

# Japanese Eco Fuel Catalyst

*Revolutionizing fuel  
efficiency & sustainability*

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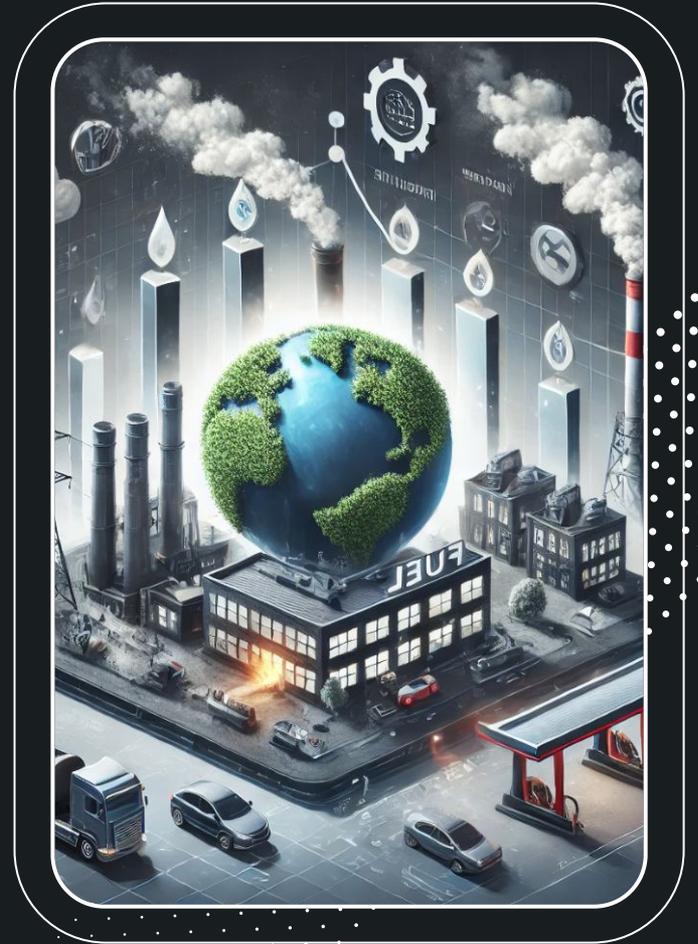
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# The Growing Need for Fuel Efficiency

The global energy crisis, rising fuel costs, and environmental concerns are pushing industries to seek cost-effective, eco-friendly solutions.

Traditional fuel consumption methods lead to:

- Higher operational costs due to excessive fuel usage
- Inefficient combustion, resulting in wasted energy
- Harmful emissions, contributing to pollution and regulatory penalties



# What is the Japanese Eco Fuel Catalyst?

The Japanese Eco Fuel Catalyst (JEFC) is a revolutionary fuel activation catalyst designed to:

- Optimize fuel combustion, ensuring near-complete burning of hydrocarbons
- Work with gasoline, diesel, kerosene, and heavy oil across various applications
- Reduce fuel consumption by 20–30%, leading to substantial cost savings
- Lower emissions of CO<sub>2</sub>, CO, NO<sub>x</sub>, and SO<sub>x</sub>, making it an eco-friendly alternative

\*\* Only a small proportion (1/10000) is needed to achieve maximum impact

# Why JEFC is superior to fuel additives

## Fuel Additives:

- Act as an additional flammable substance
- Only partially assist in combustion, often leaving carbon residue
- Require frequent replenishment

## Japanese Eco Fuel Catalyst (JEFC):

- Breaks down fuel molecules, making combustion more efficient
- Ensures almost complete combustion, preventing carbon buildup
- Does not burn itself, meaning it actively enhances fuel performance
- Works immediately, with measurable improvements in torque, horsepower, and efficiency

\*\*By choosing JEFC over traditional additives, businesses save more fuel, reduce maintenance costs, and lower emissions

# The Science behind JEFC - How it works

## Before Applying JEFC:

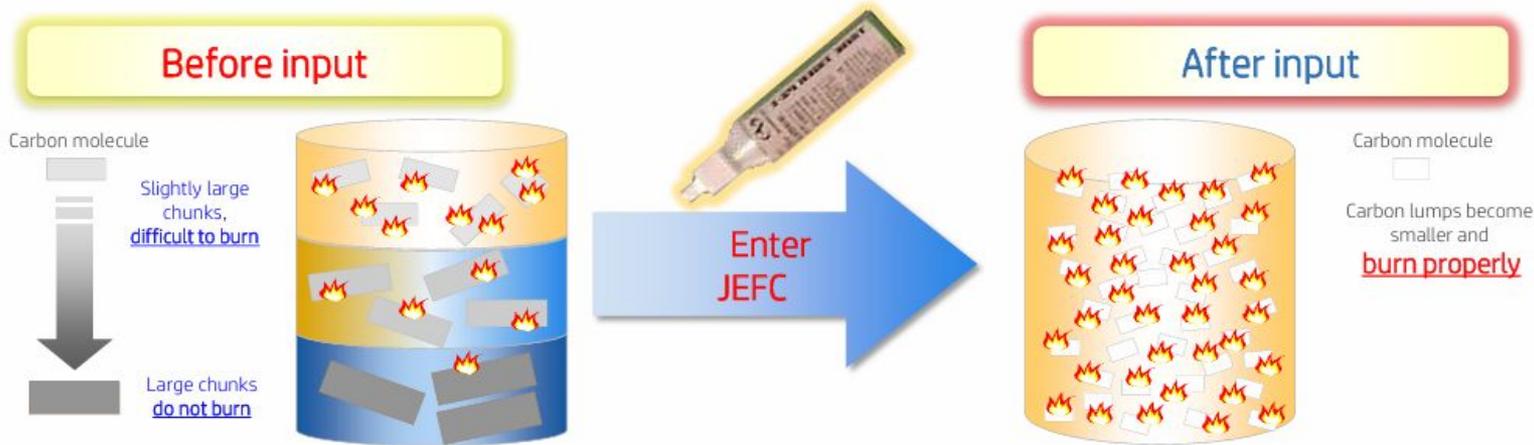
- Large fuel molecules cause inefficient combustion
- Unburned fuel leads to black smoke, air pollution, and energy loss
- Engines and boilers work harder, consuming more fuel and increasing costs

## After Applying JEFC:

- Fuel molecules are fragmented, improving burn efficiency
- Engines run cleaner and smoother, reducing wear and tear
- Fuel consumption drops by 20-30%, leading to lower costs
- CO and NOx emissions are significantly reduced, ensuring regulatory compliance

\*\*This isn't just a claim - it's backed by scientific research, real-world testing, and proven results.

# Visual Representation



# Where can JEFC be Used?

The Japanese Eco Fuel Catalyst is versatile and ideal for:

## 1. Automotive & Transportation:

- Fleets, logistics companies, and government vehicles
- Military and defense units

## 2. Industrial & Manufacturing:

- Boilers, furnaces, and generators in factories, plants, and processing units
- Hotels, hospitals, and energy plants

## 3. Agriculture & Food Processing:

- Poultry farms, greenhouses, and food production facilities

JEFC has already been adopted by major corporations and industries across Japan and India, including:

- Toyota-affiliated companies (Aisin Group) - Fuel efficiency improved by 18%
- Okinawa Orion Beer Factories, JAL Hotel Group, and Hokuetsu Paper Mill
- EXIO's 13,000+ commercial vehicles benefiting from JEFC

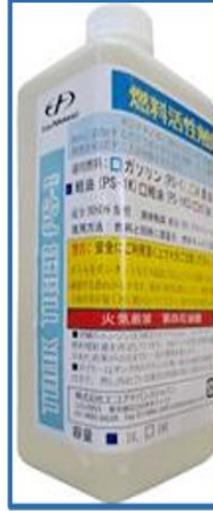
# Types of Catalysts



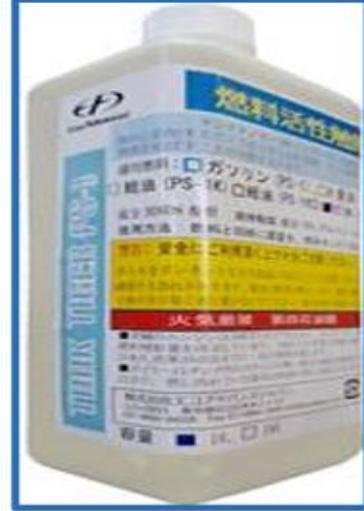
For gasoline/Petrol 1L  
PS-1



For heavy oil/HFHSO/FO A 1L  
PS-1B



For Light oil/ LDO/ HSD/Diesel 1L  
PS-1K



For kerosene 1L  
PS-1T

# Proven Performance - Test

## Results

### Automobile Performance Tests:

- Daihatsu Tanto (Japan) - Improved horsepower and torque
- Nissan Infiniti 3.5L (USA) - Enhanced fuel efficiency across different speed ranges

### Boiler Efficiency Tests - Laforet Resort Biwako:

- CO emissions dropped from 118 ppm to 0 ppm after using JEFC
- Fuel efficiency maximized, saving operational costs

\*\*These results prove that JEFC is not just a concept - it's a game-changing innovation in fuel technology

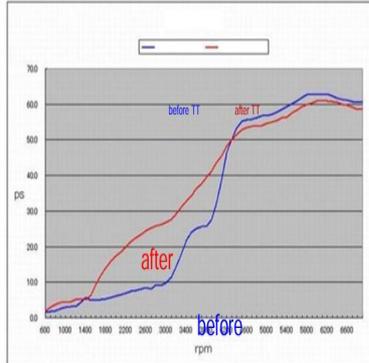
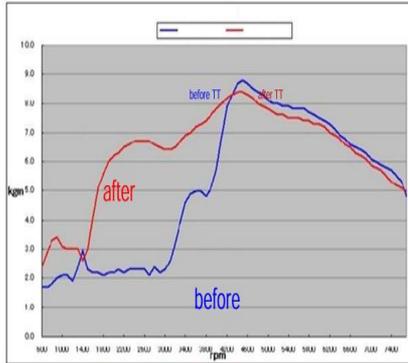
# Proven Results

Horsepower and torque measurement before and after Japanese Eco Fuel Catalyst ①

Automobile  
Application  
Results

■ Torque comparison

■ Horsepower comparison



Measurement vehicle: Daihatsu Tanto

Measurement: Super Autobacs Shinonome store

Using : BOSCH measuring equipment

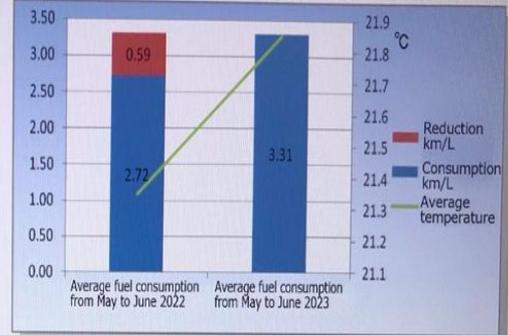
★ Fuels with fine molecules mix well with oxygen. By promoting complete combustion, the engine produces more horsepower and torque, and produces cleaner exhaust gases.

Vehicle: Fuso Truck 10 ton panel van  
Cargo: Loading moving cargo  
Operation status:  
60% city driving, 40% highway driving  
Driver: Same driver  
Fuel: Light oil Motor oil: Mineral oil  
Service area:  
Fukuoka prefecture and surrounding areas  
\*In June, the use of air conditioners will increase.  
\*Temperature will be approximately 0.5°C higher in the same month in 2023 than in 2022.  
Car number: 4521

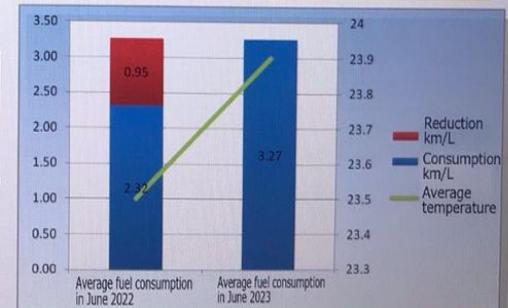
	Consumption km/L	Reduction km/L	Average temperature
Average fuel consumption from May to June 2022	2.72	0.59	21.35
Average fuel consumption from May to June 2023	3.31		21.85

■ The tests in 2023 were conducted under worse conditions than in 2022. The data is collected by a digital tachograph installed on the truck and is highly reliable.

	Consumption km/L	Reduction km/L	Average temperature
Average fuel consumption in June 2022	2.32	0.95	23.5
Average fuel consumption in June 2023	3.27		23.9



In the average fuel consumption comparison from May to June 2022, the fuel consumption was reduced by about **21%**.



Comparing only June 2022 and June 2023, we have achieved a fuel reduction of about **40%**.

# Some more test results and certifications

## 4.燃費比較実験

同一車両・同一人物でタンクタイガーを投入した場合と未投入の場合をそれぞれ約22日間7359km走行での燃費を比較。

車両：トヨタエール715kクラス・ディーゼル3000Lターボ付きエンジン2012年型  
計測器：オクダ製FUEL CONSUMPTION METER Model FC-9521  
燃料：軽油、工場内インタンクより給油。

排気量：3000cc  
CO2排出量計算式：燃料使用量(L)×単位発熱量(38.2GJ/L)×排出係数(0.0187G/GJ)×換算係数(44/12)

※CO2排出量の計算の根拠【添付資料1】1.1CO2排出量計算 P4

### 軽油(従来技術)

日付	曜日	燃料消費量 L	走行距離 km	燃費 km/L	走行時 間H	CO2排出 量t-CO2
2013/5/1	水	31.5	326	10.3	6.8	0.08
2013/5/2	木	30.9	326	10.6	6.4	0.08
2013/5/3	金	32.1	330	10.3	6.2	0.08
2013/5/4	土					0.00
2013/5/5	日					0.00
2013/5/6	月	36.5	347	9.5	7.1	0.10
2013/5/7	火	36.4	347	9.5	7.2	0.10
2013/5/8	水	29.9	326	10.9	6.9	0.08
2013/5/9	木	30.6	326	10.7	6.3	0.08
2013/5/10	金	33.0	330	10.0	7.6	0.09
2013/5/11	土					0.00
2013/5/12	日					0.00
2013/5/13	月	35.6	347	9.7	6.9	0.09
2013/5/14	火	36.1	347	9.6	6.8	0.09
2013/5/15	水	32.2	326	10.1	6.3	0.08
2013/5/16	木	30.7	326	10.6	6.2	0.08
2013/5/17	金	31.9	330	10.3	7.1	0.08
2013/5/18	土					0.00
2013/5/19	日					0.00
2013/5/20	月	35.8	347	9.7	6.1	0.09
2013/5/21	火	36.2	347	9.6	6.2	0.09
2013/5/22	水	30.8	326	10.6	7.2	0.08
2013/5/23	木	30.6	326	10.7	6.8	0.08
2013/5/24	金	33.1	330	10.0	7.3	0.09
2013/5/25	土					0.00
2013/5/26	日					0.00
2013/5/27	月	36.2	347	9.6	6.3	0.09
2013/5/28	火	36.7	347	9.5	6.5	0.10
2013/5/29	水	29.9	326	10.9	5.9	0.08
2013/5/30	木	29.8	326	10.9	6.2	0.08
合計		726.5	7356	10.2	146.3	1.90

## タンクタイガー投入済軽油(申請技術)

タンクタイガーは検証開始時に一度燃料を全て抜き、再度給油したときの給油量の10000分の1を注入。その後は給油時に給油量の10000分の1を注入

日付	曜日	燃料消費量 L	走行距離 km	燃費 km/L	走行時 間H	CO2排出 量t-CO2	タンクタイガー 注入量cc
2013/6/5	水	29.1	326	11.2	5.8	0.08	2.91
2013/6/6	木	28.9	326	11.3	5.9	0.08	2.89
2013/6/7	金	27.3	330	12.1	6.1	0.07	2.73
2013/6/8	土					0.00	
2013/6/9	日					0.00	
2013/6/10	月	27.6	347	12.6	6.1	0.07	2.76
2013/6/11	火	27.9	347	12.4	6.3	0.07	2.79
2013/6/12	水	29.6	326	11.0	5.6	0.08	2.96
2013/6/13	木	28.9	326	11.3	5.7	0.08	2.89
2013/6/14	金	28.0	330	11.8	6.2	0.07	2.80
2013/6/15	土					0.00	
2013/6/16	日					0.00	
2013/6/17	月	26.9	347	12.9	6.1	0.07	2.69
2013/6/18	火	26.8	347	12.9	6.3	0.07	2.68
2013/6/19	水	25.1	326	13.0	5.7	0.07	2.51
2013/6/20	木	26.1	326	12.5	5.9	0.07	2.61
2013/6/21	金	27.6	330	12.0	6.4	0.07	2.76
2013/6/22	土					0.00	
2013/6/23	日					0.00	
2013/6/24	月	25.9	347	13.4	6.2	0.07	2.59
2013/6/25	火	26.4	347	13.1	6.5	0.07	2.64
2013/6/26	水	26.3	326	12.9	5.6	0.07	2.53
2013/6/27	木	25.8	326	12.8	5.9	0.07	2.54
2013/6/28	金	27.3	330	12.1	6.1	0.07	2.73
2013/6/29	土					0.00	
2013/6/30	日					0.00	
2013/7/1	月	25.6	347	13.6	6.3	0.07	2.56
2013/7/2	火	27.1	347	12.8	6.3	0.07	2.71
2013/7/3	水	25.2	326	12.9	5.4	0.07	2.52
2013/7/4	木	26.3	326	12.4	5.6	0.07	2.63
合計		594.3	7356	12.4	132	1.56	59.43



## Japanese Eco Fuel Catalyst

It is a well-known fact that hydrocarbons deteriorate in proportion to time.

Eco Advance Japan has been researching and developing active catalysts for petroleum fuels for many years.

(Fuel Activation Catalyst) (JEFC) has the function of converting unsaturated hydrocarbons in fuel into flammable saturated hydrocarbons, but it does not reform the fuel itself, so it depends on the type of fuel. It can be safely used in any vehicle that uses petroleum-based fuel.

This catalyst is an environmentally friendly product that does not place any burden on the environment.

We look forward to using your service for many years to come.

CEO

Fumio Fukushima

Eco Advanced Japan, Inc

# Financial Benefits - Why Businesses Should Invest in JEFC

## 1. Cost Savings & Profitability:

- Fuel cost reduction of 20-30% translates to higher profits
- Less maintenance required, reducing equipment downtime
- Extended engine life, lowering replacement costs

## 2. Strategic Market Advantage:

- Companies become more competitive by cutting operational expenses
- Supports corporate sustainability goals, enhancing brand image
- Meets global environmental regulations, avoiding penalties

## 3. Estimated Savings Per Fuel Type:

- Petrol Savings - 15-25% per liter
- Diesel Savings - 20-30% per liter
- HEavy Oil Savings - 10-20% per liter

\*\*For businesses managing large fleets or industrial operations, these savings add up to millions annually.

# Reduction effect example

Reduction effect/introduction example: Laforet Biwako

Before input

年月日	ボイラー NO	時間	燃焼状況	温度(°C)	O <sub>2</sub> (%)	CO (ppm)	CO <sub>2</sub> (%)	空気比 (m)	燃焼効率
9月18日	1	14:00	L	124	10.1	26		1.92	
				128	9.1	30		1.76	
				132	β.4	33		1.67	
	1		H	210	5.3	15		1.34	
				217	4.8	22		1.30	
				221	4.6	65		1.28	
9月18日	2		L	210	8.7	48		1.70	
				200	8.5	35		1.68	
				195	8.3	30		1.66	
	2		H	229	8	10		1.62	
				251	7.6	42		1.57	
				254	8	118		1.62	
年前にバーナー調整後なにも無い				適正値	適正値	適正値		適正値	
1月60KL使用				室温20℃	5%以内	0が望まし		1.2~1.3	
1回のメンテナンス注入は12000L				で250℃					
毎年3月に調整 法定検査									

After input

年月日	ボイラー NO	時間	燃焼状況	温度(°C)	O <sub>2</sub> 酸素 (%)	CO (ppm)	CO <sub>2</sub> (%)	空気比 (m)	効率	
10月30日	1	11:16	L	152.2	6.4	0	11	1.44	93.6	
		11:19	L	159.3	6.2	0	11.1	1.42	93.1	
外22度		11:24	H	249.3	4.8	0	12.2	1.30	89.5	
室内23度		11:27	H	257.3	4.8	0	12.2	1.30	89.1	
11月6日	1	14:08	L	208.7	6.1	0	12.2	1.41	92.3	
外20度			H	252.6	5.3	0	11.9	1.34	90.3	
室内22度			M	190.3	5.2	0	11.9	1.33	92.1	
			L	175.2	6.1	0	11.2	1.41	92.3	
			L	180.4	5.9	0	11.3	1.39	92.1	
10月30日	2	11:35	L	178.7	4.8	0	12.2	1.3	92.8	
		11:38	L	178.5	4.8	0	12.2	1.3	92.8	
		11:48	H	257.7	4.8	0	12.2	1.3	90.1	
		12:00	H	264	4.8	0	12.2	1.3	88.8	
		12:12	H	268.9	4.8	0	12.2	1.3	88.6	
11月6日	2	14:38	L	140.4	4.7	0	12.2	1.29	94.6	
			L	141.9	4.6	0	12.3	1.28	94.5	
			L	145.2	4.5	0	12.4	1.27	94.4	
			L	146.2	4.6	0	12.3	1.28	94.3	
3年前にバーナー調整後なにも無い				L	150.6	4.6	0	12.3	1.28	94.1
1月60KL使用				L	154.5	4.5	0	12.4	1.27	94
1回のメンテナンス注入は12000L				H	251.5	4.7	0	12.2	1.29	89.3
毎年3月に調整 法定検査				H	256.8	4.7	0	12.2	1.29	89.1
			H	260.1	4.7	0	12.2	1.29	89	

Japanese Eco Fuel Catalyst (using PS-1B for heavy oil A)

Zero CO (carbon monoxide)!!

# Easy Application & Safety Compliance

JEFC is simple to use, requires no special equipment, and is completely safe

## Application Process:

- Add 1L of JEFC to 10,000L of fuel - that's all it takes
- Works instantly without requiring modifications to existing machinery

## Safety & Environmental Compliance:

- 90% alcohol-based, non-toxic formulation
- No arsenic, chromium, or lead - completely eco-friendly
- Fully compliant with international safety and environmental standards

\*\*By switching to JEFC, companies reduce their carbon footprint while maximizing operational efficiency

# FAQs

## Q. Do I need special equipment to use JEFC?

A: No, simply mix it with fuel as per the recommended ratio

## Q. Does JEFC work with all fuel types?

A: Yes, it is compatible with gasoline, diesel, kerosene, and heavy oils

## Q. How soon will I see results?

A: Immediately – from the first use, you'll notice better fuel efficiency and reduced emissions

## Q. Is JEFC safe for long-term use?

A: Absolutely, it even prolongs engine life and reduces wear and tear



# Honourable Mention - The catalyst is also recommended by the government of Japan on official website

The screenshot shows the official website of the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) of Japan. The page is in Japanese and displays search results for the query "TANK TIGER FUEL CATALYST".

**Header:** 国土交通省 (Ministry of Land, Infrastructure, Transport and Tourism). Navigation menu includes: ホーム (Home), 国土交通省について (About MLIT), 報道・広報 (Press & Publicity), 政策・法令・予算 (Policy, Laws, Budget), 白書・オープンデータ (White Papers, Open Data), お問い合わせ・申請 (Contact Us, Applications).

**Search Results:** 検索結果 (Search Results). The search bar contains "TANK TIGER FEUL". The results section shows "一致する結果はありません" (No results found). Below this, it says "Google で「TANK TIGER FUEL CATALYST」を検索する" (Search for "TANK TIGER FUEL CATALYST" on Google).

**Footer:** 国土交通省 (法人番号2000012100001) [アクセス情報・地図] (Ministry of Land, Infrastructure, Transport and Tourism [Access Information, Map]). Address: 〒100-8918 東京都千代田区霞が関2-1-3 (代表電話) 03-5253-8111. Links include: プライバシーポリシー (Privacy Policy), リンク・著作権・免責事項について (About Links, Copyright, and Disclaimers), 関連リンク集 (Link Collection), 国土交通省 ソーシャルメディア関連リンク集 (MLIT Social Media Link Collection), and ソーシャルメディア利用方針 (Social Media Usage Policy). Copyright © 2008 MLIT Japan. All Rights Reserved.

# Take Action - Secure your fuel savings today!

The Japanese Eco Fuel Catalyst is already transforming industries worldwide. Now, it's your turn to experience the benefits.

## Why Choose JEFC?

- ✓ Immediate reduction in fuel costs
- ✓ Proven performance across industries
- ✓ No modifications or extra equipment needed
- ✓ Environmentally responsible solution

**THANK YOU!**

Contact:

Dr. Pramod Wahane - Director, When's Ltd. Tokyo, Japan