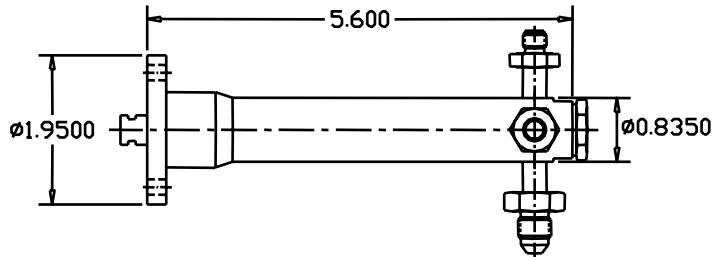


# General Kinetics Inc.

## 0.5 in. H<sub>2</sub>O<sub>2</sub> Gas Generator

P/N: GK-PD022-201-001



### Specifications

- Fluid 98% hydrogen peroxide
- Life > 5000 sec.
- C-Star Efficiency > 95%
- Feed Pressure 700 psia, nominal
- Exit Pressure 500 psia, nominal
- Flow rate 0.04 lbm/sec.
- Catalyst Proprietary
- Mass ~ 0.2 lbm
- Status In development, values may change

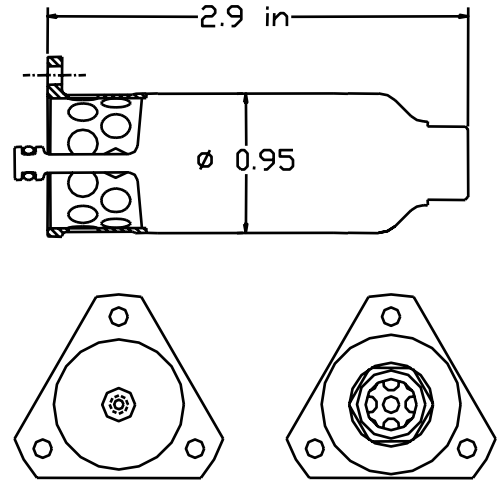
### Description

This gas generator is being used to evaluate propellant contamination effects on catalyst performance. May also be used for 70-90% H<sub>2</sub>O<sub>2</sub>

# General Kinetics Inc.

## 0.875 in. H<sub>2</sub>O<sub>2</sub> Gas Generator

P/N: GK-ED007-202-001



### Specifications

- Fluid 70 to 92% hydrogen peroxide
- Life > 240 sec.
- C-Star Efficiency > 95%
- Feed Pressure 275 psia, nominal
- Exit Pressure 130 psia, nominal
- Flow rate 0.045 lbm/sec., nominal
- Catalyst Silver screen
- Mass ~ 0.3 lbm

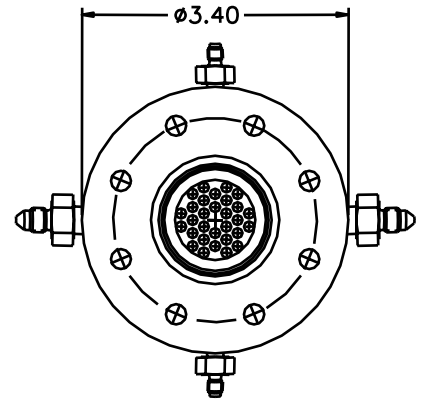
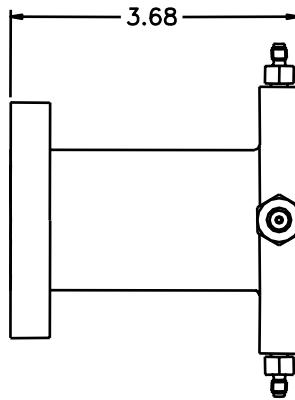
### Description

This gas generator is derivative catalyst bed based upon a 6 lbf rocket engine. This gas generator is being used for hot gas pressurization system research. May be upgraded for use with 98% H<sub>2</sub>O<sub>2</sub>

# General Kinetics Inc.

## 1.125 in. H<sub>2</sub>O<sub>2</sub> Gas Generator

P/N: GK-PD032-201-001



### Specifications

- Fluid 90% hydrogen peroxide
- Life > 1000 sec.
- C-Star Efficiency > 95%
- Feed Pressure 1800 psia, nominal
- Exit Pressure 1400 psia, nominal
- Flow rate 1.5 lbm/sec.
- Catalyst Silver
- Mass ~ 1.0 lbm
- Status In development, values may change

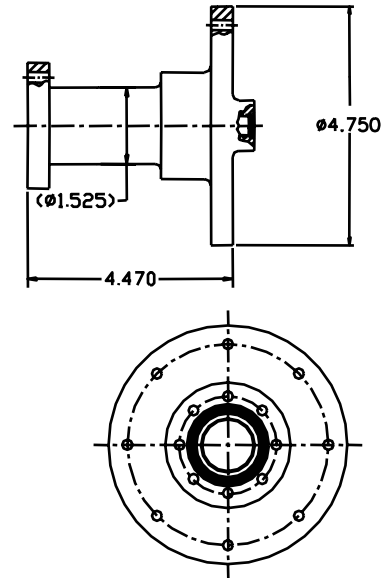
### Description

Advanced high flux catalyst bed used for research of high performance combustion devices.

# General Kinetics Inc.

## 1.125 in. H<sub>2</sub>O<sub>2</sub> Gas Generator

P/N: GK-PD020-201-001



### Specifications

- Fluid 98% hydrogen peroxide
- Life > 1800 sec.
- C-Star Efficiency > 95%
- Exit Pressure 500 to > 1500 psia, nominal
- Flow rate 0.3 lbm/sec., nominal
- Mass < 5 lbm
- Status R&D

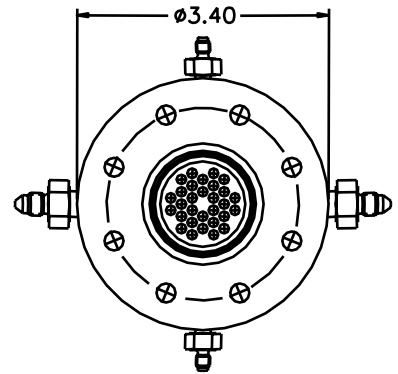
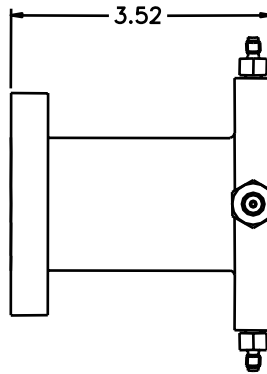
### Description

This gas generator is presently in research and development testing.  
May also be used with 70-90% H<sub>2</sub>O<sub>2</sub> catalyst

# General Kinetics Inc.

## 1.25 in. H<sub>2</sub>O<sub>2</sub> Gas Generator

P/N: GK-PD023-201-003



### Specifications

- Fluid 90% hydrogen peroxide
- Life > 1000 sec.
- C-Star Efficiency > 95%
- Feed Pressure 1800 psia, nominal
- Exit Pressure 1400 psia, nominal
- Flow rate 1.5 lbm/sec.
- Catalyst Silver
- Mass ~ 1.0 lbm
- Status In development, values may change

### Description

Advanced high flux catalyst bed used for research of high performance combustion devices.

# *General Kinetics Inc.*

## **1.25" Light weight H2O2 Gas Generator**

P/N: GK-PD033-201-002



### ***Specifications***

- Fluid 90% hydrogen peroxide
- Life > 1000 sec. estimated
- C-Star Efficiency > 95%
- Feed Pressure 1800 psia, nominal
- Exit Pressure 1400 psia, nominal
- Catalyst Silver

### ***Description***

Advanced high flux catalyst bed used for research of high performance combustion devices.

# *General Kinetics Inc.*

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## ***Specifications***

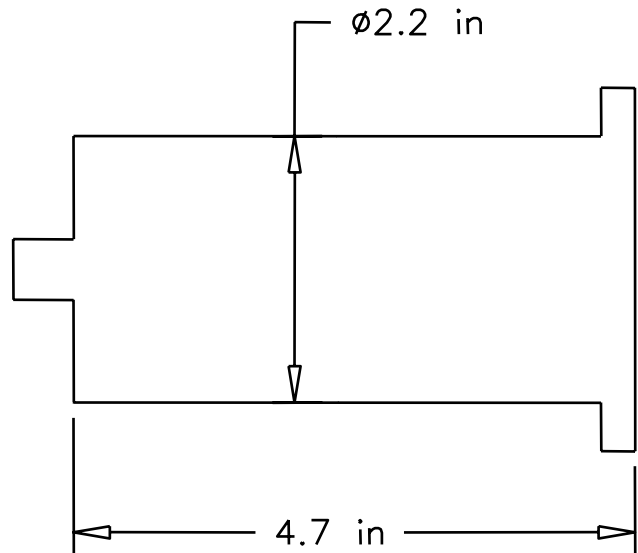
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<h3><i>Description</i></h3>
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# General Kinetics Inc.

## 1.8 in. H<sub>2</sub>O<sub>2</sub> Gas Generator

P/N: GK-PD014-201-001



### Specifications

- Fluid 70 to > 92% hydrogen peroxide
- Life > 2500 sec.
- C-Star Efficiency > 95%
- Exit pressure 500 psig, nominal
- Flow rate 0.25 lbm/sec., nominal
- Diameter 1.8 in.
- Catalyst Silver screen
- Mass ~ 5.5 lbm
- Status > 5 Units in Service

### Description

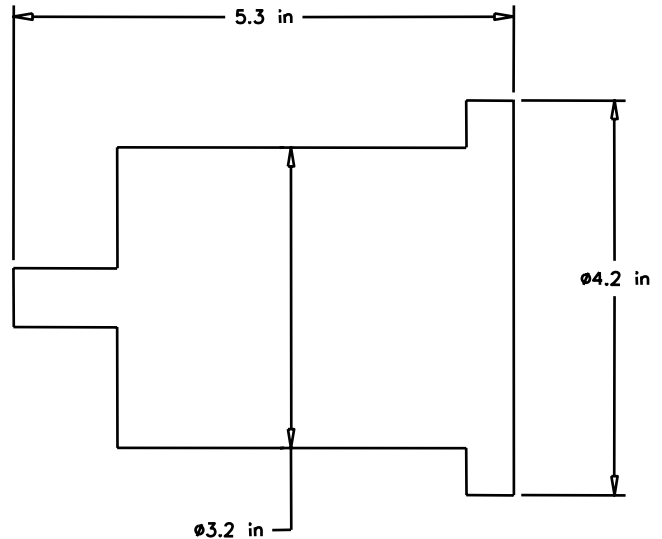
This gas generator is a general purpose catalyst bed used for propellant evaluation, catalyst life testing, small bi-propellant rocket engine and gas generator testing, and other gas generator applications.



# General Kinetics Inc.

## 3 in. H<sub>2</sub>O<sub>2</sub> Gas Generator

P/N: GK-ED012-201-001



### Specifications

- Fluid 70 to 92% hydrogen peroxide
- Life > 500 sec. (predicted)
- C-Star Efficiency > 95%
- Exit pressure 500 psig, nominal
- Status 4 Development Units Fabricated

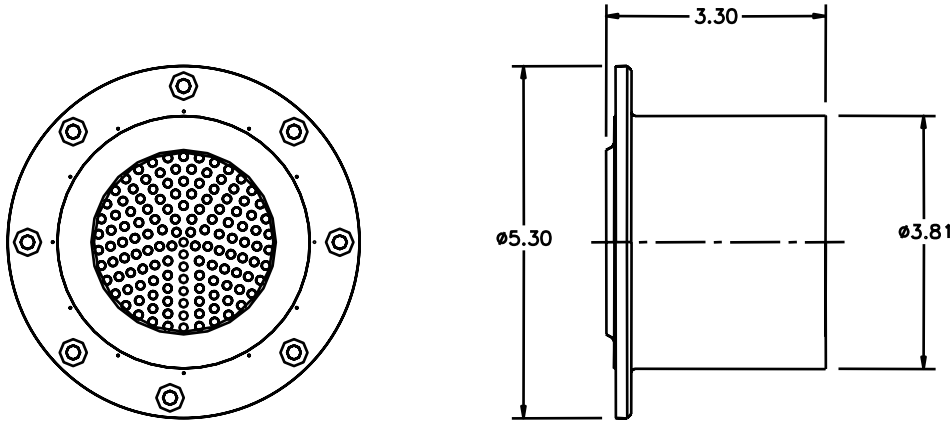
### Description

This gas generator is a development unit for driving a turbo pump, acoustic research, and other research and development tasks.

# *General Kinetics Inc.*

## **3 in. H<sub>2</sub>O<sub>2</sub> Gas Generator**

P/N: GK-PD016-201-001



### ***Specifications***

- Fluid 98% hydrogen peroxide
- Life > 500 sec. (predicted)
- C-Star Efficiency > 95%
- Exit pressure 500 psig, nominal

### ***Description***

This gas generator is a development unit used for advanced combustion device research.

# *General Kinetics Inc.*

## **3 in. H<sub>2</sub>O<sub>2</sub> Gas Generator**

P/N: GK-PD030-201-001

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### ***Specifications***

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- Fluid 90 to 92% hydrogen peroxide
- Life > 500 sec. (predicted)
- C-Star Efficiency > 95%
- Exit pressure 1000 psig, nominal

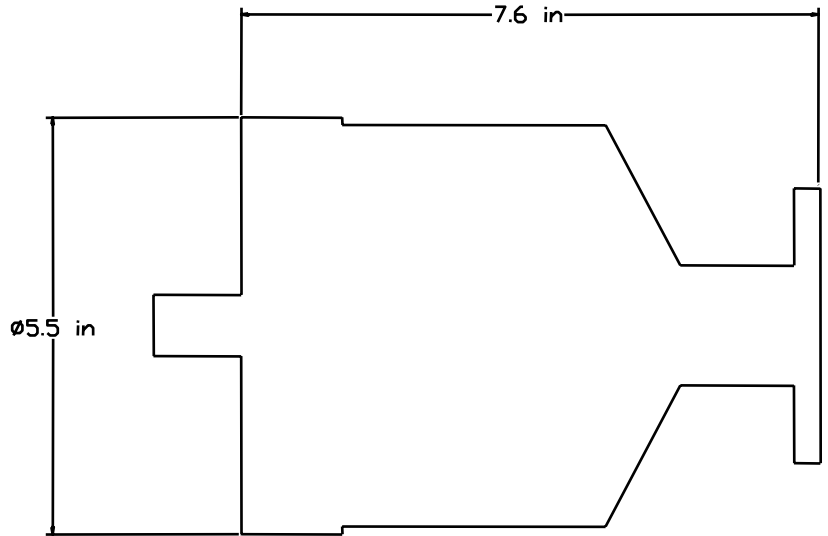
### ***Description***

This gas generator is for research and development.

# General Kinetics Inc.

## H2O2 Gas Generator (5 Inch Diam)

P/N: GK-ED002-202-001



### Specifications

- Fluid 70 to 92% hydrogen peroxide
- Life > 6000 sec.
- C-Star Efficiency > 95%
- Design pressure Approximately 500 psia
- Flow rate Designed to Customer Requirements
- Catalyst Silver screen
- Mass Approximately 22 lbm
- Status 10 Units Delivered

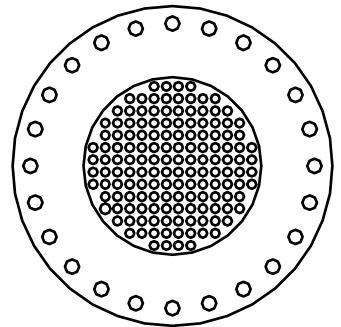
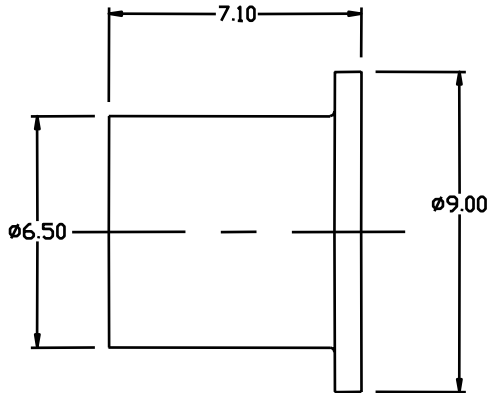
### Description

This gas generator is used for vacuum aspiration in a steam ejector.

# General Kinetics Inc.

## H2O2 Gas Generator (5 Inch Diam)

P/N: GK-PD026-201-001



### Specifications

- Fluid 98% hydrogen peroxide
- Life > 500 sec. (predicted)
- C-Star Efficiency > 95%
- Design pressure Designed to Customer Requirements
- Flow rate Designed to Customer Requirements

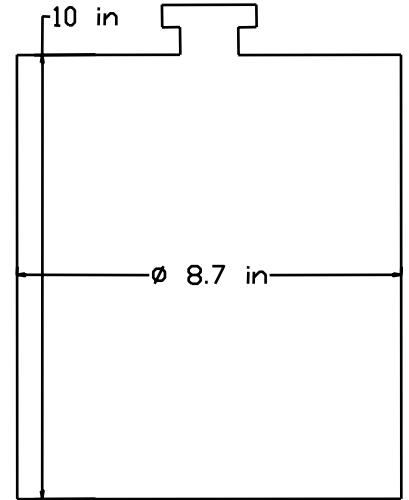
### Description

This gas generator is used for research and development.

# General Kinetics Inc.

## H2O2 Gas Generator (8 Inch Diam)

P/N: GK-ED001-201-001



### Specifications

- Fluid 70 to 92% hydrogen peroxide
- Life > 1000 sec.
- C-Star Efficiency > 95%
- Design Pressure Approximately 500 psia
- Flow rate Designed to Customer Requirements
- Catalyst Silver plated nickel screen
- Mass ~ 106 lbm
- Status 37 Units in Service

### Description

This gas generator is used for vacuum aspiration in a steam ejector.

# *General Kinetics Inc.*

## ***H2O2 Gas Generator (8 Inch Diam)***

P/N: GK-PD027-201-001

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### ***Specifications***

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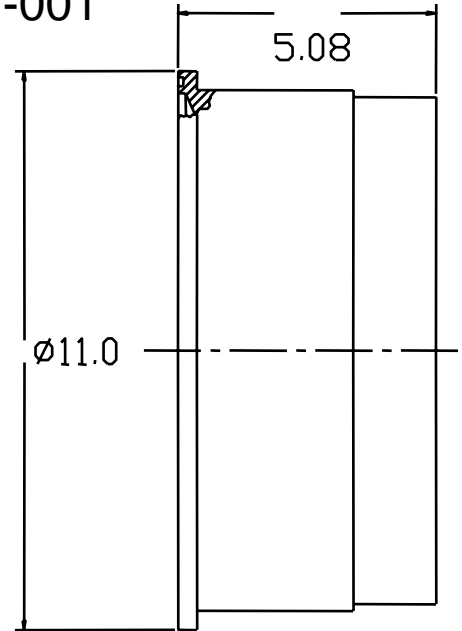
- Fluid                      70% hydrogen peroxide
- Life                        > 1000 sec.
- C-Star Efficiency        > 95%
- Design Pressure        Approximately 500 psia
- Flow rate                Designed to Customer Requirements
- Catalyst                 Silver plated nickel screen
- Mass                      ~ 80 lbm
- Status                    10 units in service

### ***Description***

# General Kinetics Inc.

## 9.5 in H<sub>2</sub>O<sub>2</sub> Gas Generator

P/N: GK-PD010-201-001



### Specifications

- Fluid 85% hydrogen peroxide (operable with 92%)
- Life > 1000 sec., predicted
- C-Star Efficiency > 95%
- Exit Pressure 500 psia, nominal
- Flow rate 38 lbm/sec., nominal
- Catalyst Silver screen
- Status 2 Units

### Description

This gas generator was designed for an upperstage bi-propellant engine application. May be upgraded for use with 98% H<sub>2</sub>O<sub>2</sub>



# *General Kinetics Inc.*

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## ***Specifications***

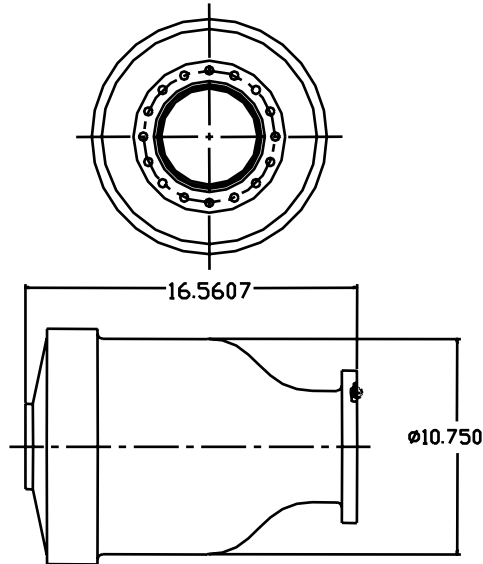
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<h3><i>Description</i></h3>
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# *General Kinetics Inc.*

## **10.2 in. H<sub>2</sub>O<sub>2</sub> Gas Generator**

P/N: GK-PD019-204-001



### ***Specifications***

- Fluid 85% to 92% hydrogen peroxide
- Life > 700 sec.
- C-Star Efficiency > 95%
- Exit Pressure 500 psia, nominal
- Flow rate 38 lbm/sec., nominal
- Catalyst Silver screen

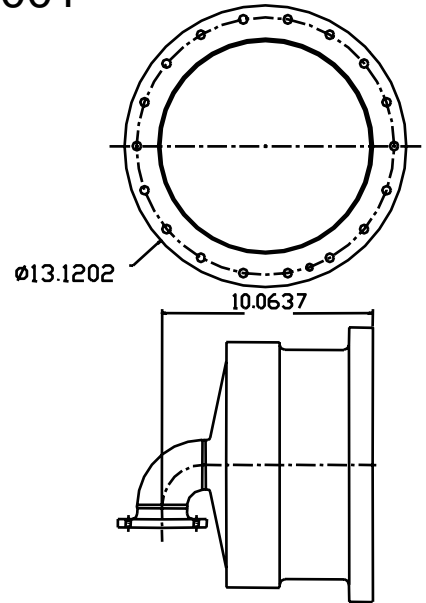
### ***Description***

- This gas generator was designed for an upperstage bi-propellant
- engine application. May be upgraded for use with 98% H<sub>2</sub>O<sub>2</sub>.

# General Kinetics Inc.

## 10.2 in. H<sub>2</sub>O<sub>2</sub> Gas Generator

P/N: GK-PD019-201-001



### Specifications

- Fluid 85% to 92% hydrogen peroxide
- Life > 700 sec.
- C-Star Efficiency > 95%
- Exit Pressure 500 psia, nominal
- Flow rate 38 lbm/sec., nominal
- Catalyst Silver screen
- Status 3 Units

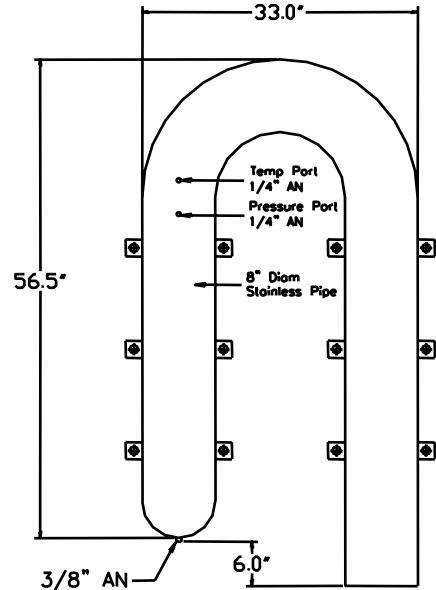
### Description

This gas generator was designed for an upperstage bi-propellant engine application. May be upgraded for use with 98% H<sub>2</sub>O<sub>2</sub>.

# General Kinetics Inc.

## Decomposer, Vertical

P/N: GK-ED008-201-001



### Specifications

- Fluid 70 to 98% hydrogen peroxide
- Life > 12,500 sec. with  $\leq$  85% hydrogen peroxide
- C-Star Efficiency > 95%
- Inlet pressure 70 psig, nominal
- Operating press. < 70 psig, nominal
- Flow rate 0.8 lbm/sec., nominal
- Catalyst Manganese Dioxide/Silver Plated Nickel
- Structure Sch 40, 8 in. pipe
- Mass ~ 200 lbm
- Status 2 Units in Service

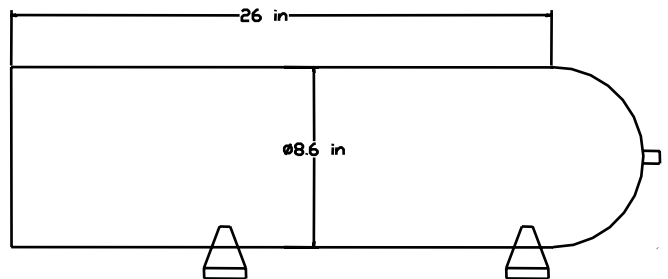
### Description

This catalyst bed is designed to decompose hydrogen peroxide into water and oxygen. This device is being used for the elimination of residual fluids from rocket engine run tanks.

# General Kinetics Inc.

## Decomposer, Horizontal

P/N: GK-ED008-201-002



## Specifications

- Fluid 70 to 98% hydrogen peroxide
- Life > 56,000 sec. with 70% hydrogen peroxide
- C-Star Efficiency > 95%
- Inlet pressure < 50 psig, nominal
- Flow rate 0.8 lbm/sec., nominal
- Catalyst Manganese Dioxide
- Structure Sch 40, 8 in. pipe
- Mass ~ 170 lbm
- Status 2 Units, Multiple Refurbished

## Description

This catalyst bed is designed to decompose 70% to 90% into water and oxygen. This device is being used for the elimination of residual fluids from rocket engine run tanks.

# *General Kinetics Inc.*

## **12 in. Decomposer**

P/N: GK-ED008-201-004



### ***Specifications***

- Fluid 70 to 98% hydrogen peroxide
- Life > 10,000 sec. (predicted)
- C-Star Efficiency > 95%
- Inlet pressure < 50 psig, nominal
- Flow rate 1.8 lbm/sec., (estimated)
- Catalyst Manganese Dioxide
- Structure Sch 40, 12 in. pipe

### ***Description***

This catalyst bed is designed to decompose 70% to 98% into water and oxygen. This device is being used for the elimination of residual fluids from rocket engine run tanks.