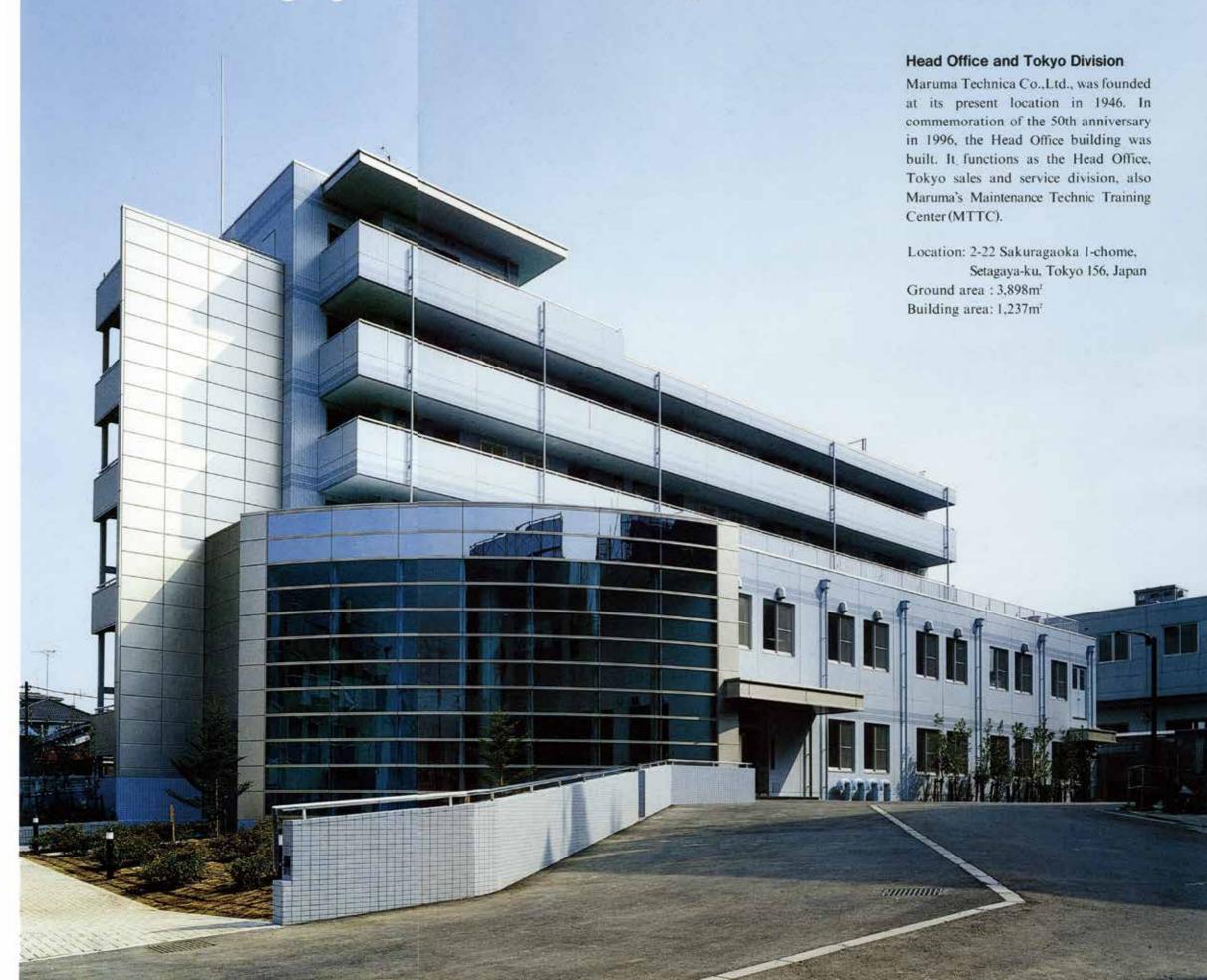


GUIDE TO MARUMA

It has been 60years since starting from "Zero" Challenging the endless technological innovation

MOTTOS

- 1. Pioneer Spirit
 - Utopia for Workers -
- 2. Harmony
- 3. Progress and Improvement
- 4. Spirit of Service
- 5. Reward Merit, Punish Faults
- 6. Immediate Implementation and Resolute Decision-making



In 1946, Maruma started the first repair and maintenance workshop for earthmoving machines in Japan. Since then, we have concentrated and contributed toward the development of this industrial field. Along with our long experience, we have incorporated the technology from overseas and developed our own high level of technology in the manufacturing and marketing of our attachments, special tools and equipment for repair and maintenance services. The resulting reliability and ease of use of our products have been highly acclaimed by our customers.

Ever since the Japanese Government started extending technical and economical aid to developing countries, Maruma has gained a good reputation for its efficient results in supplying service workshops, from designing, engineering and preparing the equipment layout to the training of personnel.

We have also been extending our technical collaboration to countries in Asia, Africa and Latin America by dispatching our engineers, as well as receiving many trainees, instructing them on the latest repair and maintenance techniques.

Hereafter, we are striving to make Maruma a fully integrated engineering company, to devote our services and contribute to the needs of the global community.

BRIEF HISTORY

- 1946 Maruma Tractor & Equipment Co., Ltd. was established.
- 1949 Appointed as authorized service shop in Japan for Caterpillar Tractor Co., U.S.A.
- 1955 Appointed by Kyokuto Boeki Co., Ltd. as authorized service shop in Japan for Barber-Greene Co., U.S.A.
- 1957 Appointed as authorized service shop for Komatsu Ltd.
- 1959 Started the manufacture of special tools for tractors (extra high pressure hydraulic pumps and cylinders).
- 1960 Established Chemical Machinery Department.
- 1963 Opened Nagoya Factory.
- 1964 Opened Mizushima Branch Office in Kurashiki City to expand business in the chemical industry. Opened Sagamihara Factory in Sagamihara City.
- 1965 Received orders from the newly-established Caterpillar-Mitsubishi Co., Ltd. for special tools and attachments for tractors. This marked the tremendous expansion of Maruma's manufacturing activities.
- 1966 Received orders from Komatsu Ltd. for the engineering and manufacture of special tools for tractors.
- 1968 Established the new plant in Sagamihara Factory for the manufacture of special attachments for tractors as the first specialized factory in Japan.
- 1971 Opened Branch Office in Kashima industrial District.
- 1972 Entered into a license manufacturing agreement with Wolff Manufacturing Company, U.S.A., for the manufacture and sales of L & B Rodgers undercarriage rebuilding equipment. Entered into a contract with Stoody Company, U.S.A., to be the exclusive distributor in Japan for sales of hardfacing welding wire and rods.
- 1973 Entered into a contract with Charles Machine Works Inc., U.S.A., to be the exclusive distributor in Japan. Entered into a technical tie-up with Rome industries, U.S.A., for manufacture and sales of special attachments for tractors.
- 1976 Entered into a technical tie-up with Medford Steel Division CSC Inc., U.S.A., for manufacture of ROPS cabs in Japan. Increased capital to ¥96,000,000.
- 1978 Entered into a technical tie-up with Barrier Corporation, U.S.A., for manufacturing the noise control system exclusively in Japan.
- 1979 Authorized by Ministry of Labor as an inspection and verification station for wheeled construction equipment and forklift trucks.
 Installed 3,000 HP dynamometer in Sagamihara Factory.
- 1981 Established Maintenance Technic Training Center in commemoration of 35th Anniversary.

- President Yasumitsu Moriki received an honorary award from the Ministry of Construction for his many years of service to the construction industry.
- 1983 Entered into a contract with Barber-Greene Co., U.S.A., to be the agent of service and parts sales.
- 1984 Appointed by Caterpillar Tractor Co., U.S.A., as authorized supplier of undercarriage rebuilding equipment and toots.
- 1985 Entered into an original equipment manufacturing agreement with Leslie Hartridge Limited, U.K., for supply of diesel fuel injection pump testers.
- Appointed by Cummins Diesel Ltd., as a dealer in KANTO AREA and CENTRAL JAPAN AREA.

 1986 Changed the company's name to "Maruma Technica Co., Ltd." in commemoration of the 40th anniversary of the foundation.
 - Repair and Maintenance division of Sagamihara Factory was authorized by Marubeni Construction Machinery Sales Inc., as a service shop for Volvo articulated dump trucks.
- 1987 Moved the whole facilities for manufacturing the undercarriage rebuilding equipment from Tokyo Factory to Sagamihara Factory. Increased the production machines and facilities at the shop and enhanced the productivity by adopting many automatic machine tools, welders and plate formation machines.

Combined the operations of Chemical Machinery Department and Underground Construction Machinery Department to establish a new subsidiary company, Maruma Hydraulic and Chemical Service Inc.

Entered into contract with Arcair Co., U.S.A., Metrotech Co., U.S.A., to be the exclusive distributor and Stanadyne Inc., U.S.A., to be the exclusive SERVICE and PARTS sales agent in Japan.

- 1988 Entered into a contract with LaBounty Manufacturing Inc., U.S.A., to be the exclusive distributor in Japan.
 Increased capital to ¥211,609,000.
- 1989 Entered into a contract with OTC Tool & Equipment Division, SPX Corporation, U.S.A., to be the exclusive distributor in Japan.
- 1991 Established construction equipment maintenance factory P.T. Bisma in Indonesia as a joint company with Sumitomo Corporation and P.T.Bintang Cosmos.
- 1992 Entered into a contract with Vermeer Manufacturing Co., U.S.A., to be the exclusive distributor in Japan. Appointed by Krupp Maschinentechnik Germany, as a distributor in Japan for the supply of hydraulic hammers.
- 1994 Established Tokyo Service Center (Maruma Hydraulic and Chemical Inc. and Maintenance Technic Training Center etc.) at the site of the Tokyo Factory.
- 1995 Entered into a contract with Isomec Srl, Italy, to be again of Grapple, Bucket, etc.
- 1996 Established Head office building at the site of the Tokyo Factory.
 In commemoration of 50th Anniversary, established Atsugi Factory.
 Entered into a contract with IMTC, Italy, to be the exclusive distributor in Japan.



Previous Head office & Tokyo Factory



Overseas Trainees

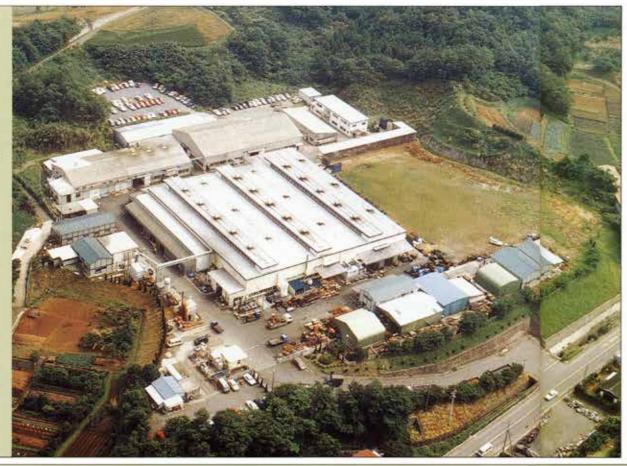
FACTORIES

Atsugi Factory

Established in 1996, the Atsugi Factory has the most up-to-date facilities, manufacturing special attachments, machines for rebuilding and special tools.

Location: 651 Ono, Atsugi City, Kanagawa Pref., 243-01 Japan

Ground area: 39,812m² Building area: 10,909m²

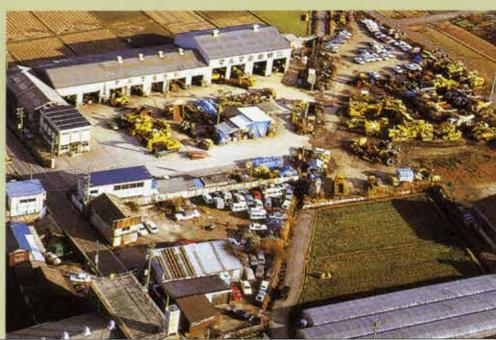


Nagoya Fctory

Established in 1963, to handle the increasing demand for repair and maintenance of construction equipment in Central and Western Japan. This factory also manufactures special attachments.

Location: 25, Nakaichiba, Obari, Komaki City Aichi Pref., 485 Japan

Ground area: 12,886m² Buliding area: 3,354m²



Sagamihara Factory

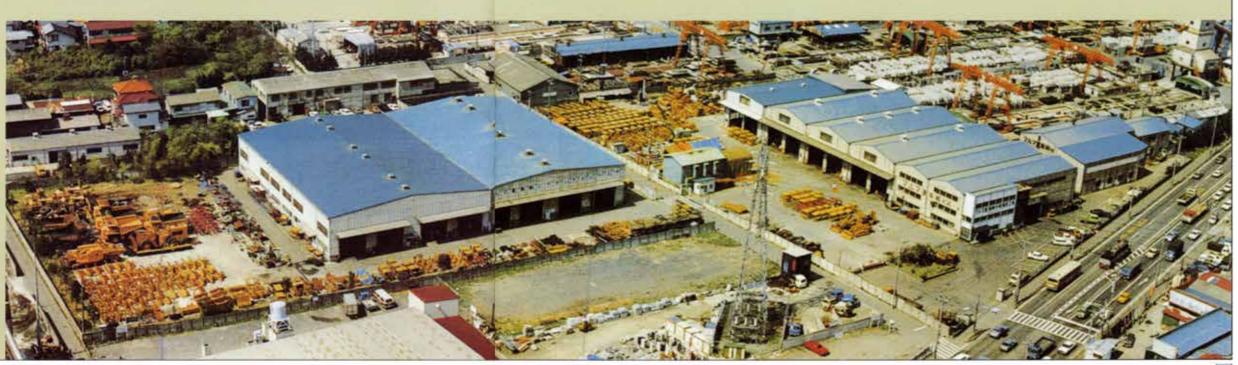
Established in 1964, the Sagamihara Factory manufactures rebuilding machines, equipment and special tools for construction equipment.

This factory also offers repair and servicing of large-sized construction equipment and development of the special attachments for construction equipment.

In addition, centralized repair for hydraulic components is carried out here.

Location: 2-1, Ohnodai 6-chome, Sagamihara City, Kanagawa Pref., 229, Japan

Ground area: 20,669m² Building area: 8,593m²



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WHAT WE DO

PAGE PAGE 9~12 **MANUFACTURING** 15 **CONSULTING & DESPATCHING ENGINEERS** ■ Track Undercarriage Rebuilding Equipment Track Press, Track Welder, Shoe Rebuilder, Roller Welder, Roller Idler Press, etc. Equipment for Maintenance Work Special Tool, Wheel Dolly, Hydraulic Component Universal Tester, 16 **SERVICE TRAINING** Portable Dynamometer, Hydraulic Shop Press, ■ Special Attachments Super Long Boom, Two Way Dozer, Log Fork, ■ Mobile Workshops, Auxiliary Trucks, and Diagnostic Trucks. Maintenance Training Aids. 17 **REPAIR & SERVICE** System Board, Cutaway Models, etc. **SALES ACTIVITIES** 18 13~14 **ENGINEERING** For various Construction equipment, Repair shop equipment, Special tools, Design and Construct Repair Shops and Training Parts and Consumable materials such as Centers for construction equipment, buses and Hard facing welding wires & rods trucks. **■** Recondition Construction **Engineering** Equipment and Maruma "ReCon" ■ Build Vocational Schools ■ Miscellaneous Machinery ■ Build Repair Shops for Construction Road stabilizer attachment, Shearing attachment, Equipment and Automobiles Finisher, Trans-Planting attachment, Multi Tree Chipper, Foundation Work Equipment, etc. ■ Railway Maintenance Machinery ■ Parts and Materials

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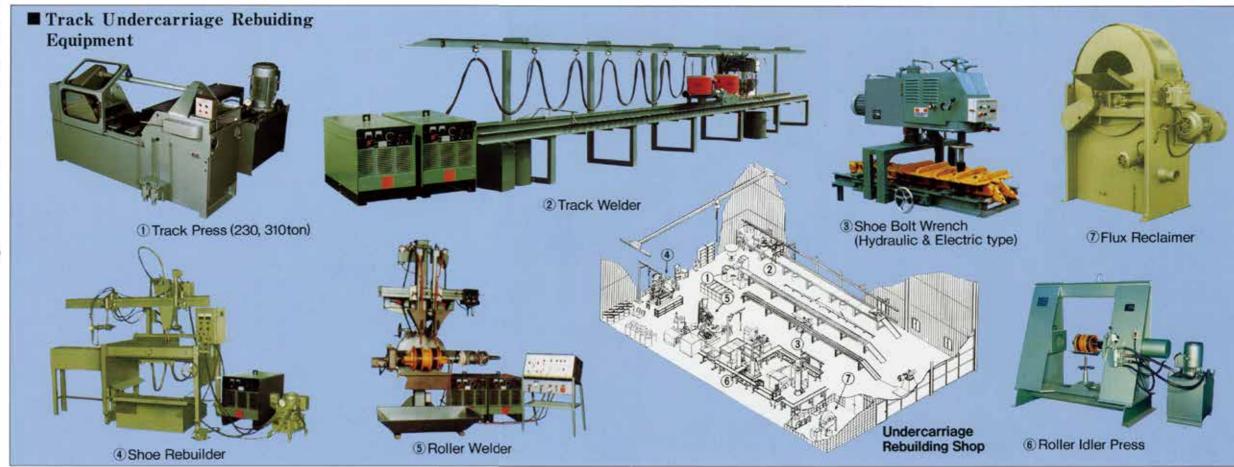
MANUFACTURING(I)

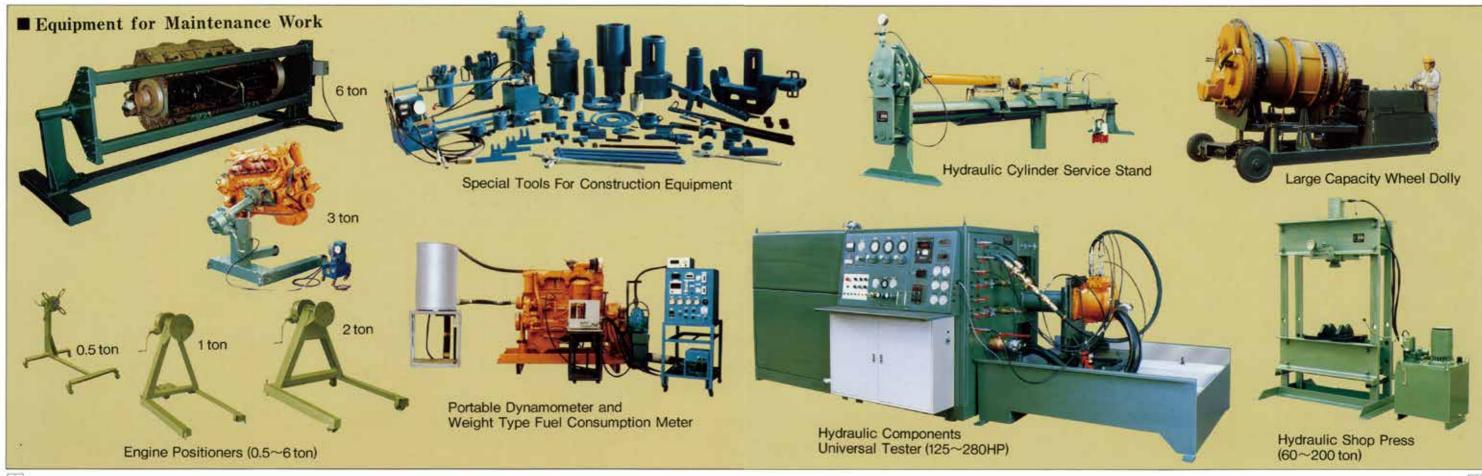
Maruma's high level of technology and skill have been developed through 50 years of hands-on experience in actual machine repair and through technical tie-ups with several overseas manufacturers

As a result, Maruma Technica Co., Ltd., can supply a greater variety of rebuilding equipment, special tools and equipment for maintenance, and special attachments for construction equipment than any other manufacturer in Japan.

License Manufacturing Agreement (in alphabetical order)

- Barrier Corporation, U.S.A.
- · Medford Steel Div., CSC, Inc., U.S.A.
- Rome Industries, U.S.A.



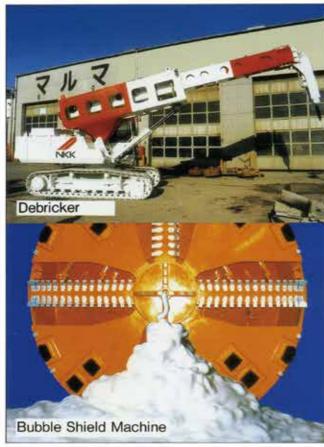


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MANUFACTURING(II)

■ Special Attachments





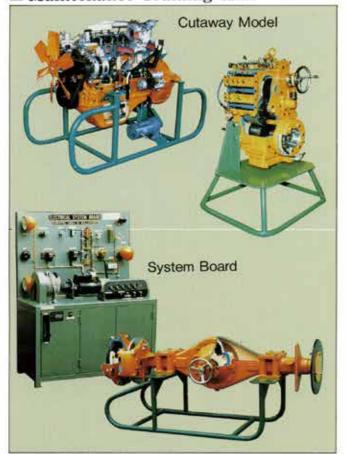


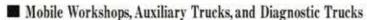


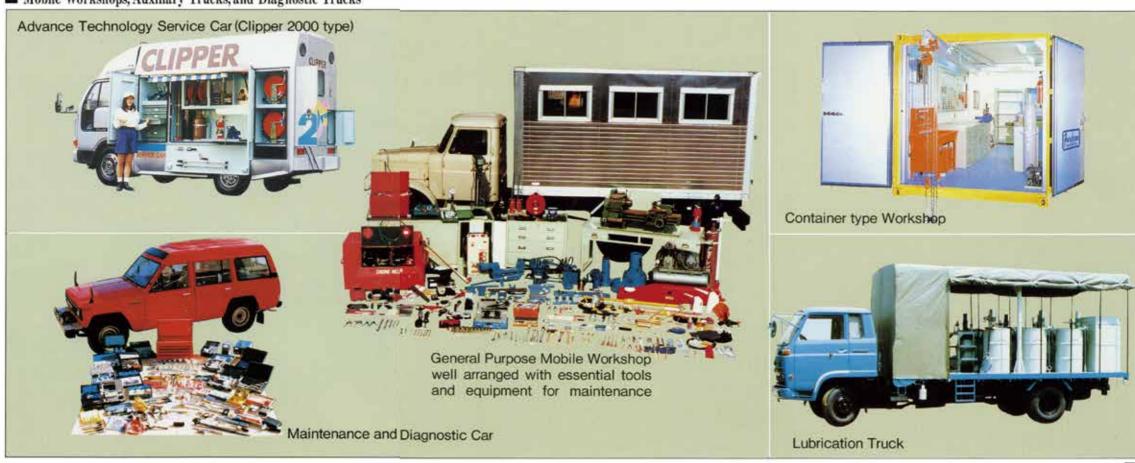




■ Maintenance Training Aids







ENGINEERING

Maruma has wide and long experience in all aspects of building repair shops, from designing the layout to actual operation. Before starting work, all relevant factors are taken into consideration: i.e. the kind of repairs that will be made, the customer's budget, the number of machines that will undergo repair, the nearby available facilities, the number of engineers and their technical level, the parts supply situation, climate, location, and other site conditions. Our customers include government agencies, construction companies, harbor construction companies, and forestry industries.

Maruma has the expertise to install the quality equipment that it manufactures. Our user-oriented service includes providing operating instructions, giving on-thejob training on how to make repairs, and offering advice on how to manage the shop, especially in the area of controlling parts supply and inventories. These strong points give Maruma a decisive advantage over other suppliers.

Recently, Maruma has received several orders to build complete mechanics' training facilities on a turn-key basis. We are now ready to offer our best proposal to prospective customers based on the purpose of training, the length of the training course, number of trainees per course, their present and targeted technical levels, and the customer's budget.

Maruma has earned a good reputation by satisfying the customers thanks to its wide experience in building training facilities, training its own and customer's engineers in several countries of the world, and in running its own extensive repair shops.

■ Engineering







Training on Hydraulic test bench

■ Constructing a Vocational School









■ Building a Repair Shop for Construction



Equipment





Chassis Repair Shop

Undercarriage Rebuilding Shop

CONSULTING & DESPATCHING ENGINEERS

SERVICE TRAINING

On demand, Maruma despatches its engineers to job sites both in Japan and abroad. Our engineers are willing to go wherever construction equipment is in operation, including dams, roads, harbors, drainage works, railways, petrochemical complexes, and deforestation projects.

This despatch service has been winning Maruma the full confidence of many overseas and domestic customers.

Our engineers have been despatched to the countries shown on the map in order to maintain and service construction equipment, train local mechanics, or give instruction in the operation of undercarriage rebuilding equipment.



In 1981, Maruma established the Maintenance Technic Training Center (MTTC) at the Head Office. This facility offers training in maintenance, service, and repair techniques not only to Maruma employees, but also to managers, engineers, and mechanics from domestic dealers, overseas distributors, customers, and government agencies.

Trainees can fully gain from the extensive experience Maruma has acquired from its many years in the field of construction equipment maintenance to learn the technical know-how and become familiar with the various maintenance systems.













Graduation Ceremony

Training

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REPAIR & SERVICE

The reliability of the Maruma's maintenance and repair process, including disassembly, washing, parts inspection. rebuilding, and final inspection has been improved through the use of specially designed tools, equipment and measuring instruments.

Also, Maruma specializes in the installation of compressors at petrochemical plants and city gas plants. It is also responsible for periodic inspections, repairs, technical consultation and other related assistance.

Authorized Service Shop for: (in alphabetical order)

- Barber-Greene Co., (U.S.A. & U.K) Asphalt paving
- · Caterpillar-Mitsubishi Co., Ltd., Construction equipment
- · Cummins Diesel (Japan)Ltd., Cummins diesel engine
- · Garret Turbo Inc., Turbocharger
- Ishikawajima-Harima Heavy Industries Co., Ltd., Construction equipment
- · Kawasaki Heavy Industries, Ltd., Construction equipment
- Komatsu Diesel & Component Co., Ltd., Komatsu diesel engine & component
- Komatsu Ltd., Construction equipment
- . Koyo Machine Co., Ltd., Road cutting machine
- Linnhoff & Thesenfitz Maschinenbau GmbH... Guessasphalt mixer
- · Marubeni Construction Machinery Sales Inc., Volvo articulated dump truck
- · Mitsubishi Heavy Industry Co., Ltd., Concrete pump Fundamental const. machine, Diesel hammer
- Niigata Engineering Co., Ltd., Construction equipment
- Niigata Worthington Co., Ltd., Compressor
- Nippon Sharyo Seizo Kaisha, Ltd., Pile hammer, Scrapedozer
- Nisho Iwai Co., Ltd., All terrain crane
- Okura & Co., Ltd., Vögele asphalt finisher
- Stanadyne Inc., U.S.A., Diesel injection system
- Tokyo Mitsubishi Fuso Motor Sales Corp., Fuso motor

Representing-(in alphabetical order)

- · Cummins Diesel (Japan) Ltd.
- · Komatsu Ltd.
- · Nippon Sharyo Seizo Kaisha, Ltd.
- Tokyo Mitsubishi Fuso Motor Sales Corp.

Acting as distributor-(in alphabetical order)

- · Cejn Production AB Ltd. (hydraulic and aero quick coupler., etc)
- · Cummins Diesel (Japan) Ltd. (diesel engine)
- Flo-Tech, Inc., U.S.A. (hydraulic flow meter, etc.)
- •IMT, Italy (Foundation work equipment)
- Komatsu Ltd. (construction equipment)
- Krupp Maschinentechnik GmbH Germany (hydraulic hammer)
- · LaBounty Manufacturing Div. of Stanley Hyd. Tools U.S.A. (mobile shears)
- · Linnhoff & Thesenfitz Maschinenbau GmbH (guessasphalt mixer)
- · Lucas Assy & Test Systems, Hartridge Test Products England (fuel injection pump tester, injector tester)
- Miller Electric Mfg. Co., U.S.A. (welding equipment)
- Nippon Sharvo Seizo Kaisha Ltd. (construction equipment)
- OTC Div. Spx Corporation, U.S.A. (tools & equipment)
- · Robbins Mfg. Co., U.S.A. (rotary blast hole drilling mechine)
- Stanadyne Inc. U.S.A. (diesel injection system)
- · Sweeney, A Doxer Industries Co., U.S.A. (torque multiplier, etc.)
- · Thermadyne Co., U.S.A. (stoody welding wire and electrodes, areair slice cutting systems)
- Tokyo Mitsubishi Fuso Motor Sales Co., Ltd. (auto-
- Tokyo Roki Co., Ltd. (catalytic exhaust muffler purifier)
- · Vermeer Mfg. Co., U.S.A. (trencher, hammerhead mole, etc.)





Hydraulic Cylinder Disassembling Hydraulic Control Valve Testing







Master-Pin Removing



Hydraulic Component Disassembling



Track Assembling



PT Pump Testing

SALES ACTIVITIES

Besides acting as a supplier of the full line of undercarriage rebuilding equipment, tools, and facilities of its own manufacture. Maruma also sells both brand new and reconditioned construction equipment, Other sales items are special attachments, spare parts and consumable parts for the construction equipment of various makes and customized equipment to meet specific customer requirements.

Maruma's team of experienced and expert engineers can provide practical and expert knowledge for consulting work.

Maruma's many products operate hard at work both in Japan and abroad, providing reliable performance to the end-users.

■ Reconditioned Construction Equipment





Before Reconditioning

After Reconditioning

■ Reconditioned Parts

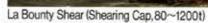






■ Miscellaneous Machinery







Diesel Catalytic Exhaust Purifier







Multi Tree Chipper





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Sagamihara Factory:

2-1, Ohnodai 6-chome, Minami-ku, Sagamihara City, Kanagawa Pref. 252-0331, Japan

Tel:042(751)3800 Fax:042(756)4389

Overseas Sales Dep. Tel:042(751)3024 Fax:042(751)9065 651 Ono, Atsugi City, Kanagawa Pref. 243-0125, Japan

Tel:0462(50)2211 Fax:0462(50)5055

Atsugi Factory: Nagoya Factory:

25, Nakaichiba, Obari, Komaki City, Aichi Pref. 485-0037, Japan

Tel:0568(77)3311 Fax:0568(72)5209