

Registration No.	Number 00089		
Registration Date	September 27, 2011	Registration Category	Category 1

Name (Model, etc.)	S1A-01 Gas Turbine		
Location	Akashi City, Hyogo Pref		
	Kawasaki Heavy Industries, Ltd. Akashi works		
Owner (Custodian)	Kawasaki Heavy Industries, Ltd. Gas Turbine Division		
Manufacturer (Company)	Kawasaki Heavy Industries, Ltd.		
Year Manufactured	1975		
Reason For Selection	<p>In 1974, the Japanese Fire Service Act was greatly revised. The new law required that large stores install electric generating facilities on their premises. Given this situation, Kawasaki Heavy Industries, Ltd. in 1975 developed a 150kW gas turbine (the S1A-01 type) for use in electric generation. Kawasaki planned to mass-produce this turbine. Considering that the most difficult points in development of the small-scale gas turbine were cost and improvement of fuel performance, designers made the structure of the gas turbine a one axle type, the simplest structure possible, and to reduce the number of parts they adopted precision foundry extensively. They also made other improvements and achieved high efficiency from a high-pressure ratio realized by introducing centrifugal two-stage compression and setting a high temperature at the turbine entrance.</p> <p>This gas turbine (the S1A-01 model) became the prototype of small gas turbines for the industrial use that were developed afterwards, and gas turbines based on a similar configuration to this one were developed one after the other.</p> <p>Sales of the class of gas turbines that came after this one spread rapidly. These turbines achieved a high reputation as emergency generators for off-grid power systems because their start-up was highly reliable and they were light, small, and able to run without cooling water. Sales of these gas turbine facilities spread so well that by Heisei 21 (2009), they were 42% of the total of generating facilities for emergency use. This machine is a product that we should remember as the forerunner of the class of gas turbines that became so popular after it.</p>		
Registration Standard	2 - A		

Open/Closed to Public	Closed to Public
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Other useful information	
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