

Creating new Materials and Configurations

Objectives

Learn how to add a new Material and Configuration to a System Database

Overview

Materials/Configurations

Adding a Configuration

Copy/Paste Rules

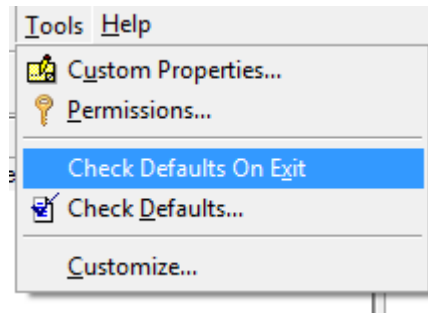
Tooling

Materials/Configurations

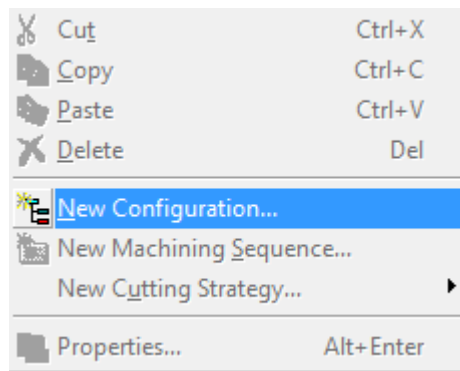
New Materials and Configurations are created in the System database in Insight. In order to open a System database, the user needs to have Administrative privileges. This is then ensure that an unauthorized user won't accidentally mess up a System database that is shared by multiple users. There are a couple ways to add a Material/Configuration. In the Insert menu, select New Configuration... or in the Configurations pane, Right-click on Cutting Strategy Selection and select New Configuration...

Example - Let's add a new Material/Configuration - Graphite/Electrode

Start Insight. By default, the User Database is loaded, but we want the System Database. In the File menu, pick Open. Change the type to System Database. Browse to the correct directory - \ProgramData\AMT Software\Prospector\User. Double-click the system.sdb. Before we do anything, let's turn off Check Defaults on Exit. In the Tools menu, select the Check Defaults on Exit menu item. Careful not to select the next one "Check Defaults..."



Right-click on "Cutting Strategy Selection" and select New Configuration...



We're presented with the New Configuration dialog:

New Configuration ? [X]

Enter a material name and configuration name:

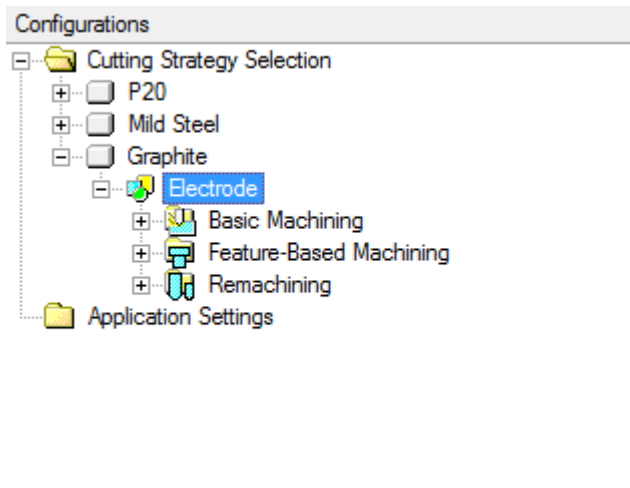
Material:

Configuration:

OK Cancel

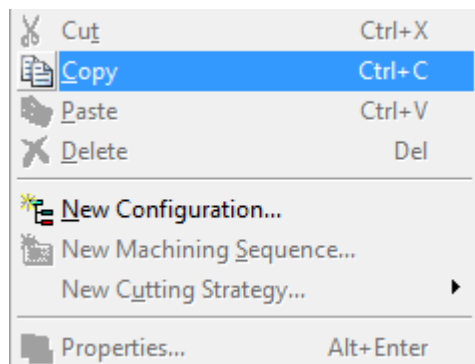
We have to specify both a Material and Configuration. You can't have one without the other. You can select an already existing

Material/Configuration from their respective drop down lists. Or you can type in a new Material/Configuration. For Material, type in Graphite. For Configuration, type in Electrode. Click the OK button. Now we have a new Material - Graphite, with one Configuration – Electrode:

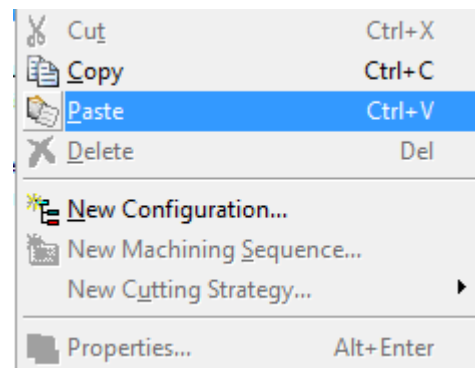


Copy/Paste

But all the Rules are empty. The System database must have a Rule for each Property. The best thing to do is copy from a different Configuration. Unfortunately, there's a bug that prevents a direct Copy/Paste, so we have to do three copy/paste operations. Open P20/Plastic Injection Mold. Right-click on Basic Machining, and select Copy:



Open Graphite/Electrode, Right-click on Basic Machining and select Paste:



This will overwrite all Rules, but that's okay because we don't have any Rules. When prompted, click Yes to overwrite. Do this for Feature-Based Machining and Remachining. If you work in both Inch and Metric, you'll want to copy the rules for mm as well. Now we have a good starting point for our Rules. Note, that this only copied the Rules. Now we have to do something about the Tools. Save the database.

Tooling

By default, Tooling will open the User databased Prospector uses, which is what we want. Notice that Insight and Tooling can both access the databases at the same time. For each Tool, you will have to add a new Tool Configuration with the new Material. This is why it's important to set up your tools ASAP. For now, let's just add a Tool Configuration for each type of Tool in "Inch/Rough/Z-Planar with Clearing and Pocketing." Let's test our new Material/Configuration. Save the Database

Prospector

Create a new Project: Select New.. from the File menu. Use:

Job Number: 100
Project Name: Trode1
Part Data File: Browse... for Electrode.x_b

Now let's look at the drop down list for Material. Graphite should be in the list, select it. Click Next to go to the Setup page. Now let's look at the drop down list for Configurations. Electrode should be in the list, select it. Click Finish. Now let's check our tooling. Start a new 3D program in the Rough Category, Window Around Part, Z-Planar With Clear, and Next to the Tooling page. You should have one tool for each type - ball, bull, end mill.