

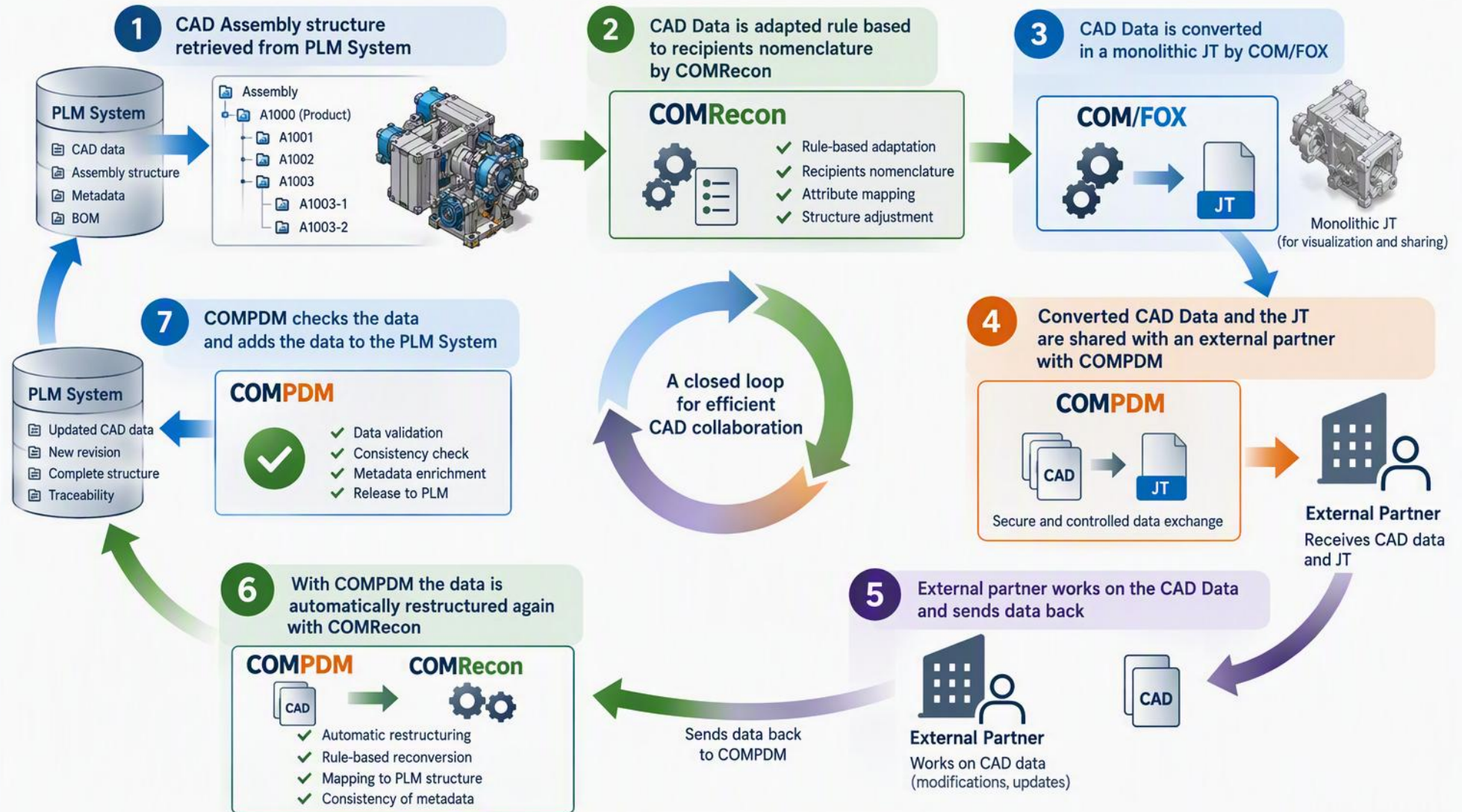
Collaboration with Partners & OEMs and how to handle the challenge of different nomenclature rules

Andreas Baisch T-Systems International GmbH

Thu., 1 October 2026 | nh Frankfurt Airport West | Raunheim, Germany

CAD Data Exchange Cycle

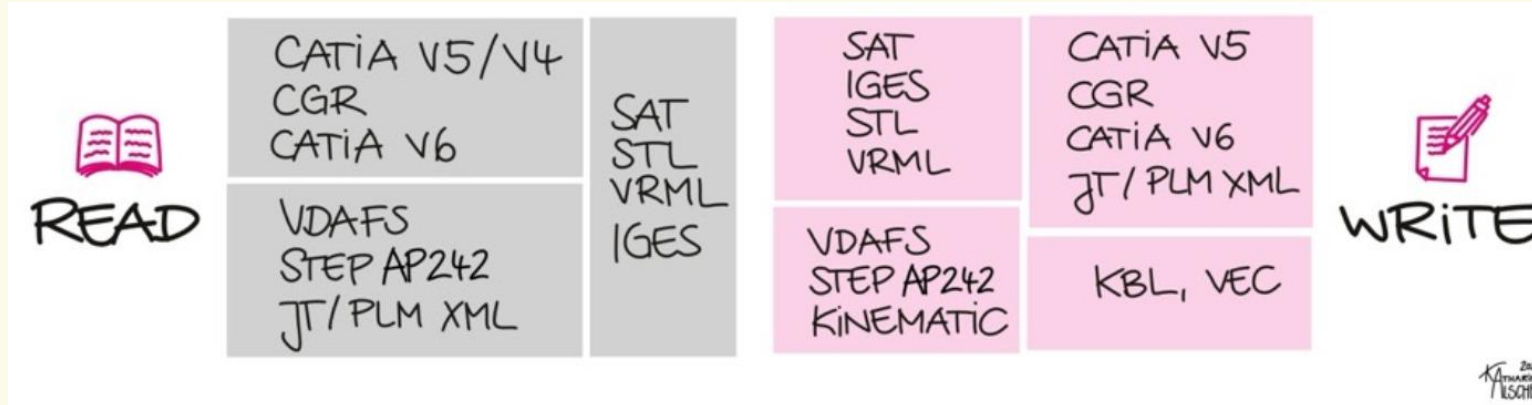
From PLM to Partner and Back – Automated. Consistent. Reliable.



Same Data. New Opportunities.

Seamless CAD Data Exchange with COMRecon, COM/FOX and COMPDM.

COM/FOX



01

COM/FOX

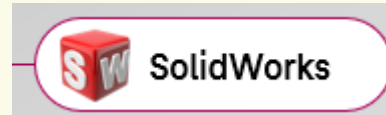
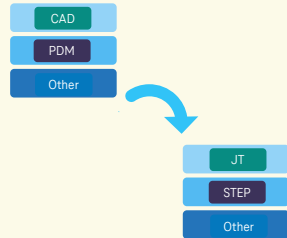
Updates for PMI Validation Properties and Kinematic basic joints.
Support for current CATIA versions added



COM/FOX supports you in various conversion scenarios - from OEM JT data creation up to fine granular tuned JT geometries and structures.



COMRecon



01

COMRecon

Main use case is the restructuring and renaming of files and internal entities of CAD Structures. Also checking CAD structures to fulfill given rules is possible.

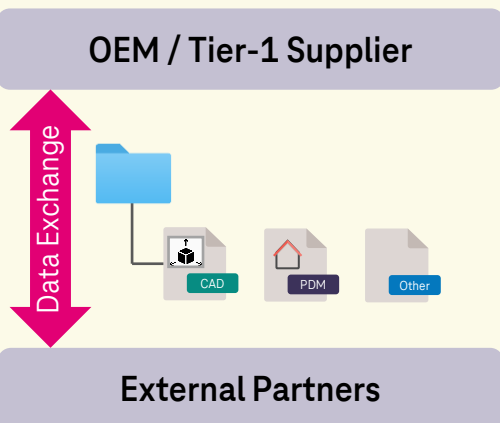


COMRecon supports you when exchanging data with a Partner or OEM who uses other nomenclatures.

The reconciliation is based on rules and can be adapted to your specific needs.



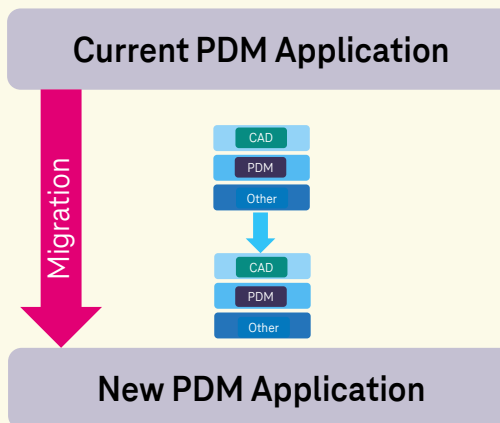
COMPDM



01

Data Exchange

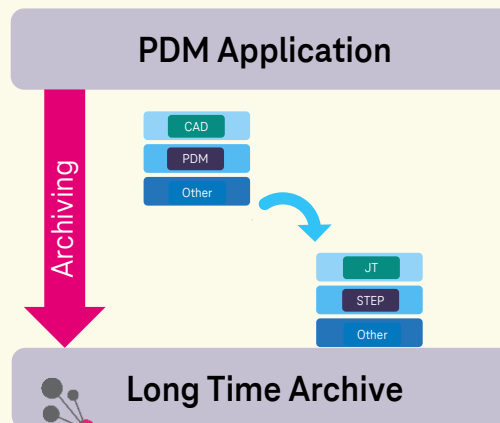
Exchange of CAD and related design data with external partners (file-based)



02

Data Migration

Migration of CAD and related design data from an existing PDM application to another.



03

Long Time Archiving

Transformation of CAD and related design data into neutral formats and archiving into a long-term archive.

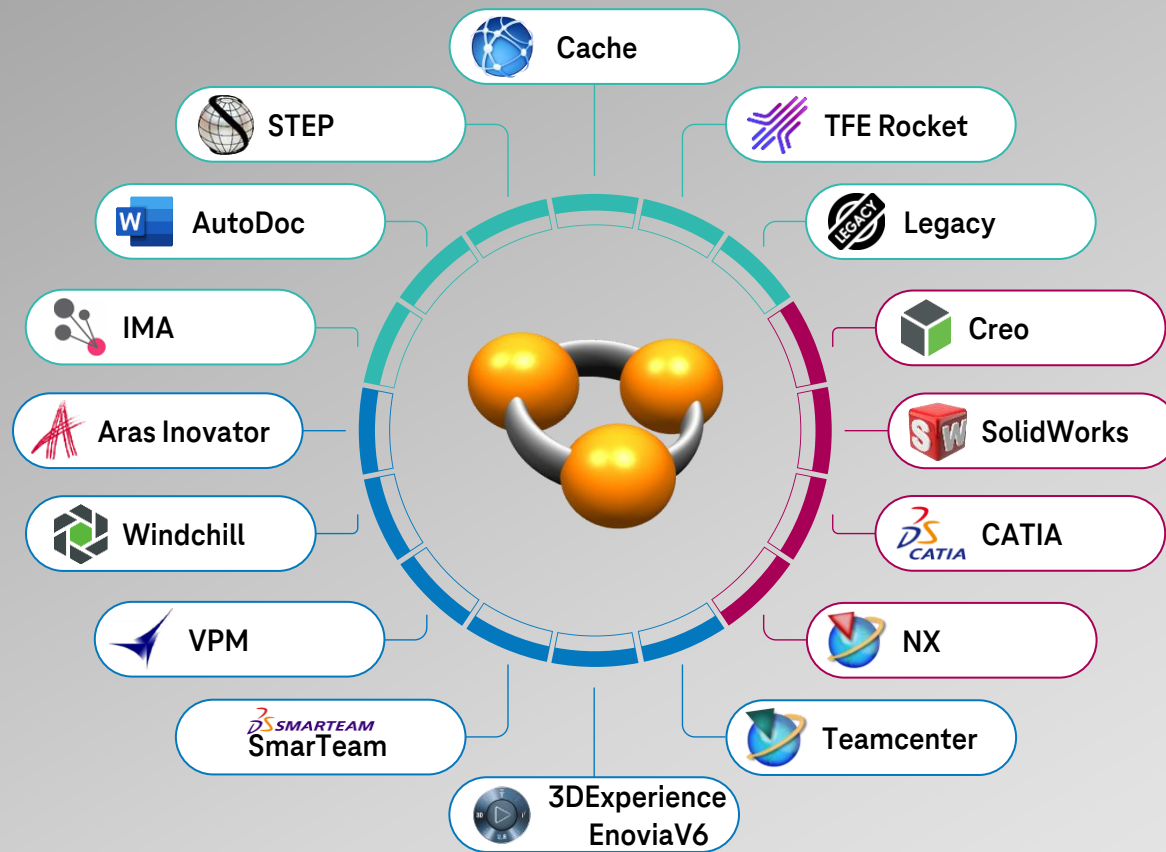


COMPDM supports you from simple to very complex scenarios



COMPDM helps to automate processes, ensures data quality plus saves time and costs

COMPDM Release 2026.2



-  Change Management: support of Observation
-  Export Control: support of SecurityClassification, Certification and Export License
-  Support Element Reference (EER) mechanism
-  Preparation to AP242 Edition 5 (2027)
-  Brand new CIM Database module
-  Aras Support for xClasses
-  NX up to 2606
-  CATIA up to R36
-  SolidWorks up to 2025
-  Creo up to 12 & Windchill WGM Download

COMPDM STEP AP242 interface functionalities 1/3

PDM information		Implementation format								Level of implementation (XML-DM)		
		AP242 Ed1 (TC)		AP242 Ed3		AP242 Ed4		AP242 Ed5 (2027)		Pilot	IF test	COTS
		P21-AIM	XML-BOM	P21-AIM	XML-DM	P21-AIM	XML-DM	P21-AIM	XML-DM			
General	PDM Representation of Document and Assembly Structure	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
	CAX Representation of Document and Assembly Structure	YES	PARTIAL	YES	PARTIAL	YES	PARTIAL	YES	PARTIAL	YES	not planned	YES
	Support of STEP Part21 (.stp) geometry files	NO	YES	NO	YES	NO	YES	NO	YES	YES	YES	YES
	Support of ISO 14306 (.jt) geometry files	N.R.	YES	N.R.	YES	N.R.	YES	N.R.	YES	YES	YES	YES
	RelationshipObjectRelationship between PartView Usage and Occurrence Usage	N.R.	n/a	N.R.	n/a	N.R.	NO	N.R.	NO	NO	not planned	NO
	Geometry on Assembly Node	YES	YES	YES	YES	YES	YES	YES	YES	YES	not planned	YES
Bill of Material	"As Designed" PDM product structure	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
	"As Planned" PDM product structure	N.R.	YES	N.R.	YES	N.R.	YES	N.R.	YES	YES	YES	YES
	Multi-BoM Links	N.R.	PARTIAL	N.R.	PARTIAL	N.R.	PARTIAL	N.R.	PARTIAL	YES	YES	YES
External References	Nested PDM product structure old (specified reference mechanism)	NO	YES	NO	YES	NO	YES	NO	YES	YES	YES	YES
	Nested PDM product structure new (EER mechanism)	N.R.	n/a	N.R.	n/a	N.R.	YES	N.R.	YES	YES	YES	YES
	Incremental Exchange (reference mechanism)	N.R.	YES	N.R.	YES	N.R.	YES	N.R.	YES	YES	YES	YES
	Incremental Exchange (EER mechanism)	N.R.	n/a	N.R.	n/a	N.R.	NO	N.R.	PLANNED	PLANNED	in preparation	PLANNED
	Delta Exchange (reference mechanism)	N.R.	n/a	N.R.	NO	N.R.	NO	N.R.	NO	NO	not planned	NO
	Delta Exchange (EER mechanism)	N.R.	n/a	N.R.	n/a	N.R.	NO	N.R.	PLANNED	PLANNED	in preparation	PLANNED
Alternate / Substitute Parts	Alternate Parts on Part Level	N.R.	YES	N.R.	YES	N.R.	YES	N.R.	YES	YES	YES	YES
	Alternate Parts on Part Version Level	N.R.	YES	N.R.	YES	N.R.	YES	N.R.	YES	YES	YES	YES
	Substitute Parts on Part View Usage Level	N.R.	YES	N.R.	YES	N.R.	YES	N.R.	YES	YES	YES	YES
	Substitute Parts on Part Occurrence Usage Level	N.R.	YES	N.R.	YES	N.R.	YES	N.R.	YES	YES	YES	YES
Mirroring	Mirrored Parts via same Geometry	N.R.	YES	N.R.	YES	N.R.	YES	N.R.	YES	YES	YES	YES
	Mirrored Parts via different Geometry	N.R.	YES	N.R.	YES	N.R.	YES	N.R.	YES	YES	YES	YES

COMPDM STEP AP242 interface functionalities 2/3

PDM information		Implementation format								Level of implementation (XML-DM)		
		AP242 Ed1 (TC)		AP242 Ed3		AP242 Ed4		AP242 Ed5 (2027)				
		P21-AIM	XML-BOM	P21-AIM	XML-DM	P21-AIM	XML-DM	P21-AIM	XML-DM	Pilot	IF test	COTS
Attributes, Properties	Lifecycle management (LifeCycle, ApplicationDomain, Approval)	N.R.	YES	N.R.	YES	N.R.	YES	N.R.	YES	YES	YES	YES
	Person and organization	N.R.	YES	N.R.	YES	N.R.	YES	N.R.	YES	YES	YES	YES
	Date and Time	N.R.	YES	N.R.	YES	N.R.	YES	N.R.	YES	YES	YES	YES
	Properties without unit (Real, Integer, Boolean, ...)	N.R.	n/a	N.R.	n/a	N.R.	YES	N.R.	YES	YES	YES	YES
	Classification	N.R.	YES	N.R.	YES	N.R.	YES	N.R.	YES	YES	YES	YES
	User defined attribute (applying to one given CAD model)	NO	YES	NO	YES	NO	YES	NO	YES	YES	YES	YES
	Customized PDM properties (applying to all parts, all documents, etc.)	NO	YES	NO	YES	NO	YES	NO	YES	YES	YES	YES
	Property Groups	N.R.	PARTIAL	N.R.	YES	N.R.	YES	N.R.	YES	YES	YES	YES
	File Properties (Format, Content, Creation, Size)	N.R.	YES	N.R.	YES	N.R.	YES	N.R.	YES	YES	YES	YES
	Multi-identification on one object: identifiers from different context (organization, SuppliedObjectRelationship: one object for each context	N.R.	YES	N.R.	YES	N.R.	YES	N.R.	YES	YES	YES	YES
	Bounding Box for performant scan through large product structure	N.R.	NO	N.R.	NO	N.R.	NO	N.R.	NO	NO	not planned	NO
	PartViewRelationship.Id (FindNumber)	N.R.	YES	N.R.	YES	N.R.	YES	N.R.	YES	YES	YES	YES
Change Management	WorkRequest + Activity	N.R.	YES	N.R.	YES	N.R.	YES	N.R.	YES	YES	YES	YES
	WorkOrder + Activity	N.R.	YES	N.R.	YES	N.R.	YES	N.R.	YES	YES	YES	YES
	Observation + Activity	N.R.	n/a	N.R.	n/a	N.R.	YES	N.R.	YES	YES	YES	YES
	Visual Issue Management (VIM) incl. SavedView and Red Lining	N.R.	n/a	N.R.	n/a	N.R.	NO	N.R.	NO	NO	in preparation	NO
Configuration Management	based on Effectivities	N.R.	YES	N.R.	YES	N.R.	YES	N.R.	YES	YES	YES	YES
	based on Specifications	N.R.	YES	N.R.	YES	N.R.	YES	N.R.	YES	YES	YES	YES
	based on Version Branch Effectivities	N.R.	n/a	N.R.	n/a	N.R.	NO	N.R.	PLANNED	PLANNED	in preparation	PLANNED
	Filtering Information (e.g. [EffectivityControlled]ProductConfiguration)	N.R.	YES	N.R.	YES	N.R.	YES	N.R.	YES	YES	YES	YES
Compression	.stpA	NO	YES	NO	YES	NO	YES	NO	YES	YES	YES	YES
	.stpxZ	n/a	YES	n/a	YES	n/a	YES	n/a	YES	YES	YES	YES
	.stpZ	NO	n/a	NO	n/a	NO	n/a	NO	n/a	YES	YES	YES
Validation Properties	Assembly validation properties (number of children, notional centroid based on LOTAR Product Structure Validation Properties (LOTAR Part 205)	NO	YES	NO	YES	NO	YES	NO	YES	YES	YES	YES
		N.R.	NO	N.R.	NO	N.R.	PARTIAL	N.R.	PARTIAL	YES	YES	NO

COMPDM STEP AP242 interface functionalities 3/3

PDM information		Implementation format								Level of implementation (XML-DM)		
		AP242 Ed1 (TC)		AP242 Ed3		AP242 Ed4		AP242 Ed5 (2027)		Pilot	IF test	COTS
		P21-AIM	XML-BOM	P21-AIM	XML-DM	P21-AIM	XML-DM	P21-AIM	XML-DM			
Export Control	Security Classification	N.R.	YES	N.R.	YES	N.R.	YES	N.R.	YES	YES	in preparation	PLANNED
	Certification	N.R.	YES	N.R.	YES	N.R.	YES	N.R.	YES	YES	in preparation	PLANNED
	Export License (Contract)	N.R.	YES	N.R.	YES	N.R.	YES	N.R.	YES	YES	in preparation	PLANNED
Persistent Ids (for EER)	Part	NO	n/a	NO	n/a	NO	YES	NO	YES	YES	YES	PLANNED
	PartVersion	NO	n/a	NO	n/a	NO	YES	NO	YES	YES	YES	PLANNED
	PartView	NO	n/a	NO	n/a	NO	YES	NO	YES	YES	YES	PLANNED
	Occurrence	NO	n/a	NO	n/a	NO	YES	NO	YES	YES	YES	PLANNED
	WorkRequest	N.R.	n/a	N.R.	n/a	N.R.	PLANNED	N.R.	PLANNED	PLANNED	in preparation	PLANNED
	WorkOrder	N.R.	n/a	N.R.	n/a	N.R.	PLANNED	N.R.	PLANNED	PLANNED	in preparation	PLANNED
	Observation	N.R.	n/a	N.R.	n/a	N.R.	PLANNED	N.R.	PLANNED	PLANNED	in preparation	PLANNED
	Activity	N.R.	n/a	N.R.	n/a	N.R.	PLANNED	N.R.	PLANNED	PLANNED	in preparation	PLANNED
	ProductClass	N.R.	n/a	N.R.	n/a	N.R.	PLANNED	N.R.	PLANNED	PLANNED	in preparation	PLANNED
	ProductConfiguration	N.R.	n/a	N.R.	n/a	N.R.	PLANNED	N.R.	PLANNED	PLANNED	in preparation	PLANNED
	Specification	N.R.	n/a	N.R.	n/a	N.R.	PLANNED	N.R.	PLANNED	PLANNED	in preparation	PLANNED
Mating (combined with xMCF)	AssemblyGroup (MatingGroup, MatingConnection)	N.R.	n/a	N.R.	n/a	N.R.	n/a	N.R.	PLANNED	PLANNED	in preparation	PLANNED
	NestedMatingConnection	N.R.	n/a	N.R.	n/a	N.R.	n/a	N.R.	PLANNED	PLANNED	in preparation	PLANNED
Material and Properties	PDM Representation of Material	N.R.	NO	N.R.	NO	N.R.	NO	N.R.	PLANNED	PLANNED	in preparation	PLANNED
	CAX Representation of Material	NO	NO	NO	NO	NO	NO	NO	PLANNED	PLANNED	???	PLANNED
	Alternative Material	N.R.	NO	N.R.	NO	N.R.	NO	N.R.	PLANNED	PLANNED	in preparation	PLANNED
	CoatingLayer	N.R.	NO	N.R.	NO	N.R.	NO	N.R.	PLANNED	PLANNED	in preparation	PLANNED
	SurfaceCondition	N.R.	NO	N.R.	NO	N.R.	NO	N.R.	PLANNED	PLANNED	in preparation	PLANNED
Part Evolution and Interchangeability	Stock management	N.R.	PLANNED	N.R.	PLANNED	N.R.	PLANNED	N.R.	PLANNED	PLANNED	in preparation	PLANNED
	Together-with	N.R.	PLANNED	N.R.	PLANNED	N.R.	PLANNED	N.R.	PLANNED	PLANNED	in preparation	PLANNED
	Obsolescence of a Part	N.R.	PLANNED	N.R.	PLANNED	N.R.	PLANNED	N.R.	PLANNED	PLANNED	in preparation	PLANNED
	Interchangeability relationship	N.R.	PLANNED	N.R.	PLANNED	N.R.	PLANNED	N.R.	PLANNED	PLANNED	in preparation	PLANNED

Complete PDF and comparison: www.mbx-if.org/home/pdm/implementation-coverage/

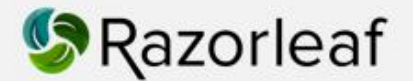
COMPDM References and Partners

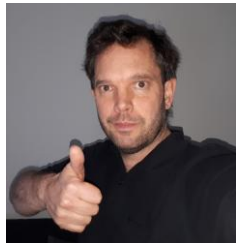


Customers (Excerpt)



Partners





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Thank you for
your time,
your energy,
and your invaluable
insights.