Note: All tolerances are up to the builder to decide so they are not included in this drawing, but here is a comment from the original creator:

"Since this was a mandatory test piece, made with blunt files, blunt drills and blunt hack saw, I would consider anyone doing it voluntarily a mashoicist :) It did teach us a "feel" for a thou of tolerance. Once you spend ever afternoon for a couple of months draw filing and measuring with a micrometer, you get pretty good at both.

You start off making the two sides. (10mm or 3/8" mild steel plate). There are two tooling holes where we riveted the pieces together and drilled and filed them to size as one. We were required to file everything to within a thou, and square.

Then the end block and fixed jaw and the sliding jaw are made (20mm or 3/4" steel). The Sliding jaw clamp plate is only 6mm (1/4"). We tapped the hole in the end block, but turned the spindle, and the cross handle on the lathe.

As all holes were drilled to marked and punched holes, rather than match drilled, you had to be pretty exact to even be able to assemble it."
Right and left side of the vice are mirror images of each other.

Clamping plate for retaining the Sliding jaw on the sides.

Chamfered for countersunk M4 screw

Screw Retaining Plate

Sliding Jaw

2x M4x0.7 6H x 8/8

M6x1.6H x 12/12

Chamfered for countersunk M4 screw

Sliding Jaw

C-C (1:1)
M6x1 6H x 16/16

M6x1 6H x 16/16

M12x1.25 6H x 20/20

M12x1.25 Threading rod. Turned down at one end to lock into the screw retaining plate.

Hole for river or other fastener to retain the end cap.

<table>
<thead>
<tr>
<th>Designation</th>
<th>Type</th>
<th>Dimension</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Socket head cap screw</td>
<td>Din 6912</td>
<td>M6x20</td>
<td>8 pcs</td>
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<tr>
<td>Countersunk Socket head Cap Screw</td>
<td>DIN 6912</td>
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<td>DN 7991</td>
<td>M4x8</td>
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<td>Fastener list</td>
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