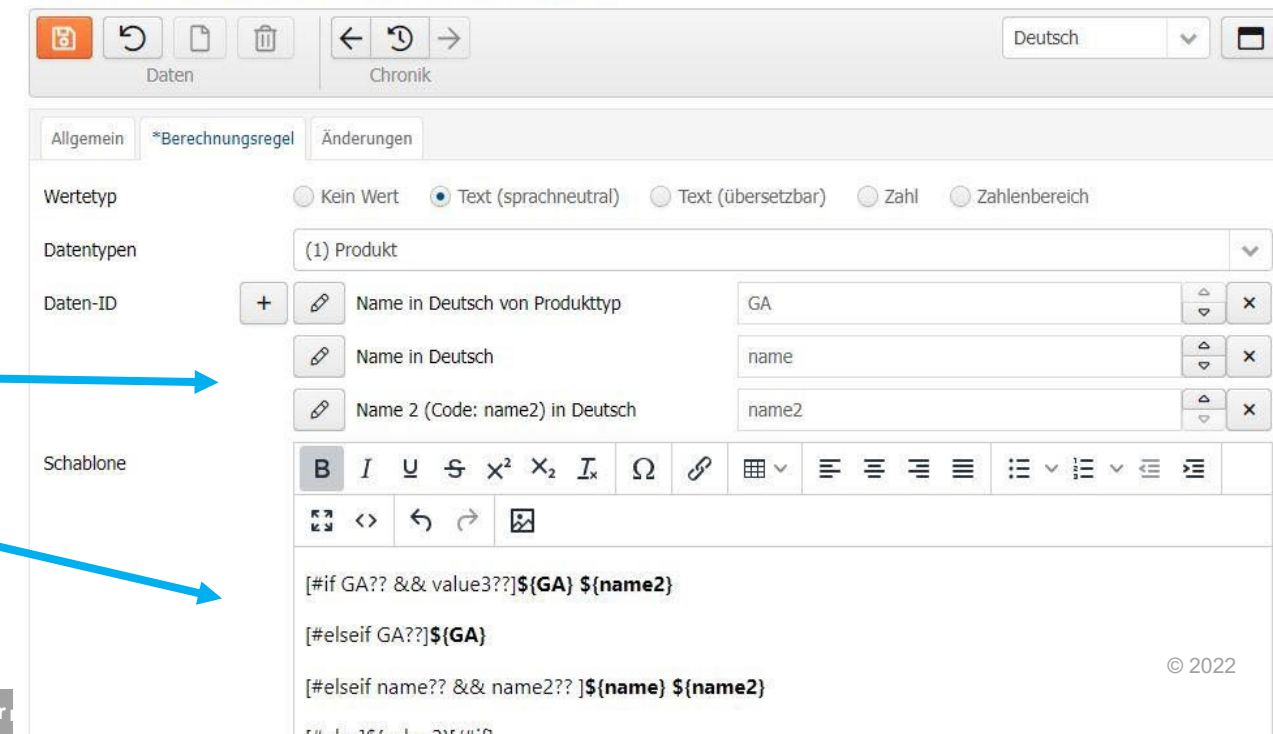
- **Parameters automatically calculated**
from the texts/values of other parameters and if applicable also filler words and fixed text elements
- **Excellent data with little work**
Often used by us, e.g. for ERP designation(see screenshot);
with almost 1 million products (many supplier products) better data without much manual effort
- **Create formula via flexible rules**
Reference to data fields,
use of fixed text modules possible,
format language Freemarker for rules

Example: Name for ERP = (name ODER generic article) AND name2



AMG Artikelnummer	Name	Name von Produkttyp	Name von Datenbereich
1000106539		Lagerbuchse, Blat...	FEBI BILSTEIN
1000106557		Lagerung, Kühler	FEBI BILSTEIN
1000106844		Lagerung, Motor	FEBI BILSTEIN

Berechnungsregel "default_marketing_text (Code: default_marketing_text)"



Wertetyp: ☒ Text (sprachneutral)

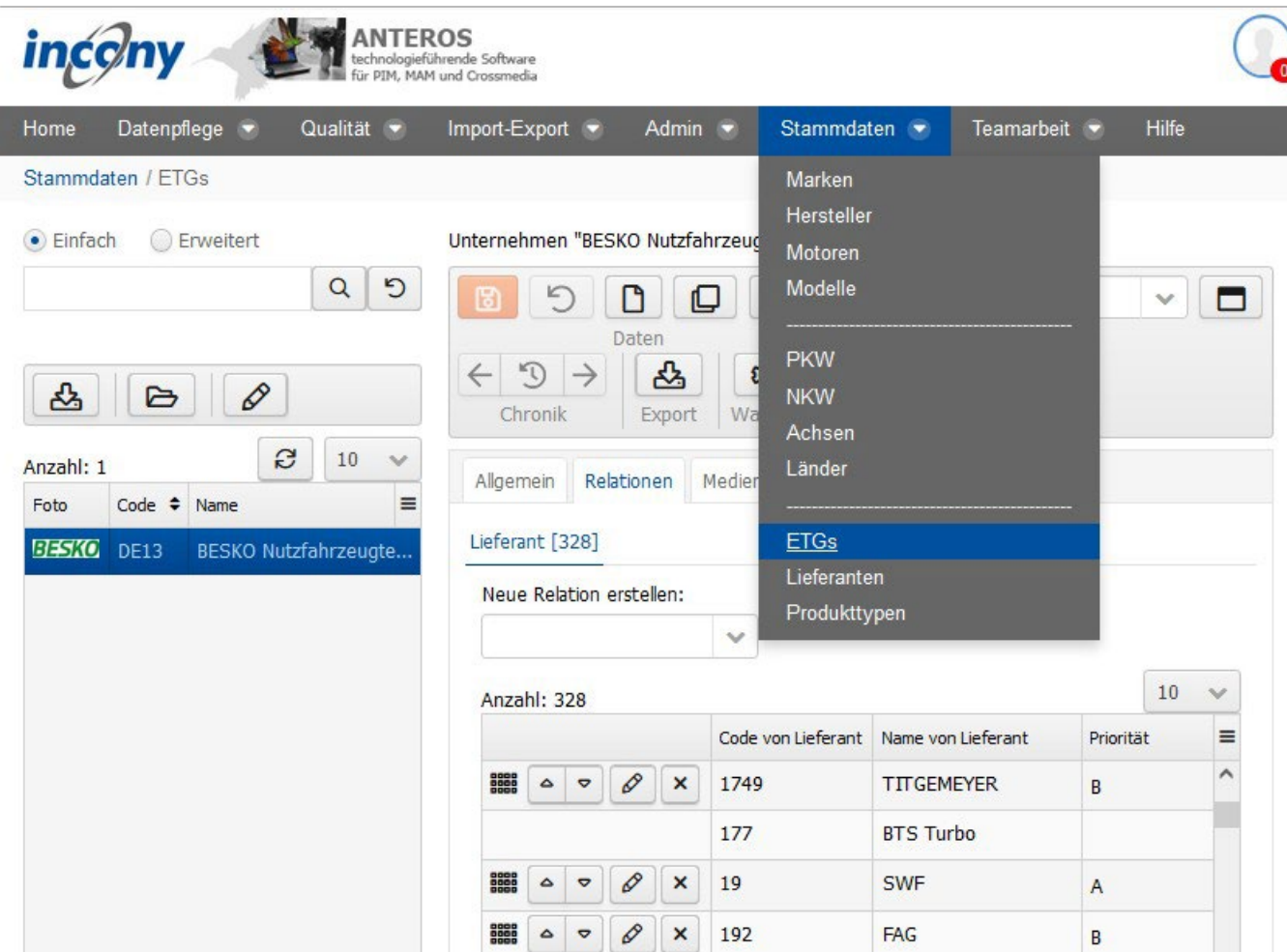
Datentypen: (1) Produkt

Daten-ID:

- + GA
- + name
- + name2

Schablone:

```
[#if GA?? && value3??]${GA} ${name2}  
[#elseif GA??]${GA}  
[#elseif name?? && name2??]${name} ${name2}
```



The screenshot shows the ANTEROS software interface. The top navigation bar includes Home, Datenpflege, Qualität, Import-Export, Admin, Stammdaten (selected), Teamarbeit, and Hilfe. The Stammdaten dropdown menu is open, showing options: Marken, Hersteller, Motoren, Modelle, PKW, NKW, Achsen, Länder, ETGs (highlighted), Lieferanten, and Produkttypen. The main content area displays 'Unternehmen "BESKO Nutzfahrzeug' with a search bar and filters. A table lists suppliers with columns: Code von Lieferant, Name von Lieferant, and Priorität. The table shows 328 results.

Code von Lieferant	Name von Lieferant	Priorität
1749	TITGEMEYER	B
177	BTS Turbo	
19	SWF	A
192	FAG	B

1. Vehicle data imported from Topmotive

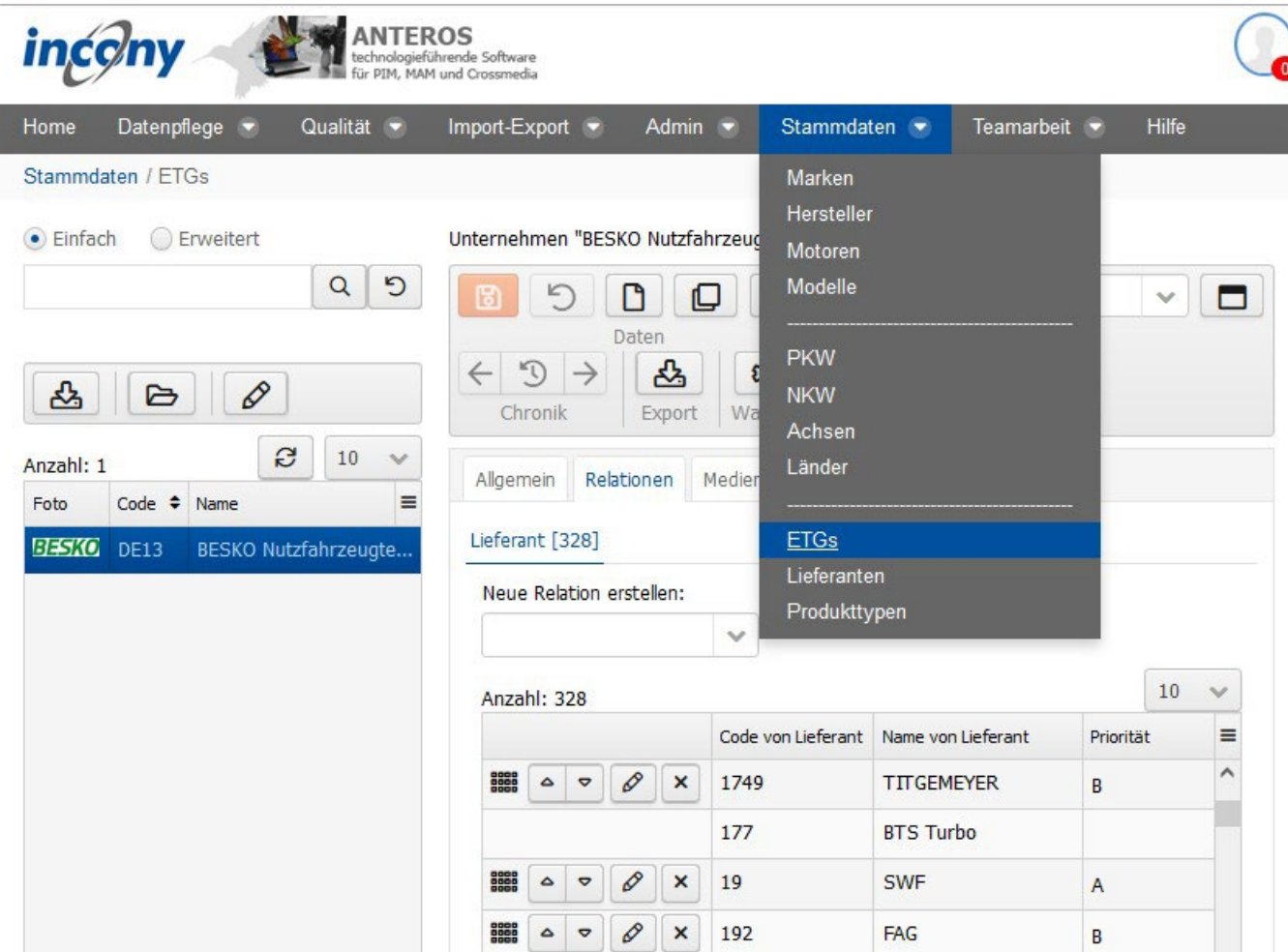
➤ more generic articles

for a finer structuring, advantageous for PIM maintenance and search in online store

➤ more criteria

technical products are often sold via technical criteria, which users use for filtering

→ not only with Topmotive, can also be used for own store or further exports



The screenshot shows the ANTEROS software interface. The top navigation bar includes 'Home', 'Datenpflege', 'Qualität', 'Import-Export', 'Admin', 'Stammdaten', 'Teamarbeit', and 'Hilfe'. The 'Stammdaten' menu is open, showing options like 'Marken', 'Hersteller', 'Motoren', 'Modelle', 'PKW', 'NKW', 'Achsen', 'Länder', 'ETGs', 'Lieferanten', and 'Produkttypen'. The 'ETGs' option is selected. The main area displays 'Unternehmen "BESKO Nutzfahrzeuge' with a search bar and a list of suppliers. The list has a header with 'Code von Lieferant', 'Name von Lieferant', and 'Priorität'. The data rows are:

Code von Lieferant	Name von Lieferant	Priorität
1749	TITGEMEYER	B
177	BTS Turbo	
19	SWF	A
192	FAG	B

2. Additional master data for store and ERP

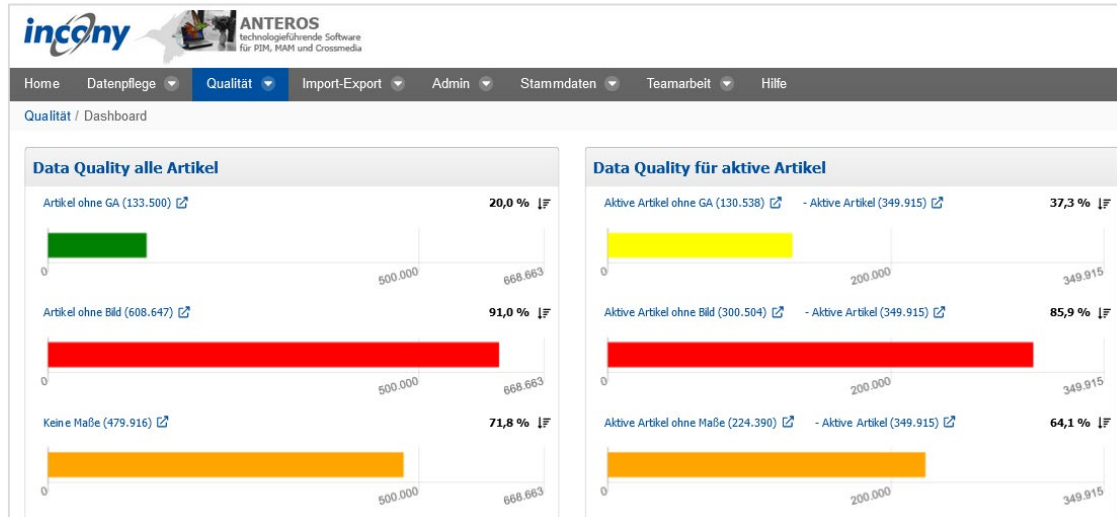
- Addition for brands,
e.g. for ERP, whether brand is in local assortment
 - New objects: Suppliers, ETG,
e.g. for store: list of suppliers per ETG (with data to suppliers, to ETG and relation attributes to supplier-ETG)
- everything in one system
- can be maintained efficiently

Everything is efficiently maintainable in one system in ANTEROS.

Gradually improve the quality of data,
of all products (imported and manually input)

- Create own **quality reports**
- Identify problems in the **dashboard** at any time





Advantages of the dashboard:

- Deficits in quality in the data very clear
- Every login brings you to the dashboard, reminds you of quality issues
- Traffic light colors highlight the problems
- Each user can create their own quality reports or reports for all users

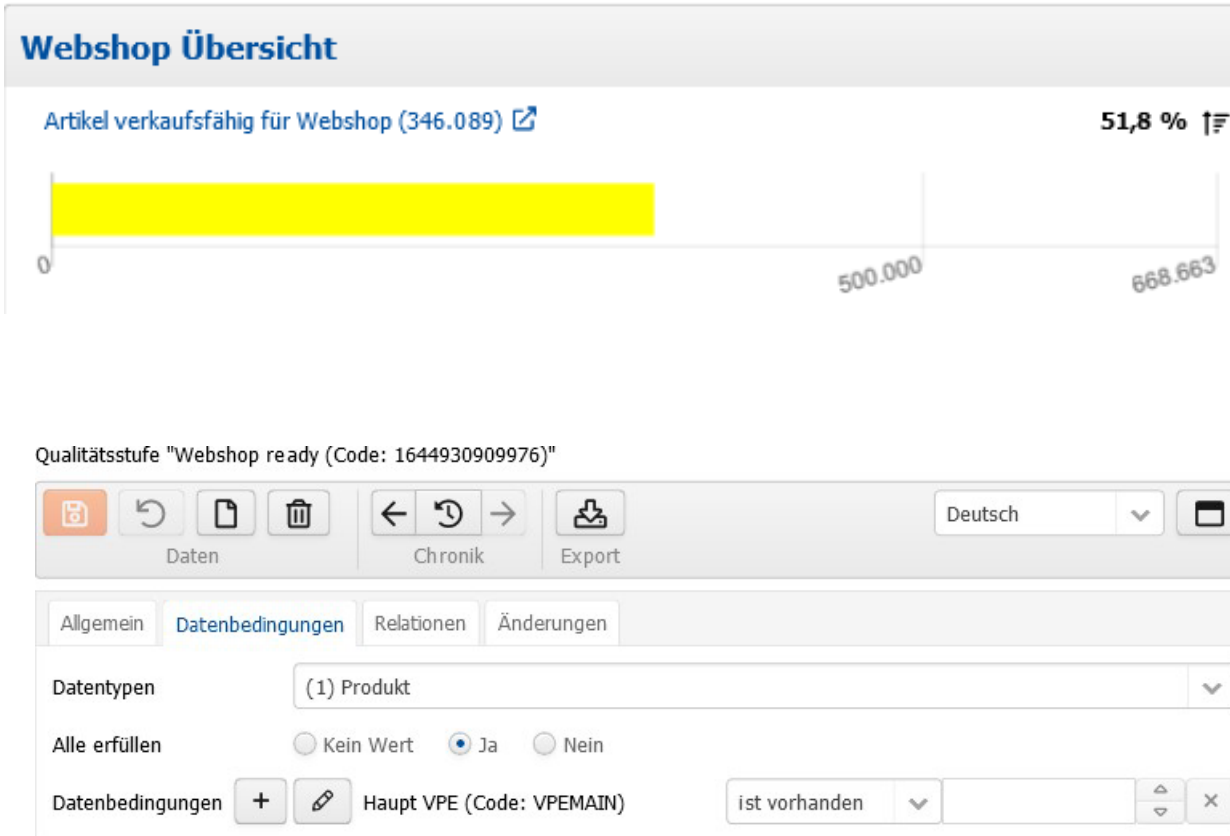


1. Quality checks via search queries like:

- Article without picture
- Article without dimensions,...

Cascading of search queries is possible:

- Active items without image
(„Active item“ + QS level „item without image“)
- Active items without image and dimensions
(„Active item“ + QS level „item without image“
+ QS level „no dimensions“)



2. Check data fields via quality levels

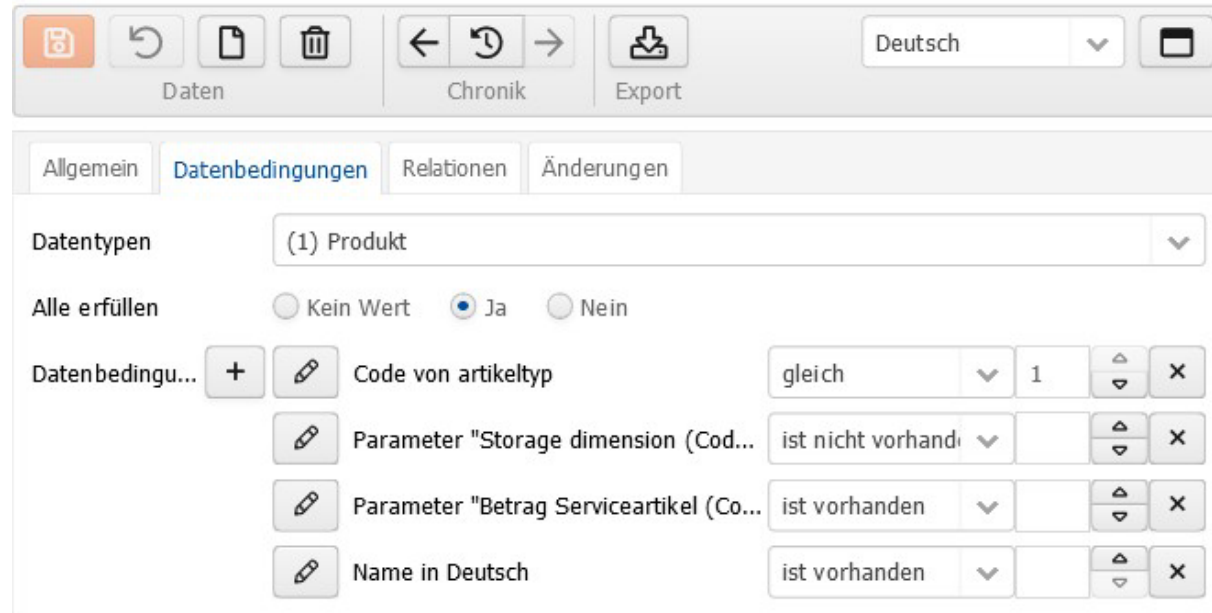
Example 1:

- Online store-ready: products with VPE

• Display in dashboard

• Set condition on data fields

Qualitätsstufe " Korrekter Serviceartikel (Code: 1633418988726)"

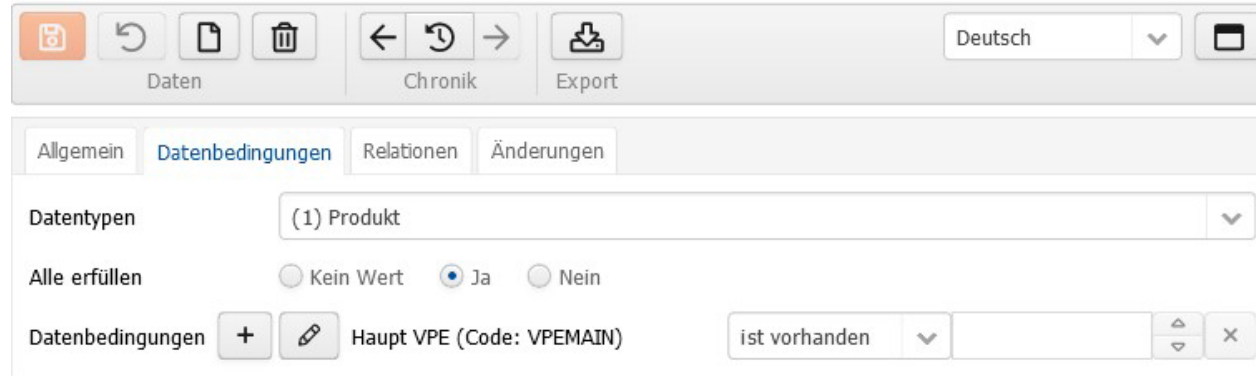


The screenshot shows the ANTEROS dashboard interface. At the top, there's a header bar with icons for 'Daten' (Data), 'Chronik' (History), and 'Export', along with a language dropdown set to 'Deutsch'. Below this is a tabbed interface with 'Allgemein', 'Datenbedingungen' (selected), 'Relationen', and 'Änderungen'. The 'Datenbedingungen' tab displays a list of data conditions for the item '(1) Produkt'. The conditions are defined by four criteria: 'Code von artikeltyp' (set to 'gleich' and '1'), 'Parameter "Storage dimension (Cod..."' (set to 'ist nicht vorhande'), 'Parameter "Betrag Serviceartikel (Co..."' (set to 'ist vorhanden'), and 'Name in Deutsch' (set to 'ist vorhanden'). Each condition has an edit icon and a delete 'x' button.

Example 2:

- Correct Service Item:
Condition on four data fields:
Item Type, Name, Service Item and Storage Dim.
- Simple usage:
By edit icon reference to data fields,
which can be extended at any time
- Flexible rules:
Operations such as is-present, not-present, has-
minimum length, <, >, ... applied to the data.

Qualitätsstufe "Webshop ready (Code: 1644930909976)"



The screenshot shows the 'Datenbedingungen' (Data Conditions) tab. It features a top toolbar with icons for 'Daten', 'Chronik', and 'Export', along with a language dropdown set to 'Deutsch'. Below the tabs, there's a 'Datentypen' dropdown showing '(1) Produkt'. Under 'Alle erfüllen' (All fulfill), there are radio buttons for 'Kein Wert', 'Ja' (selected), and 'Nein'. The 'Datenbedingungen' (Data conditions) section includes a '+', an edit icon, and a condition: 'Haupt VPE (Code: VPMAIN)' with a dropdown set to 'ist vorhanden'.

Quality level cascading is possible:

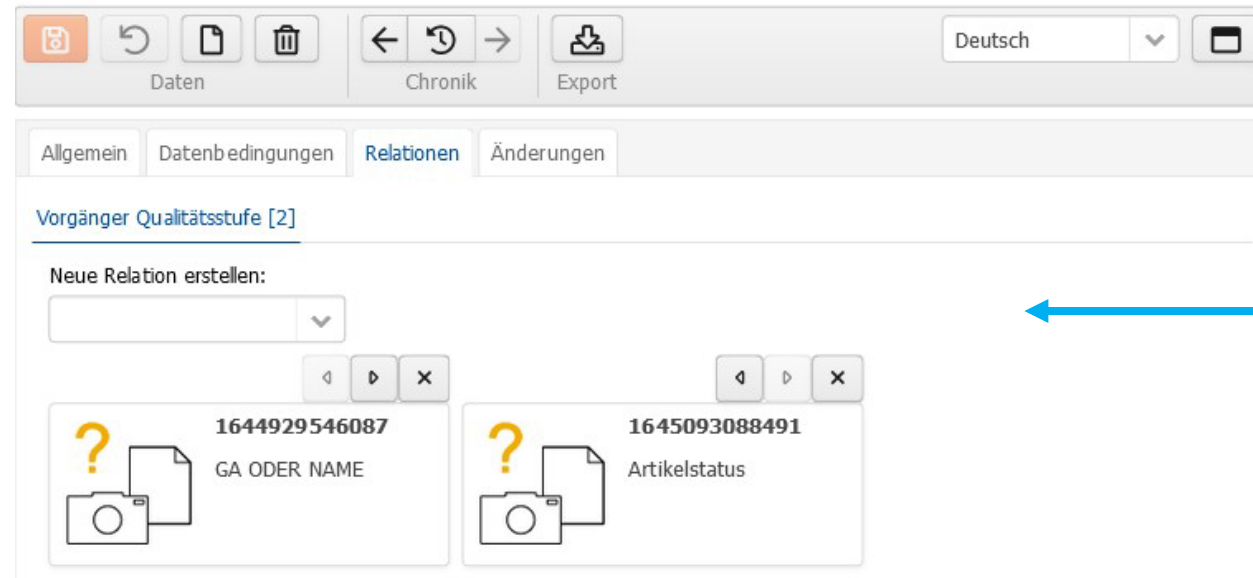
Example 2:

Online shop ready =

- VPE present AND
- Name or GA present AND
- Item status = Active

Cascading via **relations**,
similar to product relations

Qualitätsstufe "Webshop ready (Code: 1644930909976)"

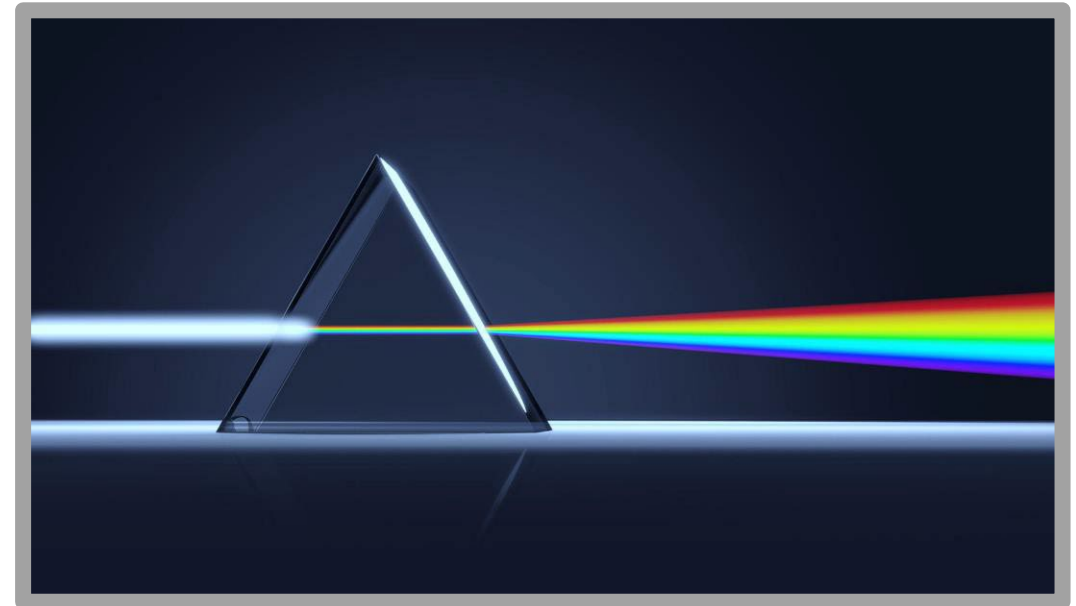


The screenshot shows the 'Relationen' (Relations) tab. It has the same top toolbar as the previous screenshot. Below the tabs, there's a link 'Vorgänger Qualitätsstufe [2]'. Under 'Neue Relation erstellen:' (Create new relation:), there's a dropdown menu. Below this, two relation cards are shown. The first card has a yellow question mark icon, a document icon, and the text '1644929546087 GA ODER NAME'. The second card has a yellow question mark icon, a document icon, and the text '1645093088491 Artikelstatus'. A blue arrow points from the text 'Cascading via relations, similar to product relations' to the first relation card.

Centrally maintain product data in the PIM

Multiple use for

- ▶ ERP system
- ▶ Online store
- ▶ Dealer portal TecDoc
- ▶ Dealer portal TopMotive
- ▶ If needed for further exports,...



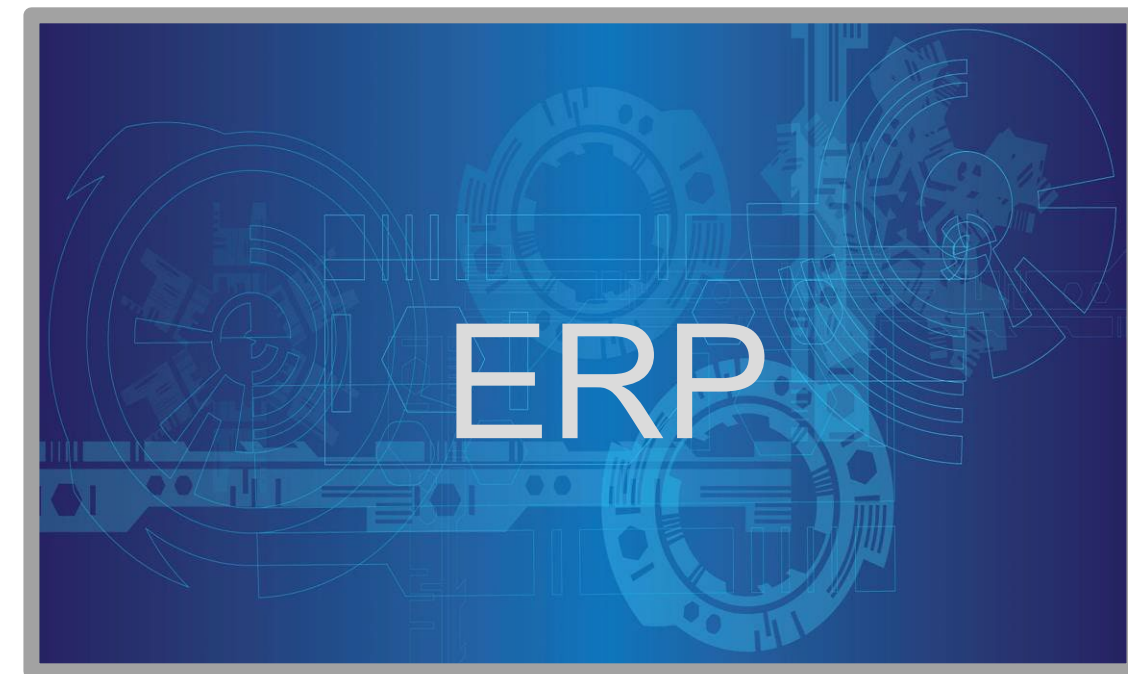
Interface from PIM to ERP at BPW

ERP system at BPW:

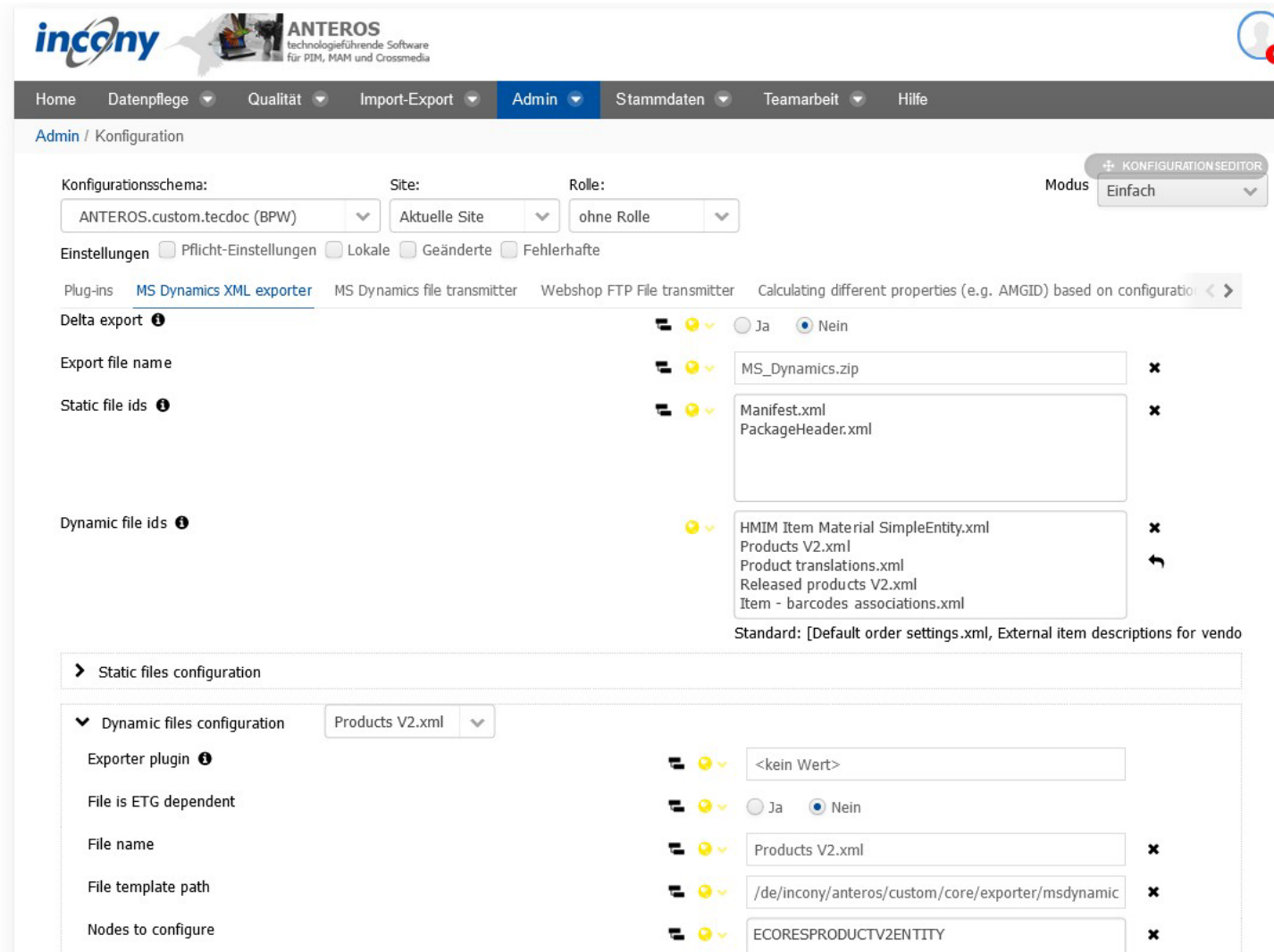
- ▶ MS Dynamics 365 by Microsoft
- ▶ System runs on the Azure Cloud

Interface between PIM and ERP

- ▶ Using Azure services to transfer data
- ▶ Transfer all new and changed product data (delta update), 1x nightly



Interface between PIM and ERP at BPW



incony **ANTEROS**
technologieführende Software
für PIM, MAM und Crossmedia

Home Datenpflege Qualität Import-Export **Admin** Stammdaten Teamarbeit Hilfe

Admin / Konfiguration

Konfigurationsschema: ANTEROS.custom.tecdoc (BPW) Site: Aktuelle Site Rolle: ohne Rolle Modus: Einfach

Einstellungen ☐ Pflicht-Einstellungen ☐ Lokale ☐ Geänderte ☐ Fehlerhafte

Plug-ins **MS Dynamics XML exporter** MS Dynamics file transmitter Webshop FTP File transmitter Calculating different properties (e.g. AMGID) based on configuration

Delta export

Export file name MS_Dynamics.zip

Static file ids Manifest.xml
PackageHeader.xml

Dynamic file ids HMIM Item Material SimpleEntity.xml
Products V2.xml
Product translations.xml
Released products V2.xml
Item - barcodes associations.xml

Standard: [Default order settings.xml], External item descriptions for vendor

Static files configuration

Dynamic files configuration Products V2.xml

Exporter plugin <kein Wert>

File is ETG dependent ☐ Ja ☒ Nein

File name Products V2.xml

File template path /de/incony/anteros/custom/core/exporter/msdynamic

Nodes to configure ECORESPRODUCTV2ENTITY

ANTEROS configuration by BPW:

BPW has configured the XML exporter in the config.editor of ANTEROS themselves:

- ▶ which files
- ▶ which fields per file
- ▶ which tags per field

The XML format for this is provided by MS Dynamics.

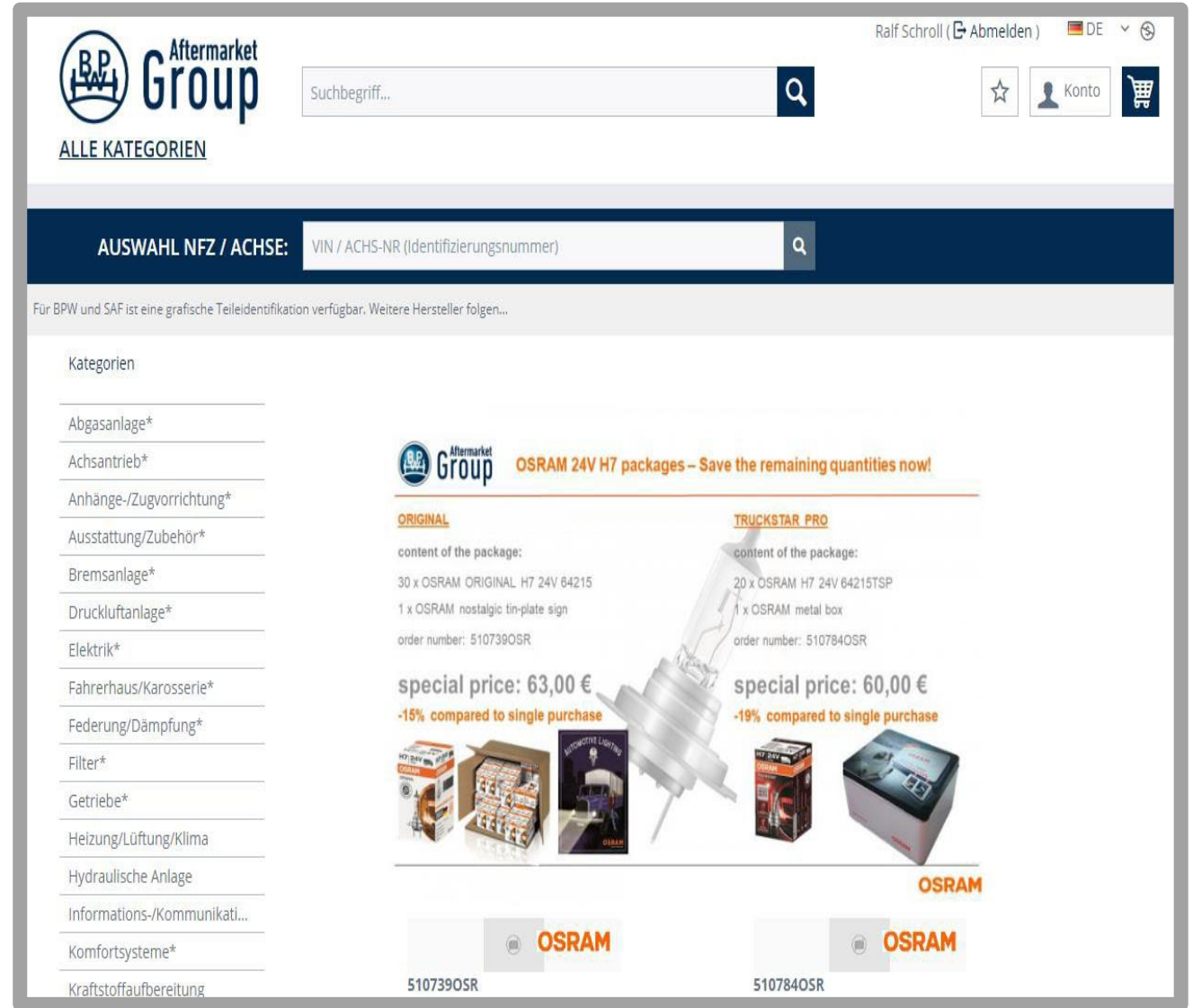
Interface between PIM and online store at BPW

Online shop at BPW:

- In-house development

Interface from PIM to online store

- Data transfer in txt format (own format with fixed field lengths, similar to TAF)
- Transfer of all product data



The screenshot shows the BPW Aftermarket Group online shop interface. At the top, there is a navigation bar with the BPW Aftermarket Group logo, a search bar, and user account options (Ralf Schroll, Abmelden, DE, Konto, and a shopping cart icon). Below the navigation bar, there is a section for "AUSWAHL NFZ / ACHSE:" with a search bar for VIN / ACHS-NR (Identifizierungsnummer). A message states: "Für BPW und SAF ist eine grafische Teileidentifikation verfügbar. Weitere Hersteller folgen...".

On the left side, there is a "Kategorien" (Categories) list with the following items:

- Abgasanlage*
- Achsantrieb*
- Anhänge-/Zugvorrichtung*
- Ausstattung/Zubehör*
- Bremsanlage*
- Druckluftanlage*
- Elektrik*
- Fahrerhaus/Karosserie*
- Federung/Dämpfung*
- Filter*
- Getriebe*
- Heizung/Lüftung/Klima
- Hydraulische Anlage
- Informations-/Kommunikati...
- Komfortsysteme*
- Kraftstoffaufbereitung

The main content area features a promotional banner for "OSRAM 24V H7 packages – Save the remaining quantities now!". It compares two packages:

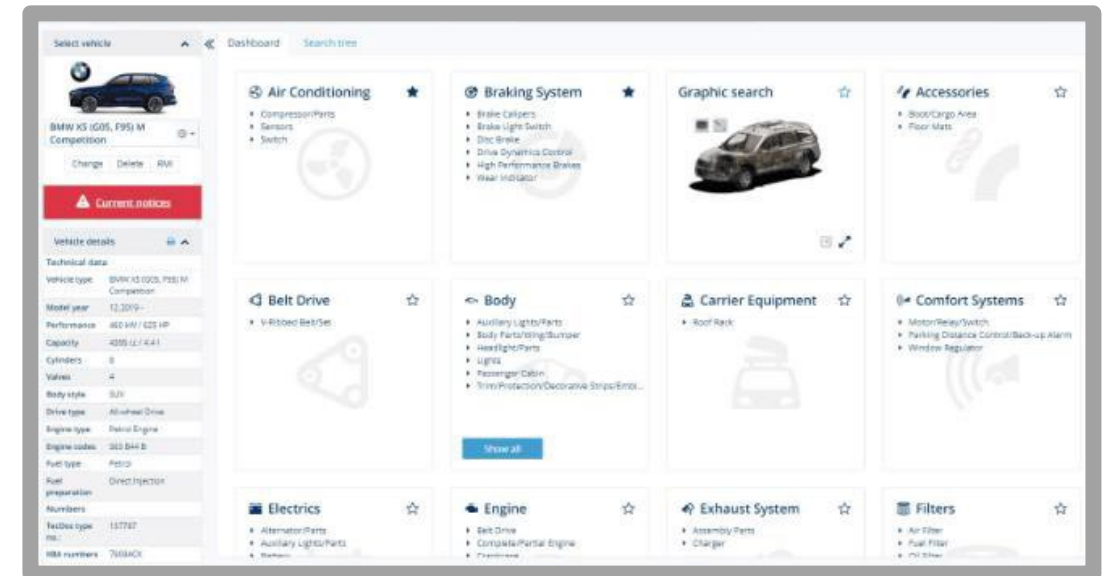
ORIGINAL	TRUCKSTAR PRO
content of the package: 30 x OSRAM ORIGINAL H7 24V 64215 1 x OSRAM nostalgic tin-plate sign order number: 510739OSR	content of the package: 20 x OSRAM H7 24V 64215TSP 1 x OSRAM metal box order number: 510784OSR
special price: 63,00 € -15% compared to single purchase	special price: 60,00 € -19% compared to single purchase

Below the comparison, there are images of the OSRAM product boxes and a large image of an H7 bulb. At the bottom, the OSRAM logo is displayed twice, corresponding to the order numbers 510739OSR and 510784OSR.

Interface between PIM and TecDoc at BPW

TecAlliance dealer portal:

- ▶ Important association of manufacturers and dealers from the automotive industry for over 25 years
- ▶ TecDoc catalog for workshops, among others, with products from many manufacturers
- ▶ TecAlliance maintains master data, such as vehicles, models, generic articles



Interface from PIM to TecDoc (planned):

- ▶ TAF format: TecDoc standard format
- ▶ For ANTEROS standard import and export

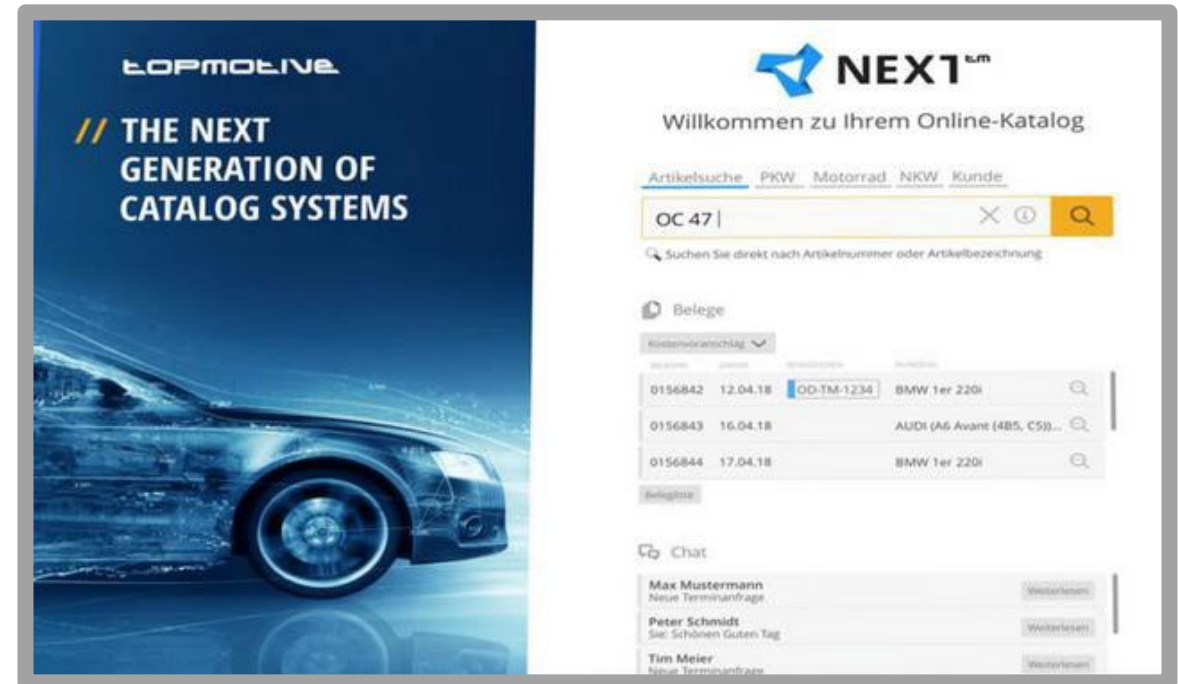
Interface between PIM and Topmotive at BPW

Dealer portal from DVSE:

- ▶ Online catalogs for workshops and industry, among others, with products from many manufacturers
- ▶ DVSE maintains master data, such as vehicles, models, generic articles, manufacturers

Interface from PIM to TecDoc (planned):

- ▶ TAF format: TecDoc standard format
- ▶ For ANTEROS standard import and export



Summary: Successful PIM implementation!

- **Efficient data maintenance with ANTEROS**
 - of approx. 700,000 products
 - PIM is the leading system for product data at BPW
 - Supplier data can be easily imported in TecDoc format
 - own brand product data can be easily maintained
 - additional data automatically added via calculation rules
 - not limited to TecDoc master data: in our case, among others, further generic articles and criteria, suppliers, ETGs
- **Improve data quality in a targeted manner via dashboard, quality levels**
- **Interfaces to use PIM data multiple times**
 - Data transfer to ERP, store and dealer portals
- **Agile project approach for fast results**
- **ANTEROS is very flexible, INCONY team is very competent**

