



Lyon, the 5th of may 2025

## **STEP: state of the art at Datakit**

**Let's break down their features and why they matter to your workflow !**

**Datakit is committed in the support of STEP for many years and well known for the quality of its read/write STEP converters which cover the processing of wide range of entities in parts and assemblies in graphical and semantic terms.**

Our Step reader allows to read files of the STEP Revisions AP203 (Edition 1 and 2), AP214 (up to Edition 3), AP242 (up to Edition 3), AP242 BO XML, including:

- Model géometry / Topology: BRep entities, Face and trimming, Surfaces, Curves, Wireframe, Meshes,
- Assembly: shape representation (with items placement / representation), occurrence, relationships, ...
- Graphical attributes: style, colors, assignment, transparency,
- Part properties, validation properties at part and assembly levels, user defined attributes, ...
- FDT Graphics, symbols as polylines or placeholder since AP243E3: leader curve, style, texts, saved views,...
- FDT Semantics with AP203E2 and later : geometrical dimensioning and tolerancing, datum elements, notes, associated geometry...
- Step AP242 BO XML (STEP Domain Model): assemblies, product data, properties, metadata, ...

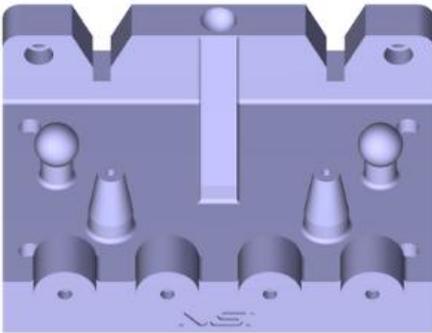
Our Step writer allows to write files STEP Revisions AP242 : AP242E1 (Edition 1), AP242E2 (Edition 2) AP242E3 (Edition 3), AP242 BO XML (Domain XML), including:

- Model géometry/ Topology: BRep entities, Face and trimming, Surfaces, Curves, Wireframe, Meshes,
- Assembly: product (with or without proper 3D geometry), metadata, occurrence, external reference, ...,
- Attributes: graphical attributes, colors, thickness, layer, visibility, invisibility, transparency, ...,
- Part properties, validation properties at part and assembly levels, user defined attributes, ...,
- FDT Graphics, symbols as polylines or placeholder since AP243E3: leader curve, style, texts, saved views ...,
- FDT Semantics with AP203E2 and later: geometrical dimensioning and tolerancing, datum elements, notes, associated geometry...,
- STEP AP242 BO XML (Domain Model): assemblies, product data, properties, metadata, ...,

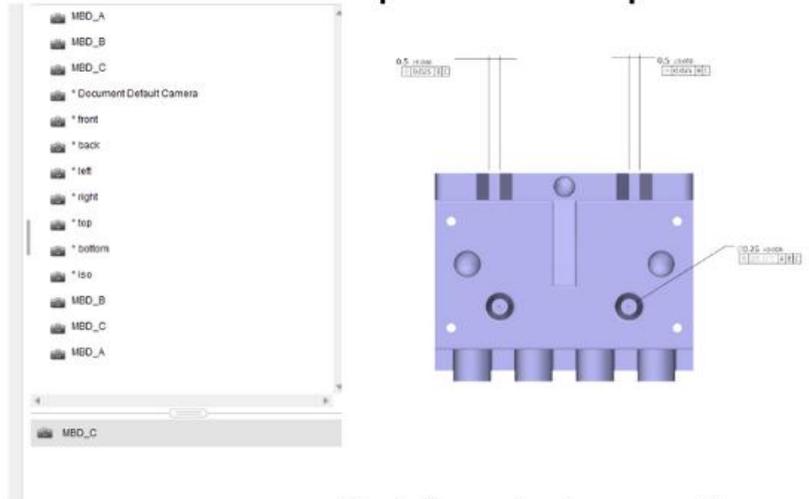


# State of art STEP

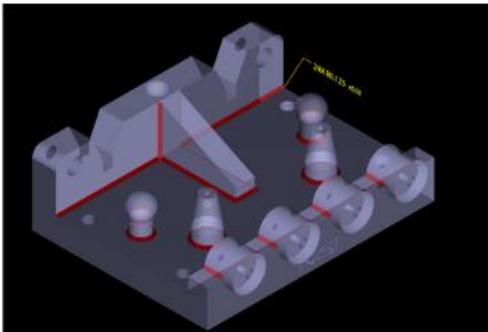
Saved views



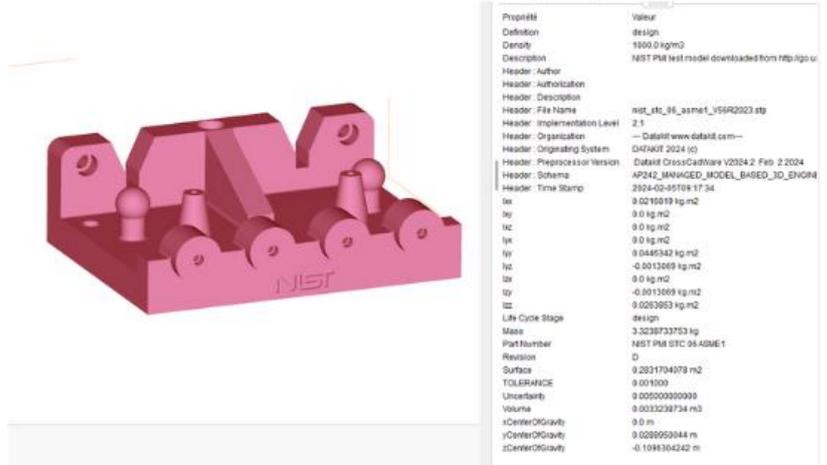
Graphic FDT in a specific view



Semantic associated geometry



Part / product properties, validation properties



To get further information about what's in progress: [solutions@datakit.com](mailto:solutions@datakit.com)