



POWER ENGINEERING CORPORATION



## CMS 2000 Installation for Cooling Pump

**Client:** QVC

**Location:** Mesaieed, Qatar

### Challenge

#### Issue:

1. Gland packing leakage at cooling pump.
2. Client changes packing every 6 months.

#### Goal:

1. Leakage Control in no time.
2. Extend the packing change interval more than 6 months.

### Solution

#### Preparation:

1. Remove all old packing (remove lantern ring(s)), if any and plug connections.
2. Clean shaft or shaft sleeve.

#### Application:

1. One ring of 412-w packing ring was insert into stuffing box using CHESTERTON tamping tool.
2. Fill stuffing box with CMS-2000.
3. Install outer packing ring (412-w).
4. Start pump and tighten to control leakage.

### Results:

1. Maintenance works was finished within half an hour.
2. Thanks to the very low coefficient of friction for CMS-2000, Cost savings was noticed as motor consumed power decreased as friction between pump shaft and the packing.
3. Energy saving 7000 hrs/year ,238000 kw
4. Increased the packing change interval up to 18 months.
5. Reduce shutdown intervals.



Pump leakage before installing CMS-2000



Pump leakage after installing CMS-2000



Pump in service after CMS -2000 installation by 18 months