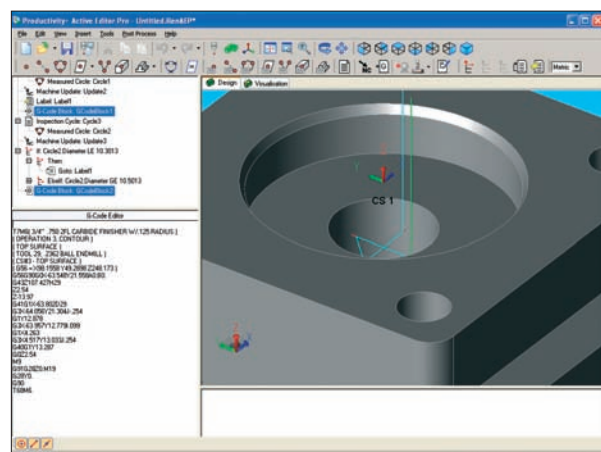


## Using Productivity+™ Active Editor Pro to integrate probing into machining programs

This document outlines various methods of integrating probing operations into your machine code using Productivity+™ Active Editor Pro.

## Productivity+™ Active Editor Pro, all versions

Although the program contains several small blocks of G-Code separated by probing, the Post Process operation combines them and outputs all elements in a single file.



## Method 2: Calling a machining program from a G-Code block

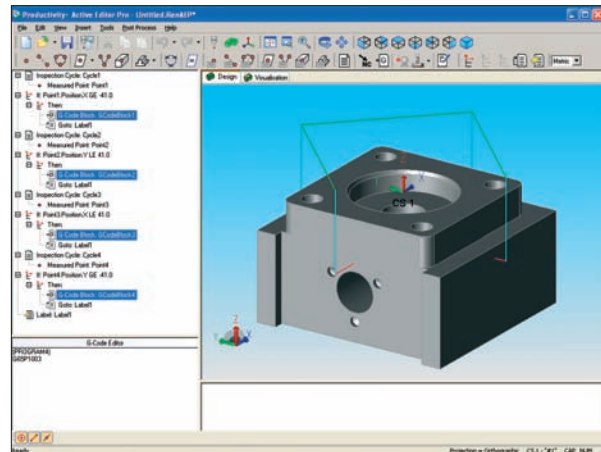
This method is best suited for applications where a probe is used to identify the loaded component and a machining program is selected based on the result. It can also be used to call an existing cutting program from a Productivity+™ Active Editor Pro program. If you want to change the machining program at a later date, you only have to change the sub program.

The disadvantage of this method is that it is harder to integrate logic; however, by splitting each program for each orientation, you can combine the benefit of easy upgrades with the benefits of in-process control.

Example 1: a component requires multiple machine programs. These programs can be called from multiple G-Code blocks.

Example 2: a component requires a specific machining program depending on its set-up. The component can be probed to determine orientation, and (using logic) the required machining program can then be called.

(No image provided for this example.)



Method 2, example 1

## Method 3: Calling a generic probing program from machine code

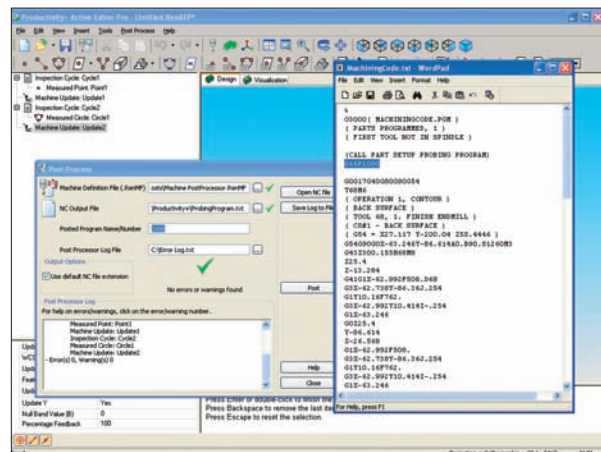
This method is useful when program names or numbers cannot be changed, or where you want to use a single program to set-up multiple jobs. Although appropriate for most types of measurement, but it will be difficult to perform in-cycle logic.

Productivity+™ Active Editor Pro can be used to create a program that only contains probing, and call it from your machining program.

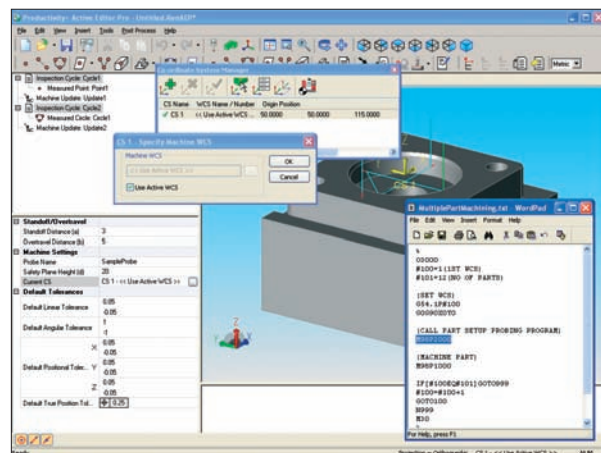
Unlike Method 1, probing cannot interact with machining code; for example, it is not possible to inspect a feature and then re-machine if necessary. This method simply uses probing elements for job set-up and part verification, independently of machining programs.

Example 1: create and post a Productivity+™ program to set the component WCS. Call this program from the machining program before metal cutting begins.

Example 2: where multiple parts are being manufactured, create a generic job set-up program in Productivity+™ Active Editor Pro that uses the WCS active on the machine tool rather than specifying a CS for each component. This way, the WCS active on the machine tool dictates the CS for each component and is set in the machining program.



Method 3, example 1



Method 3, example 2

**Renishaw plc**  
New Mills, Wotton-under-Edge,  
Gloucestershire GL12 8JR  
United Kingdom

**T** +44 (0) 1453 524524  
**F** +44 (0) 1453 524901  
**E** uk@renishaw.com  
**www.renishaw.com**

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**apply innovation™**

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- Styli for CMM and machine tool probe applications

## Renishaw worldwide

### Australia

**T** +61 3 9521 0922  
**E** australia@renishaw.com

### Austria

**T** +43 2236 379790  
**E** austria@renishaw.com

### Brazil

**T** +55 11 4195 2866  
**E** brazil@renishaw.com

### Canada

**T** +1 905 828 0104  
**E** canada@renishaw.com

### The People's Republic of China

**T** +86 21 6180 6416  
**E** china@renishaw.com

### Czech Republic

**T** +420 548 216 553  
**E** czech@renishaw.com

### France

**T** +33 1 64 61 84 84  
**E** france@renishaw.com

### Germany

**T** +49 7127 9810  
**E** germany@renishaw.com

### Hong Kong

**T** +852 2753 0638  
**E** hongkong@renishaw.com

### Hungary

**T** +36 23 502 183  
**E** hungary@renishaw.com

### India

**T** +91 80 6623 6000  
**E** india@renishaw.com

### Israel

**T** +972 4 953 6595  
**E** israel@renishaw.com

### Italy

**T** +39 011 966 10 52  
**E** italy@renishaw.com

### Japan

**T** +81 3 5366 5316  
**E** japan@renishaw.com

### Malaysia

**T** +60 3 5631 4420  
**E** malaysia@renishaw.com

### The Netherlands

**T** +31 76 543 11 00  
**E** benelux@renishaw.com

### Poland

**T** +48 22 577 11 80  
**E** poland@renishaw.com

### Russia

**T** +7 495 231 16 77  
**E** russia@renishaw.com

### Singapore

**T** +65 6897 5466  
**E** singapore@renishaw.com

### Slovenia

**T** +386 1 527 2100  
**E** mail@rls.si

### South Korea

**T** +82 2 2108 2830  
**E** southkorea@renishaw.com

### Spain

**T** +34 93 663 34 20  
**E** spain@renishaw.com

### Sweden

**T** +46 8 584 90 880  
**E** sweden@renishaw.com

### Switzerland

**T** +41 55 415 50 60  
**E** switzerland@renishaw.com

### Taiwan

**T** +886 4 2473 3177  
**E** taiwan@renishaw.com

### Thailand

**T** +66 2 746 9811  
**E** thailand@renishaw.com

### Turkey

**T** +90 216 380 92 40  
**E** turkiye@renishaw.com

### UK (Head Office)

**T** +44 1453 524524  
**E** uk@renishaw.com

### USA

**T** +1 847 286 9953  
**E** usa@renishaw.com

### For all other countries

**T** +44 1453 524524  
**E** international@renishaw.com

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