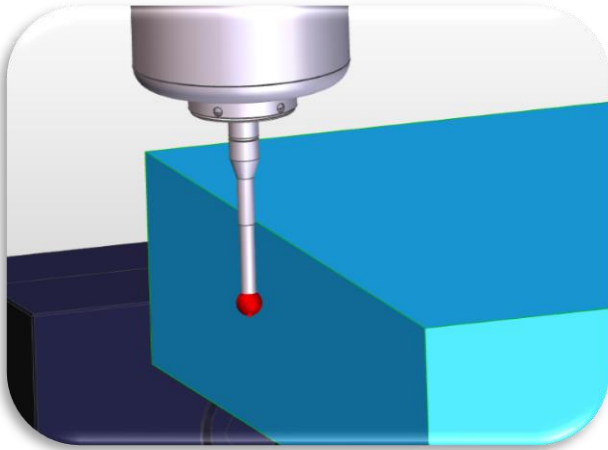


Lesson 1: Uses for macro

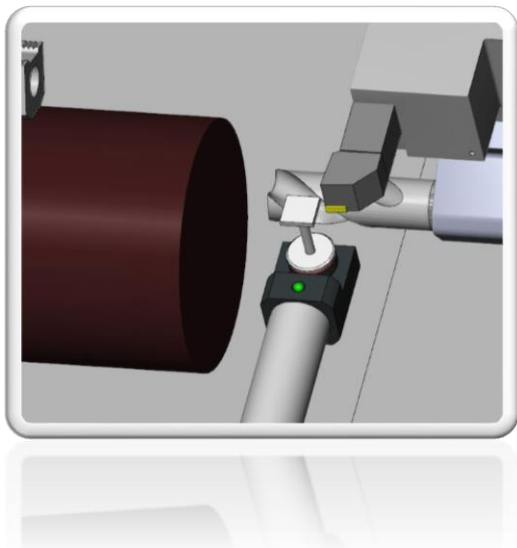
Touch Probe

Electronic touch probe for measuring parts and setting work offset datums.



Automatic tool Measurement.

On a CNC Lathe



Automatic tool Measurement.

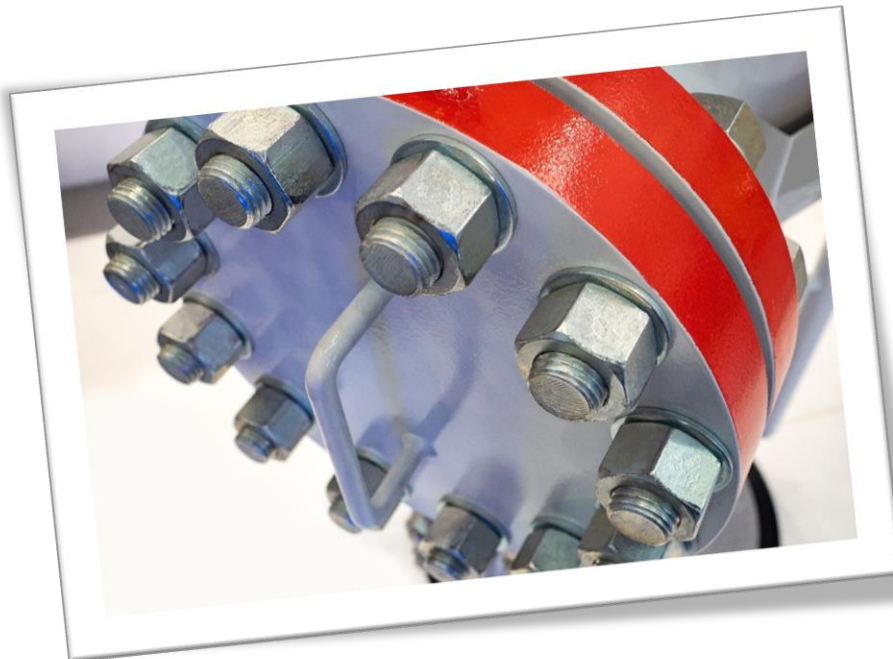
Or a CNC Milling Machine



Calculating bolt hole circles.

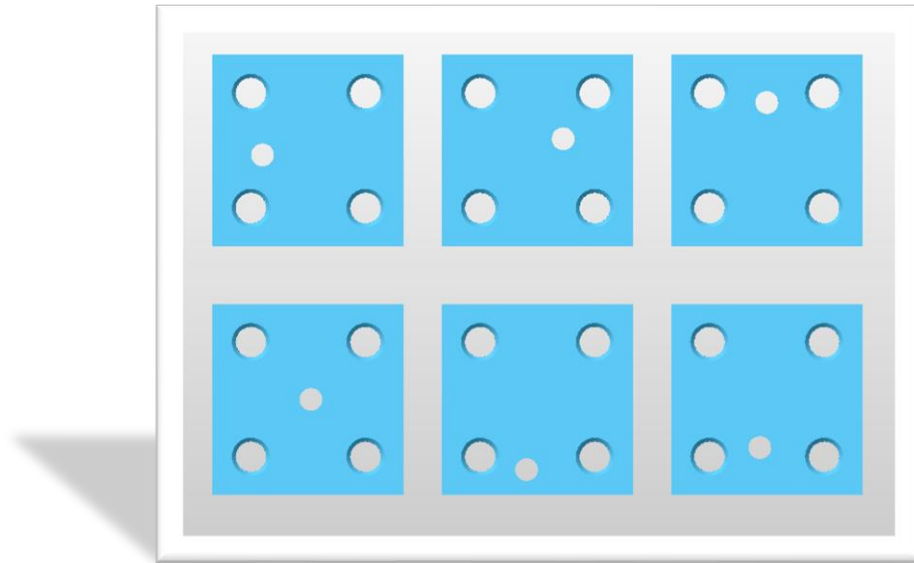
Work out the position of these 12 holes on a 10-inch pitch circle diameter.

The macro would just require the number of holes, the pitch circle diameter and a start angle.



Families of Parts

Parts where one feature is different on each part. You could have 20 parts to make that are all identical except for one hole. This hole position could be entered as a variable and changed for each part.



Safety Features

You could use macro to check if the correct tool is in the spindle. Also you check if the tool and the offset are the same.

Another use for macro is to identify pallets. If you have a multi pallet machine you can have different size holes in the pallets and then probe them to recognise the pallet.

You then use a macro program to tell the machine what to do next.