

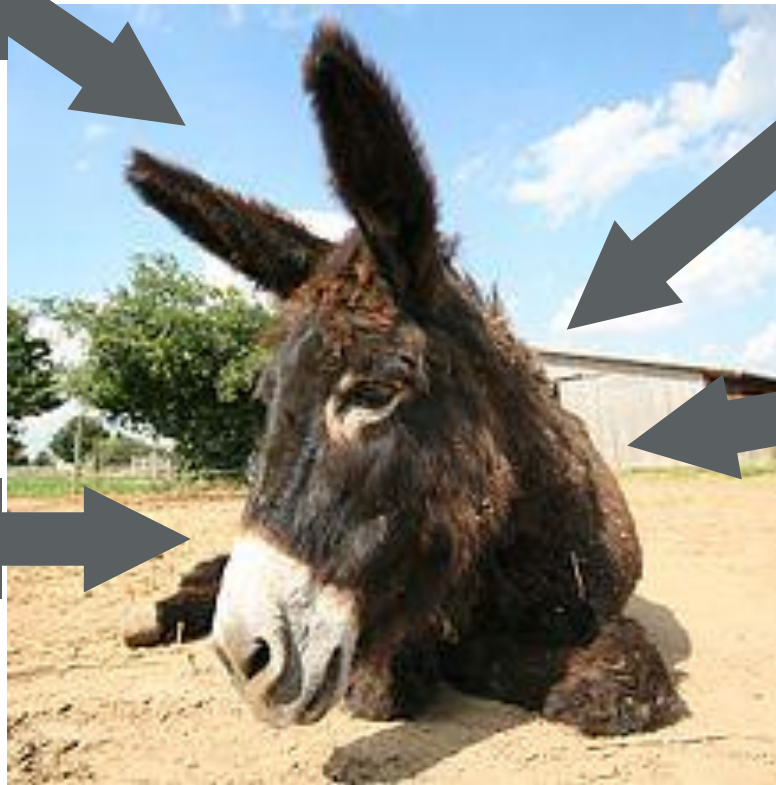
 **BIM catalogs.net**

The BIG BIM challenge for a manufacturer

or do not overload the donkey!

The characteristics of a donkey

Very Patient



Intelligent

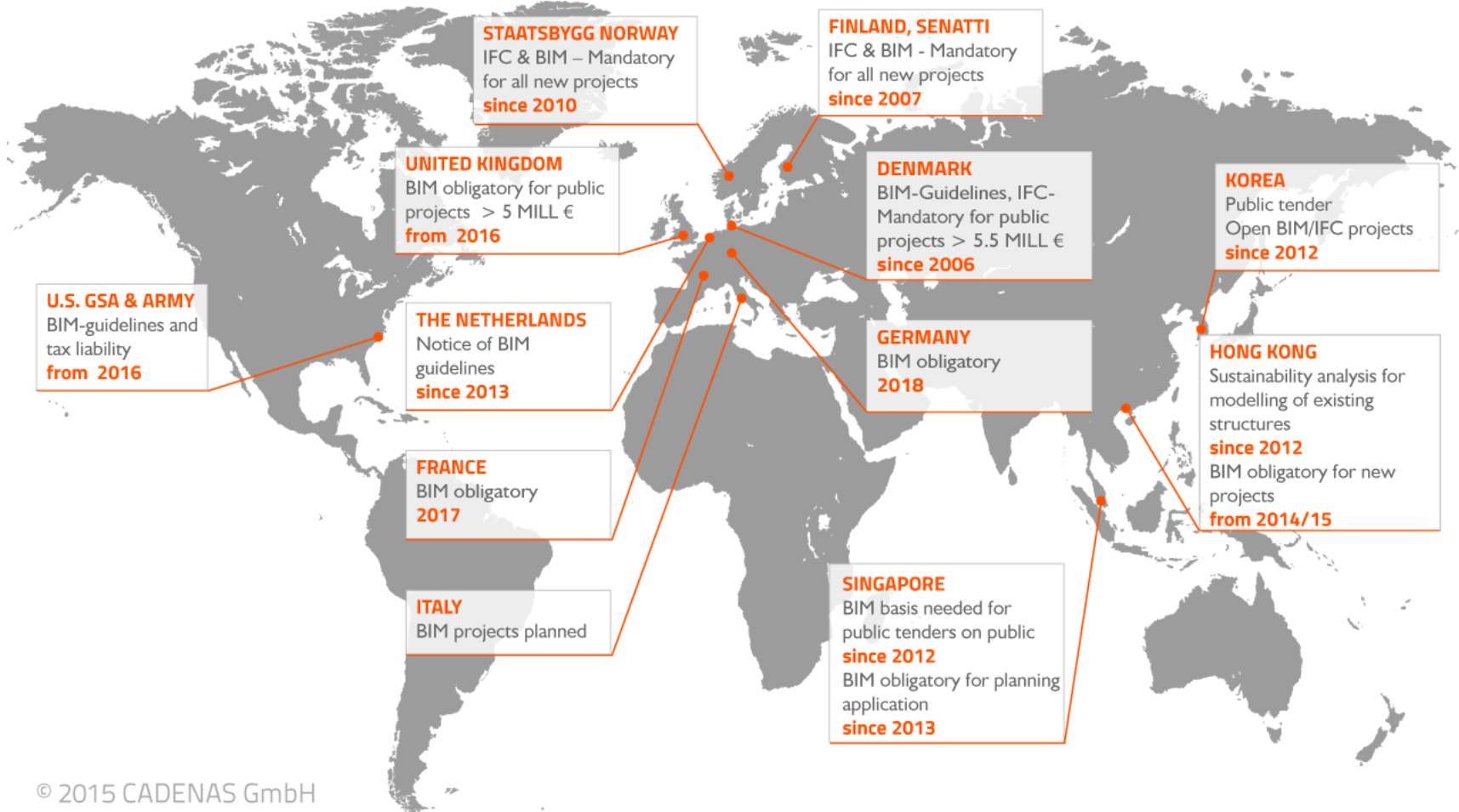
Strong pack animal

Fast 50 km/h

Worldwide BIM specifications & requirements

BIMcatalogs.net

2D & 3D BIM Multi CAD
Product Catalogs



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Worldwide BIM specifications & requirements

BIMcatalogs.net
 2D & 3D BIM Multi CAD
 Product Catalogs

Languages

- Germany
- Japan
- China
- South Korea
- USA & AR
- France
- UK
- Italy
- Poland
- Spain
- Turkey
- Russia
- Sweden

BIM CAD Systems

- UNITED KINGDOM**: BIM obligatory for public projects > 5 MILL € from 2016. **AUTODESK REVIT**
- FINLAND, SENATTI**: IFC & BIM - Mandatory
- DENMARK**: BIM-Guidelines, IFC- or public projects > 5.5 MILL € since 2006. **buildingSMART** International home of openBIM
- THE NETHERLANDS**: Notice of BIM guidelines since 2013. **PaletteCAD**
- GERMANY**: BIM obligatory since 2018. **SketchUp**, **VECTORWORKS** A NEMETSCHER COMPANY
- FRANCE**: BIM obligatory since 2017. **GRAPHISOFT ARCHICAD**, **Bentley**
- ITALY**: BIM projects planned. **Tekla**
- SINGAPORE**: BIM basis needed for public tenders on public since 2012. BIM obligatory for planning application since 2013.

Classifications

- KOREA**: **OmniClass™** under **AS/NZS 4500** since 2012
- UNICLASS** Classification
- HONG KONG**: **AIA** (Architecture Institute of Australia) & **CIBSE** (Chartered Institution of Building Services Engineers) since 2012
- COBie** (Construction Operating Building Information Exchange) since 2014
- eClass®** CLASSIFICATION AND PRODUCT DESCRIPTION
- bSDD** (Building Specification Data Dictionary)
- CAFMCONECT**

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What is the BIG BIM challenge for manufacturers?

Make all architects in all markets happy!

15 LANGUAGES 7 BIM CAD SYSTEMS 5 VERSIONS



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AUTODESK REVIT 2017

REVIT 2010

SketchUp Pro 2016

VECTORWORKS
A NEMETSCHEK COMPANY

GRAPHISOFT ARCHICAD

Allplan

Bentley

Tekla Structures

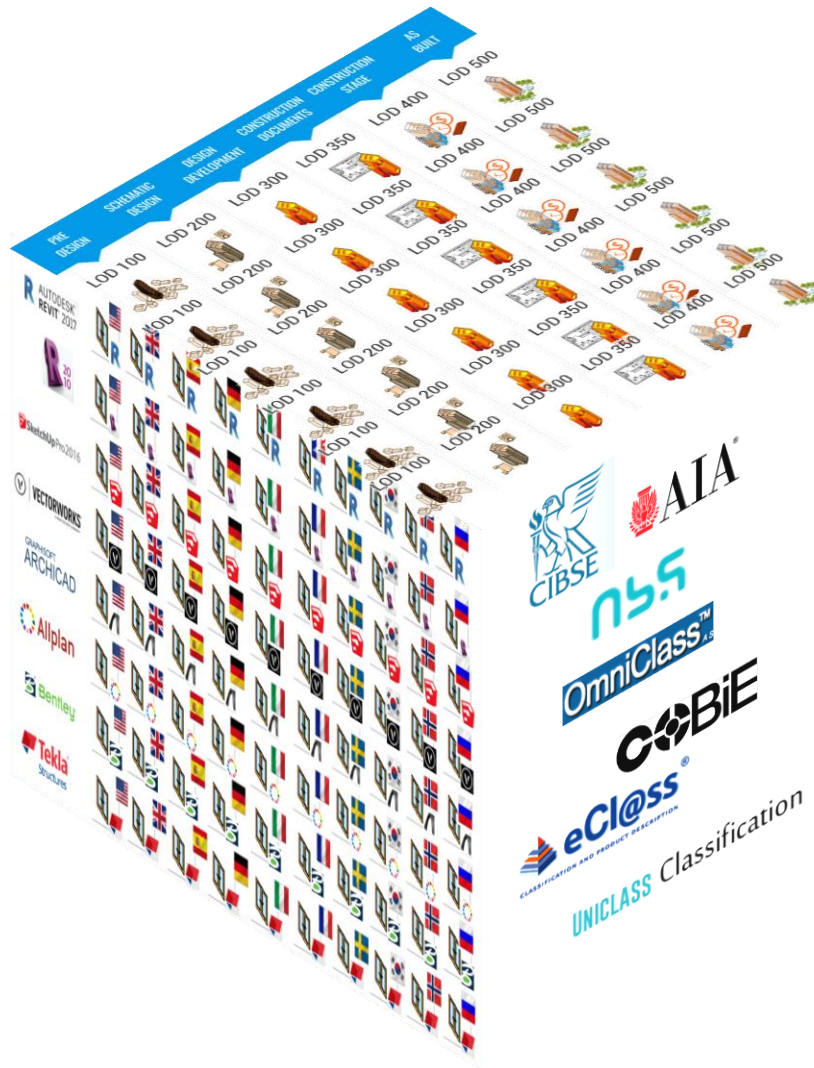
What is the BIG BIM challenge for manufacturers?

Make all architects in all markets happy!

6 LOD (+LOIs) / 8 CLASSIFICATION SYSTEMS

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Product Catalogs



La nuova norma UNI 11337, gestione digitale delle costruzioni

LOD A	LOD B	LOD C	LOD D	LOD E
Geometria Elemento architettonico verticale o pseudoverificale rappresentato mediante un simbolo 2D.	Geometria Solido generico per rappresentazione elemento architettonico verticale o pseudoverificale con forma, spessore e posizione approssimata.	Geometria Elemento architettonico (sistema e sottosistema) verticale o pseudoverificale rappresentato con ingombri calcolati secondo la normativa tecnica.	Geometria Elemento architettonico verticale o pseudoverificale rappresentato mediante un solido avente dimensioni pari alle dimensioni reali. Sono incluse tutte le stratigrafie. I dati specifici dei finiture dei materiali e le finiture.	Geometria Elemento architettonico verticale o pseudoverificale rappresentato mediante un solido avente dimensioni pari alle dimensioni reali. Sono incluse tutte le stratigrafie. I dati specifici dei finiture dei materiali e le finiture.
Oggetto Grafica 2D (linee e capture 2D)	Oggetto Solido 3D	Oggetto Solido 3D strutturato	Oggetto Solido 3D complesso	Oggetto Solido 3D complesso
Caratteristiche Posizionamento di massima	Caratteristiche Sempre geometriche d'ingombro	Caratteristiche Definizione del sistema architettonico <ul style="list-style-type: none"> • Spessore • Lunghezza • Larghezza • Volume • Definizione materiali • Definizione stratigrafie principali 	Caratteristiche Dettaglio dei componenti per gruppi e senza riferimenti a singoli prodotti <ul style="list-style-type: none"> • Definizione stratigrafie dettagliate • Spessori componenti • Tipo finitura interna • Isolamento • Camera d'aria • Sottistruttura supporto • Finitura • Dettagli costruttivi 	Caratteristiche Dettaglio dei componenti con singolo prodotto. Intimazioni di montaggio <ul style="list-style-type: none"> • Materiale di supporto • Schecche tecniche singoli prodotti • Tipo finitura interna • Superficie finitura interna • Tipo finitura esterna • Superficie finitura esterna • Composizione Materiale/Componente • Presenza certificazioni • Capacità strutturale • Trasmissione vapore • Valore R • Valore U • Valore assorbimento • Trasmissione acustica
Usi consentiti <ul style="list-style-type: none"> • Semplifici ingombri • Studio schemi compositivi 	Usi consentiti <ul style="list-style-type: none"> • Studio preliminare • Computo metrico • Stimma economica preliminare 	Usi consentiti <ul style="list-style-type: none"> • Dimensione esecutive • Utilizzo per computo metrico estimativo • Verifica interferenze con altre discipline 	Usi consentiti <ul style="list-style-type: none"> • Previsioni di scheduling di cantiere 	Usi consentiti <ul style="list-style-type: none"> • Certificazione • Produzione • Manutenzione

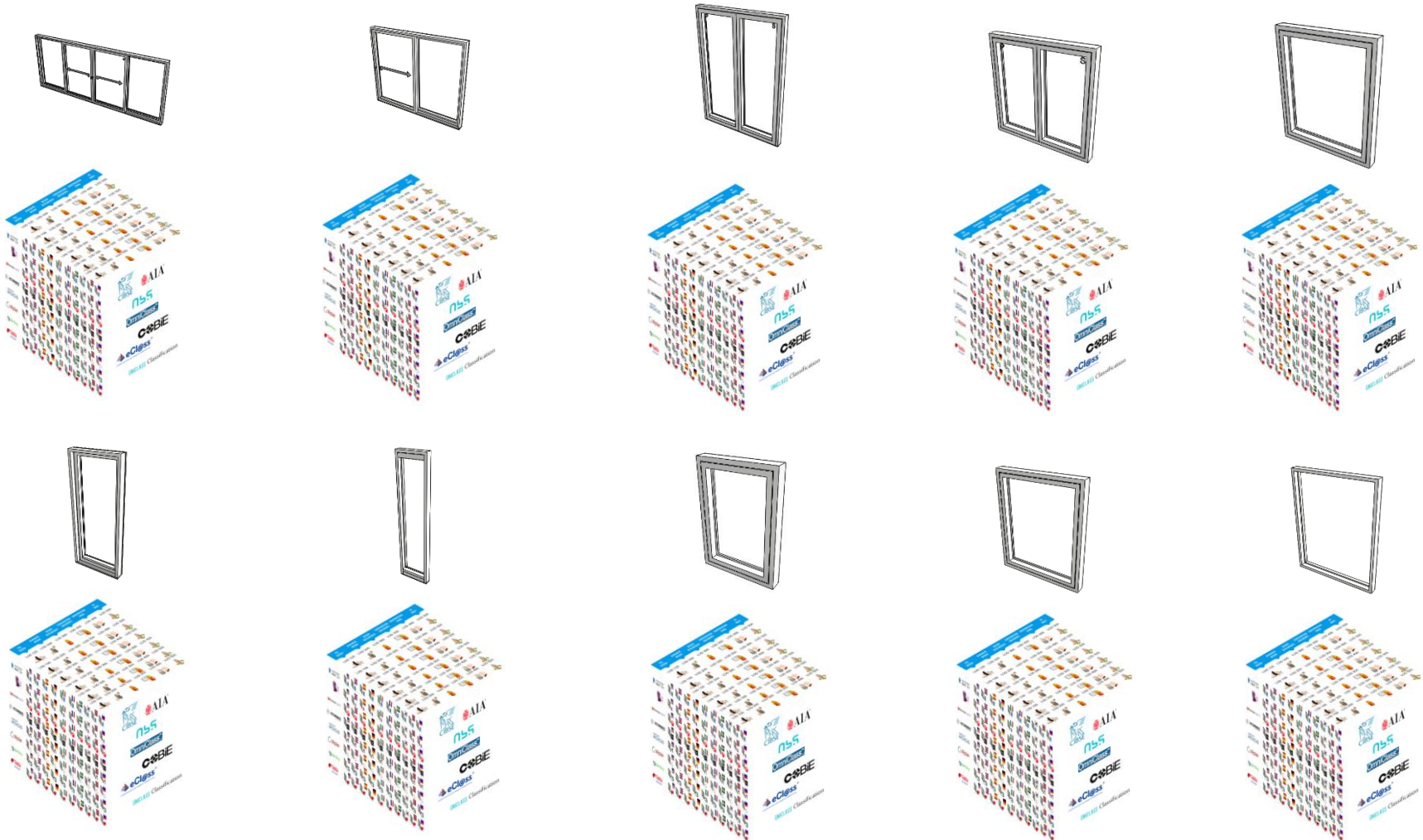
What is the BIG BIM challenge for manufacturers?

Make all architects in all markets happy!

50 PRODUCT FAMILIES

BIMcatalogs.net

2D & 3D BIM Multi CAD
Product Catalogs



Calculation of BIM component manufacturers effort

Based on a hypothetical theory to make every customer & market happy!

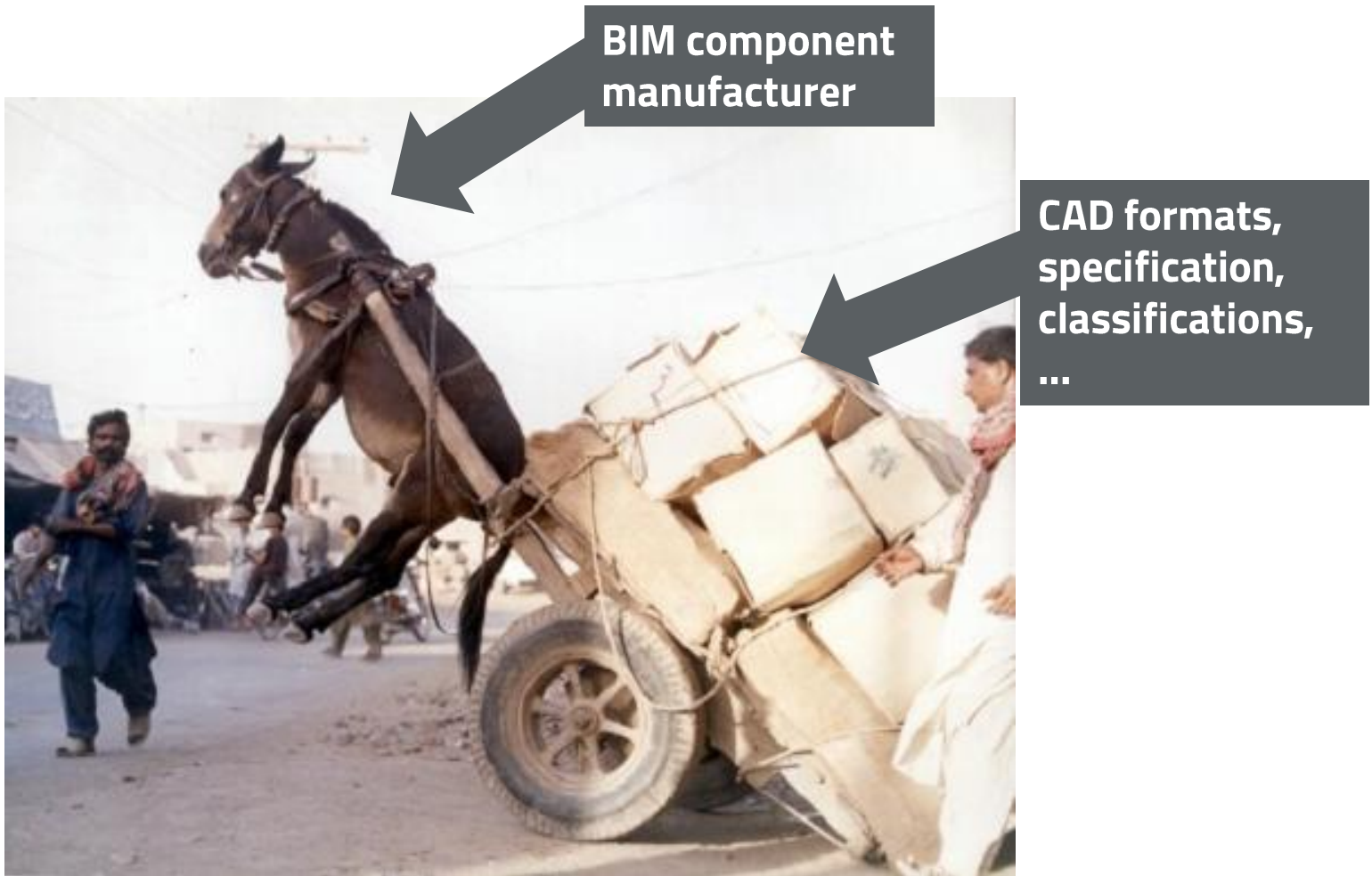
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2D & 3D BIM Multi CAD
Product Catalogs

Effort	Multiplicator
CAD/BIM Systems	8
Languages	12
CAD/BIM Versions	3
Classifications	6
Product Families (PF)	50
Variants of PF to make	86400
Time For Data Creation	4h / PF
Full Time Equivalent (FTE)	> 7 Persons
Time	216 years – 30 years/person
Cost	17,2 Mio €

Do not overload the donkey!

Can you see the BIM component manufacturer?



**BIM component
manufacturer**

**CAD formats,
specification,
classifications,
...**

How to unload the donkey?

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Product Catalogs

























CADENAS investigated the market & found out...

...there are > 30 companies who offer a BIM manufacturer solution

All companies are built on a **file sharing solution**

BIMcatalogs.net

2D & 3D BIM Multi CAD
Product Catalogs

		Revit 2017	Revit 2012	ArchiCAD 20	Vectorworks	Allplan	Sketchup	AecoSIM	ArchiCAD 17	AutoCAD
										
									✓	
										
										
				✓						
										
										
				✓						
										
									✓	
										
										
										
				✓					✓	
										
										
										
										
									✓	
										
										

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2D & 3D BIM Multi CAD
Product Catalogs

		Revit 2017	Revit 2012	ArchiCAD 20	Vectorworks	Allplan	Sketchup	AecoSIM	ArchiCAD 17	AutoCAD
									✓	
				✓						
				✓						
									✓	
				✓					✓	
									✓	

CADENAS investigated the market & found out...

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2D & 3D BIM Multi CAD
Product Catalogs











		Revit 2017	Revit 2012	ArchiCAD 20	Vectorworks	Allplan	Sketchup	AecoSIM	ArchiCAD 17	AutoCAD
									✓	
			✗							
									✓	



To find YOUR required format in YOUR language with YOUR specification and YOUR classification is like to move the wheel of fortune

Déjà-Vu Of

The requirements of the BIM market!

- | | |
|---|---|
|  Déjà-Vu |  지금까지 본 |
|  Already seen |  今まで見ました |
|  Ya visto |  Кода-либо видел |
|  Schon mal gesehen |  koskaan nähnyt |
|  Mai visto |  någonsin sett |



CADENAS already solved a similar requirement!

mechanical & electrical market 1992 - 2017

BIMcatalogs.net

2D & 3D BIM Multi CAD
Product Catalogs



Mechanic & Electrical



320 Employees



12 Countries



800 Catalogs



14 Million Users



> 500 Innovations

**BIG BIM
challenges
require a
BIG PLAYER!**

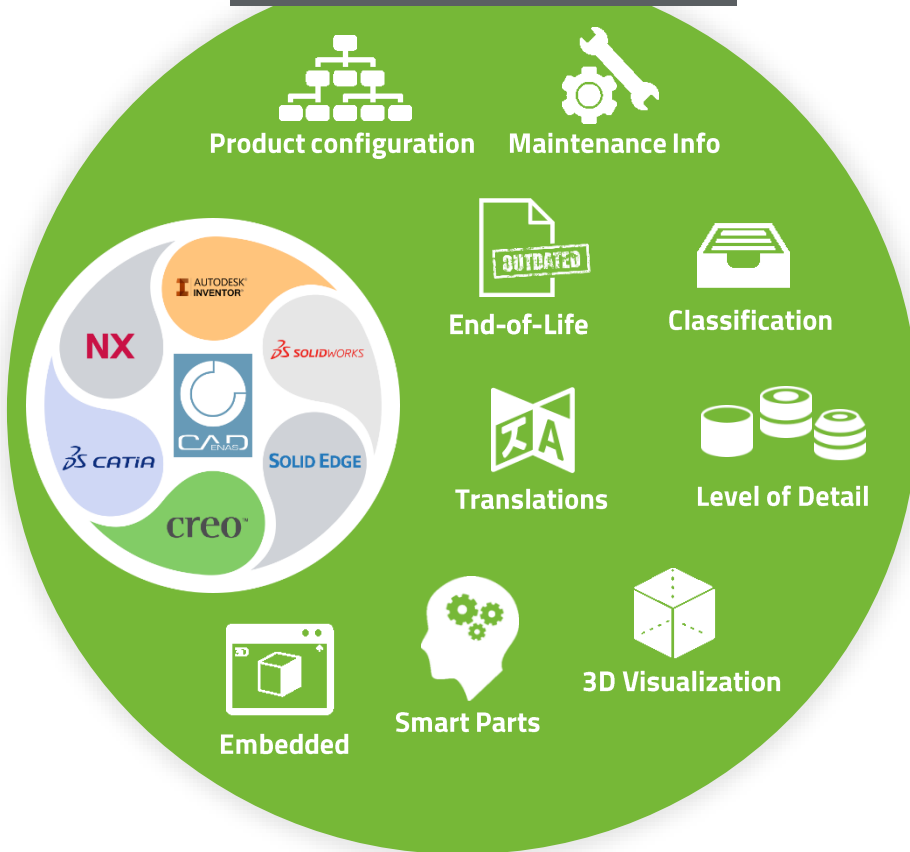
CADENAS already solved a similar requirement!

mechanical & electrical market 1992 - 2017

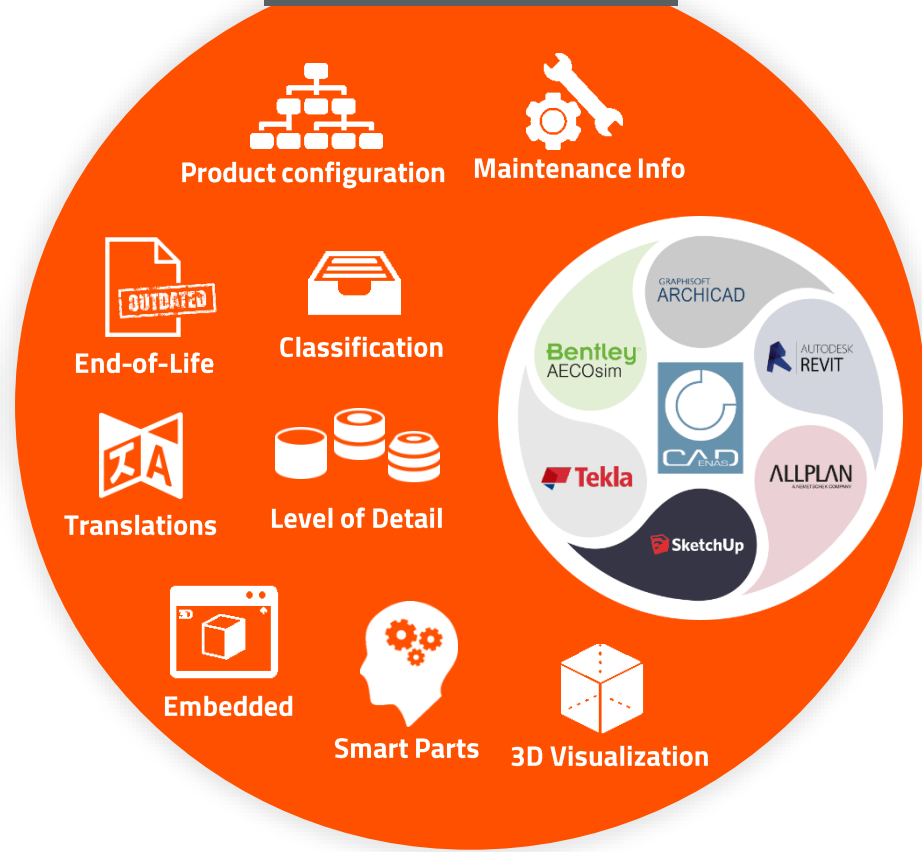
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2D & 3D BIM Multi CAD
Product Catalogs

Mechanic & Electrical



BIM / Architecture

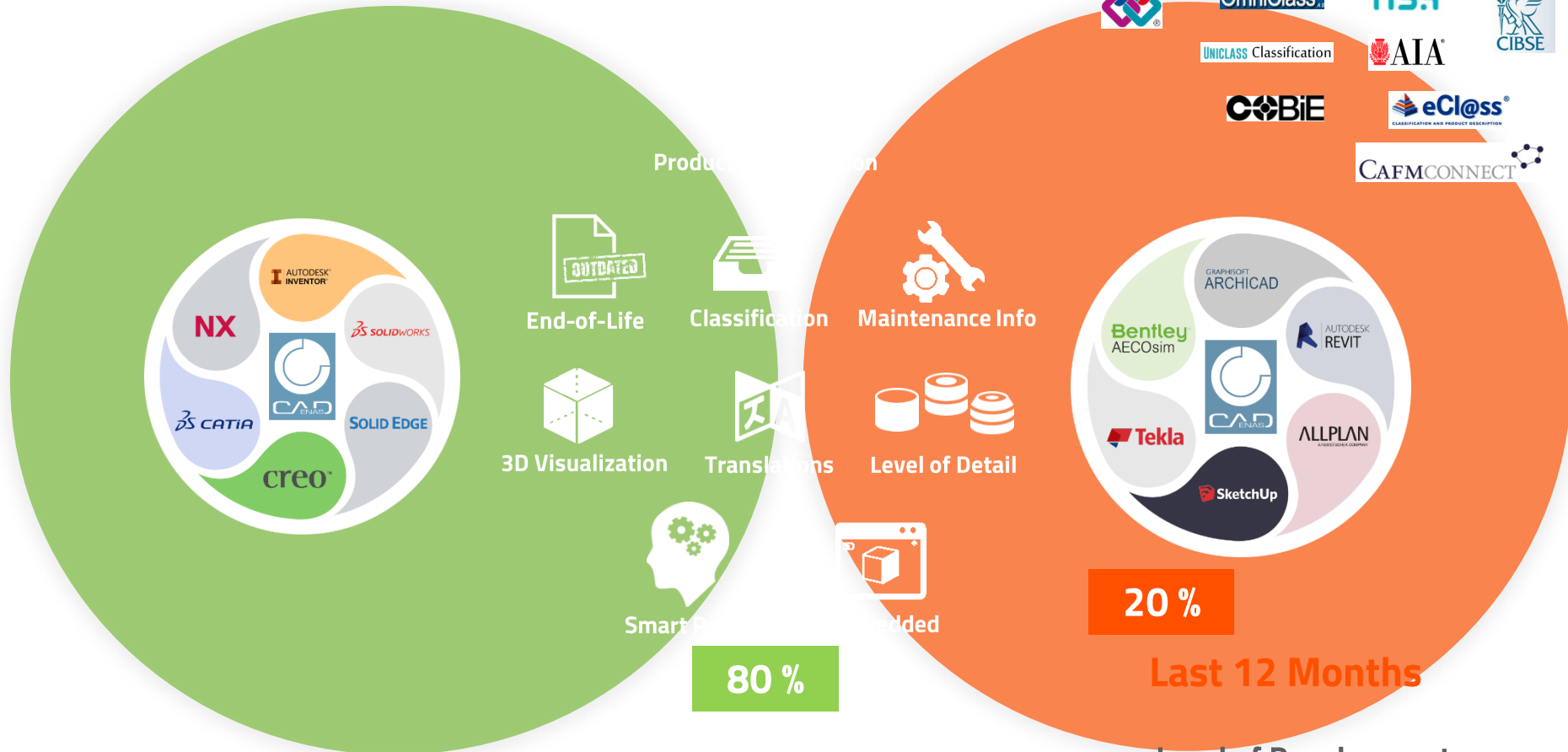


CADENAS already solved a similar requirement!

mechanical & electrical market 1992 - 2017

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2D & 3D BIM Multi CAD
Product Catalogs



Level of Development

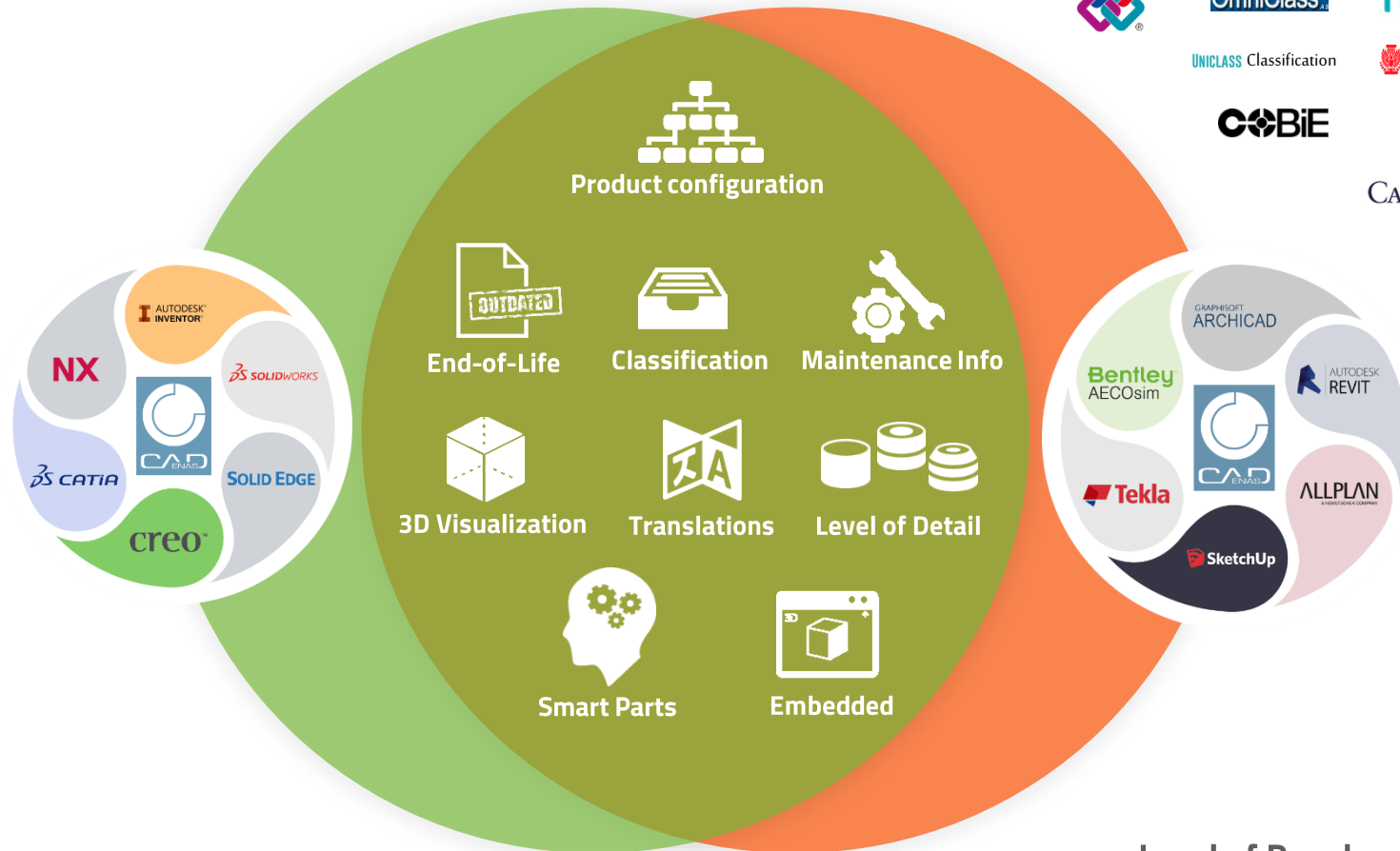
LOD A	LOD B	LOD C	LOD D	LOD E

CADENAS already solved a similar requirement!

mechanical & electrical market 1992 - 2017

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Product Catalogs



OmniClass™

nbs



UNICLASS Classification

AIA®

COBIE

eClass®
CLASSIFICATION AND PRODUCT DESCRIPTION

CAFMCONNECT

GRAPHISOFT
ARCHICAD

Bentley
AECOsim

AUTODESK
REVIT

Tekla

CAD
ENABE

ALLPLAN
A MULTI-CAD CONNECTOR

SketchUp

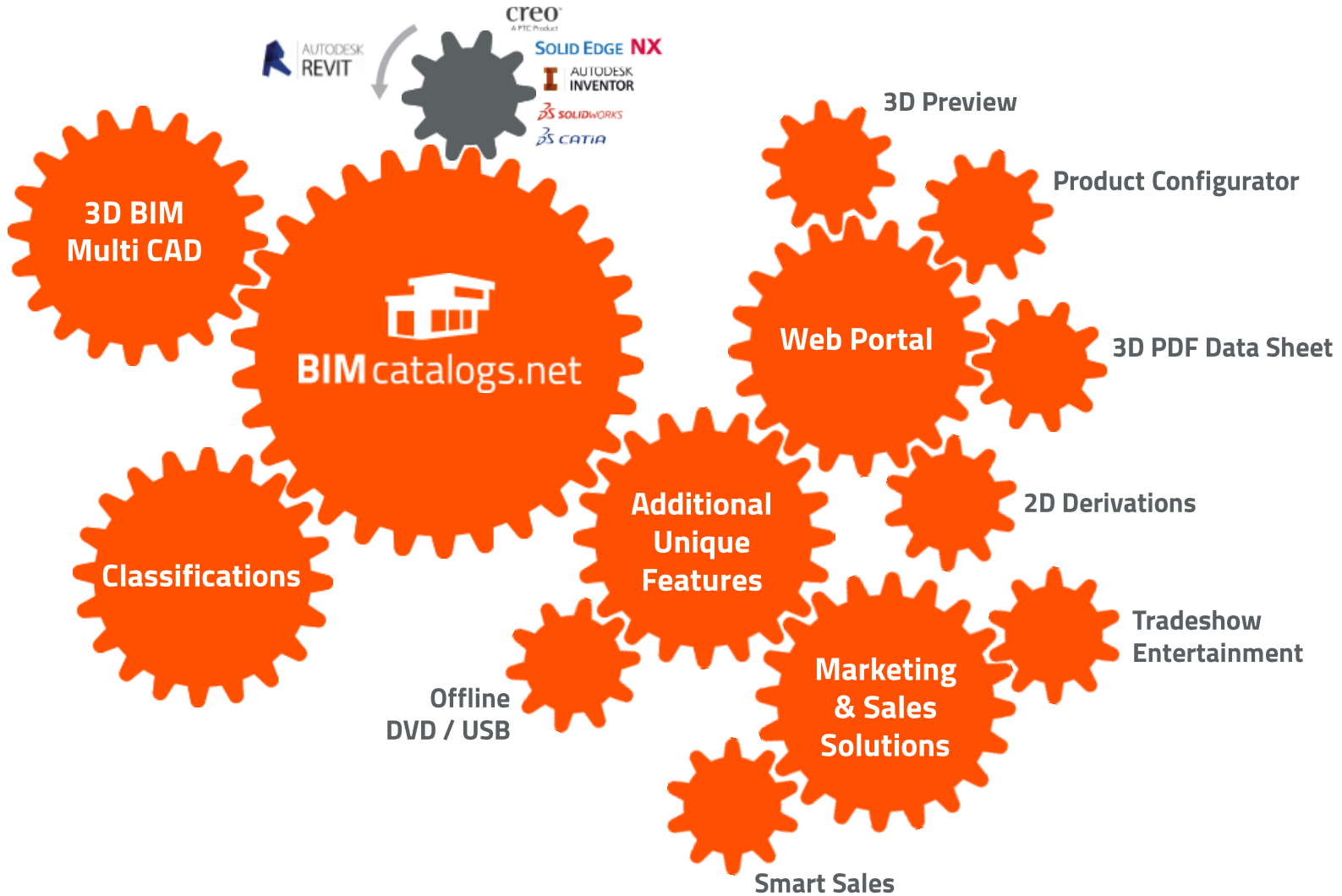
Level of Development

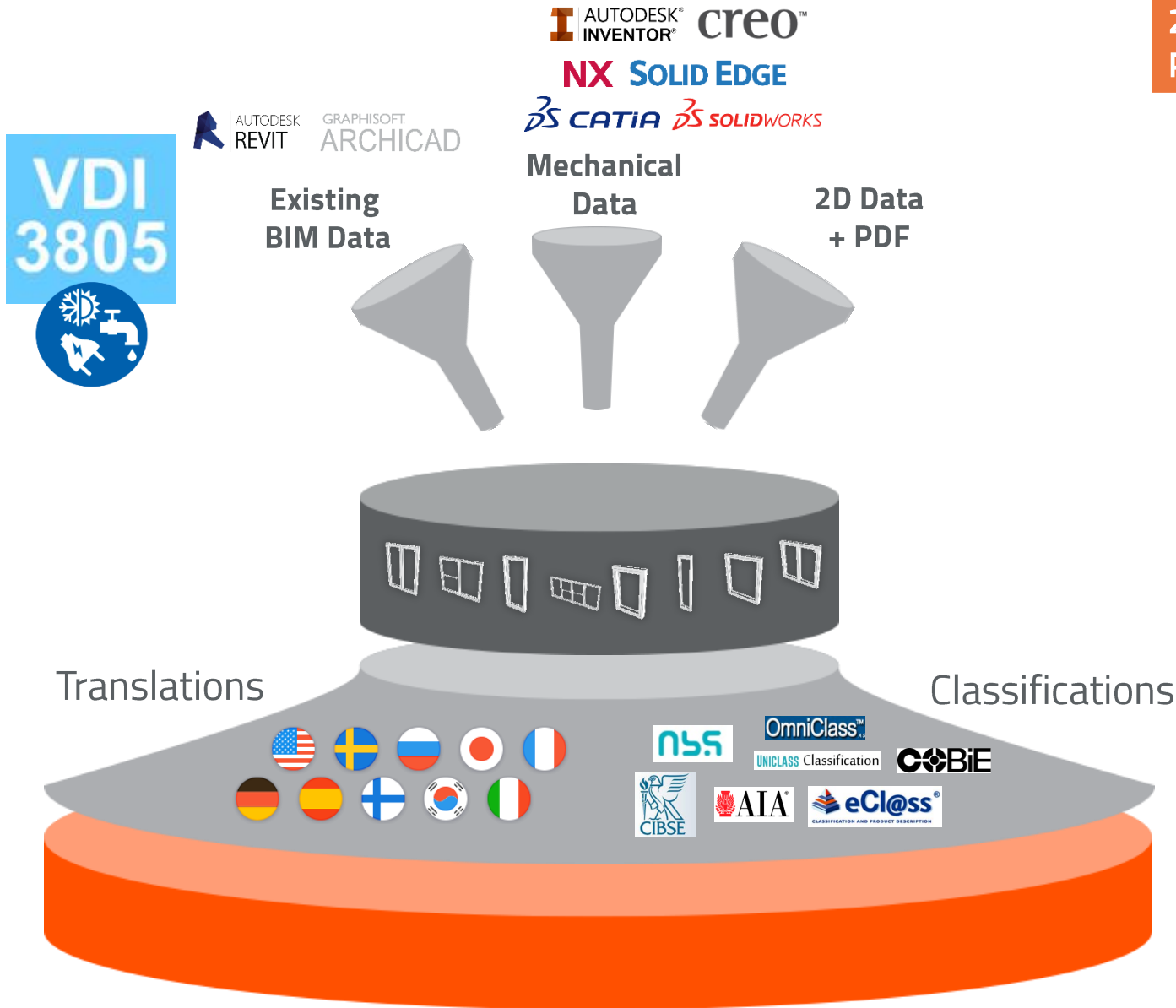
LOD A	LOD B	LOD C	LOD D	LOD E

Possibilities for your catalog

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2D & 3D BIM Multi CAD
Product Catalogs





Data creation

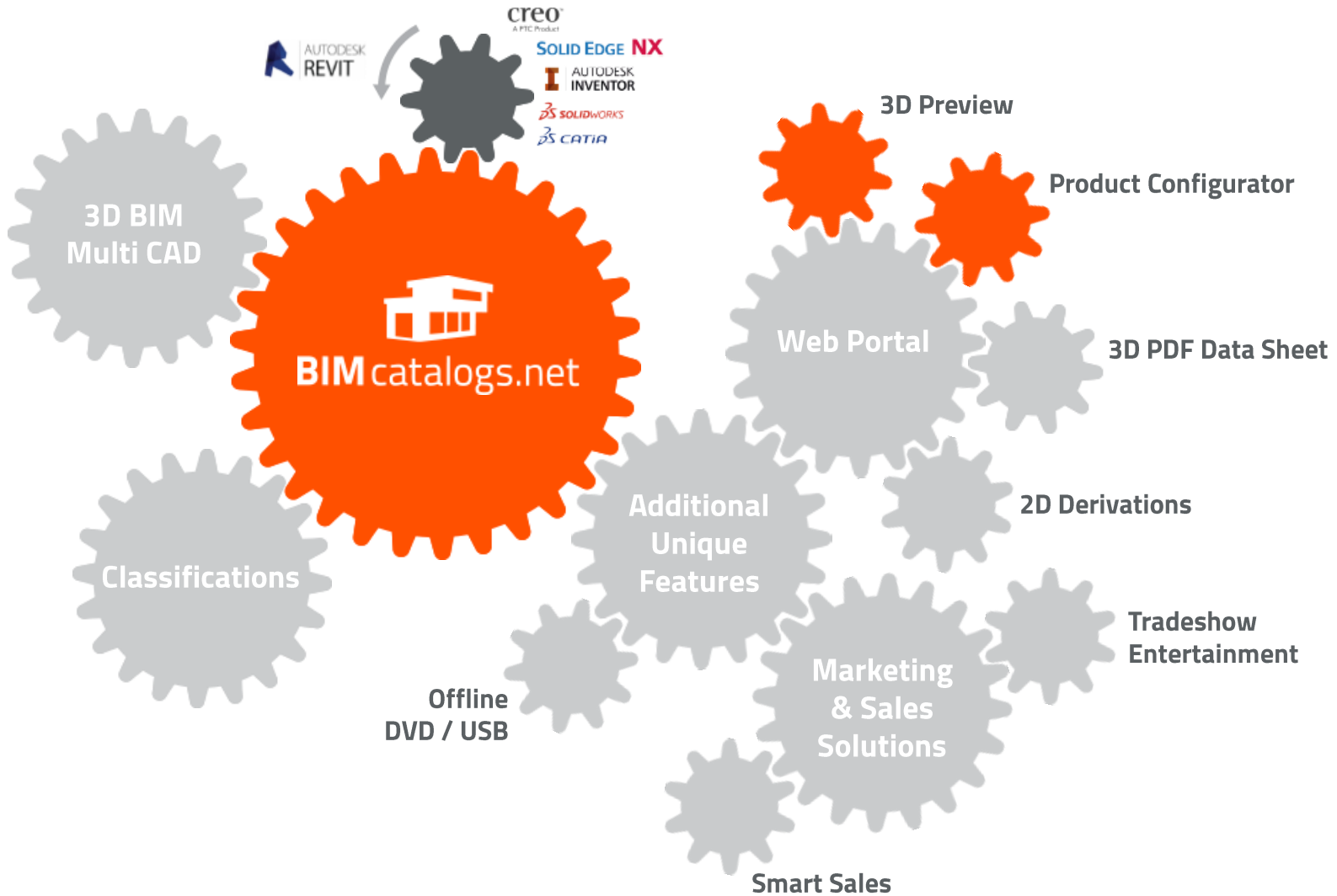
Data enrichment

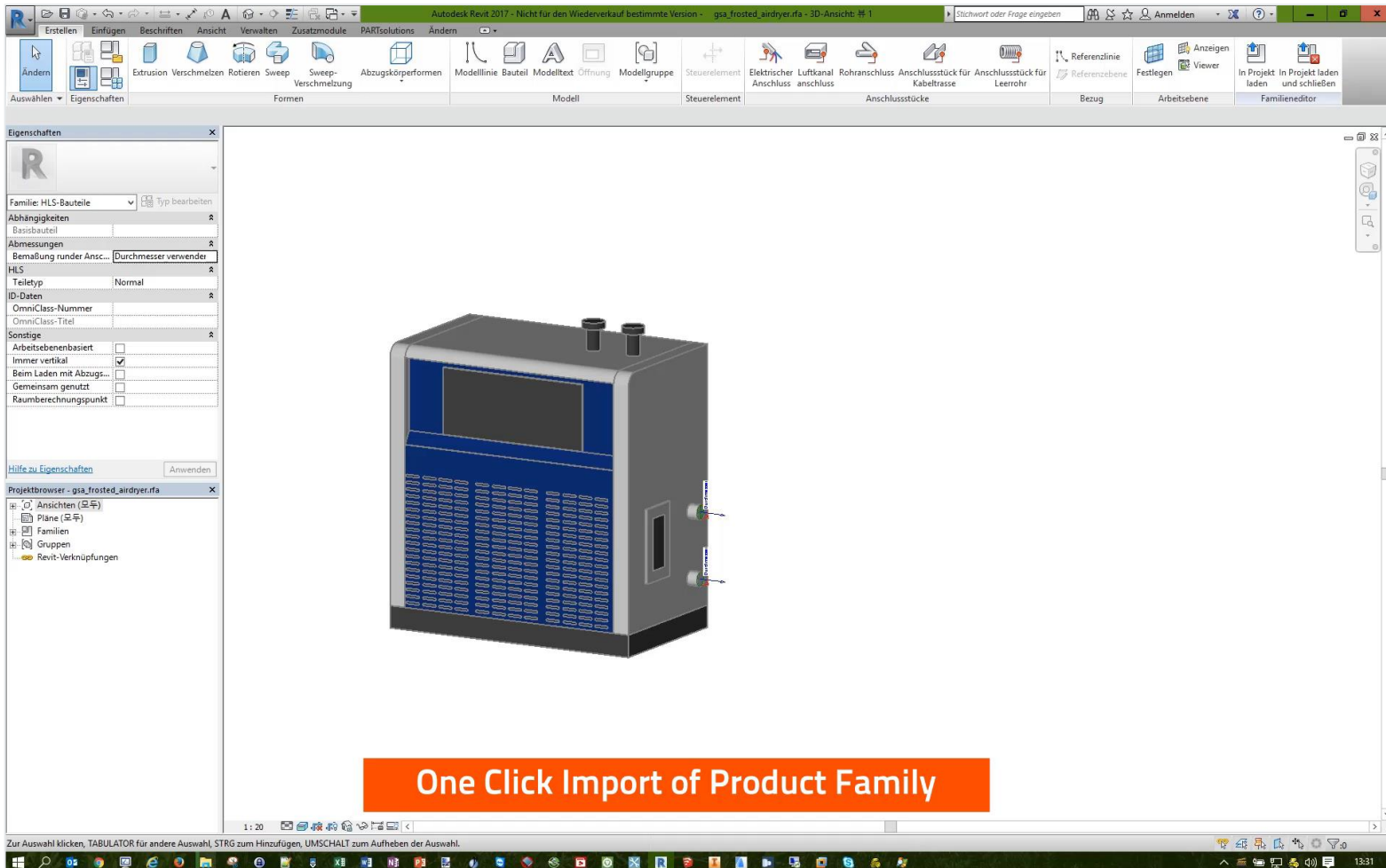
Your MultiCAD
BIM CATALOG

BIM Data preparation

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Product Catalogs

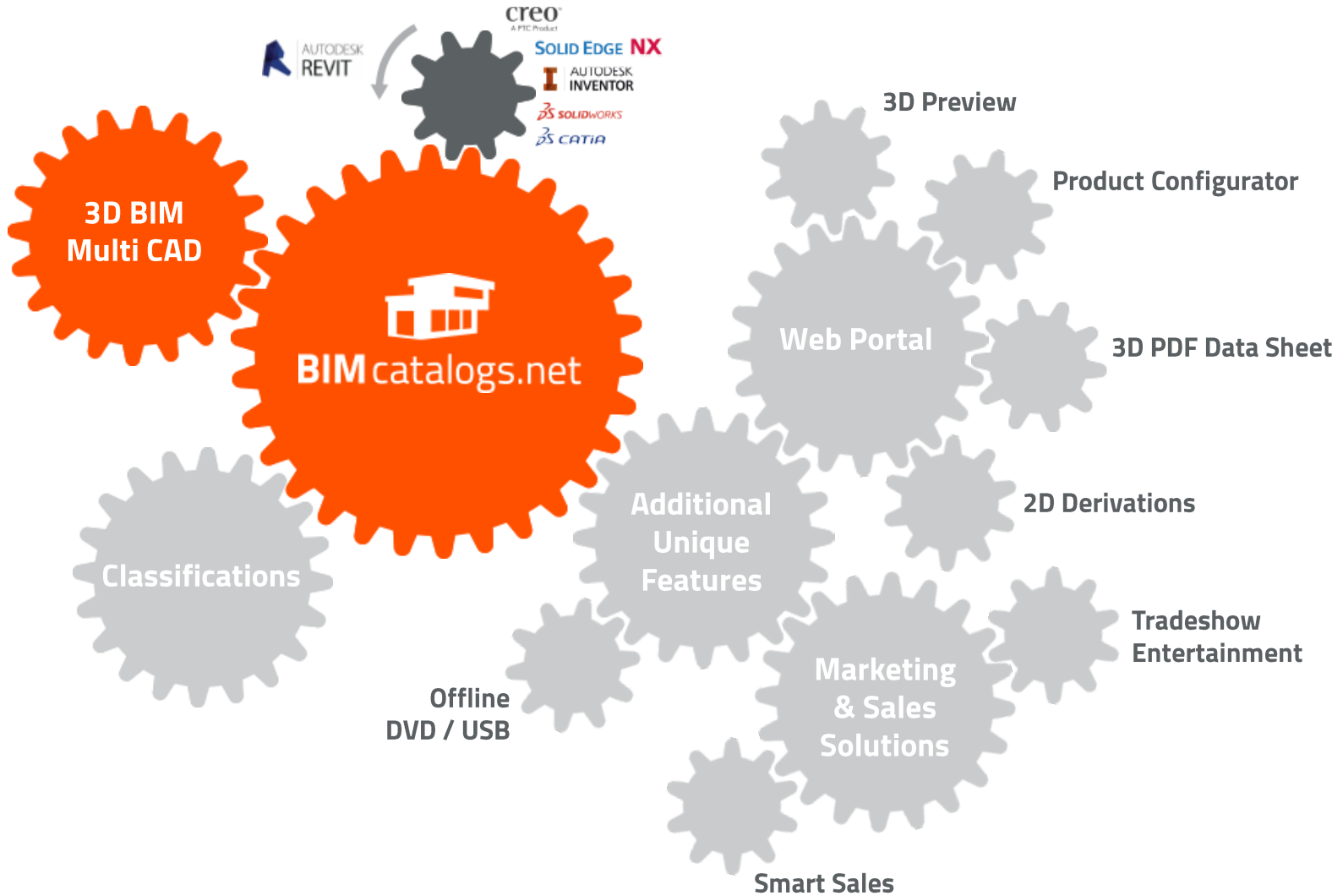




MultiCAD/BIM catalog

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Product Catalogs

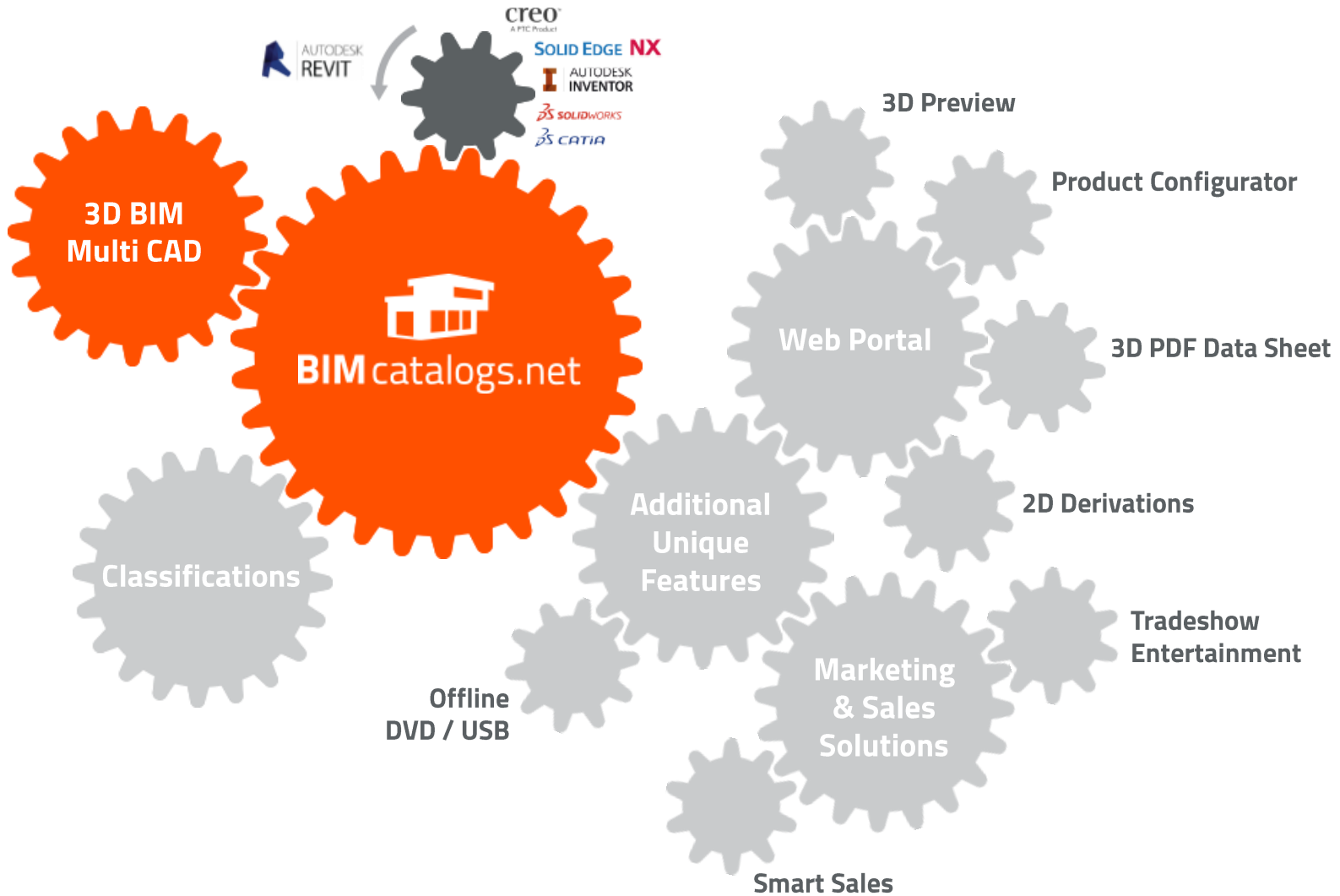




Intelligent BIM catalogs + CAD plugin

BIMcatalogs.net

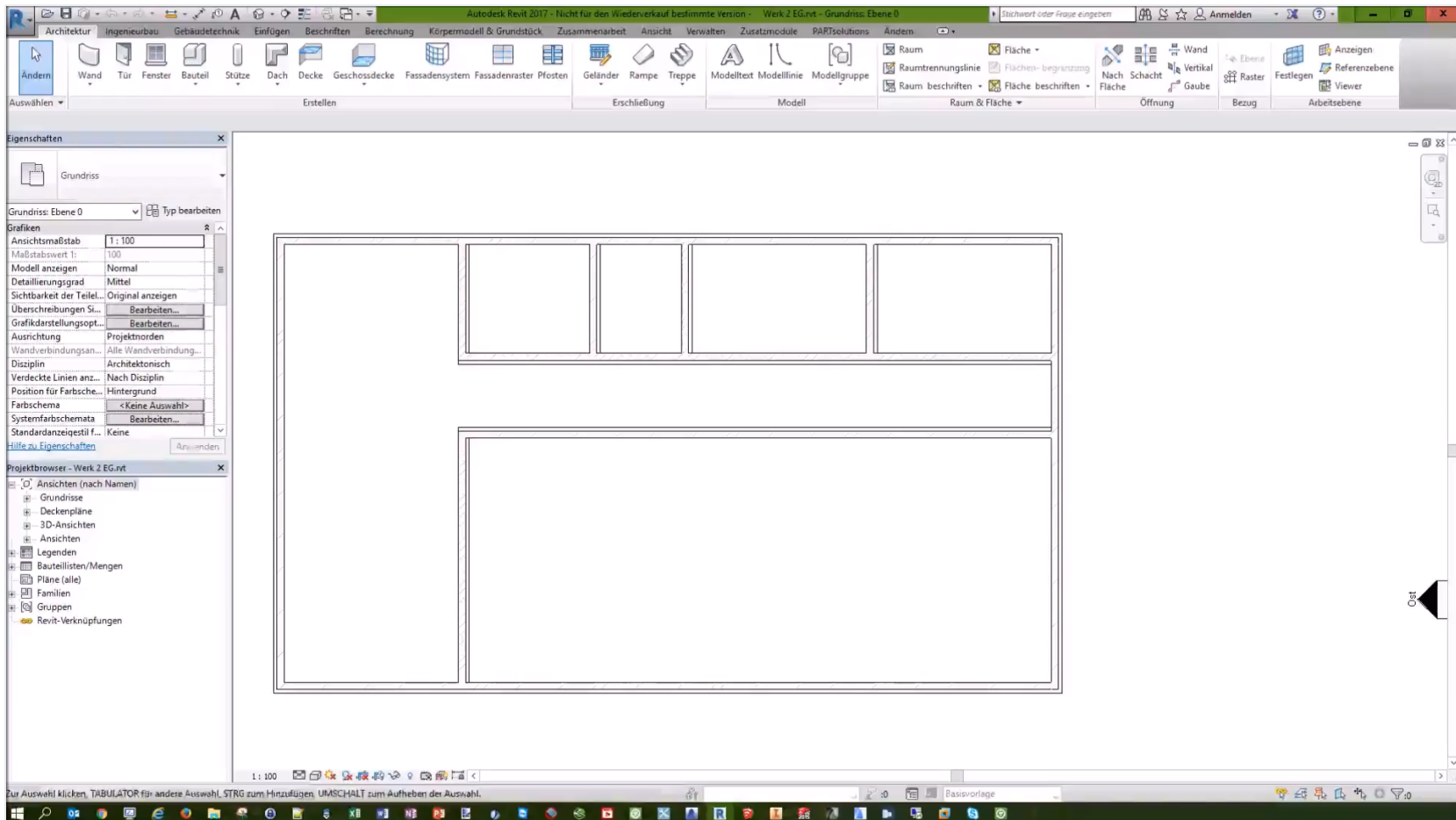
2D & 3D BIM Multi CAD
Product Catalogs



Intelligent BIM catalogs + CAD plugin

BIMcatalogs.net

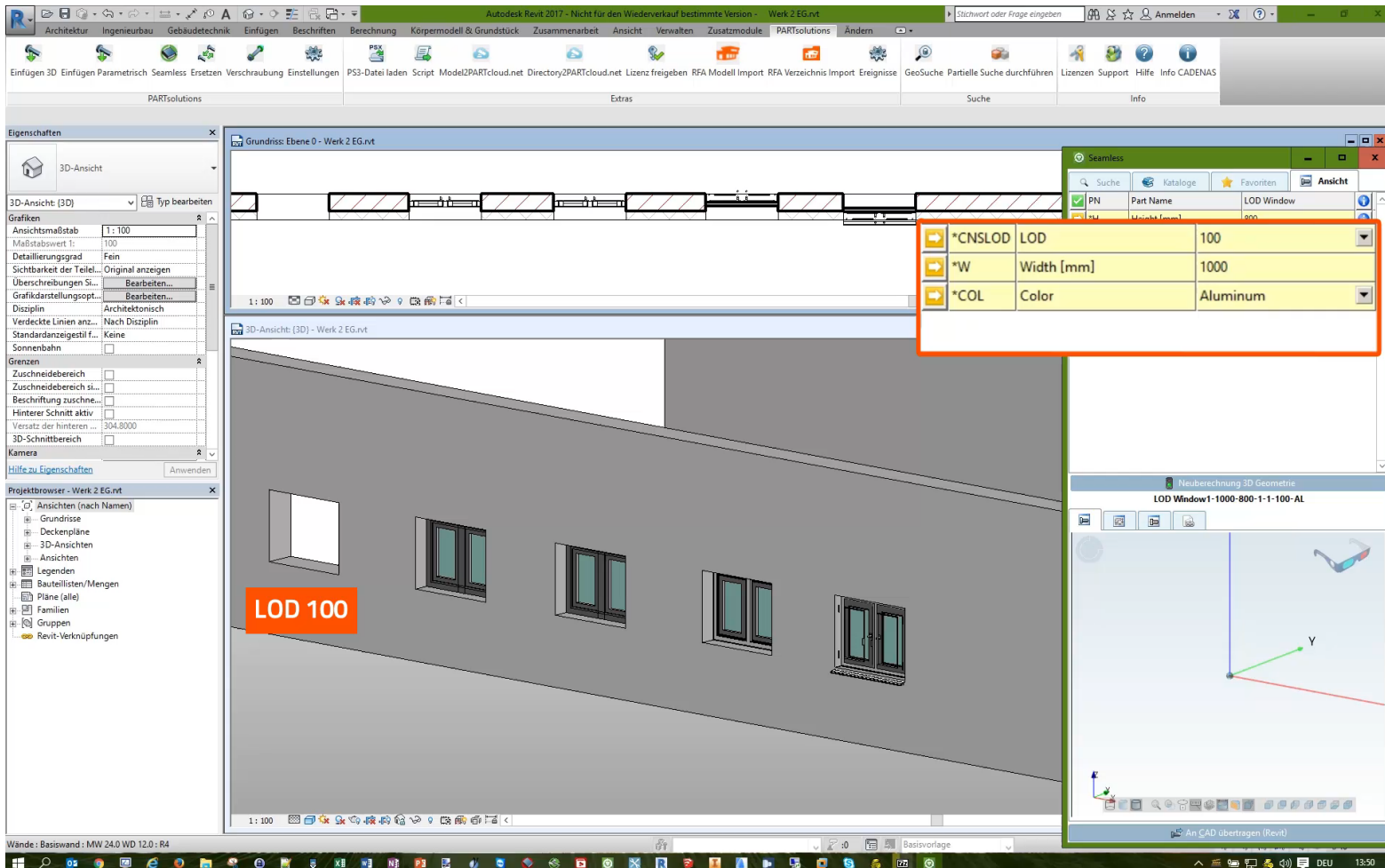
2D & 3D BIM Multi CAD
Product Catalogs



Level of development

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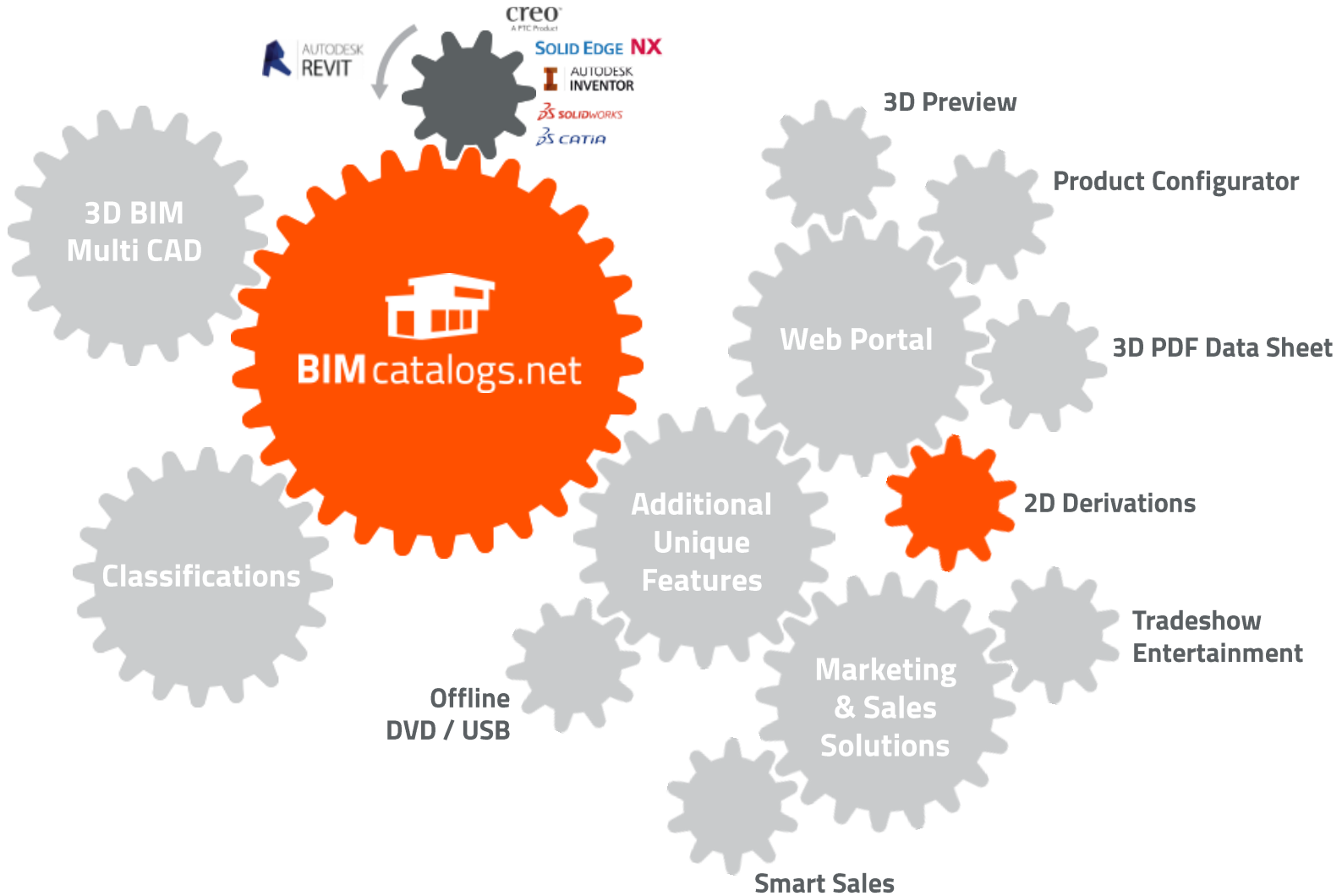
2D & 3D BIM Multi CAD
Product Catalogs

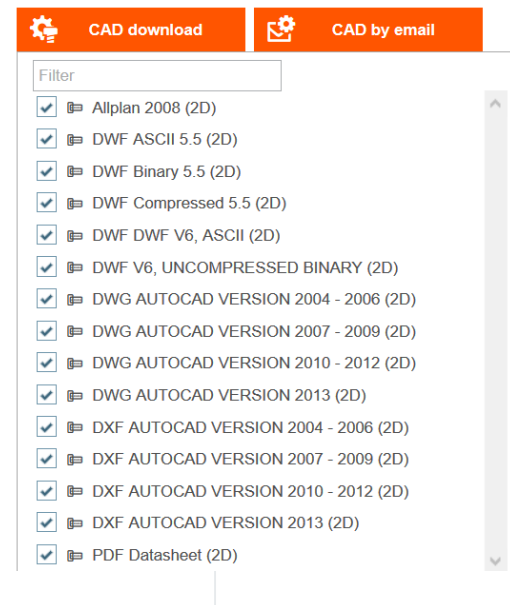


2D for AEC market

BIMcatalogs.net

2D & 3D BIM Multi CAD
Product Catalogs





The screenshot shows a web interface for downloading CAD files. At the top, there are two tabs: "CAD download" (selected) and "CAD by email". Below the tabs is a "Filter" input field. A list of 17 CAD file formats is displayed, each with a checked checkbox and a folder icon to its left. The list includes various AutoCAD and DXF versions, as well as DWF and PDF formats.

- Allplan 2008 (2D)
- DWF ASCII 5.5 (2D)
- DWF Binary 5.5 (2D)
- DWF Compressed 5.5 (2D)
- DWF DWF V6, ASCII (2D)
- DWF V6, UNCOMPRESSED BINARY (2D)
- DWG AUTOCAD VERSION 2004 - 2006 (2D)
- DWG AUTOCAD VERSION 2007 - 2009 (2D)
- DWG AUTOCAD VERSION 2010 - 2012 (2D)
- DWG AUTOCAD VERSION 2013 (2D)
- DXF AUTOCAD VERSION 2004 - 2006 (2D)
- DXF AUTOCAD VERSION 2007 - 2009 (2D)
- DXF AUTOCAD VERSION 2010 - 2012 (2D)
- DXF AUTOCAD VERSION 2013 (2D)
- PDF Datasheet (2D)

Embed in BIM manufacturers web page

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2D & 3D BIM Multi CAD
Product Catalogs

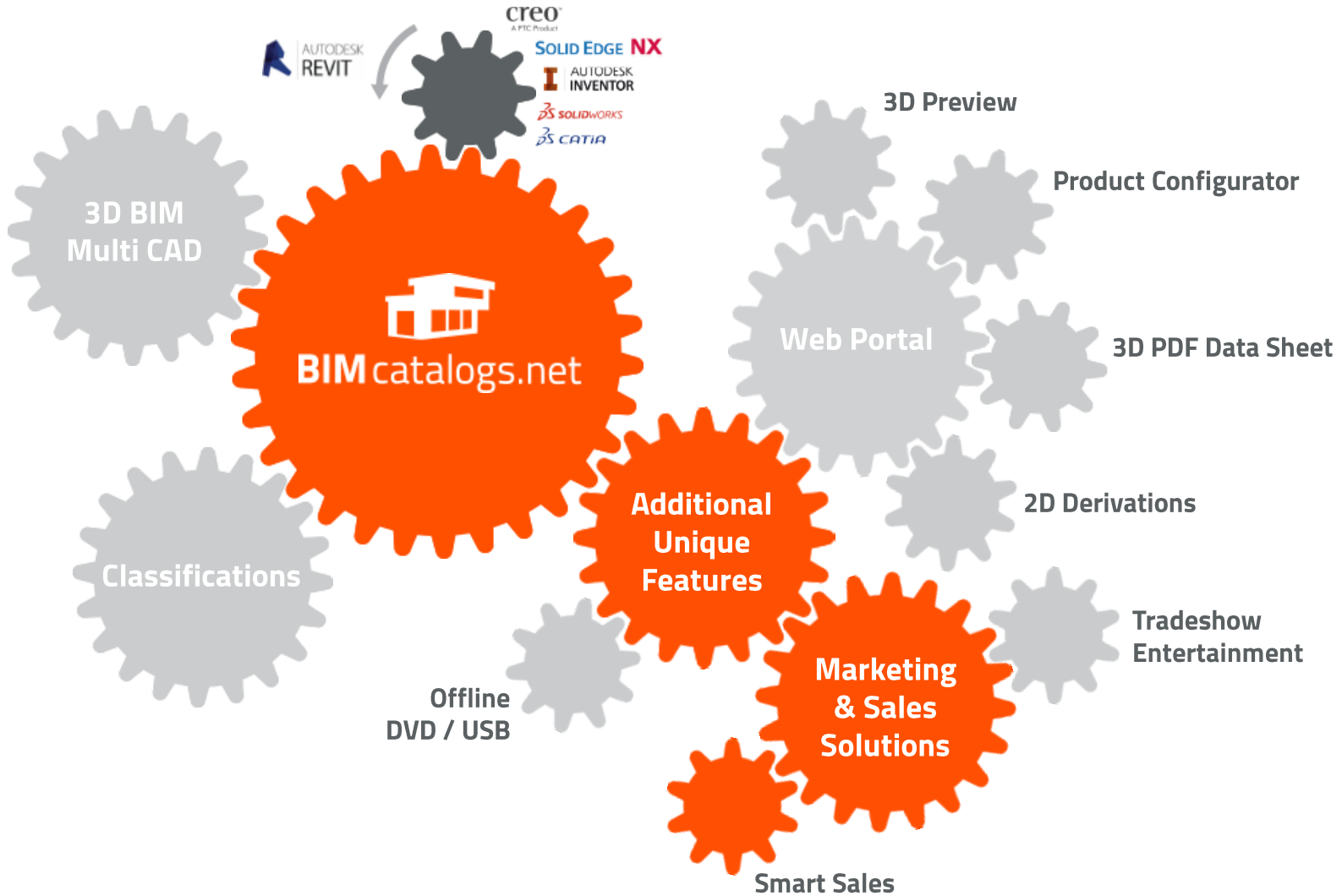


Embed in BIM manufacturers web page

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2D & 3D BIM Multi CAD
Product Catalogs

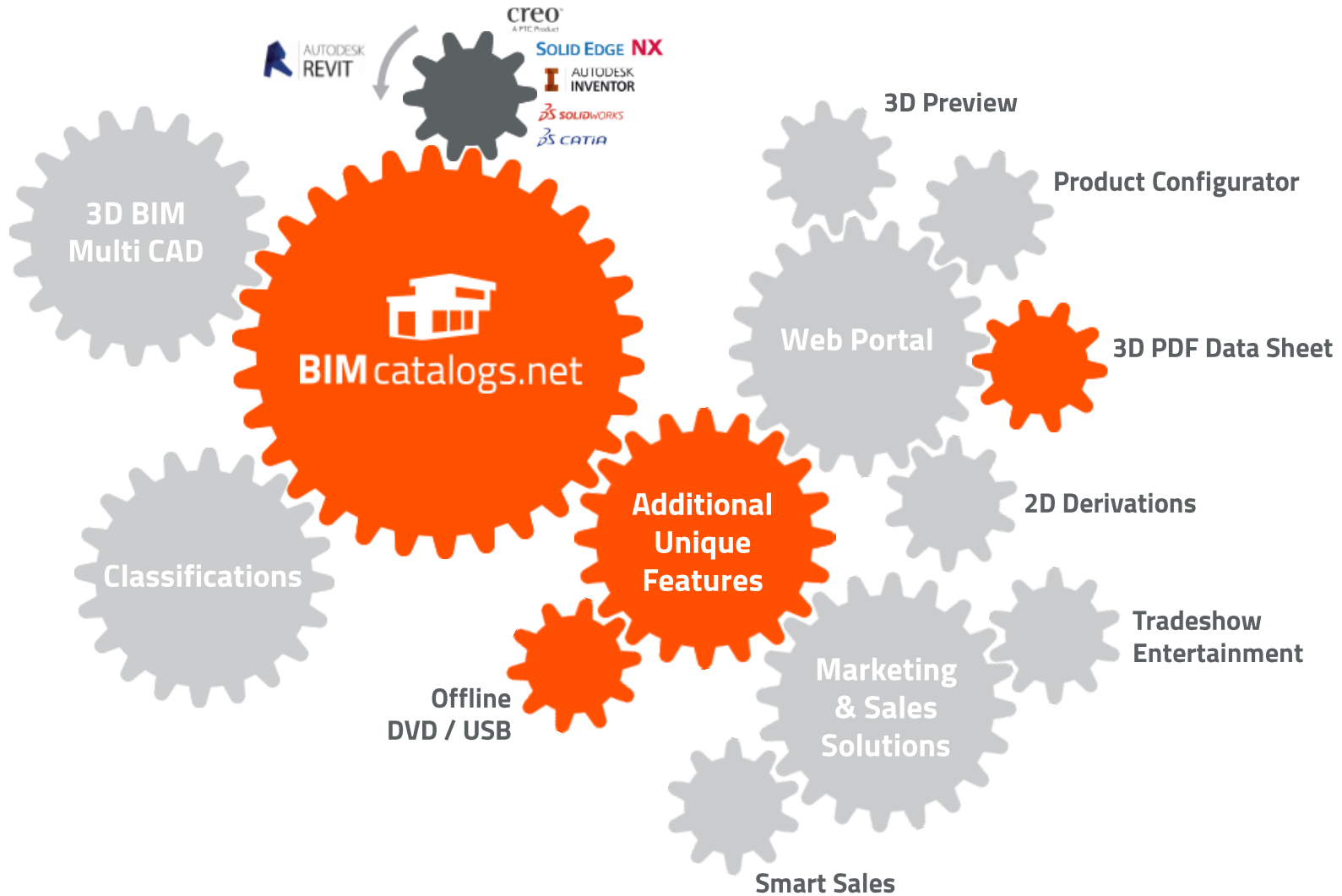




More possibilities for your catalog

BIMcatalogs.net

2D & 3D BIM Multi CAD
Product Catalogs

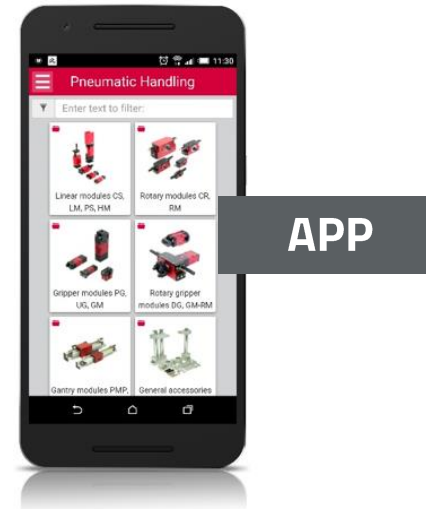


Offline & online publishing

BIMcatalogs.net

2D & 3D BIM Multi CAD
Product Catalogs

Online



Offline





Holographic display

BIMcatalogs.net

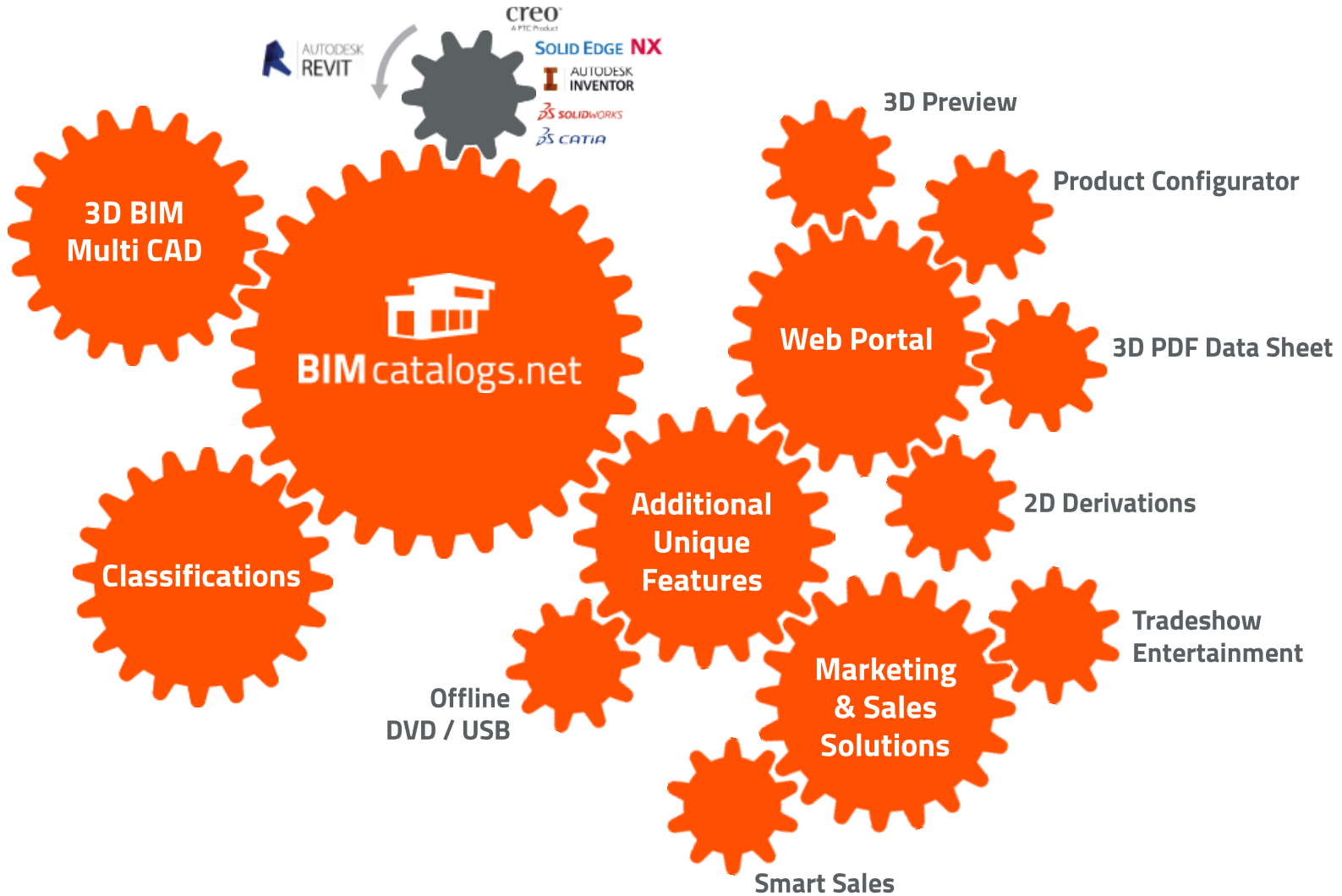
2D & 3D BIM Multi CAD
Product Catalogs

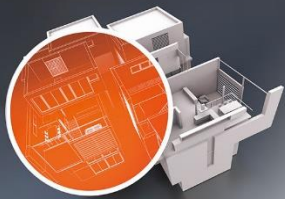


Possibilities for your catalog

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Product Catalogs



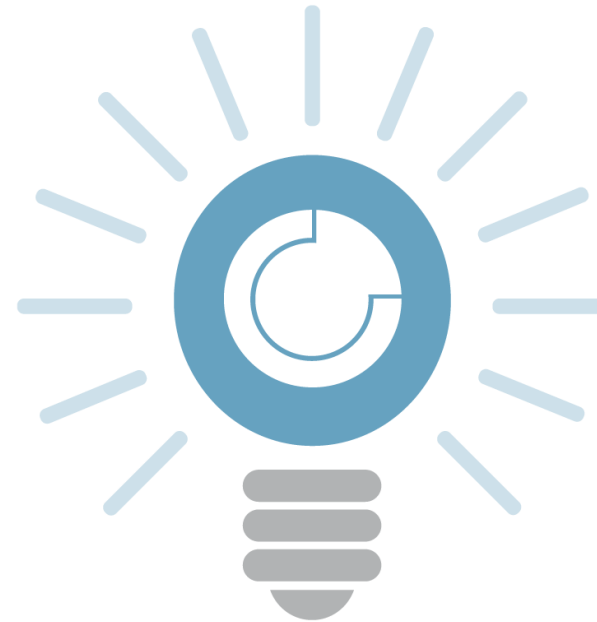


Thank You

for your attention

Questions?

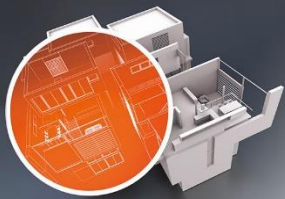
Feedback?



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