# MBD Checker

## RULES-BASED SUPPORT OF MODEL-BASED ENTERPRISE

### INTRODUCTION

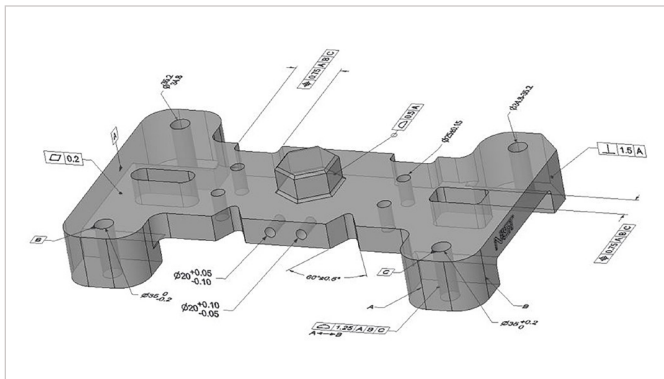**Are you implementing Model-Based-Definition in your business or enterprise?**

**Does your team manually review MBD models for data quality and standardization?**

**Does your team use or are you implementing GD&T or GPS in your Model-Based-Definition models?**

**Have you ever wondered if there is a better way to review models?**

**Have you ever wondered if there is a better way to support users in creating and reviewing their MBD?**

**Does your team struggle with the picks and clicks of creating and managing MBD data?**



**Do your MBD downstream users ever complain about:**

- Meaningless tolerances
- Incompletely specified parts
- Poorly readable 3D views and Product and Manufacturing Information (PMI)
- Missing / Lost annotations
- Lost time in engineering change processes due to needless revisions from downstream feedback

**SIGMAXIM's MBD Checker is a stand alone application that works inside of Creo to find and fix these frustrating MBD issues.**

MBD Checker is an advanced rules-based automation application tailored to support Model-Based Definition (MBD) and Model-Based Enterprise (MBE) implementations across diverse industries.

With its comprehensive validation capabilities against international standards and best practices, MBD Checker empowers engineers within businesses and enterprises to efficiently identify and rectify issues in MBD models through an interactive interface embedded within Creo.

### WHO IS MBD CHECKER FOR?

- Businesses transitioning to or already implementing Model-Based Definition (MBD)
- Teams engaged in manual review processes for ensuring MBD data quality and standardization
- Users incorporating Geometric Dimensioning and Tolerancing (GD&T) or Geometric Product Specifications (GPS) in their MBD models
- Those seeking streamlined processes for MBD creation, review, and management
- Teams grappling with the complexity of MBD data and seeking enhanced efficiency in handling it

### HOW IT WORKS

**Configuration:** Select desired rules from the configuration app.

**Validation:** Run MBD Checker within Creo on the desired model.

**Review:** Utilize the highly visual and interactive report to understand and address issues.

**Correction:** Follow guided correction steps directly within Creo to rectify flagged issues effectively.

### KEY BENEFITS

**Efficiency through Standardization:** Drive efficiency gains of 50%-100% by enforcing standardization across various aspects of MBD, including GD&T/GPS, PMI elements, presentation styles, and educational materials.
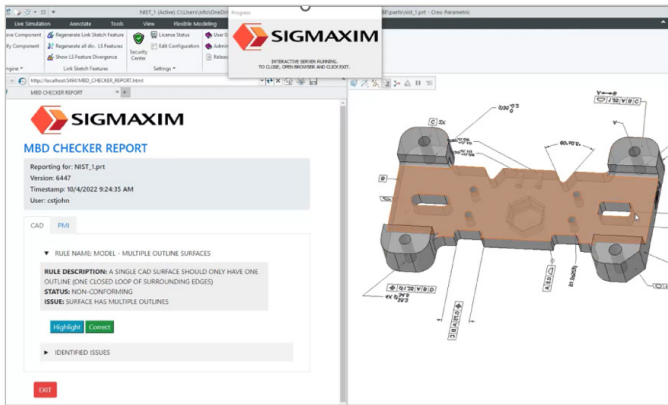
**Productivity:** New users become productive quickly, allowing advanced users to focus on development.

**Systematic:** Adapt MBD Checker to fit your products, PMI usages, desired presentation styles, etc.

## KEY FEATURES AND COVERAGE

MBD Checker offers comprehensive coverage and a robust set of features tailored to streamline Model-Based Definition (MBD) processes and ensure adherence to industry standards and best practices.

By encompassing these features, MBD Checker empowers users to achieve higher levels of consistency, accuracy, and efficiency in their MBD workflows, ultimately enhancing the quality of product design and manufacturing processes.



## KEY CAPABILITIES

**GD&T / GPS and Tolerancing:** Checks a broad spectrum of standards-based rules concerning tolerancing.

Ensures the model is fully defined, with consistent and semantically sound surface descriptions.

Validates symbology and ensures adherence to best practices.

**Other PMI – Notes, Symbols:** Validates the presentation of PMI elements, including notes and symbols.

Ensures clarity, consistency, and adherence to presentation standards.

**Presentation, Readability & Visibility:** Checks the presentation of product and manufacturing information (PMI) for readability, visibility, and comprehensibility.

Ensures PMI elements are effectively communicated and easily understood by stakeholders.

**Geometry & Semantics:** Identifies and rectifies geometric inconsistencies or irregularities in model geometry.

**CAD Modeling Practices:** Checks adherence to CAD modeling best practices to ensure model integrity and compatibility.

Identifies and addresses deviations from established modeling standards.

## USE CASES

- Check MBD data during creation
- Review and enhance translated MBD data
- Validate MBD data before integration into PLM system
- Automate MBD checks within PLM workflows
- Educate users on MBD best practices
- Adapt MBD creation and validation processes based on industry best practices

## INTEGRATION

MBD Checker seamlessly integrates with diverse enterprise solutions, ensuring consistent compliance and enables effective human presentation as well as downstream interoperability.

## ABOUT SIGMAXIM

SIGMAXIM has been the leading global expert in Creo automation solutions for over 20 years.
We partner with companies to deliver low risk, efficient automation solutions for both standardization and product configuration initiatives.

### SIGMAXIM GLOBAL CONTACTS

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|---|---|
| Belgium | +32 23 19 14 00 |
| France | +33 428 29 86 00 |
| Germany | +49 89 26200451 |
| Netherlands | +31 26 800 12 38 |
| Switzerland | +41 22 519 63 40 |
| United Kingdom | +44 20 3290 8135 |