


Registration No.	Number 00110		
Registration Date	September 11, 2012	Registration Category	Category 1

Name (Model, etc.)	Distributed Control System CENTUM
Location	Closed to Public
Owner (Custodian)	Yokokawa Electric Corporation
Manufacturer (Company)	Yokokawa Electric Corporation
Year Manufactured	1979
Reason For Selection	<p>Process control systems are used extensively in petrochemical, steel, paper and LNG production plants to maintain optimal production conditions based on a broad range of sensor data from manufacturing equipment, such as flow rate, temperature and fluid level. Process optimization is generally achieved by regulating valves and other devices on the production line.</p> <p>Since manufacturing equipment is dispersed throughout the plant over a wide area, standard production procedures and equipment maintenance are typically divided into processes. Decentralized systems are needed for functional dispersion, regional diffusion and risk distribution.</p> <p>In 1975, Yokokawa Electric Corporation released the world's first decentralized control system with the latest microprocessor and communications technology. The system consisted of a central operator console (OPC) linked to field control stations (FCS) installed on individual pieces of equipment. The OPC could be used to monitor and control operations throughout the entire plant from a central location, using a keyboard and CRT in place of a conventional instrumentation panel (although the monitor display was modeled on a traditional faceplate design).</p> <p>The decentralized control system allowed operators to combine continuous and sequential modes of control for greater precision and control, and soon became the standard in production plants the world over. This is one important example of the first decentralized control systems from the early period.</p>
Registration Standard	1 - B

Open/Closed to Public	Closed to Public
Photo	
Other useful information	