

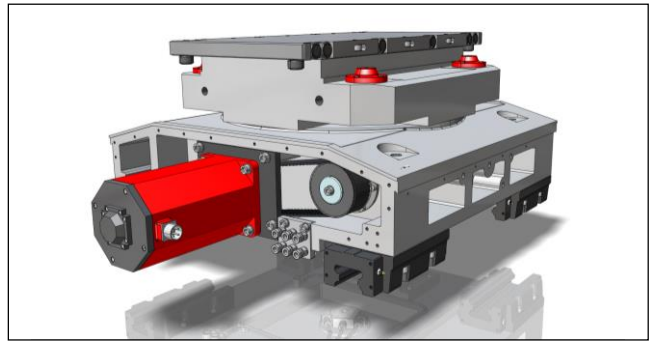
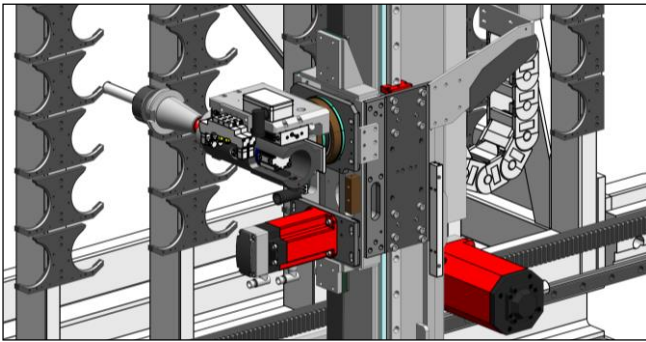
# ThinkDesign

## Engineering



**The best solution for 3D Design**

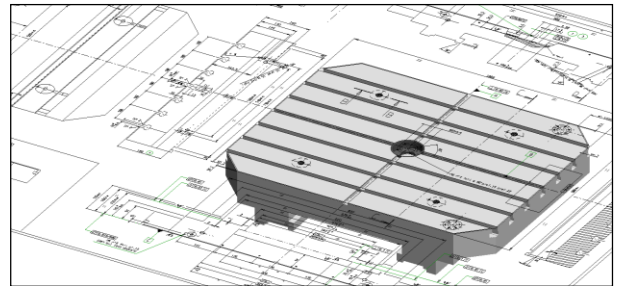
# think3



ThinkDesign Engineering addresses the needs of mechanical manufacturing companies by offering productive and reliable tools. From traditional 2D design controls, to innovative and integrated 3D design functionalities in a single environment, ThinkDesign Engineering provides a comprehensive CAD solution that allows companies to define their products in a faster, more efficient and flexible way. Part modeling, 2D/3D transparency, integrated sheet metal functionality, tubing creation and management, advanced assembly management, frame creation, smart objects, animation, data exchange interfaces with other CAD systems, high availability of mechanical parts libraries, direct FEM/FEA interface, product data management, all in one intuitive and easy-to-use product. These are just a few aspects of ThinkDesign Engineering's world. A world created to help manufacturing companies win market challenges.

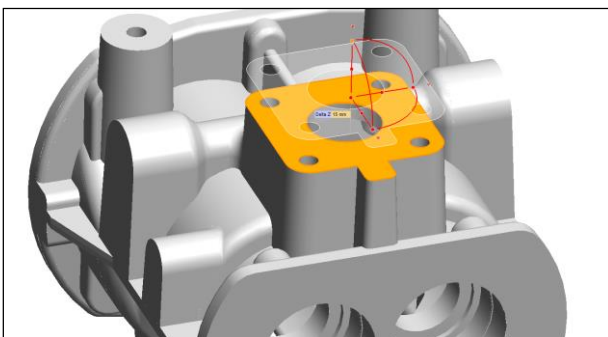
## 2D/3D/PLM TRANSPARENCY

ThinkDesign Engineering's integrated design environment ensures full 2D/3D/PDM transparency and does not require expensive interfaces for the migration from 2D to 3D. ThinkDesign Engineering offers optimized and interoperable 2D and 3D environments that are fully integrated in thinkPLM, think3's PLM (Product Lifecycle Management) application suite. Companies can then preserve and modify existing 2D data, securing their original investment and preventing the risks associated to the migration from one design platform to another.



## AUTOCAD COMPATIBILITY

think3 offers full AutoCAD compatibility: 2D drawings can be imported in ThinkDesign Engineering, modified and reused as native designs. ThinkDesign Engineering combines advanced translation functionality and a modern and comprehensive design architecture. DXF/DWG translators ensure the integrity of AutoCAD entities and support imported data.

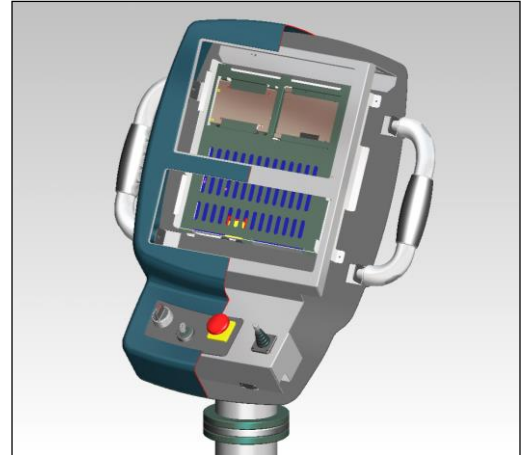


## INTERACTIVE SOLID MODELING

The modern Interactive Solid Modeling feature allows modification of solid geometries, both native and imported, and helps users overcome the parametric logic made of profiles and constraints and the object creation sequence, to get the expected modification result directly. Thanks to its solid modeling and surfacing functionalities, ThinkDesign Engineering ensures innovative part modeling functionalities in a flexible and easy-to-use design environment.

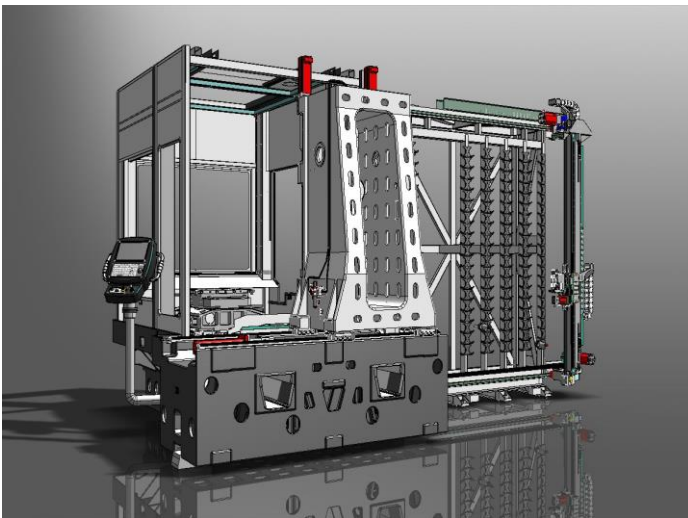
## SMART OBJECTS AND ADAPTIVE MEASURES

ThinkDesign Engineering's unique Smart Objects functionality allows the user to capture, reuse and share, either fully or partly, modeling sequences. The benefits are consistency and compliance to company standards, fewer errors and faster design cycles. Adaptive measures allow, when inserting or modifying features, to input dimensional values directly from the surrounding geometry, including solids, surfaces, and static 2D geometric elements, with a simple mouse click. With adaptive measures, users can speed up the modeling process in the context of an assembly, as well as quickly create a 3D model from 2D drawings.



## INTEGRATED SHEET METAL

ThinkDesign Engineering's high flexibility allows design engineers to create sheet metal parts more easily, starting from scratch or from existing parts, either native or imported from other CAD systems. ThinkDesign Engineering allows managing thick sheet metal parts with features on side faces while the same model may include parts with different bend tables. In addition, this application allows automatic generation of shop-floor-ready development drawings.



## ADVANCED ASSEMBLY MANAGEMENT

ThinkDesign Engineering provides innovative tools for the management of large assemblies and supports both a top-down and bottom-up approach. Simplified representations enable faster loading and viewing, preserving the parametric behavior of the assembly. Visual bookmarks simplify viewing operations and symbolic references allow quick replacement of components or subassemblies. Users can create different configurations of the same machine. The collision detection functionality allows detection of interferences between components and solids of the same assembly.

## 2D AND 3D TRANSLATORS

ThinkDesign Engineering provides 2D translators for DWG, DXF, IGES formats and GBG Draftmaker, besides 3D translators for the formats IGES, STEP, STL, VDA, VRML, WaveFront, IV, the neutral format of ThinkDesign and ASCII. A further extended set of possibilities is offered by the converter tdXchangeReader, acquirable separately, which enables the import into ThinkDesign of the latest and most popular proprietary 3D formats such as Catia v5, ProE, Parasolid and others. The bi-directional converter for Catia v4 is also available (2D included).\*

\* Check details and availability for the various platforms.

\*\* [For the system requirements, please read this document.](#)