The VWP3070 Fundamental Power Coupler was designed for the Brookhaven FEL injector. All components of the coupler are water cooled to handle the high RF power. The design utilizes a TiN coating for multipactor suppression, and high RRR copper plating for low RF loss.

FEATURES:
- 500 kW CW
- Water cooled
- Waveguide input
- Single window design
- Inner conductor may be biased
CPI 500 kW CW Power Coupler product specification: VWP3070

**Electrical Parameters**

- **Operating frequency**: 704 MHz
- **Maximum CW power**: 500 kW CW (Design limit) with matched load
- **Vacuum leak rate**: $< 10^{-10}$ mbar.L/s
- **Cold assembly sealing type**: Flat Stainless Steel surface, Compatible with aluminum Hex seal or Helicoflex gasket
- **Cold assembly outer conductor diameter**: 2.981 Inches (7.57 cm)
- **Water cooling**: All RF contacting subassemblies are water cooled

Product can be cleaned in CPI’s class 10 clean room after fabrication for an additional charge. If the product is not cleaned in CPI’s class 10 clean room, it will need to be done by the customer before the product is conditioned.

Note: Product is supplied with nut and bolt hardware, along with a heater for the Outer Conductor Assembly.