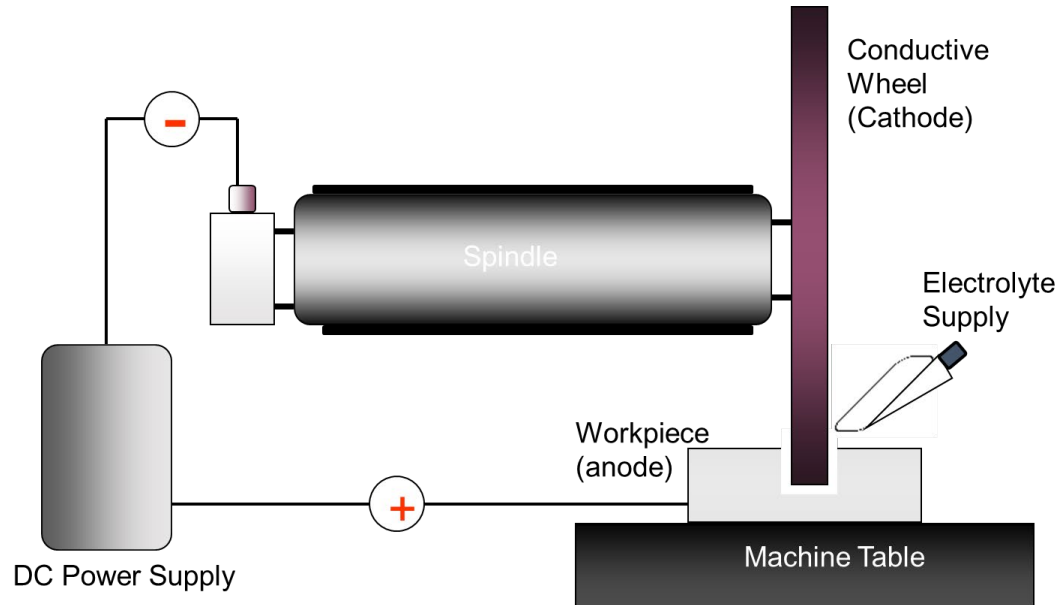




Electrochemical Grinding (ECG) explanation



ELECTROCHEMICAL GRINDING (ECG)

- A conductive grinding wheel (**cathode**) and conductive workpiece (**anode**) are connected to a DC power supply while a conductive saltwater solution (**electrolyte**) is applied to the cutting surface.
- DC current flow causes oxidation and reduction to dissolve the metal surface (**Electrolysis**).
- The conductive abrasive wheel removes the oxidized material and increases the cut rate.
- The metal removal rate is dependent on feed rate, DC current flow, and other cutting parameters

ECG ADVANTAGE

- | | |
|--|---|
| <ul style="list-style-type: none"><input type="checkbox"/> Completely burr-free cut<input type="checkbox"/> Low cutting forces for thin-walled tubes<input type="checkbox"/> Low cutting temperatures<input type="checkbox"/> No heat affected zone | <ul style="list-style-type: none"><input type="checkbox"/> No work hardening<input type="checkbox"/> Long wheel life<input type="checkbox"/> Fast, precise cuts<input type="checkbox"/> Almost all metals can be cut burr-free |
|--|---|