

## **NORTH CAROLINA STATE UNIVERSITY**

### **LOCATION**

Raleigh, North Carolina

### **PROFILE**

North Carolina State University's Centennial Steam Plant is a state-of-the-art facility serving the entire campus.

### **CHALLENGE**

Provide a steam generating system that maximizes efficiency while lowering campus emissions.

### **SOLUTION**

The Nebraska D-style boiler is an ideal solution for any steam need and forms part of a completely integrated system with our NATCOM burner and PLC-based controls.

### **RESULTS**

- 30 ppm NOx emissions achieved firing natural gas
- Back-up oil firing system ensures maximum operational flexibility
- 100% membrane construction eliminates costly annual refractory maintenance

### **Contact:**

Cleaver-Brooks

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# **Cleaver-Brooks Reduces Emission Levels Significantly for North Carolina State University**

## **Cleaver-Brooks integrates innovative technology with the Nebraska watertube boiler and NATCOM burner.**

Installed at the Centennial Campus of North Carolina State University, this unit is in the heart of multi-disciplinary R&D neighborhoods with university, corporate, and government facilities intertwined.

Steam from this unit is used for district heating and air conditioning of the entire Centennial Campus.

Our D-type boiler was the perfect answer for the Centennial Campus needs. With 100% membrane wall construction and a heavy-duty 10-gauge outer casing, this unit was built to last.

Total integration was key to this project. Not only were the burner and boiler engineered to seamlessly produce steam while only generating 30 ppm NOx, the whole system is controlled by the CB Hawk ICS, a state-of-the-art PLC combustion control system. This level of integration makes Cleaver-Brooks your true, single-source supplier.

Successfully started in December 2006, this installation continues the tradition that Cleaver-Brooks has developed with its customers since 1931. No detail was left unnoticed. The unit was even painted North Carolina State University Red!

