




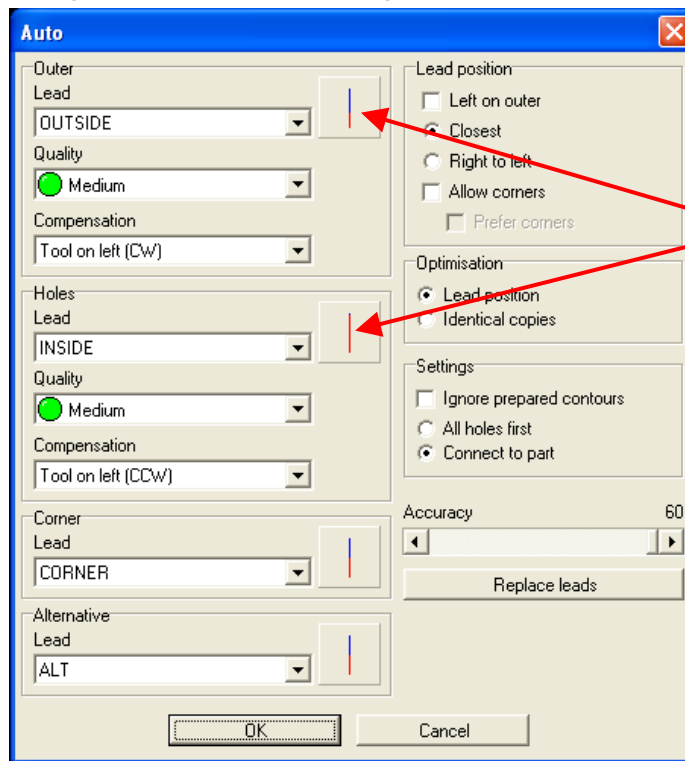


## How to program low pressure in IGEMS

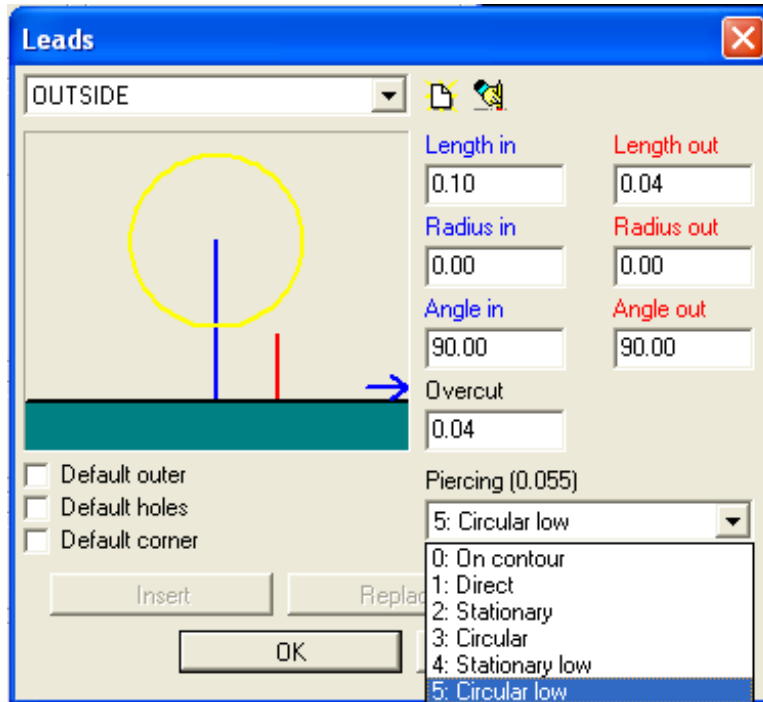
We use low pressure piercing for fragile or laminated materials like glass, marble, granite, stone and so on.

The way how to program this in IGEMS will be described in the following steps below.

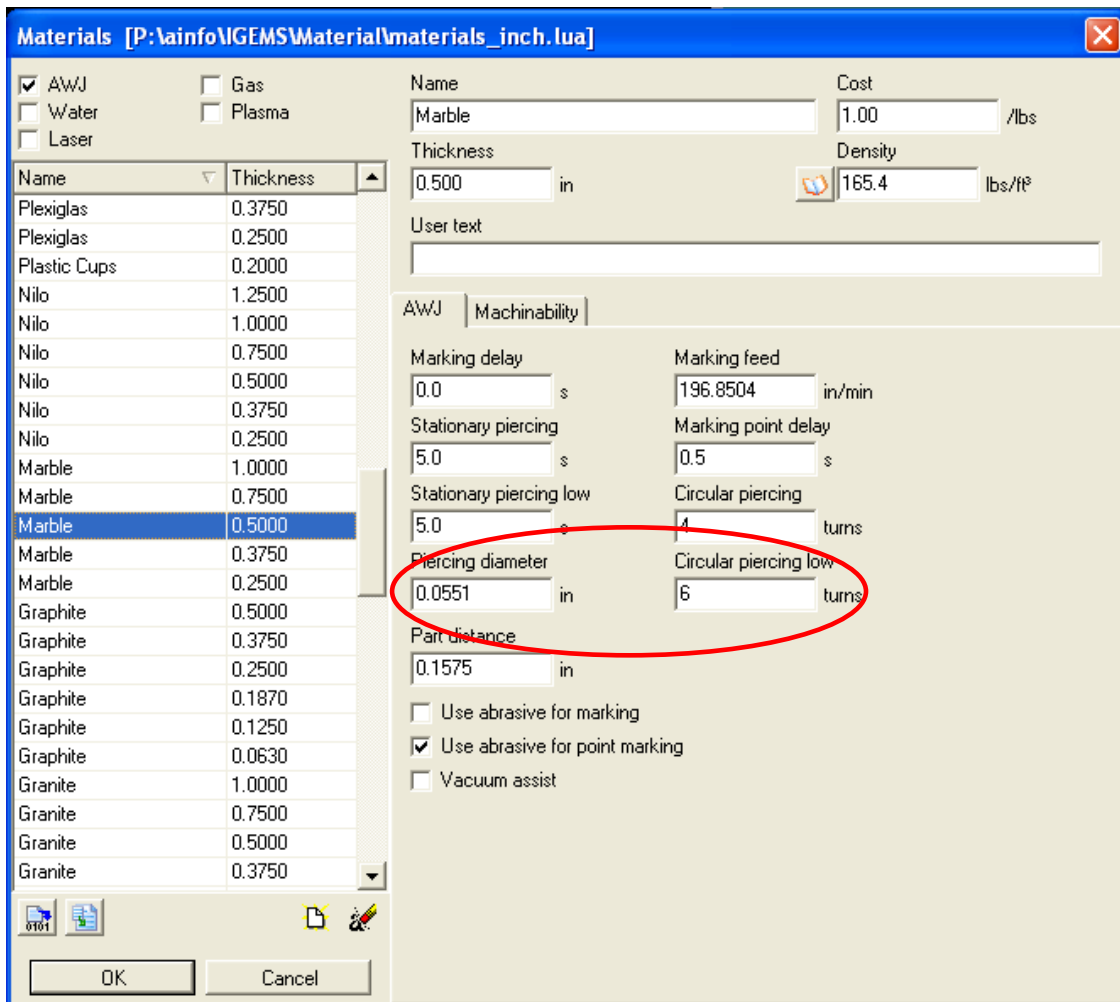
1. First you have to open a drawing or create a drawing
2. Create a part of it by using 
3. Add toolpath by using Auto  or Single 
4. Change lead in/out configuration



Click on this Lead in/out configuration button to modify the type of piercing



5. Change the Piercing parameter to Circular low. In this sample you see that it will add a yellow circle on the end of the lead in. This is the circular movement that will create the piercing. The value 0.055 is showing the diameter of the pierce. So when you use a 0.040" nozzle it will move only a little bit. You can adjust the diameter of the pierce and the amount of turns in the material database under the AWJ tab. The amount of turns depends on the thickness and the material. The thicker the more turns you need to get through the material. This requires some test cuts to find the right setting for this.



6. After selecting the low pressure setting for the outside and holes, you have to hit OK and select the part and you will see that the lead in/out show a little circle on each lead in.
7. Now you can start the sheet prepare step and the post process step.
8. When you view the NC file after post processing it, you will see that the first part of the programming is showing only low pressure pierces. All it does in the beginning of the program is making starting holes to start later on the “real” cutting process



at high pressure. Somewhere in the program you will see a M250 (High Pressure) code. This code will send a signal from the Burny to the pump if your machine is set up to run the pump remotely. This signal will change the pressure on the pump from low pressure to high pressure. These pressure settings are set points on the pump. If your machine is not equipped with this feature you have to do this manually, by changing the M250 code into M00. This will stop the program and will allow you to set the pump at a higher pressure. When you established this you just press the "GO" button again and the program will continue his program now starting to cut the contours starting from the already earlier made pierce points.

9. Typical setting for low pressure is around the 10,000 psi