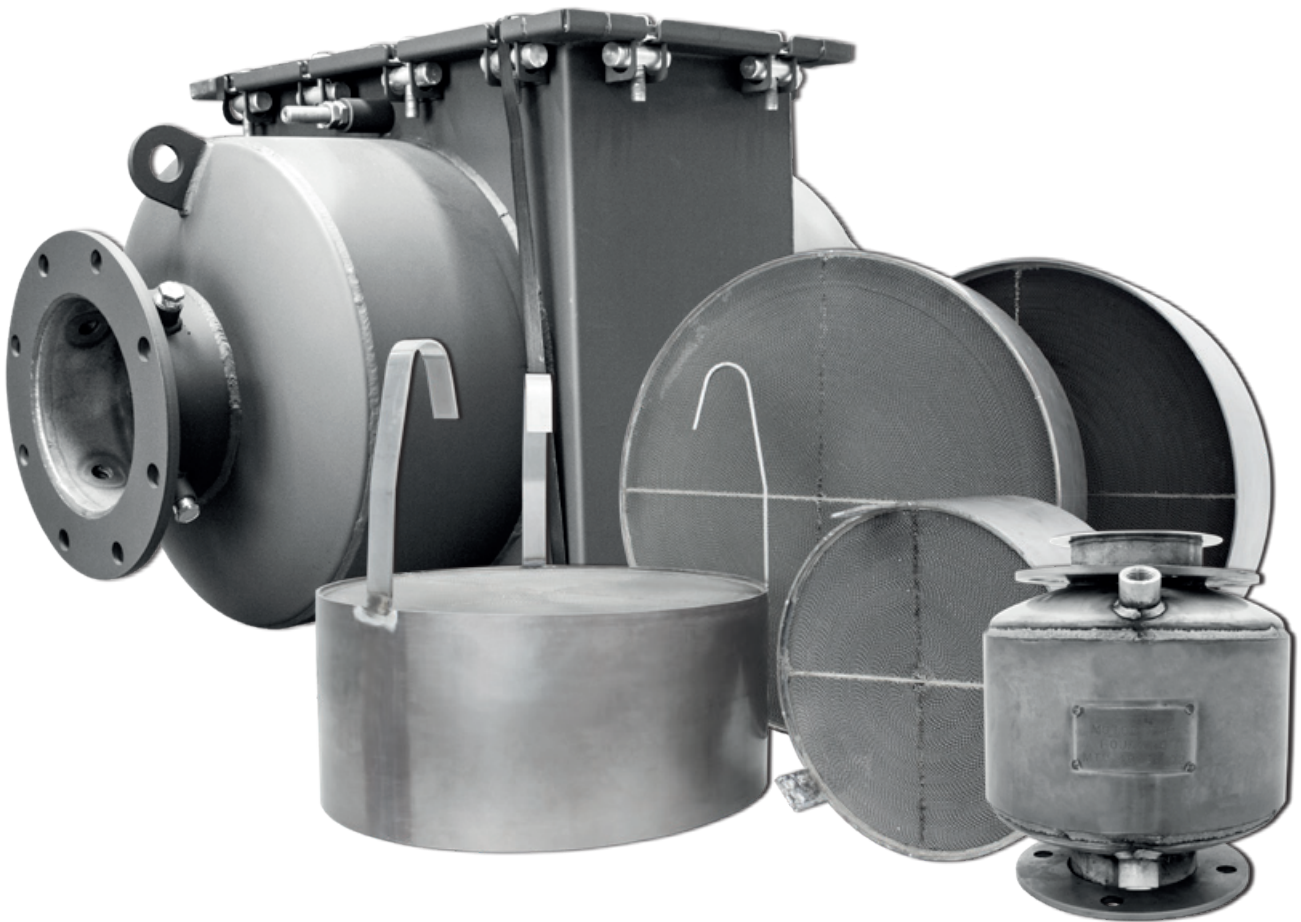


# Catalysts

For Efficient and Reliable Emission Reduction



**Exhaust Gas Aftertreatment**

reliable • efficient • worldwide

## ■ General Information

### Catalysts

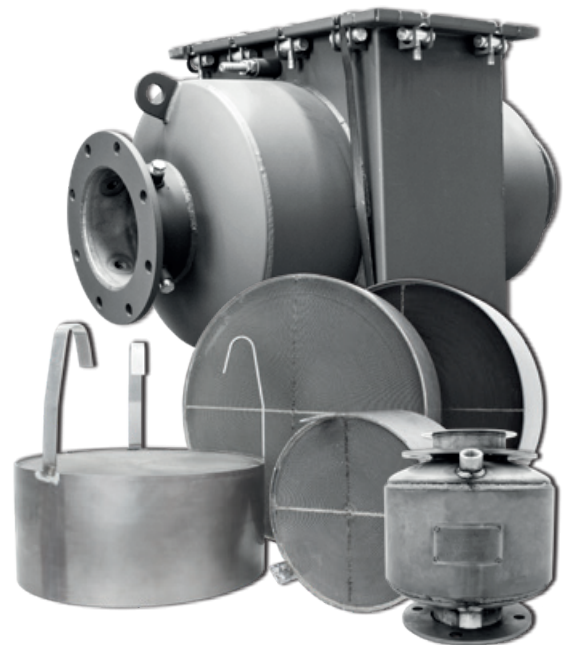
#### For Efficient and Reliable Emission Reduction

Increasingly stringent emission regulations require the use of exhaust gas aftertreatment technologies for the operation of stationary gas engines. Exhaust gas catalysts play an important role in reducing harmful emissions and complying with legal limits, thus contributing to the protection of the environment.

MOTORTECH catalysts are always designed and manufactured according to customer and application requirements and guarantee a successful reduction of harmful emissions and compliance with legal limits. With different housing concepts, tailor-made catalysts or elements are created which fit perfectly into a customer plant construction or as a replacement in existing engine sites.

### General Features

- Catalysts are designed and manufactured according to specific customer requirements
- Coatings are calculated and produced for each application's specifications
- Stainless steel modular construction includes nickel alloys or ceramic substrates resistant to high temperatures
- Catalysts can be supplied as complete units, elements with flanges or as replacement elements
- High quality substitute catalyst solutions are available to replace all popular catalyst brands



### Technical Features

- Precise control over critical manufacturing parameters assures optimum performance and longevity
- Formulated to be durable and tolerant of common contaminants
- Coating formulations engineered for long life and strong response to chemical washings
- Each catalyst is individually serial numbered and inspected for 100% traceability

# Catalyst Types

## Oxidation Catalyst for CO and VOC Reduction On Lean-Burn Gas Engines

Oxidation catalysts convert carbon monoxide (CO) and volatile organic compounds (VOC's including formaldehyde) from lean-burn reciprocating engines. MOTORTECH oxidation catalysts use only platinum precious metal for high performance, long life, poison resistance, and their ability to be chemically regenerated time after time. Field proven catalyst products are available for 2-stroke and 4-stroke engines, high-propane fuels, low-BTU fuels, refinery gases, biogases and high-sulfur fuels.

## 3-Way (NSCR) Catalyst for NOx, CO and VOC Reduction On Rich-Burn Gas Engines

NSCR (non-selective catalytic reduction) catalysts convert nitrogen oxides (NOx), carbon monoxide (CO) and volatile organic compounds (VOC's including formaldehyde) from the exhaust of rich-burn gas engines. These engines, fueled by natural gas, wellhead gas, refinery gas and others are used in gas compression and power generation.



Scan the QR code® to download the questionnaire to identify a suitable catalyst for your application.

### Catalyst Inquiry Form

**Contact Data**

Company  Contact person

Address

Phone  Fax  Email

**Catalyst Sizing**

Application and Model  Design operating principle

Engine power (kW)  Fuel  Air exhaust gas mass flow (kg/hr)

Air exhaust gas flow (Nm<sup>3</sup>/hr)  Exhaust temperature at catalyst (°C)  Oxygen content in exhaust gas (%)

Sulfur content in exhaust gas (mg/Nm<sup>3</sup> at SO<sub>2</sub>)  Dust loading in exhaust gas (mg/Nm<sup>3</sup>)  Max. cooling Catalyst outer diameter

**Raw Emissions**

Hazardous substances	Value	Unit

**Emission Limits**

Hazardous substances	Value	Unit

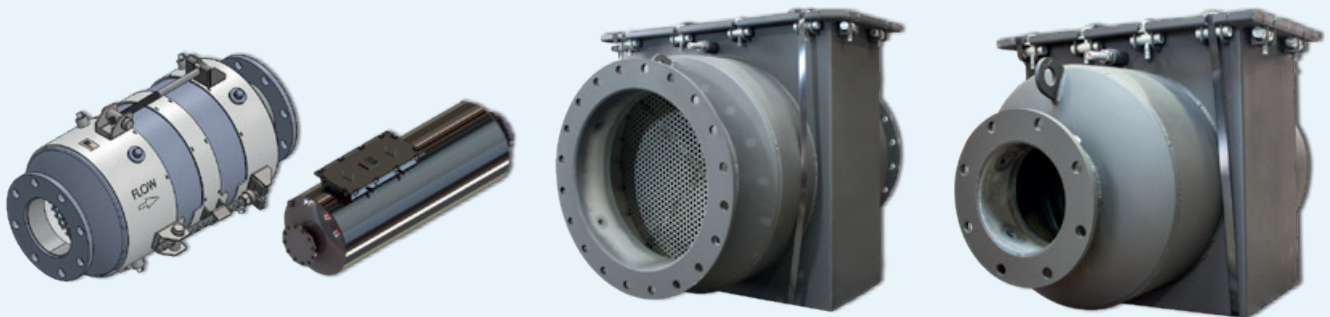
Reference oxygen concentration (%)  Max. allowable pressure (bar)

**Sizing of Catalyst Housing**

Housing type  Max. housing length (mm)  Allowed housing length (mm)

Number of exhaust gas pipes (size)  Flange specification  Housing with measurement ports?

Individual Housing Solutions and Acoustical Silencers on Request!



## Ordering Information



### Catalysts for GE JENBACHER® Gas Engines

P/N	Figure	Description	Application	Cell Density	Shell		Matrix Depth	Equivalent to
					Diameter	Depth		
21.02.504-30089-001E	1	Oxidation catalyst element	J312	300 cpsi	504 mm	100 mm	89 mm	EP-AL 600 (000207)
21.02.520-20213-001E	2	Oxidation catalyst element	J312	300 cpsi	520 mm	213 mm	89 mm	EP-AL 534-AWT (000165), 608158
21.02.520-20089-001E	3	Oxidation catalyst element	J312	200 cpsi	520 mm	133 mm	89 mm	EP-AL 837 (000213), 607401
21.02.518-30059-001E	4	Oxidation catalyst element	J412	300 cpsi	518 mm	100 mm	89 mm	586171
CAT03S44	5	Oxidation catalyst element	J420	200 cpsi	610 mm	133 mm	89 mm	607405



### Catalysts for MWM® Gas Engines

P/N	Figure	Description	Application	Cell Density	Shell		Matrix Depth	Equivalent to
					Diameter	Depth		
CAT03S61	1	Oxidation catalyst element	TCG 2016 V08 C	300 cpsi	300 mm	89 mm	89 mm	EP-AL 300-AWT (000196)
21.01.390-20108-001-E	2	Oxidation catalyst element	TCG 2016 V12 C	200 cpsi	390 mm	133 mm	108 mm	EP-AL 400-AWT (000203)
21.01.441-20108-001E	3	Oxidation catalyst element	TCG 2016 V16 B	200 cpsi	441 mm	133 mm	114 mm	EP-AL 450-AWT (000204)

## Ordering Information



### Catalysts for MAN® Gas Engines

P/N	Figure	Description	Application	Cell Density	Shell		Matrix Depth	Equivalent to
					Diameter	Depth		
21.02.254-30089-001E	1	Oxidation catalyst element	E2876, E2848, E2842	300 cpsi	254 mm	100 mm	89 mm	EP-AL 250-AWT (000191)
21.02.310-20089-001E	2	Oxidation catalyst element	E2842	200 cpsi	310 mm	133 mm	89 mm	EP-AL 300-AWT (000196)
HOUA1005	3	Oxidation catalyst with universal flange (DN100 PN6)	universal	300 cpsi	264 mm	300 mm	89 mm	EP-AL 200-DN100 PN6 (000190)
21.02.260-20089-001E	4	Oxidation catalyst element	Agenitor 250 kW	200 cpsi	260 mm	133 mm	89 mm	
21.02.339-20089-001E	5	Oxidation catalyst element	Agenitor 400 kW	200 cpsi	339 mm	160 mm	89 mm	

### Catalysts for MTU® Gas Engines

P/N	Figure	Description	Application	Cell Density	Shell		Matrix Depth	Equivalent to
					Diameter	Depth		
EC-1950-14-S-CS	6	Catalyst housing with flanges (DN350 PN10) and access door for installation of element P/N 21.01.495-30089-001E	12V4000 GS L32FB		518 mm	1140 mm		
21.01.495-30089-001E	6	Oxidation catalyst element, fits into housing P/N EC-1950-14-S-CS	12V4000 GS L32FB	300 cpsi	495 mm	89 mm	89 mm	
EC-2850-20-S-CS	6	Catalyst housing with flanges (DN500 PN10) and access door for installation of element P/N 21.01.724-30089-001E	20V4000 GS L32FB		724 mm	1140 mm		
21.01.724-30089-001E	6	Oxidation catalyst element, fits into housing P/N EC-2850-20-S-CS	20V4000 GS L32FB	300 cpsi	724 mm	89 mm	89 mm	

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