

This hexagonal pattern is typical to various heat exchangers. The 91 holes in the example would be drilled, usually with a single tool (a special drill), to speed up the machining process. Make the necessary calculations, then complete the following two projects:

- ➡ Project 27-05a: In the first project, start at the lower left hole, and calculate absolute XY coordinates of each point, in a zig-zag direction (starting horizontally). No toolpath is required, just the XY hole locations.
- ➡ Project 27-05b: In the second project, use the incremental method, again starting horizontally from the lower left hole, and in a zig-zag direction. The length of the output can be shortened by using the *L/K* method of repeating incremental motions. No toolpath is required, just the XY motions.

**Note:** The drawing includes all data necessary for the XY calculations.

