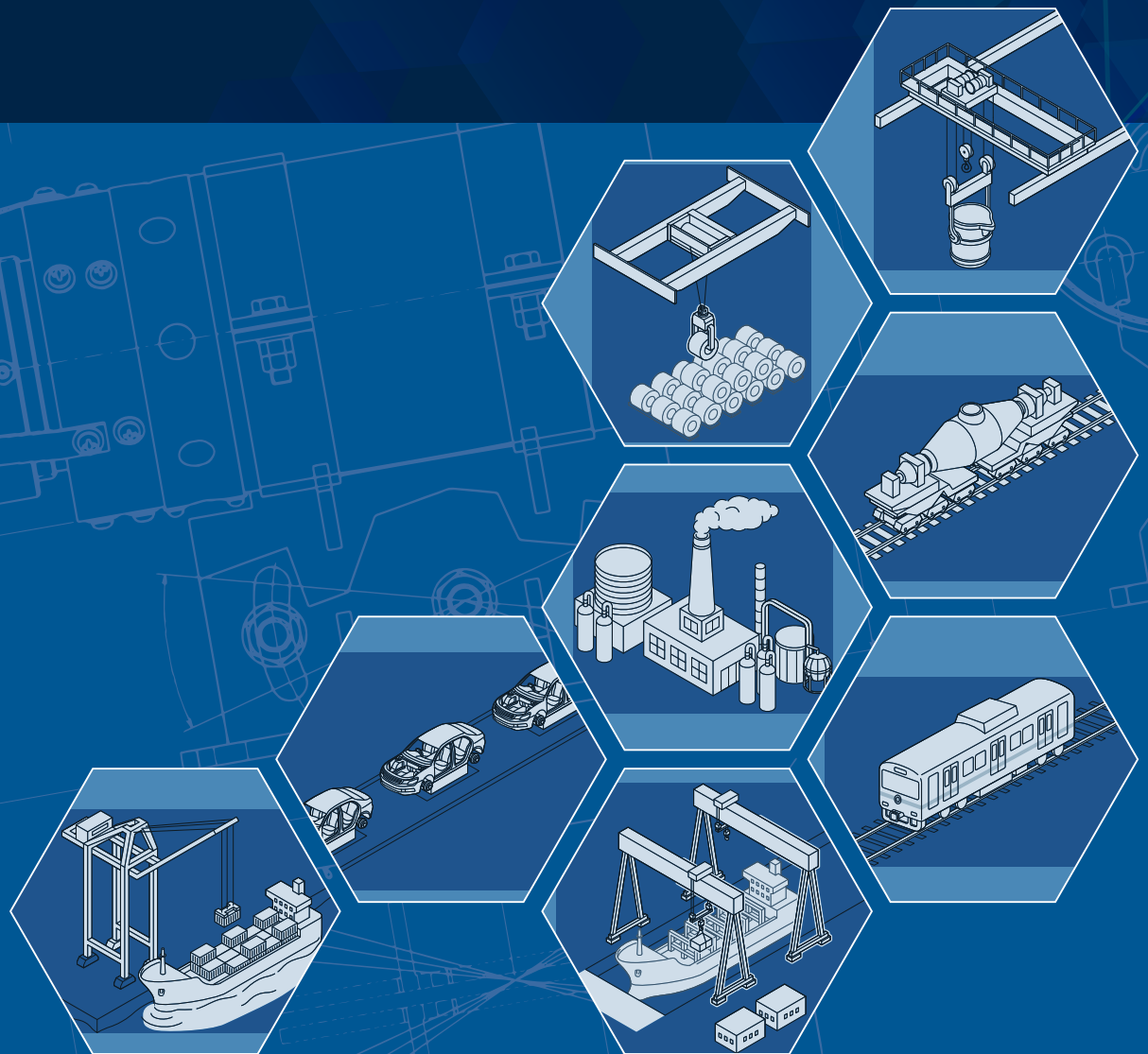


MADE IN JAPAN

Quality and Pride
in Every Detail

LUBRICATOR Catalogue

Prevent wear and extend equipment life



Just break through limitation
FUTEC ORIGIN CORP.

“We continue to accommodate the customers' needs with our advanced technologies and leading-edge products.”

FUTEC ORIGIN designs, develops and manufactures various devices used in industrial circle with a central focus on iron and steel / coil center industry. The company's product lineup includes; lubricator that prevents wear of crane wheels and rails and prolong the life of wheels, image inspection device and sheet counter utilizing image processing technology, and marker that contributes to improvement of safety for crane transportation.

Our company has expanded its business both within and outside the country while always offering support for the customers' problems and continuously conducting forward-looking development.

Industries relevant to FUTEC ORIGIN

FUTEC ORIGIN products are used in a wide range of industries, including iron & steel and automobile, contributing to a higher productivity, ensuring safety and a higher maintenance efficiency.



Our customers

In Japan

A~D Asahi Kasei Construction Materials Corp. / **Daido Steel Co., Ltd.**

E~J East Japan Railway Company / **Hitachi Plant Mechanics Co., Ltd** / Imabari Shipbuilding Co., Ltd. / Japan Freight Railway Company / Japan Marine United Corporation / **JFE Steel Corporation (including group companies)** / JGC Holdings Corporation

K~M Kanadevia Engineering Corporation / Kawasaki Heavy Industries, Ltd. / Kobe Steel, Ltd. (including group companies) / Krosaki Harima Corporation / Mazda Motor Corporation / Mitsubishi Chemical Group Corporation. / **Mitsubishi Heavy Industries, Ltd.** / Mitsubishi Materials Corporation / Mitsui E&S Co., Ltd.

N~Q Niigata Transys Co., Ltd. / **Nippon Steel Corporation (including group companies)** / Onomichi Dockyard Co., Ltd. / Osaka Port Authority / Osaka Steel Co., Ltd.

R~T ShinMaywa Industries, Ltd. / **Sumitomo Heavy Industries Material Handling Systems Co.,Ltd.** / **Tadano Infrastructure Solutions Ltd.** / **The Japan Steel Works, Ltd.** / The Okinawa Electric Power Company, Incorporated / Tokyo Port Terminal Corporation / **Tokyo Steel Manufacturing Co., Ltd.** / Toyota Motor Corporation / TOYOTA STEEL CENTER CORPORATION / Tsuneishi Shipbuilding Co., Ltd.

U~Z Ube Steel Co., Ltd. / West Japan Railway Company / **Yamato Steel Co., Ltd.** / **Yodogawa Steel Works, Ltd.**

Overseas

A~C **Ansteel Group Corporation Limited** / **ArcelorMittal Nippon Steel India Limited** / **Baoshan Iron & Steel Co., Ltd.** / Changan Ford Motor Company (Nanjing) / **China Steel Corporation** / CSBC Corporation, Taiwan

D~G **FENG HSIN STEEL CO., LTD.** / GAC Honda Automobile Co., Ltd. / GAC Toyota Motor Co., Ltd.

H~M **Jiangsu Shagang Group Co., Ltd.** / **JSW Steel Limited** / JTEKT Sales Europe B.V. / **Liuzhou Iron and Steel Group** / Lyttelton Port Company (Christchurch)

N~P **N.Z.Steel** / Port Authority of Thailand (Bangkok Port) / Port of Seattle / **POSCO Co., Ltd.**

Q~S Shanghai Jiangnan Shipyard (Group) Co., Ltd. / SMRT Corporation Ltd. / **Steel Authority of India Limited (SAIL)**

T~Z Taiyuan Heavy Industry Co., Ltd. / **Tata Steel Limited** / Tianjin FAW Toyota Motor Co., Ltd. / Toyota Motor Manufacturing, Kentucky, Inc. / **TT STEEL PROCESSING (THAILAND)CO., LTD**

“Technologies that support our future and the power to deliver safety”

We continue to pursue technological innovation and endeavor to improve the product quality.
We prioritize safety, efficiency and environmental consciousness in order to meet the need of customers, and value our contribution to realizing sustainable society.
We will continue to provide value to an entire society through technological evolution.



Company profile

Company name	FUTECH ORIGIN CORPORATION
Representative	Hidetaka Hirata
Foundation	1955
Capital fund	10,000,000 yen (Capital stock: 1,700,000,000 yen)
Location	Address: 625-4 Nishiuetacho, Takamatsu-shi, Kagawa 761-0445
TEL	+81-87-849-1281
Number of employees	40 or more
Business description	Develops, manufactures, sells and develops on a contract basis lubricators (lubrication apparatus), image inspection devices, sheet counter (part counter), and safety markers.

HISTORY

- 1955** Established Fuji Flange Lubricator Co., Ltd. to manufacture flange lubricator for special-purpose vehicles.
- 1959** The flange lubricator for vehicles manufactured by the company was officially designated as a part used in national railway vehicles.
- 1960** Completed the development of wheel flange lubricator for cranes.
- 1961** Changed the company name to Fuji Lubricator Co., Ltd.
- 1962** Started manufacturing chain lubricators.
- 1968** Started manufacturing center markers and dry flange wear-resisting instruments.
- 1970** Earned an Award for Director-General of the Science and Technology Agency (for brake clearance adjuster)
- 1973** Earned an Award for Director-General of the Science and Technology Agency (for wheel/rail flange lubrication apparatus)
- 1991** Established FUTECH ORIGIN CORPORATION
- 1992** Fuji Lubricator Co., Ltd. merged into FUTECH Inc. and changed the name to FUTECH Inc. Transferred the lubricator business to FUTECH ORIGIN CORPORATION.
- 2010** Started manufacturing and sales of safety markers. Developed image inspection devices.
- 2014** Started sales of image inspection devices (High-Res).
- 2016** Started sales of sheet counters.
- 2019** Started sales of image inspection devices (Cyano). Started sales of image inspection devices (High-Res).

Corporate philosophy

MISSION

With our own technologies and ideas, we realize sustainable and perfect Monozukuri scenes, and support an evolution of customers all around the world as a partner that creates the future together.

VISION

We deliver our products to manufacturing scenes all around the world and support safe and perfect Monozukuri of the customers.

VALUE

- "Our own technologies and ideas"
- "Provision of solutions that realize improvement of safety and optimization of the operation"
- "Sincere support for the customers"

SPIRIT

"Customer-first policy"

"Challenge to technological innovation"

"Professionalism"

Lubricator (lubrication apparatus)

Benefits of Product Implementation

Economical

- The lubrication/maintenance operation used to be performed manually is automated to save manpower.
- The lubricator extends the life of the machine, substantially reducing the replacement cost.
- The lubricator reduces the frequency of replacing wheels and rails, etc., decreasing the downtime.

Safety/environmental

- The lubricator prevents accidents and downtime of the crane caused by wear of flange/rail.
- The lubricator improves safety by preventing accidents, such as falling from height or getting caught in a machine, that are likely to occur in manual lubrication.
- The lubricator not only reduces crane noise, but also reduces electricity consumption with decreased electrical resistance and CO₂ emission, ultimately contributing to relieve some environmental burden.



▼ Wet-type lubricator



Rail lubricator
RVF-type



Flange lubricator
for cranes
F-type



Rope lubricator
RR-RG type



Gear lubricator
GF-type



Tread lubricator
VF-type



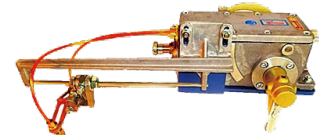
Flange lubricator for
low-speed vehicles
BF-type



Wire rope lubricator
RWF-type



(Oil feeder) Chain automatic
lubricating apparatus
CR-type



(Oil feeder) Chain
automatic lubricator
CS-type

▼ Dry type flange lubricator



CL-10 type



CL-20 type



MCL-type

More about our lubricator
(benefits and our product's
strengths etc.)

CHECK HERE!



*We have products other than those listed above. We also have models having different oil discharge orientation and different mounting brackets. Moreover, we customize ready-made products and develop new products according to the customer's needs. Please feel free to make an inquiry.

A wide variety of models respectively focusing on crane, gear, rope or chain for industrial use are included in our product line. They are wear-resistant prolonging the life of equipment and contributing to the cost reduction.

Fitting equipment for FUTECH ORIGIN's products and the use purposes (as an example)

Industry	Installation site	Subject facility	Use purpose	FUTECH ORIGIN's installable products								
				RVF	F	CL-10	RR/RG	GF	BF	CS	CF	CR
Ironworks	Hot strip mill/ Cold strip mill	Circular-overhead traveling crane/ Transfer line/Trolley	•Lubrication of crane traveling/ traverse wheels •Lubrication of crane rail	●	●	●	●	●		●		
	Cold strip mill	Lifting-magnet crane		●	●	●	●					
	Coil yard (warehouse)	Coil lifter/coil carrier vehicle		●	●	●	●					
	Pier	Pier container crane		●	●	●	●					
	Steel plant	Casting crane		●	●	●						
	Raw material yard	Reclaimer		●	●	●						
	Pier	Pier container crane	Lubrication of hoisting wire rope			●	●					
	Raw material pier	Unloader						●				
	Yard vehicle	Torpedo car	Lubrication of traveling wheels						●			
		Steel trolley							●			
Shpbuilding	Dock	Overhead traveling crane/Goliath crane	Lubrication of crane traveling/ traverse wheels	●	●	●						
		Jib crane	Lubrication of crane rail		●							
Port and harbor	Pier	Pier container crane	Lubrication of crane traveling/ traverse wheels			●	●					
			Lubrication of hoisting wire rope				●					
	Container yard	Transfer crane					●					
Automobile	Transfer line	Various types of conveyor chains	Lubrication of conveyor chains							●	●	●

Selection of equipment based on the lubrication type

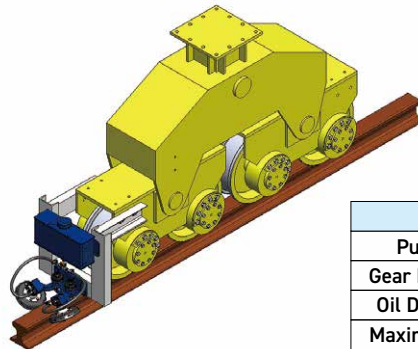
Lubrication type	Wet-type (oil)	Dry-type (solid lubricant)
Outcome of implementing the lubricator	The equipment life can be extended by 4 - 5 times for wheels or 2 - 3 times for rails. In addition, meandering and travel resistance of the crane can be reduced, lowering the power consumption.	Flange wear can be reduced by applying lubricant to the wheel flange.
Use purpose	To reduce wear on flange and rail of traveling wheels	To prevent wear on wheel flange of the overhead traveling crane and oil-incompatible places .
Lubricant used	Lubricant oil (FUTECH ORIGIN-specified lubricant oil or equivalent)	Exclusive-use lubricating rod (Molybdenum disulfide-based solid lubricant)
Characteristics	•The anti-wear effect is greater than the dry-type. •Without the need of power/air source, ultrathin lubricant oil is applied to the friction surface. •Since oil discharge is adjustable, an adequate discharge amount can be maintained according to the operating rate.	•Since it uses solid lubricant, the lubricator can be installed at a place incompatible with oil. •As the body is smaller than the wet-type, this lubricator is easier to install on small wheels or in narrow spaces.
What to keep in mind	An adequate oil quantity control is required.	When used outdoors, the lubricant applied on the surface may be washed away by rainwater, etc.
Maintenance operation	Oil refill and replacement of lubricating wheels.	Needs of lubricating rod
Key to a successful selection	Select this type for a higher wear-resistant effect.	Select this type when the installation site is oil-incompatible, too narrow to secure enough space for installation, or for installation on small wheels.

Lubricator (lubrication apparatus)

Rail lubricator/RVF-type



One unit of lubricator can reduce wear in two areas as the oil applied to the rail is transferred to the flange.



	RVF-500	RVF-1000	RVF-1800
Pump Capacity	0.05cc	0.1cc	0.19cc
Gear Reduction Ratio	1/210	1/210	1/105
Oil Discharge Cycle	109m	109m	54m
Maximum Discharge Volume	0.46cc per 1000 meters	0.9cc per 1000 meters	3.5cc per 1000 meters

Main features

- The oil is transferred from the lubricated rail-side to the flange portion, protecting both rails and flange from friction.
- **Without requiring electric or air source**, flange is lubricated with a infinitesimal quantity of oil that is **discharged only when the crane is in operation**. It reduces flange wear and extends the wheel replacement interval (by **4-5 times for wheels or 2-3 times for rails**).
- A built-in FUJIMATIC PUMP enables a stable, tiny amount of oil discharge.
- As it lubricates both sides of the rail simultaneously, fewer points of installation are necessary, making maintenance easier.
- Since the lubricating wheels are designed to swing horizontally, they don't miss the lubricating points even the crane sways from side to side while in operation.

Use/Implementation

Used for traveling wheels of overhead traveling cranes/jib cranes/gantry cranes at steel plants, shipyard and harbor.

Other specifications	There are three products available depending on the amount of oil discharge (RVF 500/1000/1800)
The number of installation	2 sets of lubricator (body) and oil tank per crane
Contents	Lubricator (body), oil tank (5L, with T-joint), and hose (2000mm) x2
Weight	Approx. 12kg

Important Notes

If there are gaps or misalignment in the rail joints, please use a flange lubricator (F-type).

• Rope lubricator/RR-type



• Sheave lubricator/RG-type



Applies an amount of oil proportional to the rope's travel distance to achieve ideal lubrication for wire ropes.

Use/Implementation

Ropes for overhead cranes, wire sheaves for container and overhead traveling cranes

Main features (RR)

- Complete automation can be achieved without requiring a control device thanks to the interlocking system between the wire rope and the lubrication wheel.



Contents	Lubricator (body), oil tank (5L), and hose (2000mm) x 1
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Application	Type	Rope diameter	Outer Diameter	Overall Width	Rubber Width	Overall Height
Rope	RR4-12	φ 12~φ 17	φ 210	18	15	348
	RR4-16	φ 18~φ 21		30	16	352
	RR4-20	φ 22~φ 29		35	21	
	RR4-30	φ 30~φ 39		45	31	

In addition to the sizes listed above and right, other sizes are available. We can also custom-make an order to your desired size.

Main features (RG)

- A tiny amount of oil is applied to the sheave groove with a minute pump that operates only when the sheave is turning, which further lubricates the wire rope by transfer.



Contents	Lubricator (body), oil tank (5L), and hose (2000mm) x 1
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Application	Type	Rope diameter	Outer Diameter	Overall Width	Rubber Width	Overall Height
Sheave	RG4-12	φ 12~φ 16	φ 210	18	15	352
	RG4-16	φ 16~φ 22		30	22	387
	RG4-20	φ 22~φ 28			28	
	RG4-30	φ 28 or larger		φ 280		



Flange lubricator for crane/F-type

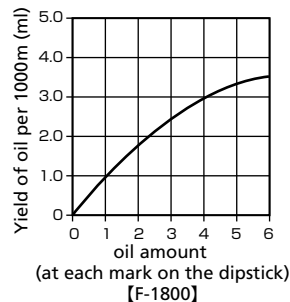
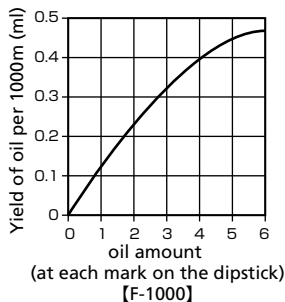
It reduces wear on flange of a crane, thus extends the wheel replacement interval dramatically.

Main features

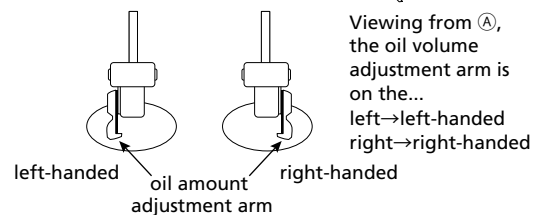
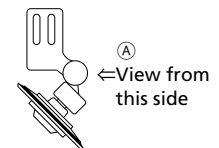
- Without requiring electric or air source, flange is lubricated with a infinitesimal quantity of oil that is **discharged only when the crane is in operation**. With decreased friction resistance, it reduces flange wear and extend the wheel replacement interval (by **4-5 times for wheels or 2-3 times for rails**).
- The oil feed can be automated in the crane maintenance operation.
- It may reduce abnormal noise.

Use/Implementation

Used for overhead traveling crane and jib crane.



Left/Right-handed orientation



Other specifications	There are 2 types depending on oil discharge (F-1000, F-1800).
The number of installation	4 sets of lubricator (body) and oil tank per crane (2 sets on each side)
Contents	Lubricator (body), oil tank (2L), and hose (800mm)×1
Weight	Approx. 5.1kg

Dry type flange lubricator / CL-10 type, CL-20 type



CL-10



CL-20

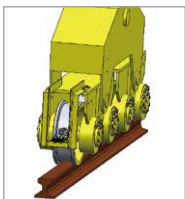
Best suited for preventing crane wheel wear. By using a solid lubricant, it can be installed on cranes where oil cannot be used.

Use/Implementation

This lubricator may be installed on overhead traveling cranes (traveling/traverse wheels) and other cranes where oil cannot be used.

Main features (CL-10)

- It is a solid lubricating material, **containing molybdenum disulfide, and has high wear resistance**. It reduces friction/wear and extends the life of wheel flange.
- Because it uses dry wax, this lubricator may **be installed on a crane where oil cannot be used**.
- This compact compass-type lubricator can be installed from any direction, and also **can be easily installed in a narrow space**.
- The metal fittings of the product never scratch the flange face.



Main features (CL-20)

- Due to the compact structure, it can be installed in a narrow space between traverse wheels and other space where CL-10 type cannot be installed.
- The straight-shaped lubricating rod has **high vibration resistance**.



Possible range of installation	Min. 60mm - Max. 160mm
The number of installation	Install one lubricator on each wheel. •4-wheel crane: 4 sets •8-wheel crane: 8 sets
Contents	Lubricator (body) x1, lubricating rod x2
Lubricating material	MS-400 lubricating rod is used (containing molybdenum disulfide)
Weight	Approx. 2kg

Possible range of installation	Min. 40mm - Max. 130mm *Please choose from "no spacer", "10mm", "20mm" and "30mm" depending on the tread width.
The number of installation	Install one lubricator on each traveling wheels. •4-wheel crane: 4 sets •8-wheel crane: 8 sets
Contents	Dry lubricator (body) x1, lubricating rod x2
Lubricating material	MS-20 lubricating rod is used (containing molybdenum disulfide)
Weight	Approx. 1.2kg

Parts and Consumables

Lubricating wheel

Please replace a part when wear is detected in the inspection.
(Roughly when to replace: When oil discharge becomes non-smooth due to felt clog)

For RVF-type

Replacement part for RVF500/1000/1800 types.



For F-type

Replacement part for F1000/1800 types.



Lubricating rod

MS400

Use two lubricating rods
per unit of CL-10



Sales unit A package contains 8 rods.

Oil tank

Exclusive-use oil tank for FUTEC ORIGIN's lubricator

Main features

Connect the tank to the main body with a hose before use. *Use one tank per lubricator as a basic construction.
Available T-joint to feed from one tank to two/three lubricators.(Option)



20L



5L



2L

FUTEC ORIGIN CORPORATION

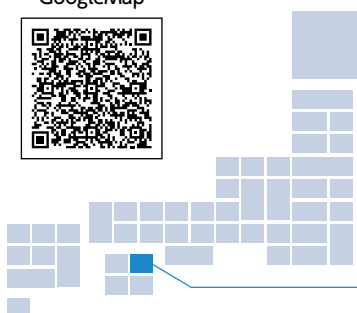
Location

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Web site



GoogleMap



Contact Information