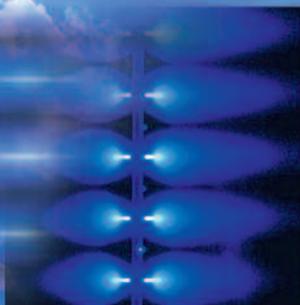


Lodge Cottrell 

*air pollution control*

Knowledge, Expertise and Technology



# Lodge Cottrell

## Working with Industry

**Employing proven advanced concepts to provide industry with highly efficient and cost-effective systems for emissions control.**

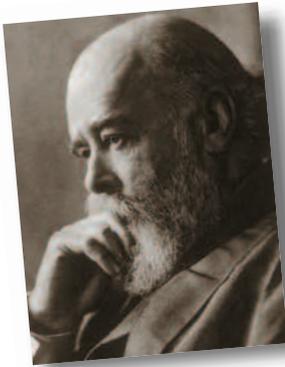
Our customers benefit from the know-how we have acquired from installing over 4,500 plants world-wide. This, together with Lodge Cottrell's extensive range of technologies means the company is uniquely qualified to provide air pollution control systems to many different processes. Working closely with industries including power generation, cement, minerals and metals processing, chemicals and Energy from Waste we can provide high efficiency cost-effective emissions control.

As part of KC Cottrell Co., Ltd., a major air pollution control company headquartered in Seoul, Korea, Lodge Cottrell markets its products and services around the globe. Our activities include feasibility studies, the supply of products from individual components to complete turnkey plants, improvement of existing installations, operation and maintenance, training of clients' personnel, services and the supply of spare parts.



# Innovative Solutions

## through technology and know-how



In 1883 Sir Oliver Lodge first demonstrated the use of electrostatic precipitation for the collection of dust particles. This innovation led to vast improvements in the lives of much of the population as the technology was used to clean up the chimneys needed to fire industry and create wealth.

Such innovation has remained core to Lodge Cottrell as it continues to provide solutions to ever more complex environmental problems.

Lodge Cottrell is one of the world's leading specialists in air pollution control. Its plants are characterised by their low capital costs, high efficiency, minimal maintenance, low running costs and industrial utilisation of by-products. A unique combination of people and technology together with sound business ethics and a focus on product development, all contribute to Lodge Cottrell's capability to offer the most suitable system for any given application.

## Particulate Control

**Lodge Cottrell prides itself on being amongst the world's leading names in dust control.**

### Electrostatic Precipitators

Our L-type dry electrostatic precipitators reduce dust emissions on every continent for leading power and process companies. Using this highly versatile technology Lodge Cottrell is also able to provide many novel options for the upgrading of existing plants to meet ever more stringent emissions limits. Our particulate control expertise extends to Wet-type precipitators with the supply of both vertical and horizontal flow units.

### Fabric Filters

Our Pulse-Jet Fabric Filters achieve dust collection efficiencies of greater than 99.9% and are used throughout industry on a wide range of applications. They provide sound technical and commercially attractive solutions on processes which demand high collection efficiencies with related low dust emissions. These filters require an absolute minimum of attention and maintenance.

### Ceramic Filters

Lodge Cottrell Ceramic Filters are an extension to the Pulse-Jet Fabric Filter range and can operate at temperatures up to 500°C. They achieve particulate emissions as low as 1 mg/m<sup>3</sup>, and can operate in arduous process conditions with high acid gas concentrations. In addition to emission control the ceramic filter is also effective for the reclamation of valuable process materials such as metals and minerals.



## Flue Gas Desulphurisation

Lodge Cottrell is able to offer FGD technology for large process applications such as power stations, steel works, and chemical plants. This high efficiency, low cost, limestone to gypsum process is well proven and is operational on many large boiler units worldwide.



*Wet FGD system at Tangjin Power Station, Korea*

## De-NOx Systems

Also included within our extensive portfolio are De-NOx systems which reduce harmful nitrous oxide gases. We are experienced providers of both catalytic (SCR) and non-catalytic (SNCR) reduction systems.

## Acid Gas Removal

When used in conjunction with a sodium or calcium based sorbent injection system, Pulse-Jet Filters can also be used to reduce acid gas emissions. This is essential for many energy from waste and incineration processes where the lowest emissions of sulphur oxides, hydrogen chloride and hydrogen fluoride are required.

Other contaminants such as heavy metals and organic species can be removed through the addition of alternative types of sorbents.

For some processes dry sorbent injection is not suitable. Where this arises a wet scrubbing system can be applied for the removal of gaseous pollutants.



## Design Excellence

From our technology centre in Birmingham, England, engineers design and develop effective emission control solutions to meet the most stringent worldwide standards.

Quality and precision are key to our culture and ISO 9001 certification is very important to our operation.

Effective project management and quality assurance are high priorities within the company, on-site and with our key suppliers.



## Environmental Services

With a large team of experienced design, installation and testing engineers we are able to offer a comprehensive after sales service. As well as servicing and maintaining both Lodge Cottrell and other proprietary equipment, we undertake a wide range of general site services from ducting repairs and installation through to complete process plant erection, commissioning, operation and maintenance.

## Worldwide Spares Service

Lodge Cottrell provides an efficient spares service for genuine components and parts wherever and whenever you may require them.

Spares can be matched against drawings and specifications for more than 4,500 particulate control systems worldwide.

Since we have designed and built these units we believe that we are the best source for spares.

In addition to Lodge Cottrell plants, the company incorporates the following well-known names and is committed to supporting the worldwide population of plants with a first class spares service.

- Lodge Sturtevant Ltd
- Buell Ltd - (Dryers, Motorised Double Flap Valves, Rotary Valves)
- Sturtevant (Gas Cleaning) Ltd (Floesal/Mancuna Valves)
- Sturtevant Process Ltd
- W.C. Holmes & Co
- Holmes Gas Cleaning
- Peabody Sturtevant Ltd
- Environmental Air Filtration



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