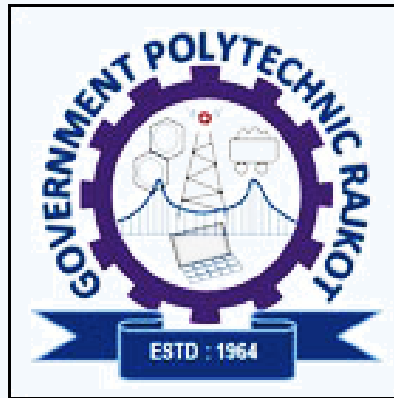


Utilization of Electrical Energy

3340903



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Unit - 2

Heating & Welding

Electric Welding

What is Welding?

- Join together (metal parts) by heating the surfaces to the point of melting by filling of gap inside joint by filler metal and uniting them.

Qualities of Good Weld

A good weld should be free from following defects

Poor fusion

Porosity

Cracks

Other Defects

- Irregular widths/heights of beads
- Deviation of prescribed dimension
- Unfilled craters on the weld surface
- Deposition of slag
- Cracks

A photograph of an industrial facility, possibly a refinery or chemical plant, at dusk. The sky is a deep blue, and the facility's lights are glowing. In the foreground, there are some trees and a grassy area. The text 'Electric Welding' is overlaid on the left side of the image.

Electric Welding

- **Advantages of Electric Welding**
 - **Fast operation**
 - **Reliable & Accurate**
 - **Good weld quality**
 - **Mass production**
 - **No skilled personnel**
 - **Neat & Clean**
 - **Applicable to everywhere**
 - **Maintain composition of metals**
 - **Uniform welding**
 - **Very economical**

Type of Welding



Thermal Welding



Gas Welding



**Electric
Welding**

Resistance
Welding

Arc
Welding

Electric Welding

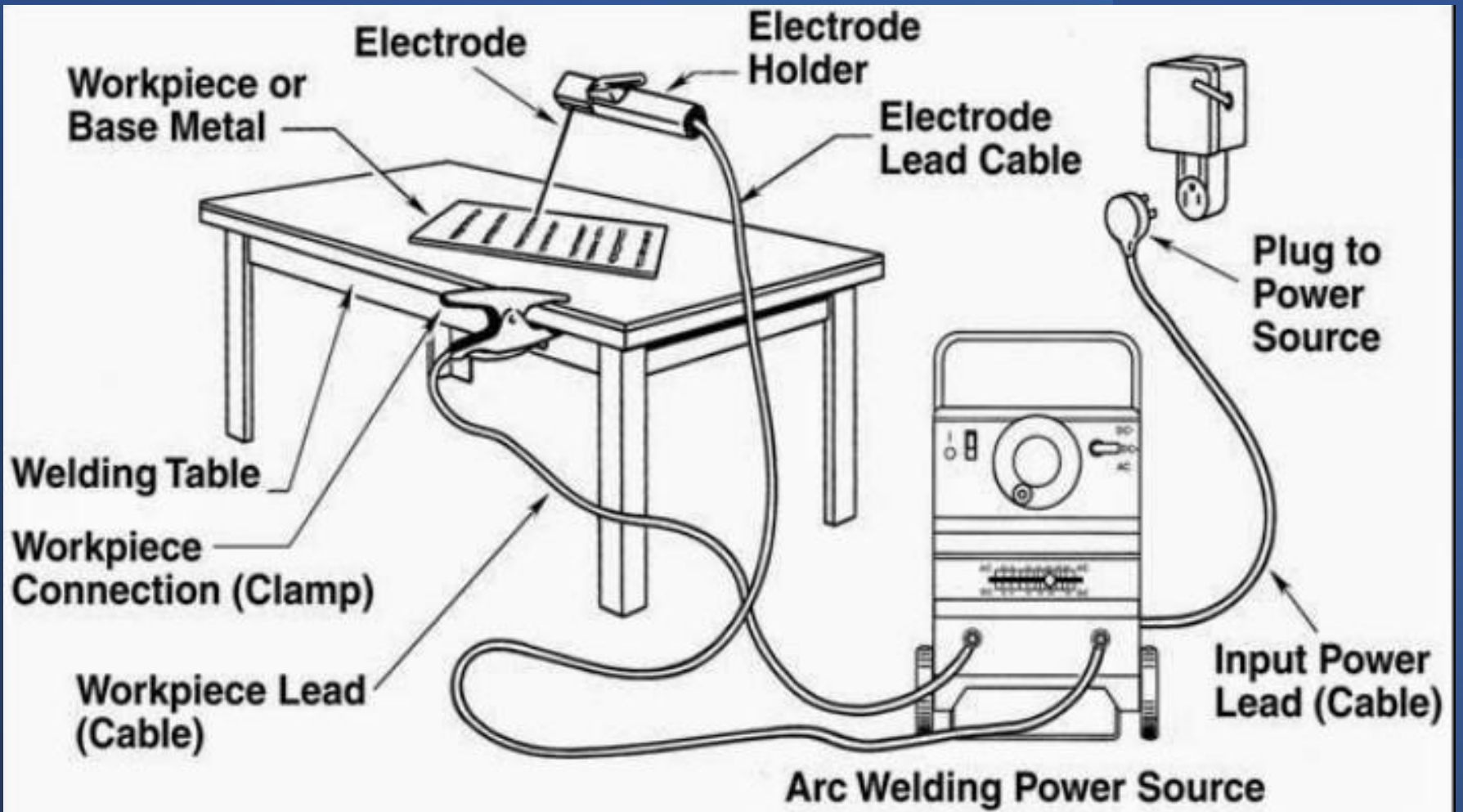
Resistance Welding

Spot Welding
Seam Welding
Butt Welding
Projection Welding
Percussion Welding
Flash Butt Welding

Arc Welding

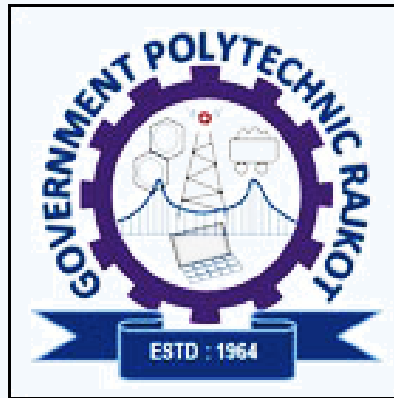
Metal Arc Welding
Carbon Arc Welding
Atomic Arc Welding
Inert Gas Arc Welding
Gas Metal Arc Welding







Thank You



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