

Standardized BIM object data **Powered by ETIM**

ETIM International

Marc Habets

Target ETIM classification regarding BIM

Offering a single, unambiguous and uniform interface to exchange all manufacturer product data, that should or can be processed electronically.

SINGLE SOURCE OF TRUTH

to quickly select the right product

technical features for catalogue, 3D, design, ...

other information can be attached

ETIM for BIM

- Basic ETIM Model
 - is already important in BIM!
- ETIM MC
 - for parametrical data (3D) and design
- ETIM in bSDD
 - as interface to the rest of the BIM world
 - via IFC applicable in all applications that need product data

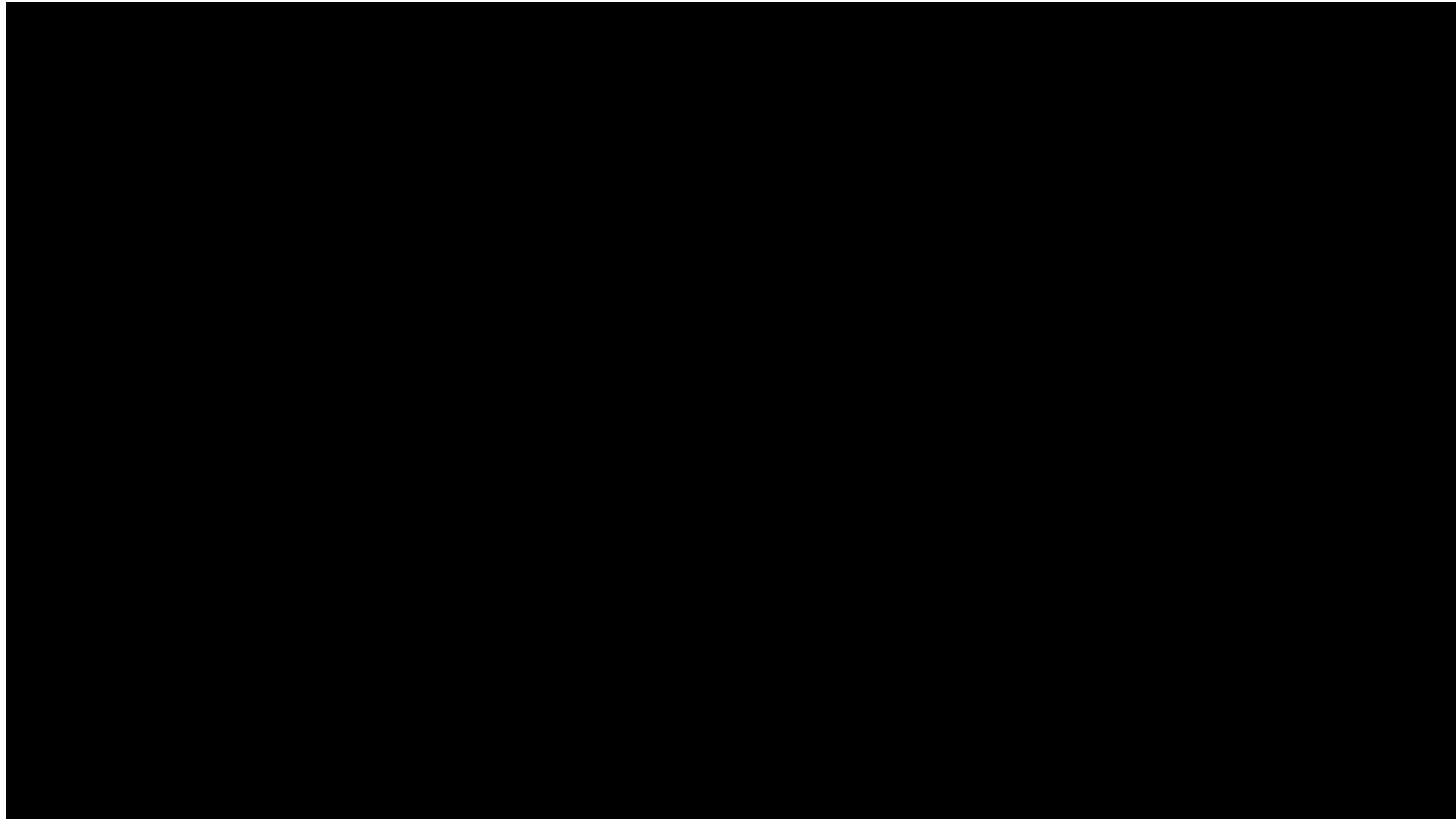
Basic ETIM model

- BIM is not just 3D!
- (technical) product master data often are still missing in BIM models
- find and order the right product
- find alternative products on specification
- ETIM can serve as requirements specification (generic products)
- future extension with features for maintenance, environment, lifecycle, etc.

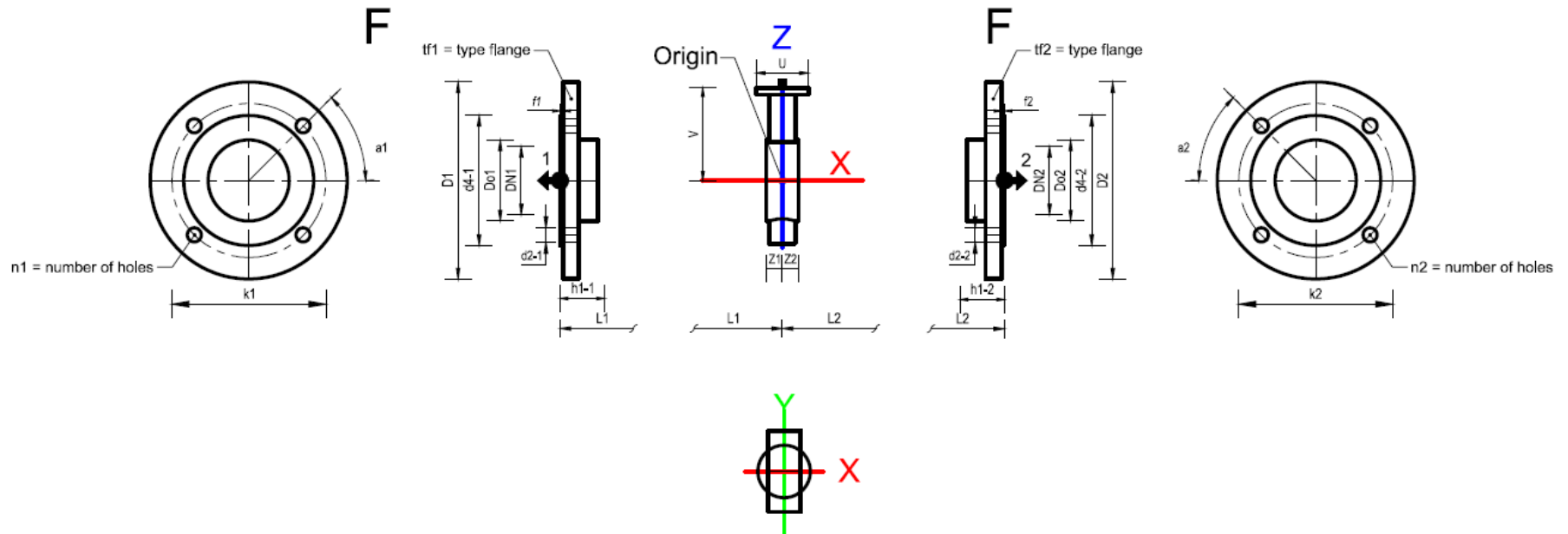
NEW: ETIM MC - Modelling class

- Standardized exchange of 3D product data
 - geometrical features to generate 3D objects real-time ('on the fly')
- An extension to the ETIM basic model
 - basic ETIM classes remain unchanged!
- MC class = drawing with dimensions and feature list
- Started as ETIM NL project for 360 'most modelled' products
- ETIM International has formally adopted ETIM MC as international ETIM standard

ETIM MC – Animated video in English



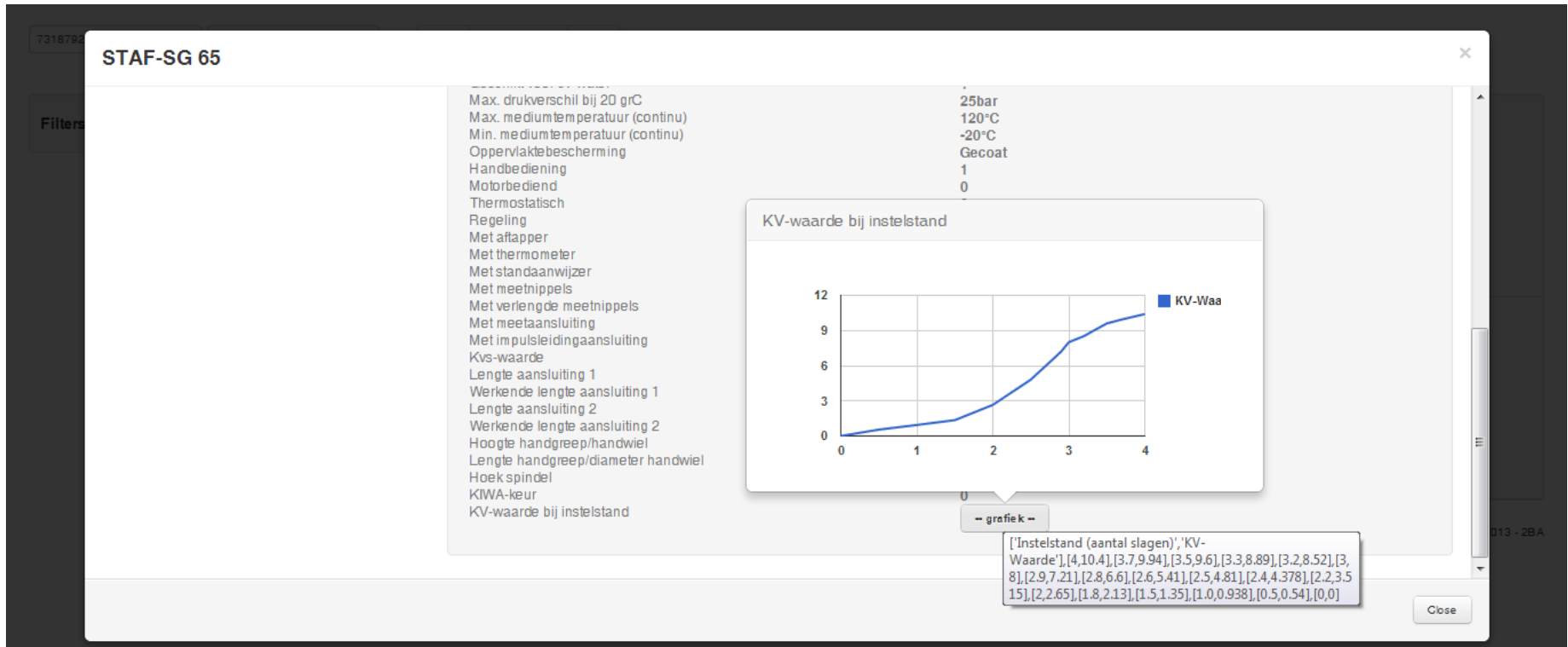
Example ETIM MC model – Dimensional drawing



Example ETIM MC model – features

	Code	Port	Drawing code	Description	Type	Unit	Unit Y-axis
1	EF010480	0	a	Shaft distance 1 control	N	Degrees (°)	
2	EF010524	1	a1	Angle till first bolt hole	N	Degrees (°)	
3	EF010524	2	a2	Angle till first bolt hole	N	Degrees (°)	
4	EF010525	1	b1	Thickness flange (incl. packing edge)	N	Millimeter (mm)	
5	EF010525	2	b2	Thickness flange (incl. packing edge)	N	Millimeter (mm)	
6	EF010040	1	C1	Height screw gland	N	Millimeter (mm)	
7	EF010040	2	C2	Height screw gland	N	Millimeter (mm)	
8	EF010526	1	D1	Diameter flange	N	Millimeter (mm)	
9	EF010526	2	D2	Diameter flange	N	Millimeter (mm)	
10	EF021780	1	d2-1	Diameter bolt hole	N	Millimeter (mm)	
11	EF021780	2	d2-2	Diameter bolt hole	N	Millimeter (mm)	
12	EF010527	1	d4-1	Diameter packing edge	N	Millimeter (mm)	
13	EF010527	2	d4-2	Diameter packing edge	N	Millimeter (mm)	
	EF010001	1	DN1	Nominal internal diam	N	Millimeter (mm)	

Example ETIM MC model – table feature





Open UOB



ETIM Productklasse
ETIM Modelleer klasse
Fabrikant
Merk
Serie
Type
GTIN
Productcode
GLN
Status
Gewicht
Voorganger
Opvolger

Vortex grille [↗](#)

MC000178 [↗](#)

UOB [↗](#)

UOB

Wervelrooster

-

-

POC product 7

8714231771753

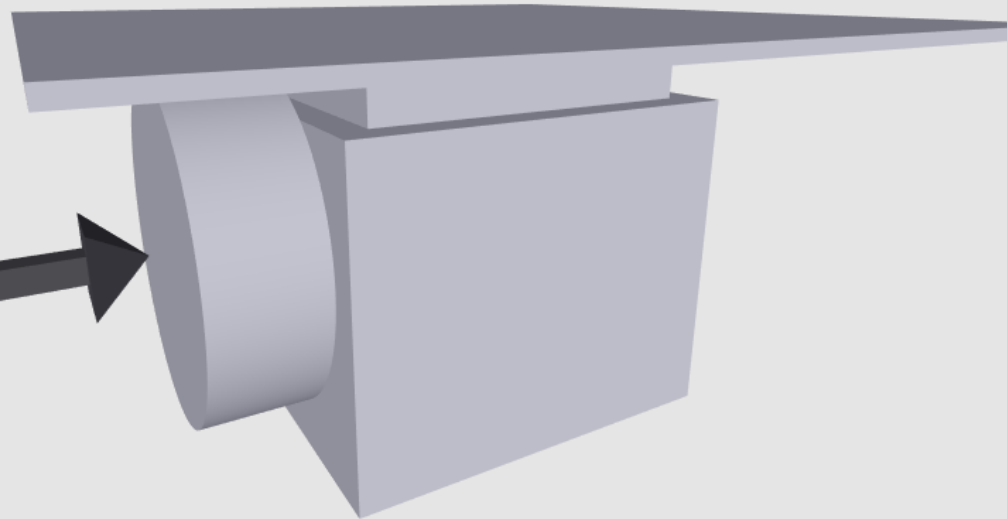
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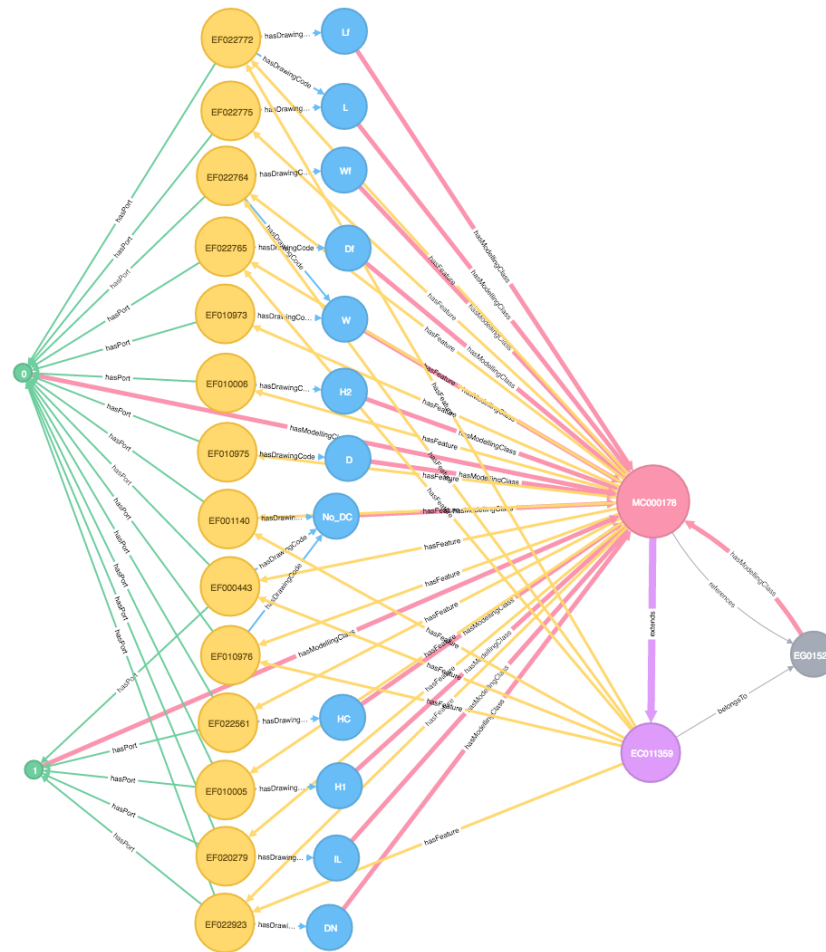
10 Kilogram

-

-

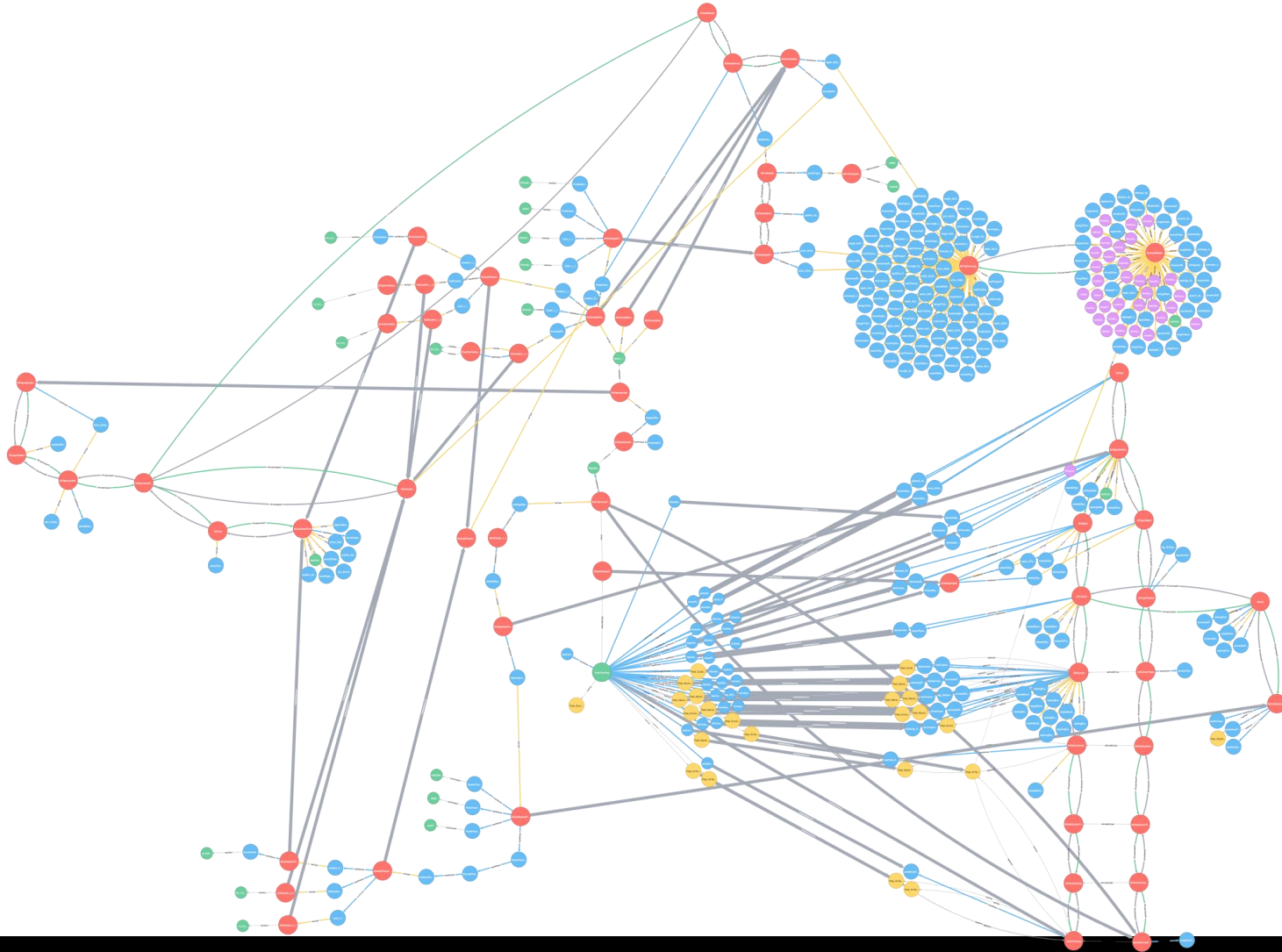
Plenum shape	Rectangular (EV000220)
Front shape	Rectangular (EV000220)
Plenum diameter	250 mm
Front diameter	350 mm
Height 1	300 mm
Height 2	50 mm
Length of plenum	300 mm
Front length	600 mm
Plenum width	300 mm
Front width	600 mm
Nominal duct diameter of connection	250 mm
Height, connection	150 mm
Insert length	80 mm
Connection	Insert end (EV020338)



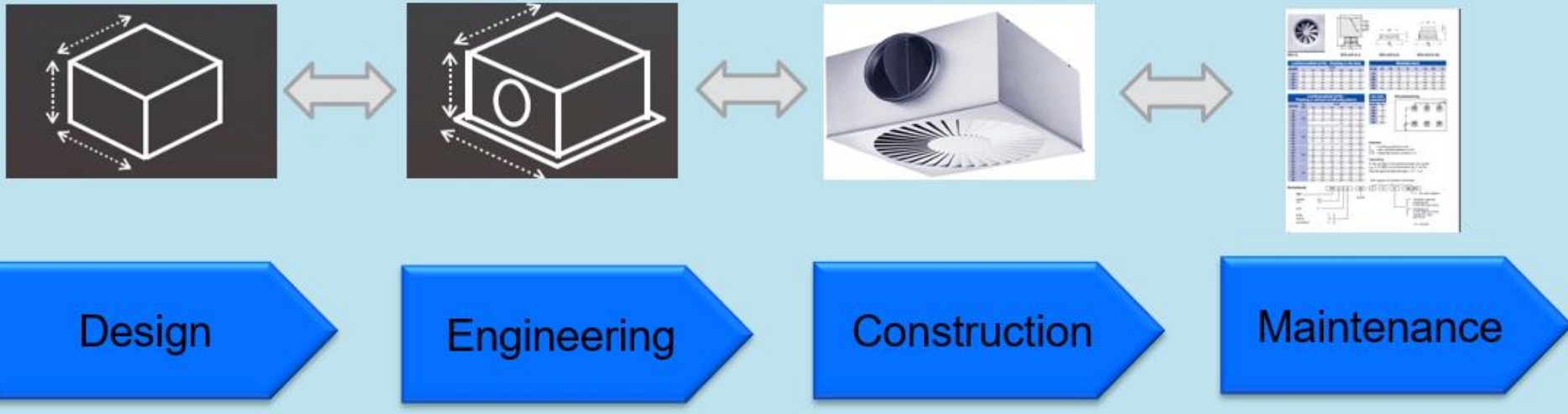




IFC AirTerminal metagraph

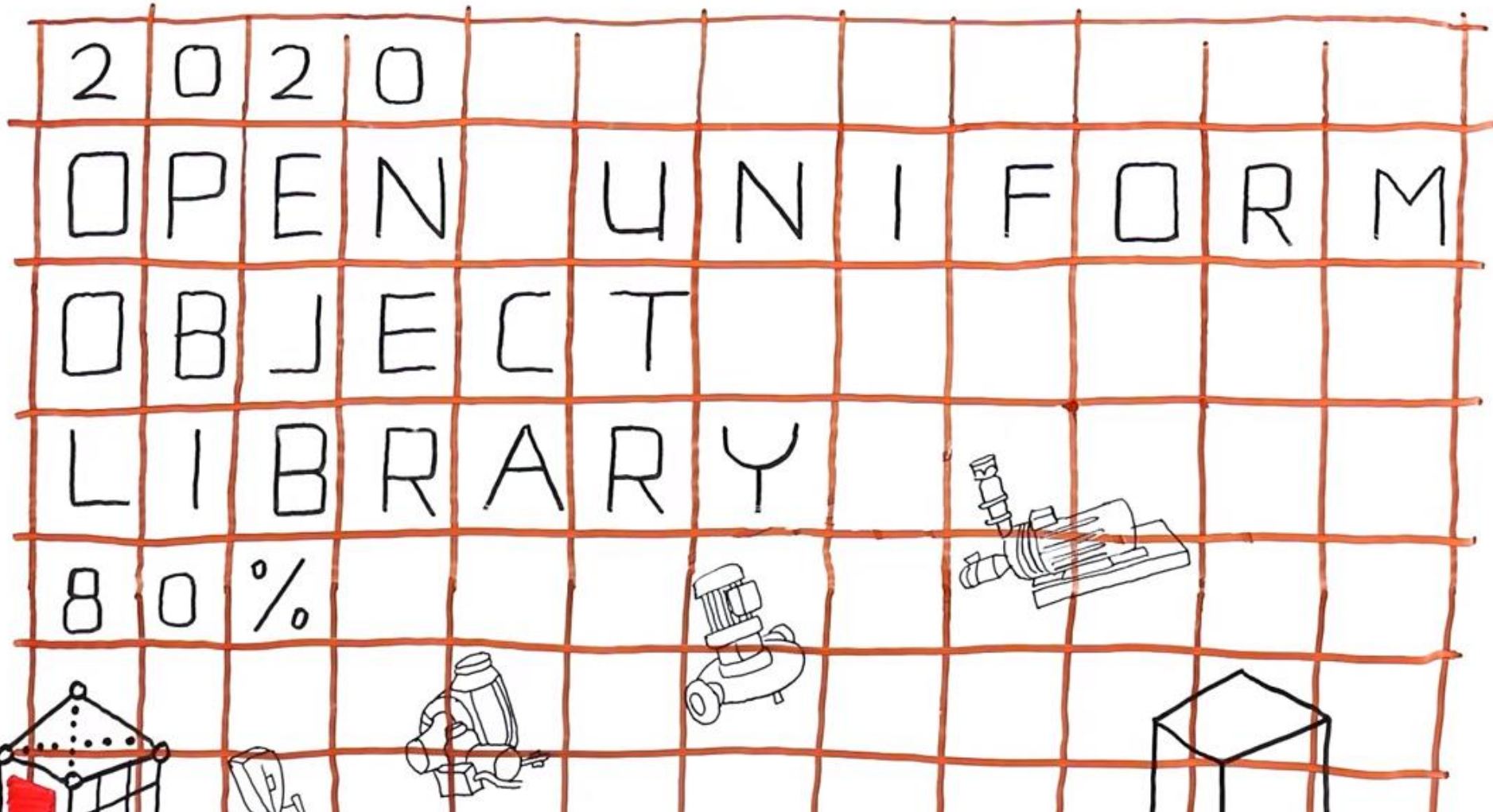


Building process: each phase requires specific data





NL – next steps - UOL



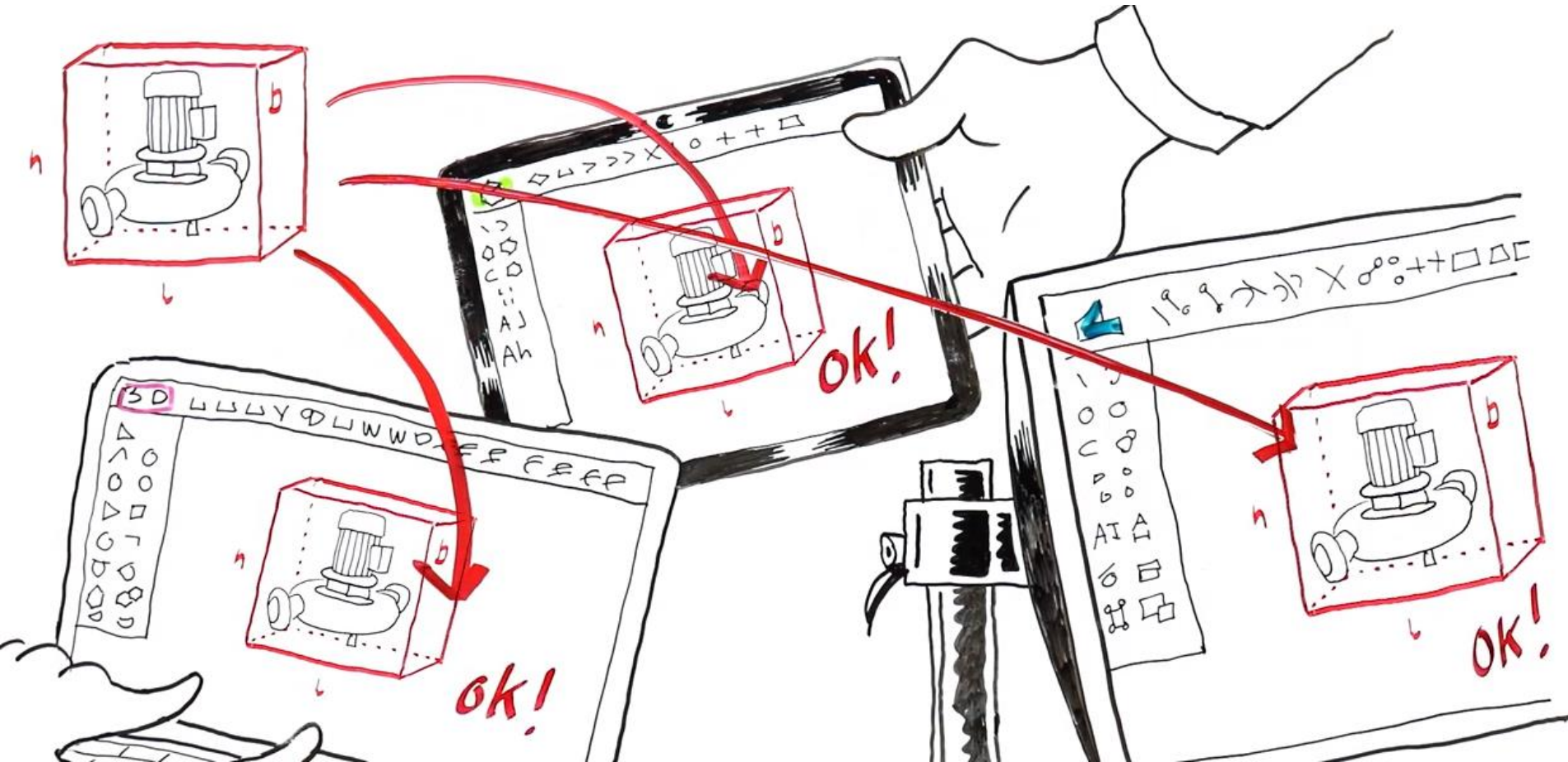


NL – next steps - UOL



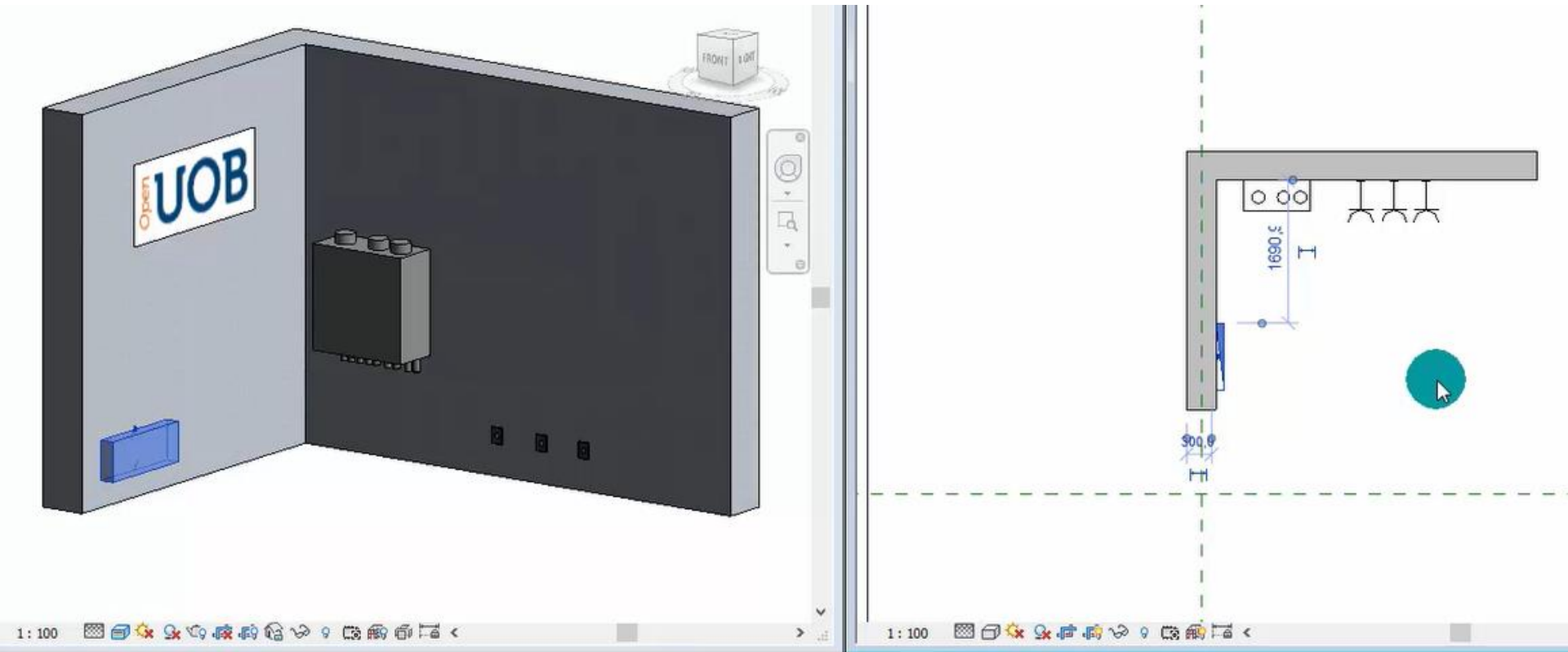


NL – next steps - UOL





NL – next steps - UOL

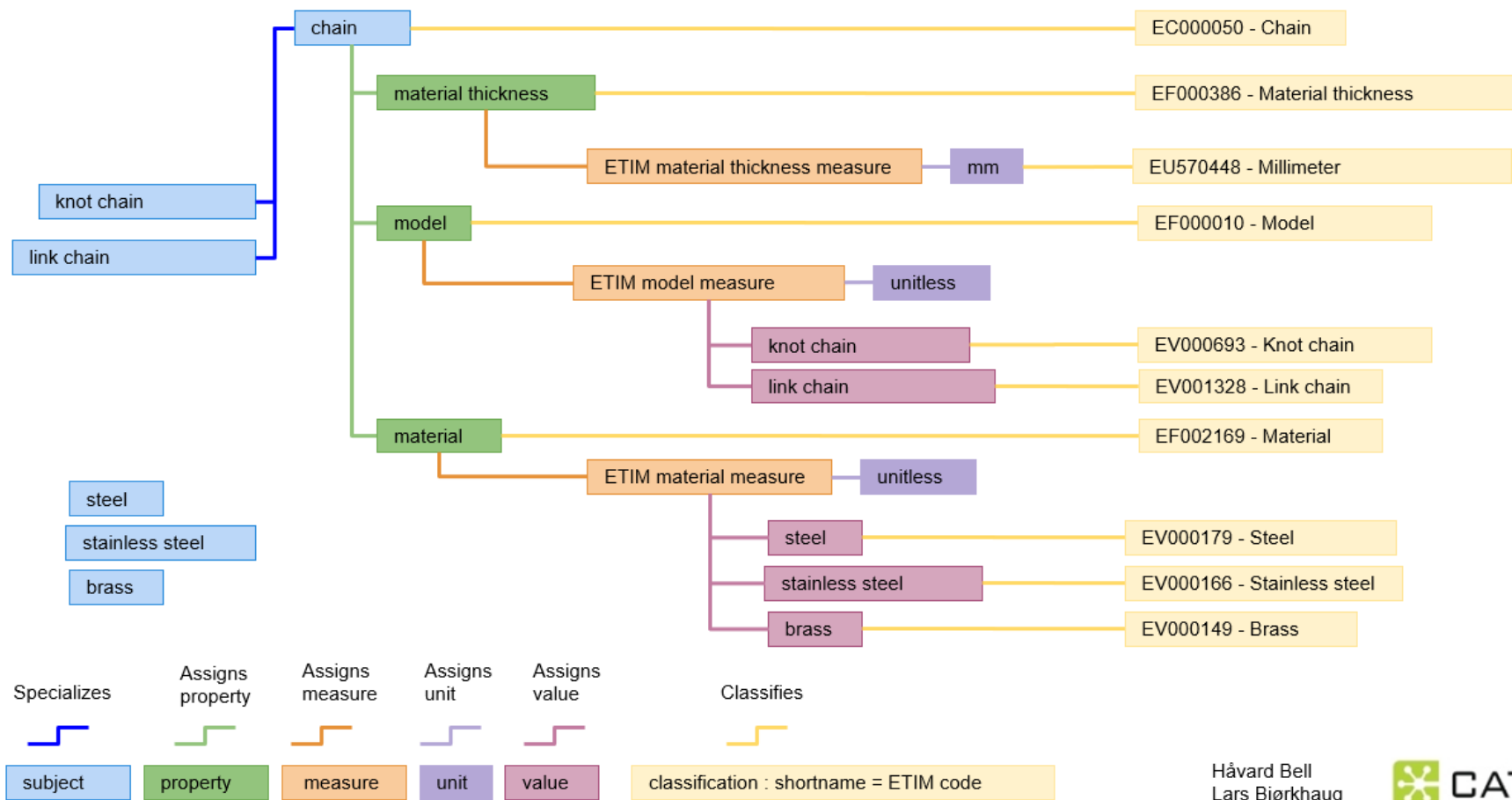


ETIM - buildingSMART

- 2017: cooperation (Memorandum of Understanding) with buildingSMART International
- first project: representation of ETIM basic model in bSDD
 - ETIM 7.0 model complete as ‘context’ in bSDD (ready)
- Started from use case ETIM Norway
- More use cases under investigation
- future inclusion of ETIM MC also targeted by bSI



ETIM in bSDD - schema



Håvard Bell
Lars Bjørkhaug



classification




[1hRxAvYsfFCAGNYEdyRdbk](#)

 1

 2017.11.26 16:48:56



Residual current circuit breaker (RCCB) | Earth leakage switch | switch | EC000003



jordfeilbryter | Jordfeilautomat | EC000003



Fehlerstrom-Schutzschalter | Allstromsensitiver Fehlerstromschutzschalter | Fehlerstrom-Leitungsschutzschalter | Fehlerstrom-Relaissteuerung | Fehlerstrom-Schutzeinrichtung | Fehlerstrom-Steuerschalter | FI | FI/LS-Schalter | FI-Automat | FI-Bergbau | FI-Fernantrieb | FI-Fernausslösung | FI-Schalter | FI-Schutzschalter | FI-Steuerschalter | FI-Weichenheizungsschalter | Hauptfehlerstromschutzschalter | Personenschutzautomat | PRCD | RCBO | RCCB | RCD | Relaissteuerung für Fehlerstrom | Schalter | Schutzschalter | SRCD | EC000003



Aardlekschakelaar | Aardfout | Aardfoutschakelaar | Aardlek | Aardlekbeveiliging | Differentiaalschakelaar | EC000003

has parts



Ambient temperature during operating
ETIM 7





Connectable conductor cross section solid-core
ETIM 7



is part of



ETIM 7
ETIM 7

Filters

Release

- ☐ DYNAMIC
- ☒ ETIM-7.0
- ☐ ETIM-6.0
- ☐ ETIM-5.0
- ☐ ETIM-4.0

Sectors

- ☐ Building
- ☐ Electric
- ☐ Shipbuilding
- ☐ HVAC and Sanitary



ETIM Viewer

✓ Tool cabinet

EC002895 / 2

[Details](#)

[Features](#)

[bSDD](#)

[eCl@ss](#)

Tool cabinet

[SUBJECT: 0bVVkxNXL4yf4\\$hsJqVFNj](#)

Number of drawers

[PROPERTY: 2s\\$bsVDNH1nxNYsl_8iSP7](#)

material , Material

[PROPERTY: 0nbLpJnznCswpPXnYiGoMl](#)

width , width

[PROPERTY: 2MTMbRUQb0TBRG3B90jo6f](#)

mm , MM (millimeter , millimetre)

[UNIT: 1GkM_00mOHtG0000PR1IRI](#)

Height

[PROPERTY: 1ebHwUtAXE9vzXI4gID9TU](#)

CM (centimetre , cm , centimetre)

[UNIT: 3vHspGoT0Hsm00051Mm008](#)

With rear wall

[PROPERTY: 3x9X25onTAthumXvVd3hzv](#)

depth , depth

CM (centimetre , cm , centimetre)

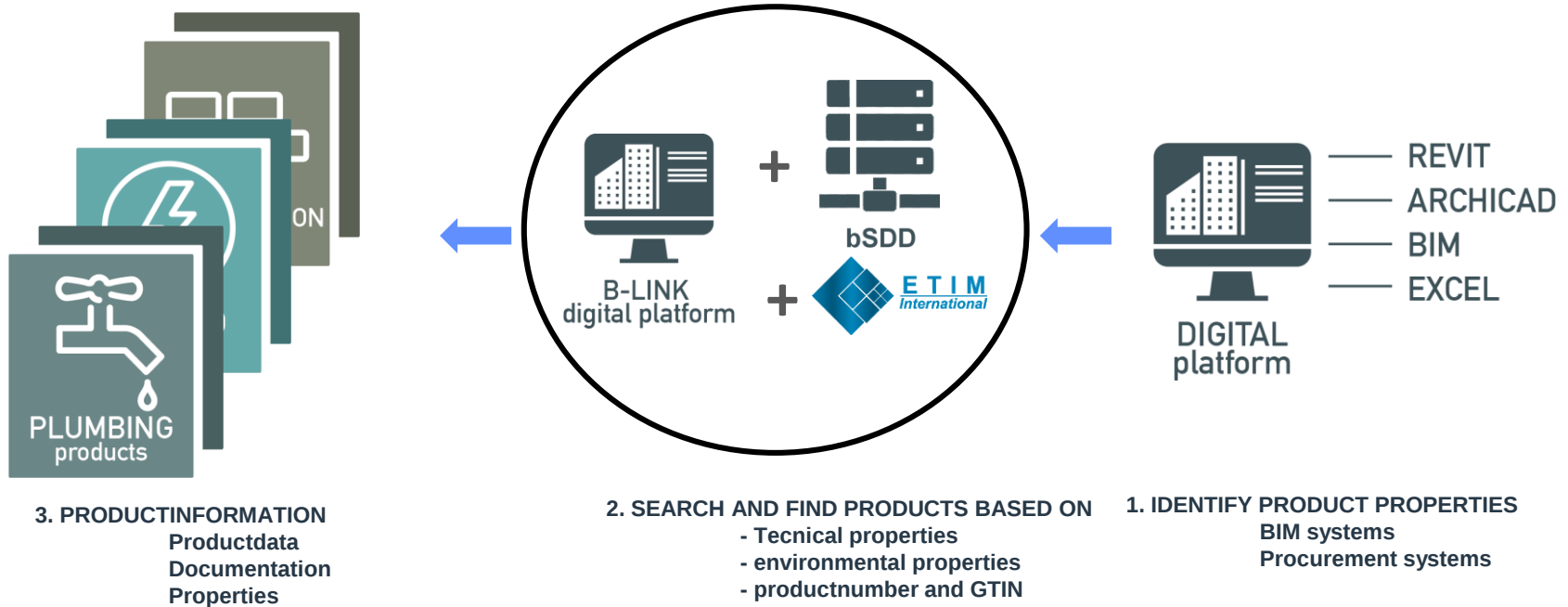
[PROPERTY: 3vHI8KoT0Hsm00051Mm008](#)

[UNIT: 3vHspGoT0Hsm00051Mm008](#)

Lockable

B-LINK

Find and use productinformation in BIM and procurement





Thank you for your attention. Any questions?