The Superwhip™ interrupter is another technical breakthrough for interrupting the capacitive line charging current of long transmission lines. Using Polywhip™ technology, Cleaveland/Price has now learned how to accelerate an all metal whip to higher speeds than ever before. Proprietary metal alloys and dimensional optimization through years of high speed analysis have advanced the state of the art of whip design.

The advantage of the Superwhip™ over other quick break whip designs is the extraordinary speed of the device and its resistance to deterioration from outdoor elements. The whip applies new technologies that enable the whip to extinguish the arc at current zero and travel so fast that it establishes an open gap faster than the voltage can increase to cause a re-strike.

Because the interrupting capability of the Superwhip™ is so high, transmission line switching sites can be located farther apart without the need for expensive vacuum or SF₆ interrupters. The whip is also very useful to interrupt capacitive current on lines that have a greater than calculated capacitive current value due to capacitive coupling from nearby higher voltage lines.

The Superwhip™ is available for use on Cleaveland/Price center break CB-AV, vertical break V2-C/A, and hookstick operated ILO-C switches rated 69 kV through 161 kV. Consult the factory for the availability of the Superwhip™ on other Cleaveland/Price switches.
Speed is the key to successful interruption of line charging currents.

The Superwhip™ delivers the speed you need. The sequence of photos below show actual laboratory interruption on a 145 kV line with 46.3 amps of capacitive current using the Superwhip™.

0 millisecond
Whip contacts are just about to separate.

4 milliseconds
The arc is at full length.

6 milliseconds
The arc starts to extinguish.

10 milliseconds
The arc is completely extinguished.

48 milliseconds
The whip has fully opened without re-strike.

The Superwhip™ can be installed on Cleaveland/Price group operated switches. The switches could be mounted in side-by-side, phase-over-phase, or phase-opposite-phase arrangement.

The Superwhip™ can be installed on hookstick operated Cleaveland/Price ILO-C in-line switches. A 138 kV switch with whip is shown below.

<table>
<thead>
<tr>
<th>Superwhip™ Line Dropping Capability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>System Voltage / Max. Voltage kV</strong></td>
</tr>
<tr>
<td><strong>Approximate line length</strong></td>
</tr>
<tr>
<td><strong>Current</strong></td>
</tr>
</tbody>
</table>

* Grounded neutral system. For ungrounded systems, use the next higher voltage whip.

www.cleavelandprice.com