seeNC Mill / seeNC Turn
Software for teaching manual CNC programming

seeNC Mill and seeNC Turn support ISO programming format on controls like Fanuc. They are designed to impart the whole range of skills required for manual CNC part programming. They come with illustrated programming manuals and workbooks. It eliminates the teacher's job of making teaching notes, presentations and programming exercises.

What the student learns
Programming in ISO format, for basic motions and subprograms.
Tool selection, spindle speed, feed rate.
Tool nose radius compensation.
Process planning.
Use of industry standard tools.
Lathe canned cycles G70, G71, G72, G73, G74, G75, G76, G90, G92, G94.
Milling canned cycles G73, G74, G76, G80, G81, G82, G83, G84, G85, G87.
Tool selection for various operations from tools database.
Checking the correctness of the tool path through graphical simulation.
Optimizing the tool path and cycle time.

How seeNC works
Type in the program through a special inbuilt editor.
The software checks the program for syntax errors and displays a list of all errors and their locations.
Refer to in-built programming guide.
Correct the errors in the editor.
Select appropriate tools from an extensive tools database with all tools commonly used in industry.
View the tool path simulation with the block by block display of tool coordinates and cycle time.
If there are any problems in the tool path, edit the program and repeat the syntax check and simulation.

Special teaching material
Programming manual that teaches programming for basic motions, canned cycles and subprograms.
Has pictures, explanations and examples and can be used for self-learning as well as for teaching.
Teachers' handbook with ready-made exercises for various operations and their solutions.
Students' handbook with just the exercises, without the solutions.
Simulating toolpath

Checking syntax

<table>
<thead>
<tr>
<th>Line no</th>
<th>Error description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Warning: Invalid code (S52500)</td>
</tr>
<tr>
<td>9</td>
<td>Warning: Invalid code (A31)</td>
</tr>
<tr>
<td>9</td>
<td>Cycle encountered without spindle speed ()</td>
</tr>
<tr>
<td>10</td>
<td>Feed motion encountered without spindle speed (G01)</td>
</tr>
</tbody>
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