Manufacturing Process Sheet

Department Course Number: __________________________
Material: ____________________________________________

Project: ____________________________________________
Rough Stock Dimensions: _____________________________

Drawing Name: _______________________________________
Quantity: __________________________________________

Drawing Number, Rev: ________________________________

Use the spaces below to sketch the set-up for your project. Be sure to include the work piece, vises and any special fixturing or machine stops. Note the origin of the work piece if using CNC machines. Make sure, that under the "Tool Description" heading, the tool diameter, number of flutes, maximum length of cut required and whether the tool being used is HSS or Carbide, are all included in the information provided.

<table>
<thead>
<tr>
<th>Tool #</th>
<th>Speed</th>
<th>Feed</th>
<th>Tool Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[
N = \frac{12V}{\pi D}
\]

\[
F = Nn_L
\]

\[
N = \text{speed (rpm)}
\]

\[
D = \text{tool diameter [in]}
\]

\[
V = \text{surface footage [sf/m] from table}
\]

\[
F = \text{feed [ipm]}
\]

\[
L = \text{chip load per tooth [from table]}
\]

[Approved] [Revise/Resubmit]

Instructor, Lab Guide or GTA ______________________ Date ______________________
CNC Machining of Parts Required (if not, explain what you are doing in comments section)

Machine Name: _______________________________  Program Number: __________________________
Operator Name: _______________________________  Cycle Time: ______________________________
Date: -------------------------------------------  Set-up Time: ____________________________
Operation Number: ___________________________  

Comments & Special Instructions: