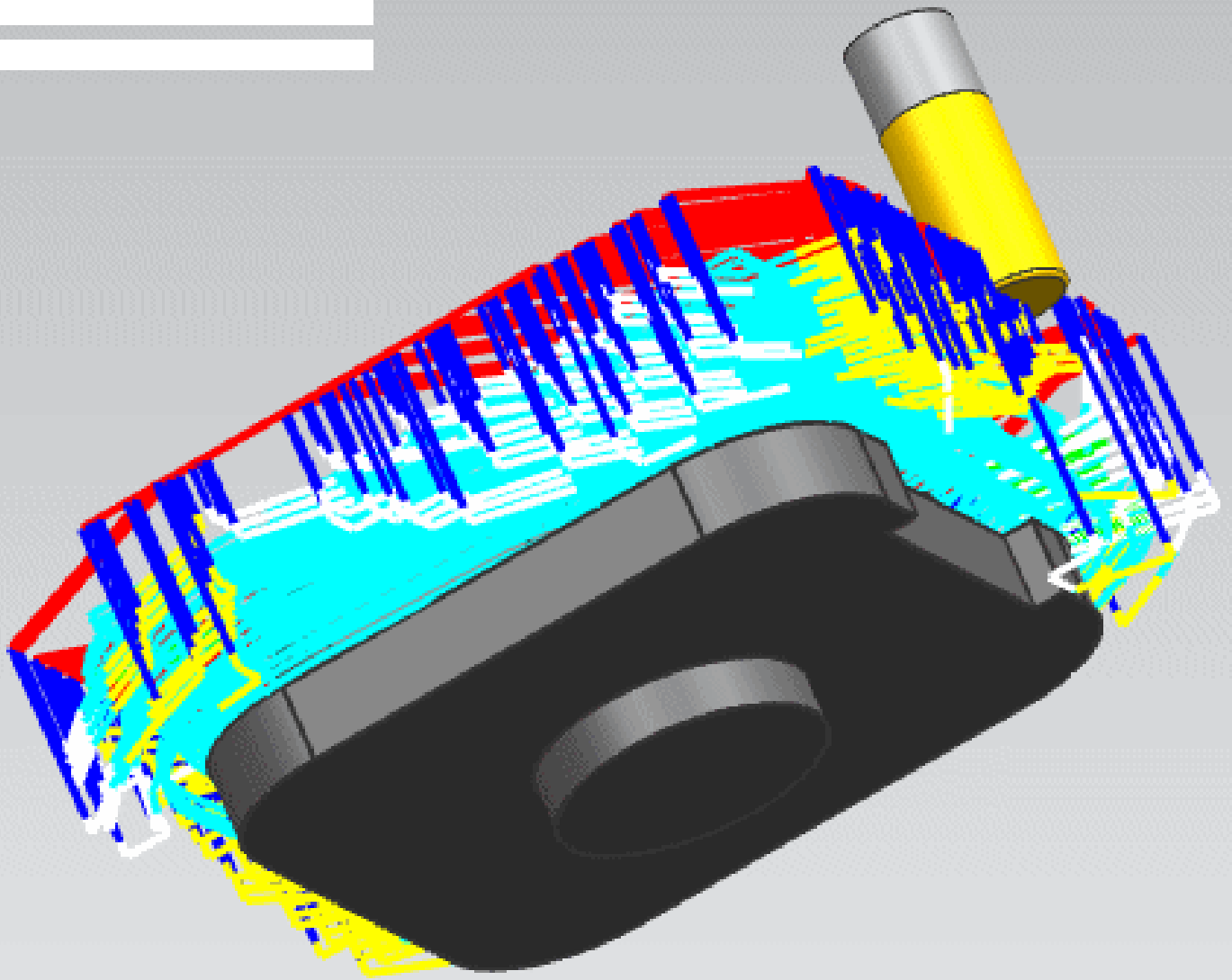


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Eliminate wasted cutting motions on overhanging blank material

NX CAM 9: How to omit insignificant cuts from overhanging IPWs in Cavity Milling

Answers for industry.

About NX CAM

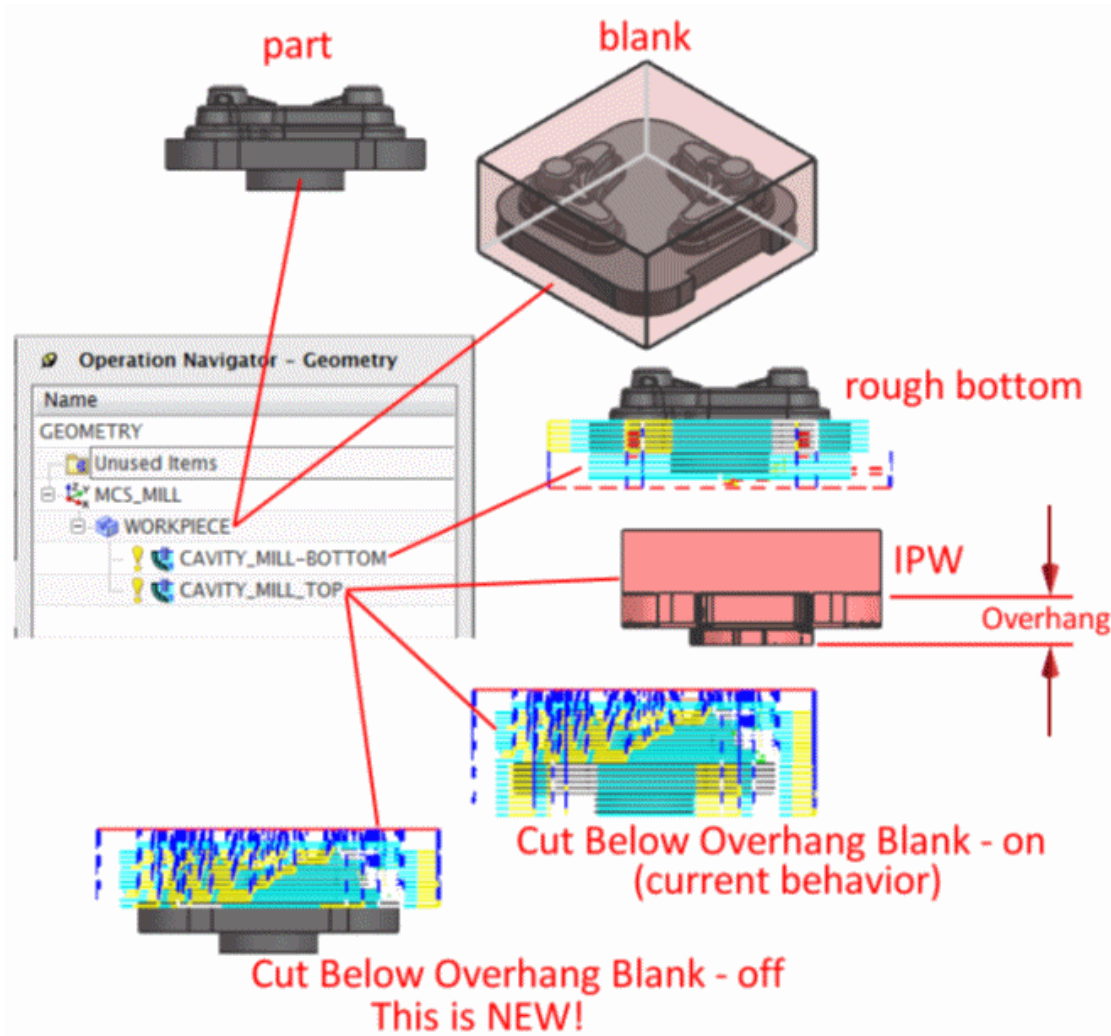
NX™ CAM software has helped many of the world's learning manufacturers and job shops produce better parts faster. You can also achieve similar benefits by making use of the unique advantages NX CAM offers.

This is one of many hands-on demonstrations designed to introduce you to the powerful capabilities in NX CAM 9. In order to run this demonstration, you will need access to NX CAM 9.

Visit the [NX Manufacturing Forum](#) to learn more, ask questions, and share comments about NX CAM.

Hands-on Demonstration: Eliminate wasted cutting motions on overhanging blank material

This enhancement improves efficiency of material removal for Cavity Mill operations that use 3D IPW as the containment by omitting cuts that remove insignificant amounts of material from overhanging IPWs.



Do you have a question?

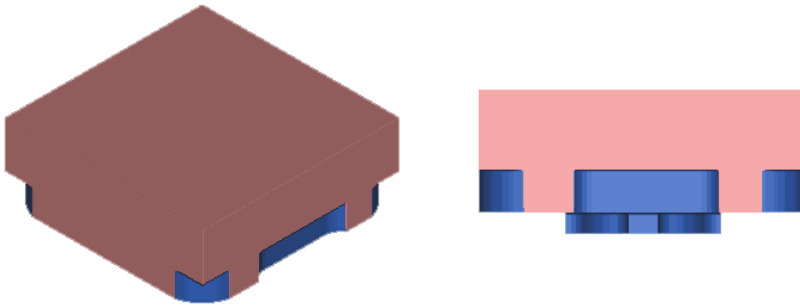
Post your questions or comments at the bottom of [this Tech Tip article in the NX Manufacturing Forum](#).

Prerequisites:

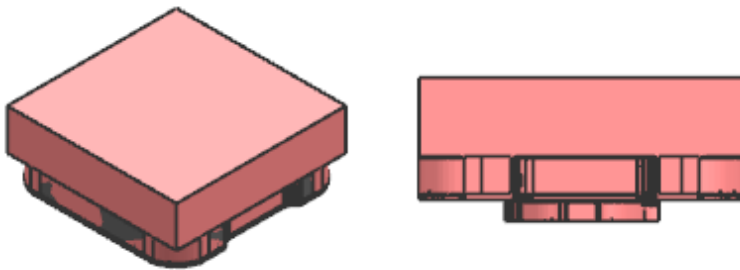
1. You will need access to **NX CAM 9** in order to run this demonstration.
2. If you haven't done so already, download and unzip **Improving 3D IPW Efficiency parts.7z**. You will find the .7z file attached directly to [this Tech Tip article in the NX Manufacturing Forum](#).

Demo:

1. Open **Improving 3D IPW Efficiency in Cavity Milling.prt** in NX.
2. Select **CAVITY_MILL_BOTTOM** in the Operation Navigator and click **Verify Tool Path**.
3. Select the **2D Dynamic** tab and **Play**.



4. Click **OK**.
5. Double-click **CAVITY_MILL_TOP** to edit the operation.
6. Click **Display** next to **Specify Previous IPW**.



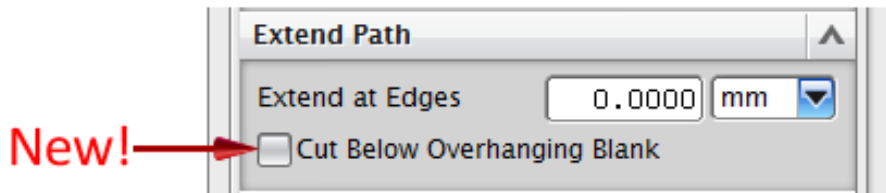
Notice that uncut material remains on the underside of the part.

7. Click **Cutting Parameters**.
8. Click the **Containment** tab.

Notice that **In Process Workpiece** is set to **Use 3D**.

9. Click the **Strategy** tab.

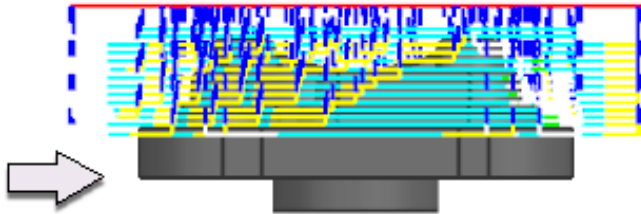
10. Notice that **Cut Below Overhanging Blank** is **Off**.



The **Off** condition produces the new behavior.

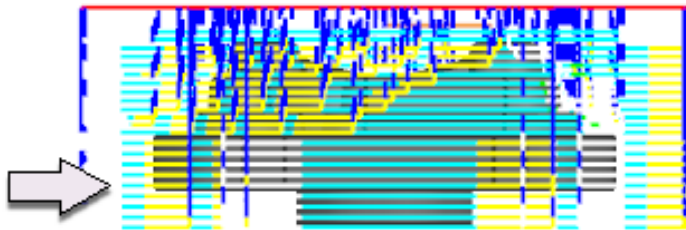
11. Click **OK**.
12. Orient the part to a **Right** view.
13. Click **Generate**.

Cutting motions are not wasted attempting to remove the IPW left behind by the previous operation on the underside of the part. This is the new behavior.



14. **Refresh** the graphics display to remove the tool path.
15. Click **Cutting Parameters**.
16. Click **Cut Below Overhanging Blank** to turn it **On**.
17. Click **OK**.
18. Click **Generate**.

Cutting motions are wasted attempting to remove the IPW left behind by the previous operation on the underside of the part. This is the old behavior.



19. Click **OK** to complete the operation.
20. Close the part without saving.

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