Kentucky CTE

Industrial Maintenance Technology: Fundamentals of Machine Tools - A (For Maintenance)

Practice and perform safe shop procedures at all times. FMTA1	**1** Practice and perform safe shop procedures at all times. FMTA1
Apply the technical math required for employment opportunities in maintenance. FMTA2	**2** Apply the technical math required for employment opportunities in maintenance. FMTA2
Perform all duties with empahsis on FMTA3	**a** integrity FMTA3A
	b responsibility FMTA3B
	c quality FMTA3C
	d discipline FMTA3D
	e teamwork FMTA3E
Demonstrate and practice safe work habits in the lab area as outlined in NIMS Framework for Machining Skills. FMTA4	**4** Demonstrate and practice safe work habits in the lab area as outlined in NIMS Framework for Machining Skills. FMTA4
Perform bench work processes, hacksaw, files, layout, drill, tap an me sta	**5** Perform bench work processes, hacksaw, files, layout, drill, tap and other activities to meet industry standards. FMTA5

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Perform safe and functional activities on the following machines: horizontal band saw, vertical band saw, drill press, arbor press, lathes, and mills. FMTA6	**6** **Perform safe and functional activities on the following machines: horizontal band saw, vertical band saw, drill press, arbor press, lathes, and mills.** FMTA6
Perform tasks with cutting hand tools and non-cutting hand tools. FMTA7	**7** **Perform tasks with cutting hand tools and non-cutting hand tools.** FMTA7
Identify and explain the handling procedure for hazardous material and the content of MSDS (Material Safety Data Sheet). FMTA8	**8** **Identify and explain the handling procedure for hazardous material and the content of MSDS (Material Safety Data Sheet).** FMTA8
Identify safety needs and regulations in a machine shop. FMTA9	**9** **Identify safety needs and regulations in a machine shop.** FMTA9
Identify non-cutting hand tools and the proper use of them. FMTA10	**10** **Identify non-cutting hand tools and the proper use of them.** FMTA10
Prepare for a bench work process. FMTA11	**11** **Prepare for a bench work process.** FMTA11
Hand saw with a hacksaw. FMTA12	**12** **Hand saw with a hacksaw.** FMTA12
Bench file the workpiece. FMTA13	**13** **Bench file the workpiece.** FMTA13
Dress and true grinding wheels on bench and pedestal grinders. FMTA14	**14** **Dress and true grinding wheels on bench and pedestal grinders.** FMTA14
De of an	**Demonstrate knowledge of power saws, parts, and applications.** FMTA15

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Demonstrate the care and safe use of the power saw. FMTA16	**16** **Demonstrate the care and safe use of the power saw.** FMTA16
Cut and weld band saw blades FMTA17	**17** **Cut and weld band saw blades** FMTA17
Perform operations on the cut-off saw FMTA18	**18** **Perform operations on the cut-off saw** FMTA18
Perform operations on the vertical band saw. FMTA19	**19** **Perform operations on the vertical band saw.** FMTA19
Demonstrate knowledge of drill press, parts, and applications. FMTA20	**20** **Demonstrate knowledge of drill press, parts, and applications.** FMTA20
Demonstrate the care and safe use of the drill press. FMTA21	**21** **Demonstrate the care and safe use of the drill press.** FMTA21
Calculate and set the cutting speed and feed on the drill press. FMTA22	**22** **Calculate and set the cutting speed and feed on the drill press.** FMTA22
Sharpen drills. FMTA23	**23** **Sharpen drills.** FMTA23
Set up a drill press and drill holes. FMTA24	**24** **Set up a drill press and drill holes.** FMTA24
Shape and finish holes on a drill press. FMTA25	**25** **Shape and finish holes on a drill press.** FMTA25
Tap holes by hand and machine on a drill press. FMTA26	**26** **Tap holes by hand and machine on a drill press.** FMTA26
Thread by hand with taps and dies. FMTA27	**27** **Thread by hand with taps and dies.** FMTA27
Operate an arbor pr	**28** **Operate an arbor press.** FMTA28

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Use chisels and punches. FMTA29	**29** **Use chisels and punches.** FMTA29
Demonstrate knowledge of hazardous materials handling. FMTA30	**30** **Demonstrate knowledge of hazardous materials handling.** FMTA30
Demonstrate knowledge of hazardous materials storage. FMTA31	**31** **Demonstrate knowledge of hazardous materials storage.** FMTA31
Demonstrate lock-out/tag-out procedures. FMTA32	**32** **Demonstrate lock-out/tag-out procedures.** FMTA32
Demonstrate use of MSDS (Material Safety Data Sheet). FMTA33	**33** **Demonstrate use of MSDS (Material Safety Data Sheet).** FMTA33
Measure with basic hand-held measuring instruments. FMTA34	**34** **Measure with basic hand-held measuring instruments.** FMTA34