



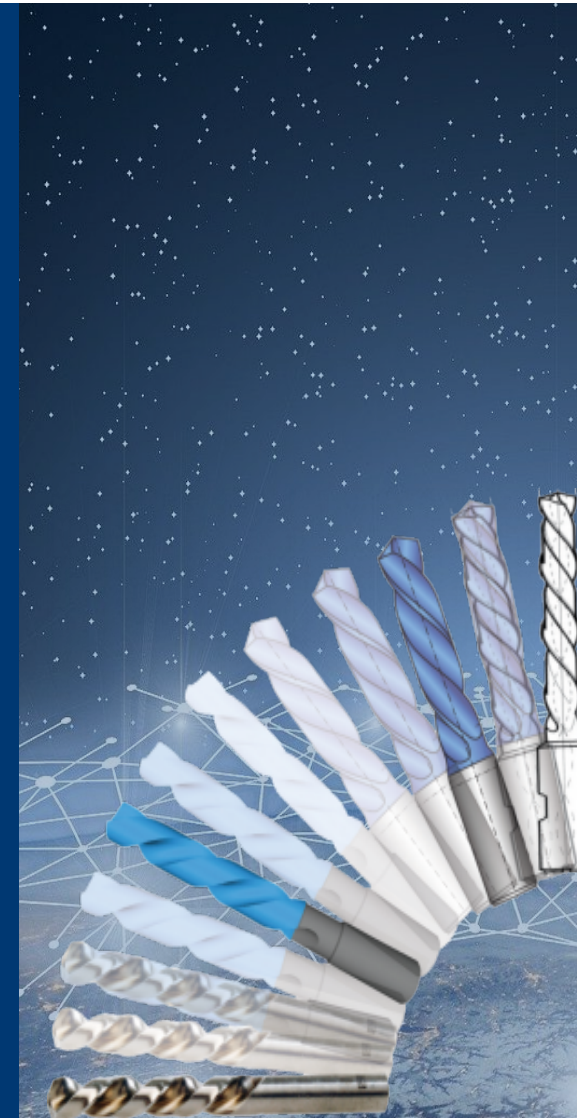
CIMSOURCE

Vendor Managed Product Data

Digitalisierung der Werkzeugindustrie:
Standards im praktischen Einsatz

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Dhafer Kallel
CIMSOURCE GmbH

Member of DIN4000 Committee for over 20 years
Member of ISO13399 Committee for over 10 years





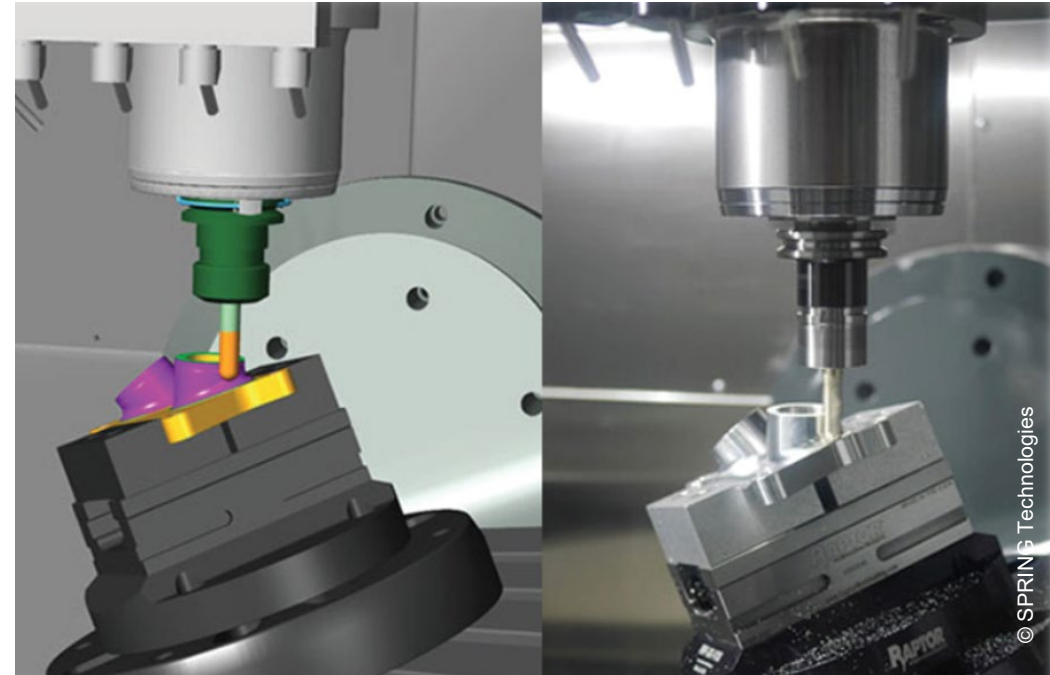
Requirements on tool data

For CAD/CAM and Toolmanagement Systems

- From single up to thousands of tool components from various suppliers
- 2D models, 3D models, geometric parameters, speeds & feeds
- Reliant quality
- No rework



CLICK & GO



Why standards?

The systems (CAD/CAM & TMS)

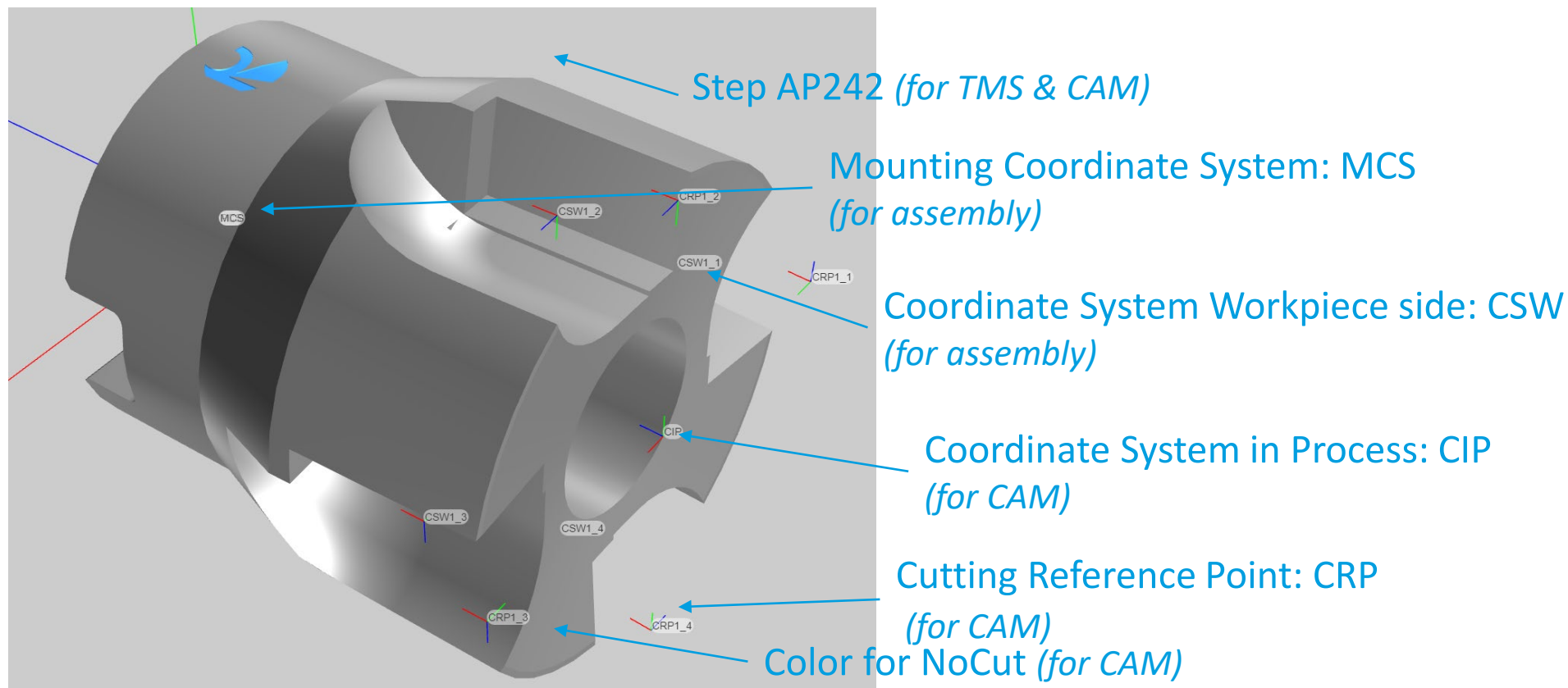
- No two systems with similar requirements
- Mainly system specific data formats
- X-Y problem





3D graphic according to ISO13399

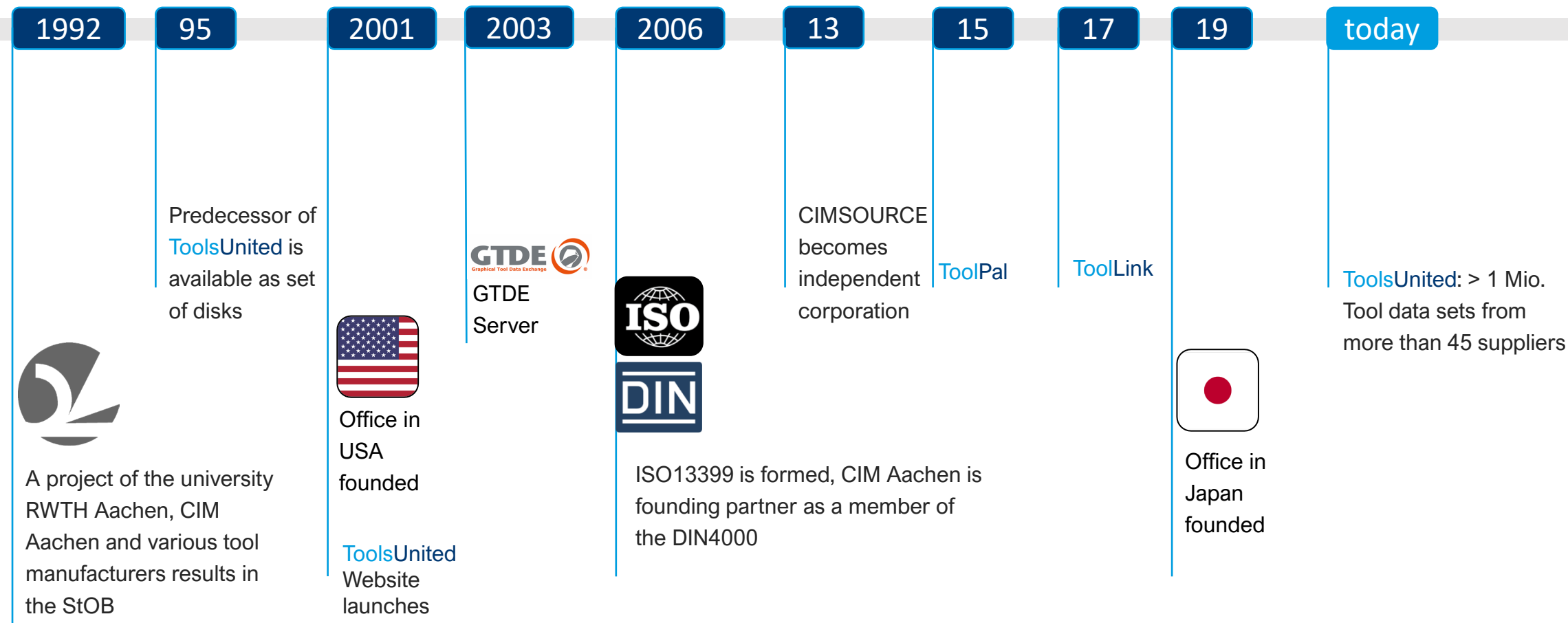
All coordinate systems are needed if you want to build a tool assembly.



	Geometric characteristics	2D Graphics	3D Graphics
Package		DIN26100 / GTC / ISO13399-90 (new)	
File-format	XML (DIN4000-102) / P21 (ISO)	DXF	STEP AP242
Structure	StOB: DIN4000/ ISO13399	ISO13399-70	DIN4003 / ISO13399
Quality	Mandatory fields of target system	Dimensioning, closed contour	No gaps, accuracy
Content	Parameters of the tool	2D graphic of the tool	3D graphic of the tool

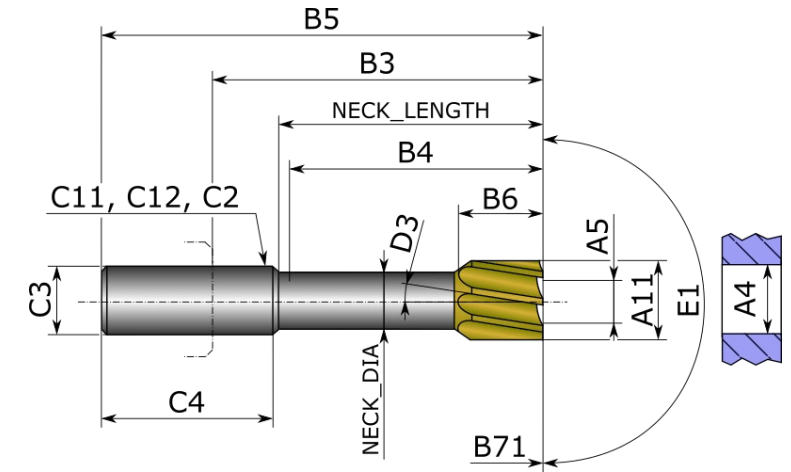


The CIMSOURCE History

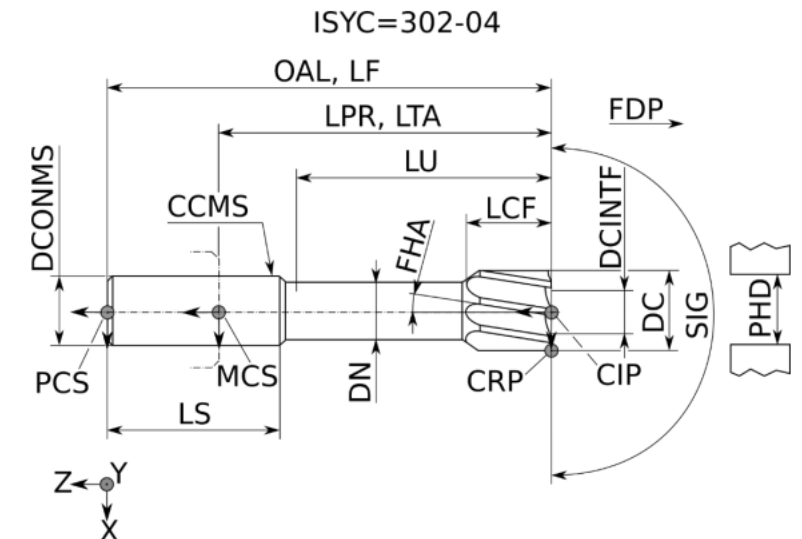


DIN-4000/ISO-13399 Mapping project

Standard	DIN4000-81	ISO13399-3
Class	Counterbore	Counterbore, cylindrical shank, solid ISYC = 302-04
Property name	Overall length	Overall length
Property symbole	B5	OAL
Property definition		
Property format	REAL 7.3	NR2S..4.6
Unit	Mm	Mm



Screenshot from DIN4000-81:2017



Screenshot from ISO-13399-3:2021

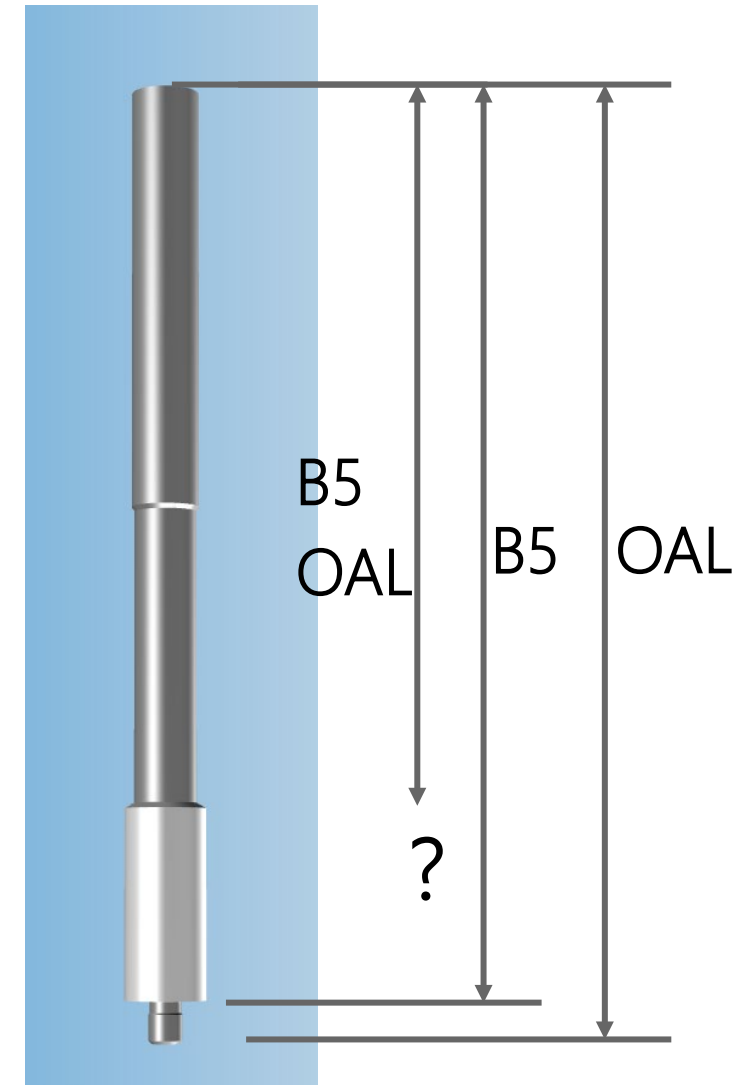


Standards In Practice II

Counterbore with guide pin

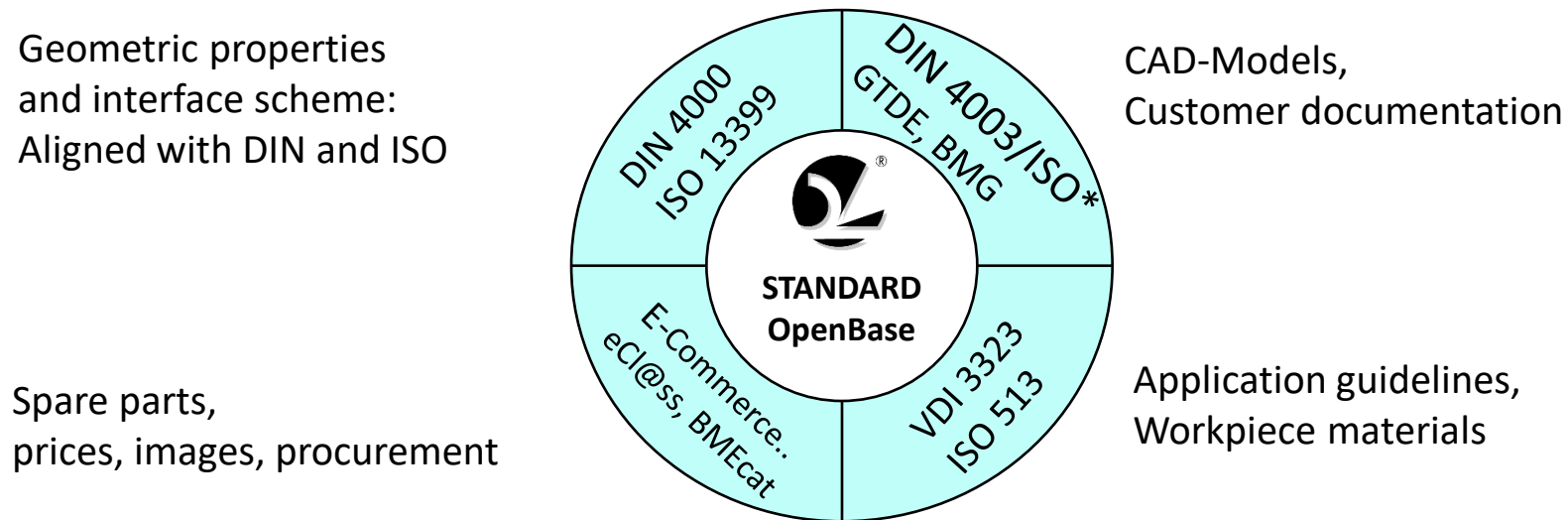
Deviation

Norm	DIN4000-81	ISO13399-3
Class	Counterbore	Counterbore, cylindrical shank, solid mit ISYC = 302-04
Property name	Overall length	Overall length
Property symbole	B5	OAL
Property definition	-	Largest dimension of an item in the direction of the Z-axis.
Property format	REAL 7.3	NR2S..4.6
Unit	Mm	Mm



STANDARD OpenBase

- **STANDARD OpenBase (StOB)** as the technological foundation of CIMSOURCE is the only comprehensive data exchange standard for cutting tools.

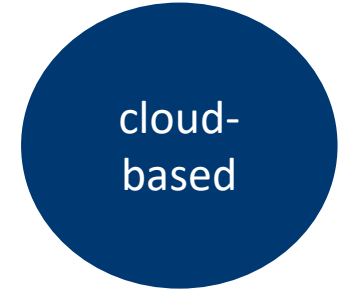
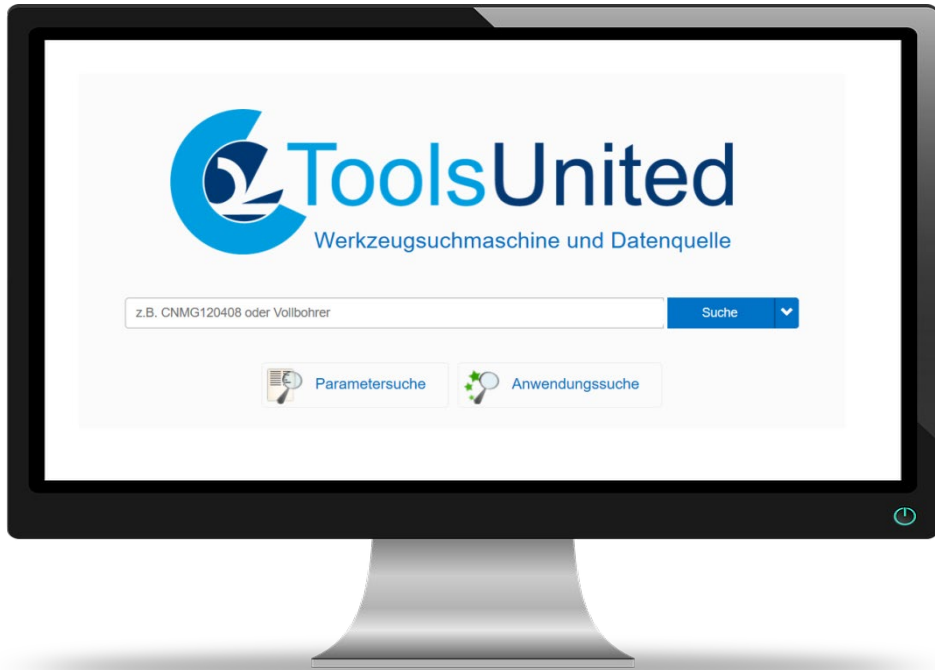


*ISO 13399 will cover both parameters and 3D modeling

STANDARD OpenBase is the Master Classification,
from which all formats and data schemes relevant to tool users be may served.



The solution: ToolsUnited



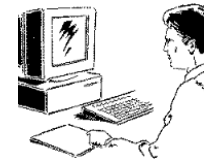
> 1.100.000
components

45
Suppliers

> 5 Mio.
Speeds & Feeds

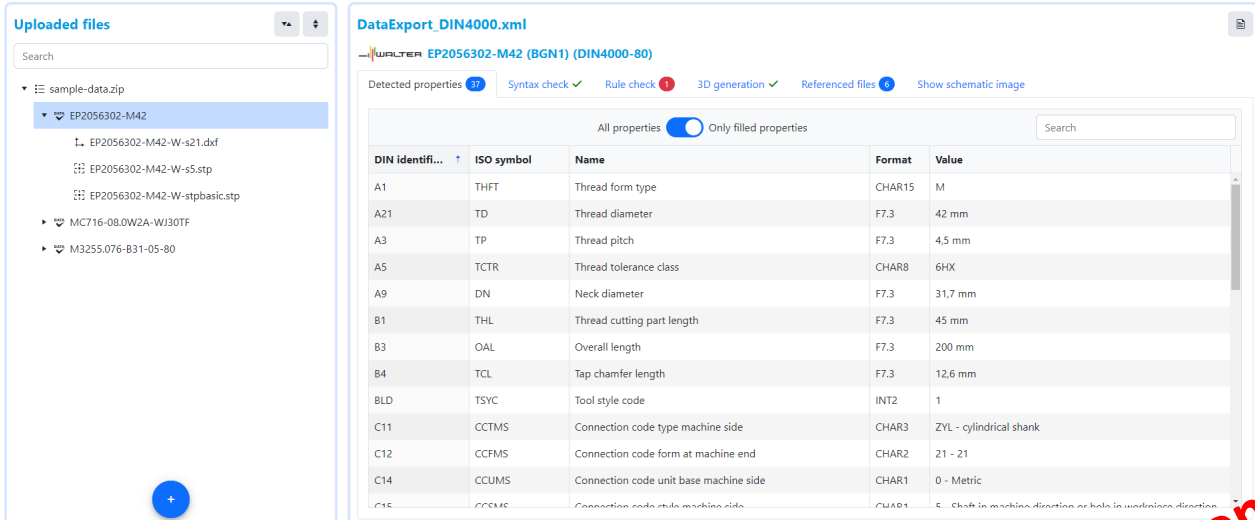
Tool Validata (NEW)

Each supplier should be able to check and evaluate its own data quality



- Scope of checking
 - parameter, 2D an 3D graphics
 - Semantic and syntactic checks
 - Extension of the set of rules
- ToolValidata is a web platform for checking tool data
 - Data sets can be checked for conformity to the standard.
 - The goal is to establish an internationally recognized checking website.
- The rules and test routines should be used in the same way in all CIMSOURCE products.

ToolValidata



The screenshot displays the ToolValidata web interface. On the left, the 'Uploaded files' section shows a search bar and a list of files under 'sample-data.zip', including 'EP2056302-M42' and its associated files. On the right, the 'DataExport_DIN4000.xml' section shows a table of detected properties for a specific tool (WALTER EP2056302-M42 (BGN1) (DIN4000-80)). The table includes columns for DIN identification, ISO symbol, Name, Format, and Value. The table is filtered to show 'Only filled properties'.

DIN identi...	ISO symbol	Name	Format	Value
A1	THFT	Thread form type	CHAR15	M
A21	TD	Thread diameter	F7.3	42 mm
A3	TP	Thread pitch	F7.3	4,5 mm
A5	TCTR	Thread tolerance class	CHAR8	6HX
A9	DN	Neck diameter	F7.3	31,7 mm
B1	THL	Thread cutting part length	F7.3	45 mm
B3	OAL	Overall length	F7.3	200 mm
B4	TCL	Tap chamfer length	F7.3	12,6 mm
BLD	TSYC	Tool style code	INT2	1
C11	CCTMS	Connection code type machine side	CHAR3	ZYL - cylindrical shank
C12	CCFMS	Connection code form at machine end	CHAR2	21 - 21
C14	CCUMS	Connection code unit base machine side	CHAR1	0 - Metric
C15	CCFMS	Connection code end machine side	CHAR1	0 - Metric

www.toolvalidata.com



For more information meet
us in hall 5 at booth C48!

Thank you for your
attention.