





# LEVERAGE COMPANY BEST PRACTICES TO IMPROVE NC PROGRAMMING EFFICIENCY AND QUALITY

**NC Knowledge Manager** (NPX) provides a 3D interactive environment that enables expert NC programmers to capture machining standards and best practices and store them as templates for re-use. Using templates to program a part, reduces programming time, improves program quality, and ensures that company best practices and standards are followed.



### INCREASE PRODUCTIVITY FOR NC PROGRAMMERS BY AUTOMATING WITH NC KNOWLEDGE MANAGER

NC programmers can use *NC Knowledge Manager* to simplify program creation and enable intelligent NC processes to be created automatically.

*NC Knowledge Manager* enables NC experts to capitalize on company know-how and best practices to create a standard for all NC programmers, which can be shared through the platform for reuse. NC experts know the toolpaths, parameters, cutting conditions and macros needed for specific materials or a given geometry to be machined (like hole, pocket or stiffener). NC experts can control which machining operation parameters can be viewed or modified by the NC programmer. These different elements of knowledge are saved and shared through the platform. This makes it easy for NC programmers to reuse the expert's knowledge; simply apply and compute, and the toolpath is complete.

With *NC Knowledge Manager*, NC programmers can build a database of company best practices. When NC programmers follow these standards, potential errors are reduced which subsequently increases productivity.



# HIGHLIGHTS

*NC Knowledge Manager* allows NC experts to create personalized operations. Within a template, the expert can customize all operation panels—with functions to set the visibility, sensitivity, default value of parameters, and even the management of strategy tabs. These customized operations can then be shared with all NC programmers who have direct access in their workbench, as with any standard operation.

**NC Knowledge Manager** allows users to define machining operations on specific features of a given part with all the details, from tool paths to cutting tools and macros, which can then be stored as templates for reuse. These templates are saved as manufacturing cells in the platform and can be revised at any time.

*NC Knowledge Manager* enables users to select any geometric feature on a given part and identify that feature as a template. For instance, power features defined by engineering can be templatized for machining.

Using an intuitive interface, this role provides a full suite of powerful tools to enable standardization of company know-how and best practices.

# BENEFITS

#### **Increase the Quality of Machined Parts**

Templates created with *NC Knowledge Manager* enforce the use of company standards and best practices. NC programmers will use proven and true methods to improve the quality and consistency of NC programs.

#### **Reduce Programming Time**

Templates created with *NC Knowledge Manager* simplify the process of defining operations by reducing the number of selections and data entries required.

#### **Mitigate User Errors**

The high level of automation and simplified user experience provided by the custom templates improve the user experience and reduce the number of mistakes made by the NC programmer.

# Our **3D**EXPERIENCE<sup>®</sup> platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the **3DEXPERIENCE** Company, is a catalyst for human progress. We provide business and people with collaborative virtual environments to imagine sustainable innovations. By creating virtual twin experiences of the real world with our **3DEXPERIENCE** platform and applications, our customers can redefine the creation, production and life-cycle-management processes of their offer and thus have a meaningful impact to make the world more sustainable. The beauty of the Experience Economy is that it is a human-centered economy for the benefit of all –consumers, patients and citizens. Dassault Systèmes brings value to more than 300,000 customers of all sizes, in all industries, in more than 150 countries. For more information, visit **www.3ds.com**.



# **SINTEK** Beal Time, Beal Besults

# SIM Technologies Pvt. Ltd.

3rd Floor, "Mamanjee Centre", S7-A, Thiru-Vi-Ka Industrial Estate, Guindy, Chennai – 600 032