

The objective of the following questions is to refresh some basic knowledge about CNC machines used mainly for *milling*. Answer the questions briefly, but make sure the answer reflects the question or instruction.

#	Question	Answer
1	Name the three most common CNC milling systems	
2	What are the names of axes on a CNC horizontal boring mill?	
3	Briefly define a CNC milling machine	
4	Designations such as BT40 or CAT50 refer to what machine feature?	
5	In metric units, what does the specification 2 - 12000 mm/min represent?	
6	Name the axes of a vertical machining center and the horizontal machining center	Vertical: Horizontal:
7	What are the types of CNC milling machines?	
8	On a typical vertical machining center, what is longer - the X-length of the table or the X-motion of the axis?	
9	Spindle output is determined in certain units. What are these units in English and metric systems?	English units: Metric units:

10	From the machine specifications chart of <i>CNC Programming Handbook</i> , identify all features that are <i>NOT</i> critical to the CNC programmer	
11	Explain the following abbreviations: ATC APC HMC VMC	ATC: APC: HMC: VMC:
12	In general terms, describe the type of work that is more suitable for a vertical machining center and the type of work that is more suitable for a horizontal machining center	Vertical: Horizontal:

Notes: