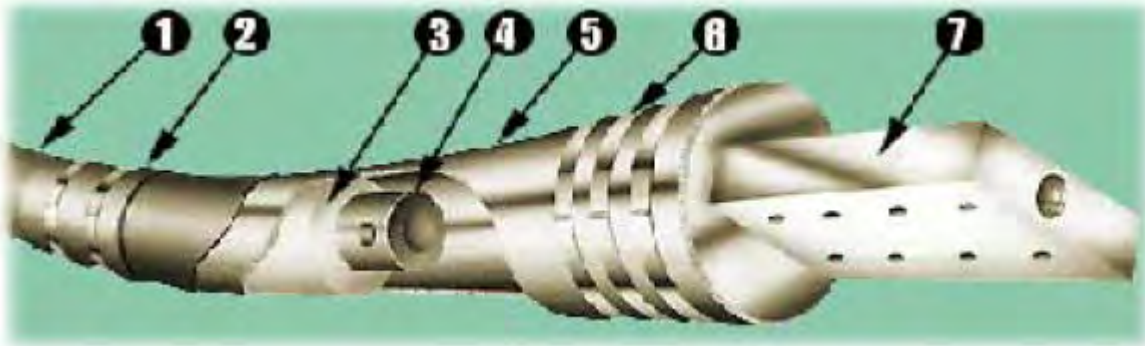


# Electric Arc Furnace (EAF) Water Cooled Cables

Technical Specifications

## Technical Specifications for Large Water Cooled Cables



### 1. Heat Shield

- Our water cooled cables feature heavy woven heat resistant material that protects the covering from radiated furnace heat.
- The heat shield may be in the form of a loose fitting sleeve or bonded to the outer hose.
- Watteredge offers a wide range of materials depending upon the application.

### 2. Anti-chafing Gear

- Double groove bumpers are a standard feature of every Watteredge electric arc furnace (EAF) water cooled cable [unless the customer specification requires different abrasion protection or does not require abrasion protection].
- Bumpers are made from tough abrasion resistant rubber for longer life and are spaced evenly on twelve inches for maximum flexibility and longer wear.

*Alternate types of anti-chafing gear can also be furnished, such as continuous sleeve, spiral wrap, loose rings or a combination of spiral wrap and bumpers.*

### 3. Conductor

- This unique Watteredge conductor design and water cooled cable construction gives the maximum current carrying capacity and the lowest AC/DC ratio due to its similarity to hollow tubular conductors.
- Optimal stranding size is the result of Watteredge experience; and is designed to insure long cable life.

### 4. Core

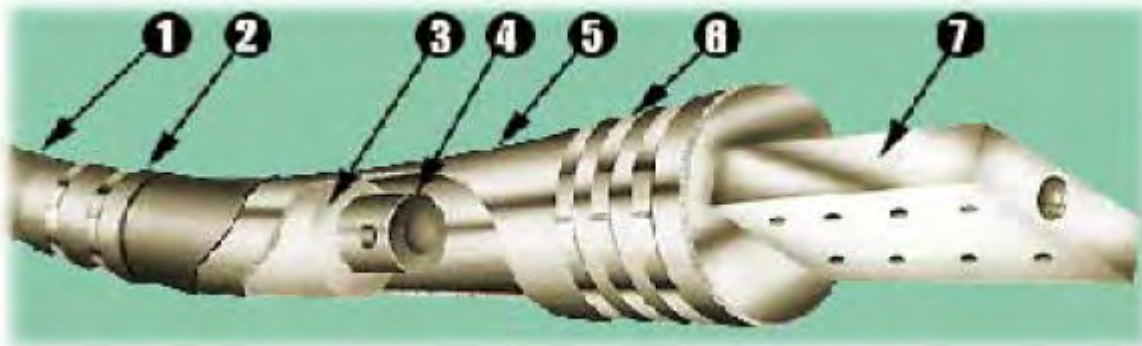
- The resilient long-life core is flexible, yet strong and retains its shape.
- The combined cable and core design insures complete self-flushing water flow and the most efficient distribution of cooling water possible.
- Since the Watteredge core is a rubber and nylon material, there is no friction wear between it and the cable stranding.



# Electric Arc Furnace (EAF) Water Cooled Cables

Technical Specifications (continued)

## Technical Specifications for Large Water Cooled Cables



### 5. Covering

- The water cooled cable covering is made exclusively for Watteredge to our exact specifications to insure long life, maximum flexibility, ozone resistance, heat resistance and abrasion resistance.
- **Watteredge** coverings provide the most complete di-electric and physical strength and are designed to withstand continuous water pressure up to 90 PSI.

### 6. Bands and Water Testing

- High tensile strength stainless steel bands are used on each end of our water cooled cables to assure maximum sealing.
- Every Watteredge water cooled cable receives both a 125 PSI static test and a dynamic water test to duplicate actual operating conditions.

### 7. Terminals

- Terminals are machined from high conductivity electronic lead free copper to exacting standards to size and finish.
- Silver plating is done by the tank immersion method using electro-deposited pure fine silver anode bars, or by the electroplating process as determined by our customers' water cooled cable requirements.

