The structural integrity of substation construct is essential to any utility project, and steel is among the most unfailing materials available. To reliably serve their customers, utility companies demand the most out of their structures, from the materials used to manufacturing accuracy to component assembly, all leading to the promise of unwavering strength from the market leader – Valmont® Utility.

Through the design and manufacture of substations of all sizes, Valmont Utility delivers the expertise and has made a driving commitment to serve lower kV structural shape construction projects that require special attention.

Utilizing the revolutionary robotic plasma cutting system, dedicated to the structural shape manufacture, we are able to deliver pure precision in our cuts, virtually eliminating all human error.

**Precision Generates Efficiency**

Valmont Utility uses an Advanced Laser measuring system, the PythonX™ by Lincoln Electric®, to determine the exact position and dimension of the steel so cuts can be referenced and placed exactly where required, for more efficient installation. Boltholes are perfectly straight, and slots and other shapes are cut to exact dimensions for the perfect fit.
PLASMA CUT VS. DRILL OR SAW CUTS

- Produces quality boltholes approved for structural joints
- More flexibility in hole diameter size – from two inches to 24 inches
- No taper in boltholes
- Cuts any shape to exact specified dimensions
- Eliminates human error
- Simplifies substation construction
- Ensures better structural integrity

THE POSSIBILITIES ARE LIMITLESS

<table>
<thead>
<tr>
<th>Machine Capability</th>
<th>Single Spindle Beam Drill Line</th>
<th>Three Spindle Beam Drill Line with Band Saw</th>
<th>Valmont Utility Plasma Cutting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cut copes with CNC accuracy</td>
<td>Incapable</td>
<td>Incapable</td>
<td>YES</td>
</tr>
<tr>
<td>Make cutouts for bracing and knife connections</td>
<td>Incapable</td>
<td>Incapable</td>
<td>YES</td>
</tr>
<tr>
<td>Text scribing (any size)</td>
<td>Incapable</td>
<td>Incapable</td>
<td>YES</td>
</tr>
<tr>
<td>Miter cut</td>
<td>Incapable</td>
<td>Costly Option</td>
<td>YES</td>
</tr>
<tr>
<td>Cut slots and any other shapes</td>
<td>Incapable</td>
<td>Incapable</td>
<td>YES</td>
</tr>
<tr>
<td>Weld Prep Bevel Cut</td>
<td>Incapable</td>
<td>Incapable</td>
<td>YES</td>
</tr>
<tr>
<td>Rip I-Beams into T-Beams</td>
<td>Incapable</td>
<td>Incapable</td>
<td>YES</td>
</tr>
</tbody>
</table>

Manufacturing Excellence

- 6 axis robotic CNC plasma cutting system
- 1mm = 1/32 inch accuracy
- It’s the only structural fabrication machine with a 1mm accuracy over 12m or about 1/32 inch over 40 feet
- Superior accuracy and measurement compared to pinch roll systems, which can slip
- High definition plasma technology aligns and focuses the plasma arc, improving arc stability and energy for more power precision cutting
- PATENTED hole taper compensation and advanced bevel tuning
- Multi-Axis robotic arm allows for best in class accuracy