

CRG-RC

Endothermic Gas Generators (Patent Pending)

Standard Model Series

A unique endothermic gas generator using newly developed high performance catalysts assures energy conservation and reduced costs.

High quality carburizing atmosphere gas is generated at low cracking temperatures (890–950°C) so that the reaction tube can be inserted directly into the furnace.



CHUGAI RO CO., LTD.

Features

To prevent atmosphere deterioration, conventional gas generators require cooling of the generated gas before it enters a carburizing or hardening furnace. The CRG-RC generator is inserted directly into the furnace eliminating the need for cooled gas. There is no energy loss as a result of cooling.

The CRG-RC generator only consumes up to 1/5 less thermal energy than a conventional generator.

gas composition even if the furnace temperature varies because of changes in the heat pattern.

1. Compact cartridge

This is a cartridge type generator and can easily be installed in an existing furnace. The operation is simple and maintenance is easy.

2. Temperature range from 700°C to 950°C.

A built-in auxiliary heater maintains normal

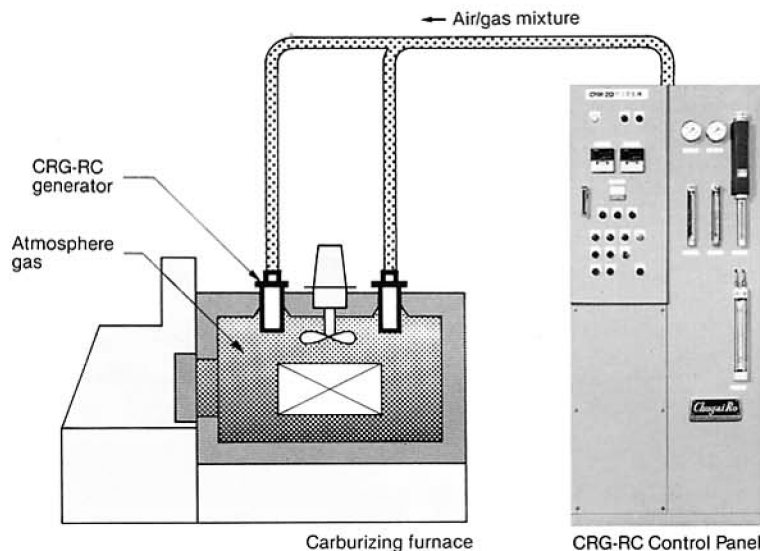
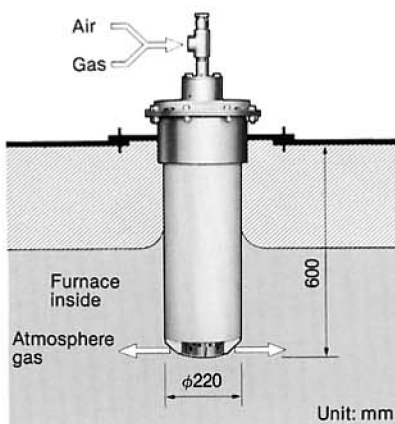
3. Immediate availability

The atmosphere gas can be generated simultaneously with the completion of furnace heat-up.

4. Compact design

The reaction tube is inserted into the furnace. The air/gas mixer and the controls are designed as a unit for installation in a compact cabinet

Construction



Standard Specifications

Model	Capacity (m ³ /h)	Reaction gas consumption (m ³ /h)			Power consumption (kw)					No. of reaction tubes
		Natural gas	Propane gas	Butane gas	Heater normal	Heater capacity	Ring blower		Control	
							60 Hz	50 Hz		
CRG-RC-12	12	2.5	0.9	0.8	1.5 (3.0)	3.0 (3.5)	0.42	1.3	0.5	1
CRG-RC-24	24	4.9	1.9	1.5	3.0 (6.0)	6.0 (7.0)	0.85	1.3	0.5	2
CRG-RC-36	36	7.5	3.0	2.3	4.5 (9.0)	9.0 (10.5)	0.85	1.3	0.5	3
CRG-RC-48	48	10.0	4.0	3.1	6.0 (12.0)	12.0 (14.0)	0.85	1.3	0.5	4
CRG-RC-60	60	12.5	5.0	3.8	7.5 (15.0)	15.0 (17.5)	0.85	1.3	0.5	5

Notes: 1 The operating temperature of CRG-RC is 950°C.

2 The reaction gas should be supplied at 0.5 kgf/cm²G.

3 Figures in () of the "Power consumption" column are when using natural gas.

4 A need for a capacity greater than 60 m³/h can be met by increasing the number of reaction tubes.

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