3D CAD Industry Standards

Shorten design & engineering cycles by using 3D CAD Standards

In a world of intensifying pressures on engineering teams to work faster and smarter, many recognize the efficiency and consistency that comes from the digital interoperability of adopting industry standard 3D CAD wherever possible. An estimated 45% of a design engineer's time is spent searching or recreating CAD models of parts for designs; an inefficiency that engineering teams cannot afford. Not only do engineering teams benefit from the confidence in using trusted and authoritative 3D CAD versions of standards from AIA/NAS, ASME and SAE; knowing revision history of those 3D CAD Standard parts; but they also benefit from consistently using the same CAD models across CAD platforms.

Utilizing 3D CAD Standards from AIA/NAS, ASME and SAE can help:

– Engineers can find parts faster by geometry, similarity, sketch, dimensions and more

– Dramatically reduce part costs by identifying & using industry standard parts

– Accelerate design cycles and increase part reuse by designing in industry standard parts

– Control the selection, specification and purchase of industry standard parts across the organization

– Shorten procurement cycles by eliminating unnecessary new part introduction. Industry standard parts are often proven best practice and best option, less expensive, and open to more strategic sourcing.

– Quickly and easily add 3D industry standard parts to the CAD library, share with others, publish internally, or reference within internal engineering specifications to drive consistency, repeatability and scalability across the organization.

3D CAD Industry Standards – Available from AIA/NAS, ASME and SAE

AIA/NAS CAD Industry Standards

- AIA/NAS - 3 million parts across 900 industry standards primarily for aerospace, aviation, military and defense industries
- Download the native CAD model for any specified AIA National Aerospace Standard (NAS, NASM, NAM, NA) part to most major CAD systems (over 150 CAD formats available including Dassault Systèmes CATIA®, Siemens NX®, PTC Creo®, SolidWorks®, Autodesk Inventor®, Siemens Solid Edge®, and many others).
- Quickly locate appropriate NAS, NASM, NA, and NAM standards and define the required parts based on parameters such as thread size, length, materials, finish and locking type.
- Includes all referenced ASTM material and heat treat specifications
- Direct access to all of the industry standard parametric data that defines that fastener including material attributes.
- View 3D sample visual with AIA Standard Part Numbering System; helping to ensure accurate use of the AIA part number for BOM management, sourcing, ordering and quality control.
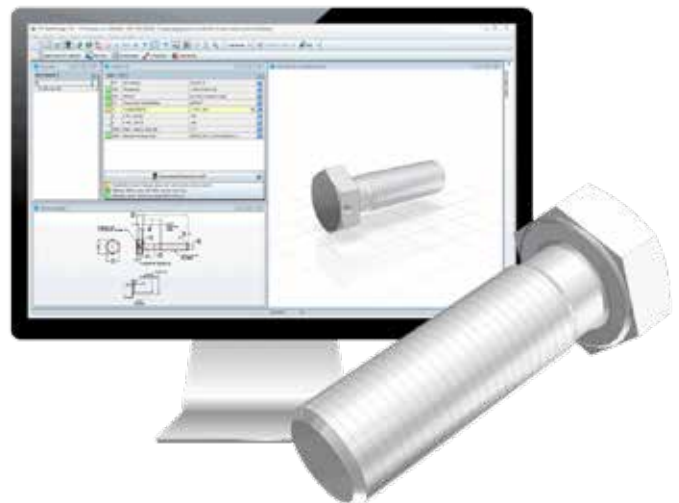
ASME 3D CAD Industry Standards

- ASME - 13 million configurable parts across 1100 industry standards utilized in construction, oil & gas, power & utility, aerospace & defense, and many other industries
- Over 700 unique fastener types and up to 500 different configurations per fastener type
- Includes all referenced ASTM material and heat treat specifications
- Quickly identify unique fasteners as defined by the ASME B18.24 PIN
- Download the native CAD model for any specified ASME PIN to most major CAD systems (over 150 CAD formats available including Dassault Systèmes CATIA®, Siemens NX®, PTC Creo®, SolidWorks®, Autodesk Inventor®, Siemens Solid Edge®, and many others).
- Cross-reference old 24-digit ASME PINs to the corresponding new 18-digit ASME PINs; providing the designer or CAD manager the ability to instantly download a native CAD version of that B18.24 Industry Standard Part.

- B18.24 superceded B18.24.1, B18.24.2 and B18.24.3 in 2005 and was DoD adopted in 2005
- Direct access to all of the industry standard parametric data that defines that fastener including material attributes.
- View 3D sample visual with ASME PIN Code Number; helping to ensure accurate use of the ASME PIN for BOM management, sourcing, ordering and quality control.

SAE 3D CAD Industry Standards

- SAE 5 million configurable parts across 500 industry standards primarily used in aerospace, military, automotive and other transportation industries
- 2D/ 3D CAD models of more than 500 SAE AS aerospace part standards
- Download the native CAD model for any specified SAE AS standard part to most major CAD systems (over 150 CAD formats available including Dassault Systèmes CATIA®, Siemens NX®, PTC Creo®, SolidWorks®, Autodesk Inventor®, Siemens Solid Edge®, and many others).
- Direct access to all of the industry standard parametric data that defines that fastener including material attributes.
- Ability to configure exact parts based on the rules designated within the industry standards
- Dynamic part number generation for configurable parts; helping ensure accurate use of part numbers in BOM management, sourcing, ordering and quality control.

Discover how 3D CAD Industry Standards can improve engineering efficiency, standard part selection, and procurement cycles:

REQUEST YOUR FREE DEMO

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Learn from the Ryerson Hyperloop team how utilizing 3D CAD Industry Standard parts can improve engineering processes:

WATCH THE VIDEO

https://ihsmarkit.com/products/3d-cad-industry-standards.html