



Technology Fact Sheet

For Further Information Contact:
Media: Jan Sieving +1 832 513 1111

August 18, 2009

Lummus Technology Heaters Utilized in Taiwan

Owner :	CPC Corporation
Location:	Lin Yuan Petrochemical Plant, Taiwan, Republic of China
Process:	Ethylene Cracking Heaters
Capacity:	Eight heaters with a capacity of 720,000 metric tons per annum
Production:	Ethylene
Technology:	SRT® Pyrolysis Furnace Module
Description:	<p>The SRT® Short Residence Time pyrolysis furnace module from Lummus Technology was developed in the mid-1960s as a response to growing ethylene demand and the need for selectivity to olefins, long run lengths and high on-stream time. Since the first SRT I was developed, the design has evolved, culminating in the SRT VI design. It features a unique 2-pass radiant coil design that is mechanically simple and easy to operate. Olefin yields are consistently high for all feedstocks.</p>
CB&I Advantage:	<p>Plants that use SRT technology currently represent about 40% of worldwide ethylene capacity. In the last decade, Lummus has built and commissioned more ethylene cracking furnaces than any other process licensor. The SRT technology consistently achieves designed capacity, meets yield guarantees, and operates for long run lengths (greater than 50 days) between coil decokings.</p> <p>The furnace module features a Bathtub Transfer Line Exchanger. This special type of multi-tubular transfer line exchanger was jointly developed by Lummus Technology and Alstom. Use of these exchangers increases the reliability of the furnaces as mechanical cleaning of the exchanger tubes is usually not required.</p> <p>The furnaces are equipped with low NOx burners to improve emissions.</p>

Benefits:

FEATURES	BENEFITS
Radiant coil design: <ul style="list-style-type: none">■ Small inlet tubes■ Large outlet tubes	<ul style="list-style-type: none">■ Higher selectivity to olefins■ High capacity per coil■ Long run length■ Simple mechanical design
Bathtub Transfer Line Exchanger	<ul style="list-style-type: none">■ Low residence time■ Low cost■ Long runs
Simple tube hanging system	<ul style="list-style-type: none">■ Lower cost■ Reliable operation
Venturi flow control	<ul style="list-style-type: none">■ Improves conversion control■ Evens flow distribution
Floor firing	<ul style="list-style-type: none">■ Fewer burners■ Lower cost
Low NOx burners	Reduces emissions

About CB&I

[CB&I](#) designs, engineers and constructs some of the world's largest energy infrastructure projects, providing a [full spectrum of EPC solutions](#) and proven [process technologies](#). Drawing upon more than a [century of experience](#) and the [expertise](#) of approximately 17,000 employees worldwide, CB&I safely and reliably executes more than 600 projects a year through its three business sectors: [CB&I Lummus](#) builds upstream and downstream oil & gas projects, LNG liquefaction and regasification terminals, and a wide range of other energy related projects; [CB&I Steel Plate Structures](#) designs, fabricates and constructs storage tanks and containment vessels and their associated systems for the oil & gas, water & wastewater, mining and nuclear industries; [Lummus Technology](#) capitalizes on more than 1,500 patents and patent applications to provide process technologies and [catalysts](#) for petrochemical facilities, oil refineries and gas processing plants. For more information, visit www.CBI.com or access technical details at [Lummus Technology Fact Sheets](#). If you would like to be added to CB&I's news release email distribution list, visit www.cbi.com/ir/news.htm.

#