

Answers to Exercises

If you are attending a class that uses this text, your instructor may ask you not to look at these answers prior to submitting your work. (Each exercise can be removed from this text without removing any content.) On the other hand, if you are reading this text on your own, you can use these answers to check your work.

Exercise 1: Basic Machining Practices

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|--|---|
| 1) 1.00 by 3.00 by 5.00 inches (or 1 by 3 by 5 inches) | 14) a: Yes, b: Not immediately, but it is getting close to it's low limit – so if you said yes, you are also correct, c: deviation from target (mean) value is 0.0007 |
| 2) 1.50 | 15) a: Yes, b: No, c: deviation from target (mean) value is 0.002 |
| 3) 1.25 by 2.0 by 0.875 | 16) a: No, b: Yes, c: 0.002 |
| 4) 316 stainless steel | 17) a: No, b: Yes, c: 0.0013 |
| 5) yes | 18) a: Yes, b: No, c: deviation from target (mean) value is 0.003 (note that there is nothing a setup person or operator could do (without changing the program) to adjust the distance between the two holes). |
| 6) true | 19) true |
| 7) Plus or minus 0.001 | 20) true |
| 8) mv: 0.75, hl: 0.751, ll: 0.749 | |
| 9) mv: 0.50, hl: 0.505, ll: 0.495 | |
| 10) mv: 0.8745, hl: 0.876, ll: 0.873 | |
| 11) true | |
| 12) Revision “A” | |
| 13) a: Yes, b: No, c: deviation from target (mean) value is 0.0003 | |

Exercise 2: What Does A CNC Machining Center Do?

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|-------------------------------|--|
| 1) true | 11) b. center drill it |
| 2) b. milling machine | 12) d. spot drill |
| 3) true | 13) false |
| 4) true | 14) c. ream or bore it |
| 5) false | 15) b. tap |
| 6) a. spindle speed | 16) true |
| 7) b. feedrate | 17) true |
| 8) c. radial depth-of-cut | 18) false (they recommend feedrate in per-tooth fashion) |
| 9) b. surface feet per minute | 19) d. all of the above |
| 10) true | 20) true |