

***KOMATSU  
ELECTRIC INDUSTRY  
CO.,LTD.***

# Company Policy : Let's extend the link of joy through our business !



## Akio Komatsu

President of Komatsu Electric Industry Co., Ltd.  
Representative of HNS- Human Nature and Science- Research Institute

My mottoes are "Mutual trust", "Peace and Harmony" and "Harmonious Spirit". I feel a geopolitical mission of the Korean Peninsula and the Japanese Islands, and wish that sympathy, confrontation, integration, and development spread in the shape of spiral, from "Peace and Harmony", the power born by uniting three kinds of soft power (wisdom with feeling, mission view, and communication ability) and two kinds of hard power (group organizing ability and expedient for realizing reason) in the whole context.

Komatsu Electric Industry keeps to act considering the words, " We should make the global society which people can live continuously and happily.", through 2 main business of the sheet shutter "happy gate monban system" and the total water administration system "YAKUMO SUIISHIN Network".

We won "the Medium and Small Business Research Center Prize" and "the Highest Prize of New Business Grand-Prix" by developing the sheet shutter MONBAN which contributes to prevention of global warming and creating the market. In 2012, happy gate monban system won "the Japanese Grand-prix Prize for an excellent work". YAKUMO SUIISHIN won "the Selection as Remarkable Invention" of the Science and Technology Agency. HNS- Human Nature and Science- Research Institute try to create the model of permanent peace of obtaining reliance and respect from the world and continuing to be satisfied with dignified desire as human, through environment and health business.

Business Philosophy " Funny! Amusing! Enjoyable! Happy!"

Principle of Action " Win-Win-Win and Profit comes later."



## Corporate history

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| <p>1973 The present representative director, Akio Komatsu established the Komatsu industry at the house barn.</p> <p>1981 Company policy is enacted. "Let's extend the link of joy through our business !" Komatsu Electric Industry Co., Ltd. was founded.</p> <p>1985 The sheet shutter "MONBAN" was developed and announced.</p> <p>1991 "MONBAN" was evaluated by the New Business Conference and "the Highest Prize of New Business Grand-Prix" was won. The water observation and control device and "MONBAN" were accepted by the Medium and Small Business Research Institute, and "the Research Center Prize" was won. (Only one company in the Chugoku and Shikoku area)</p> <p>1992 The manufacturing technologies of the sheet shutter "MONBAN" was supplied for the South Korean company "Toyu FA". The water control and observation system, "YAKUMO SUIISHIN" was developed and announced. Tokyo office was established.</p> <p>1994 Colony drainage measurement, control and observation system "New YAKUMO SUIISHIN" was announced. HNS- Human Nature and Science- Research Institute was established.</p> <p>1995 "The Selection as Remarkable Invention" was awarded by the Science and Technology Agency. ("YAKUMO SUIISHIN")</p> | <p>"Package SUIISHIN" was developed and announced.</p> <p>1998 New office building was completed at Matsue Konan Technopark.</p> <p>2000 "New SHUIISHIN Network" and "New Relay Pump Control Board" were announced. Osaka office was established. "Magic Management" (written by Kazuhiro Hayakawa) was published.</p> <p>2003 The new type MONBAN 'MX-10' was developed. The Tokyo data center of "New SUIISHIN Network" was established in the NTT DoCoMo Yoyogi Building.</p> <p>2007 Total delivery of YAKUMO SUIISHIN series broke 3 thousands facilities. The new type MONBAN 'KV-10' was developed. The Minister of Land, Infrastructure and Transport Prize was won. ("MONBAN")</p> <p>2008 The new type MONBAN 'KV Series' was announced.</p> <p>2009 Multiple-purpose management terminal "SA201E, 201X" was announced.</p> <p>2010 The new type MONBAN 'KV Series' was announced. YAKUMO SUIISHIN G Series was announced. Seoul office in Korea was established.</p> <p>2011 The overseas subsidiary, KOMATSU KOREA was established.</p> <p>2012 The Japanese Grand-prix Prize for an excellent work was won. ("happy gate monban system")</p> <p>2012 President Akio Komatsu won the Medal with Blue Ribbon.</p> |
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## Aim at creation of "Peace Culture"



### HNS- Human Nature and Science- Research Institute

The world has fallen into situations which a view does not open, such as monetary disorder and an energy-resources crisis, while nuclear proliferation and a revolution in information technology are progressing. Natural environment is sharply changed on a global scale, and we are asked for the viewpoint of how to retain the human-beings society.

In East Asia, controlled confrontation continues from the historical background, such as the dispute over Takeshima islands, a comfort-women problem and the Sea of Japan naming problem between Japan and the Korean Peninsula.

Against the background of such social environment, the time when the industrialization of peace which can create "the Peace Culture" is needed has come for the first time in human beings history of the Korean Peninsula and the Japanese Islands. The circulation which the present situation is faced squarely with a global view, the place of sympathy is created, and confrontation is led to integration and development is "Peace", and its step is "Peace and Harmony".

HNS had started from "Wisdom Revolution School" where young managers gathered in the background of foundation in 1988, and for more than 20 years since then, we have worked as "think-tank & do-tank" which proposes and performs logically the route to "the global society where we can live a life with joy continuously" based on the essence of life and characteristic of human beings. We propose to sever nuclear weapons from the Korean Peninsula and the Japanese Islands which is the nodal point of 3 big nuclear powers (the United States, China, and Russia) by the energy of confrontation, make the flow of nuclear reduction in the world, combine the culture of fermentation, advanced science, and information and communication technology, and contribute to human beings' restoration and enhancement of health of the world.

### History of HNS



1995 Suto Yahei Symposium



1997 Floral tribute and contribution to the South Korean Independent Memorial Hall



2001 Contribution to the Chinese People Anti-Japanese War Memorial Hall



2005 Visiting and contribution to the China Nanjing Memorial Hall



2006 Peace and Harmony Forum in October



2009 Time of Confusion The sun rises from Izumo.

- Apr.1988 "Wisdom Revolution School" was stated by 20 young managers.
- Apr.1994 HNS- Human Nature and Science- Research Institute was established. "One Village, One Mind" movement which was mainly publication activities for honoring the great men of a hometown publicly was started.
- Nov.1994 The "First Matchmaking World Congress in October" was held.
- Apr.1995 "Suto Yahei Symposium" was held.
- Jun.1995 "Symposium of Human, Water and Food" was held.
- Sep.1996 Symposium of Future Concept of Nakaumi and Honjo Area is held.
- Nov.1996 "Mother Sea, Nakaumi" was published from Diamond publishing company.
- Mar.1997 The "Second Matchmaking World Congress in October" was held.
- Jun.1997 Visiting the South Korean Independent Memorial Hall, Floral tribute and contribution.
- Jul.1998 Food Aid to the Democratic People's Republic of Korea through The South Korean Red Cross
- Jul.1999 "Land of Rising Sun IZUMO" was published.
- Oct.1999 The "Third Matchmaking World Congress in October" was held.
- May.2001 Visiting and Floral tribute to the Chinese People Anti-Japanese War Memorial Hall.
- Feb.2002 "Analects" translated in Japanese, Chinese and English was published.
- Aug.2002 "The great man of river improvement Shichibei Okaji" was published as novel, comic and juvenile literature. "Sanbei Izumo" was completed.
- Sep.2002 Bronze statues of Confucius, Mencius, Yahei Sudo, and Tahei Kiyohara were completed in China.
- Oct.2003 Bronze statues of Confucius, Mencius were built in the greatest Chinese garden in Japan "Enchoen".
- Oct.2004 "Land of Sun" promotion symposium was held.
- Sep.2005 Visiting and Floral tribute to the Nanjing Massacre Memorial Hall.

- Dec.2005 Attendance and Floral tribute to the Pearl Harbor Attack Memorial Ceremony of the "Arizona Memorial Hall" in Hawaii.
- Mar.2006 "Specila Symposium of the special area of peace, environment and health" was held at Kunibiki Messe.
- Oct.2006 Representative of HNS, Komatsu gave a lecture at the Pusan municipal office international conference hall.
- Nov.2006 "Peace and Harmony Forum in October" was held at Izumo Shrine.
- Mar.2007 Bronze statue of Sun-tzu was built in Enchoen.
- Dec.2007 Invitation visiting the Modification Ceremony of the Nanjing Massacre Memorial Hall.
- Feb.2008 Round-table talk was held. "One small small island" for us
- Mar.2008 Round-table talk was held. "Why the world peace from Izumo?"
- Oct.2008 The 6th International Peace Museum Meetings, "Peace and Harmony Forum of Izumo" was held in Matsue.
- Feb.2009 Publication memorial lecture of the Chinese classic famous words and the guide to the dispute over Takeshima islands, "Time of Confusion /The sun rises from Izumo." was held.
- Sep.2009 Visiting and Floral tribute to the World War II cenotaph in Vladivostok and Khabarovsk in Russia.
- Feb.2010 Support to the 60th Term Ousho Contest of Shogi held in Matsue
- Feb.2011 "Mission of the Korean Peninsula and the Japanese Islands" was published.
- Oct.2011 Representative of HNS, Komatsu gave a lecture at the Asia Pacific Research Association.
- Jul.2012 Representative of HNS, Komatsu was featured as "True Patriot" by the Korean monthly magazine "Citizen Days"
- Nov.2012 Comics of Yahei Sudo, Tahei Kiyohara and Shichibei Okaji were exhibited at the International Comic Summit in Tottori.
- Sep.2013 Representative of HNS, Komatsu was selected as "20 Global Peace Entrepreneurs" on the commemoration enterprise of the "Carnegie Peace Centennial" in Hague in the Netherlands.





The first type of the high-speed sheet shutter MONBAN was born by functional improvement of the steel shutter and total sales exceed 140,000 sets. Market has been spread out by its dramatic air-conditioning effect, anti-dust effect and wind-resistance effect and Monban brand has recognized widely. Monban won the Medium and Small Business the Research Center Prize and the Highest Prize of New Business Grand-Prix in 1991. After that, won the Minister of Land, Infrastructure and Transport Prize in 2007. In 2010, all models of Monban received authorization of an eco-mark. The new model, happy gate monban system won the Japanese Grand-prix Prize for an excellent work in 2012.



Auto-reverse control function

Unit ty

## History of MONBAN



1989 Nationwide sales of MONBAN started.



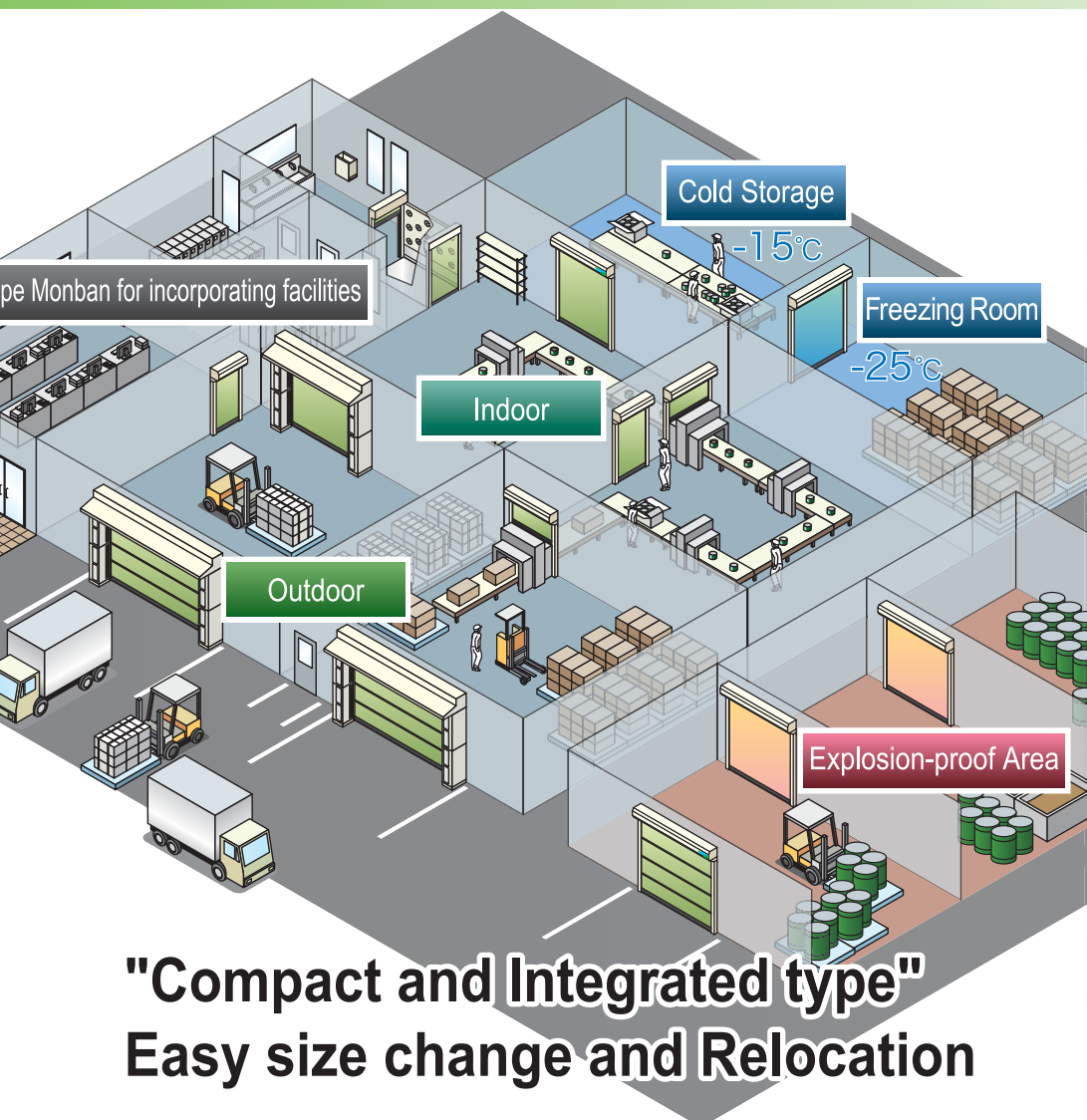
1991 The Highest Prize of New Business Grand-Prix was won.



2012 The Japanese Grand-prix Prize for an excellent work was won.

Nov.1980 A prototype was developed by manufacture request of the sheet shutter from Mitsubishi Agricultural Machinery.  
 Aug.1985 Sheet shutter MONBAN was announced nationwide.  
 Oct.1986 Rolling-up type was developed.  
 Oct.1986 OEM contract was signed with Bunka Shutter. "Air-Keeper" started to be manufactured.  
 Feb.1988 Total sales achieved to 1,000 sets in 3 years after national announcement.  
 Jun.1988 Rolling-up type KS type was series-ized. The control panel of a printed circuit board was developed.  
 1989 Demo machine was manufactured and started for business nationwide.  
 Mar.1989 The FMS sheet metal uninhabited line was introduced prior to other companies in Shimane.  
 Jun.1989 The cooperative "Techno Kunibiki" was founded by seven cross-industrial companies.  
 Jan.1990 Total sales achieved to 5,000 sets in 5 years after national announcement.  
 Feb.1990 Kumano Office was completed and production of the parts for the sheet shutter was started there.  
 Oct.1990 The business tie-up with the South Korean company "Toyo FA" was started in the sheet shutter business.  
 Jan.1991 The Research Center Prize" was won by the Medium and Small Business Research Institute.  
 Jan.1991 Total sales achieved to 10,000 sets in 6 years after national announcement.  
 Sep.1991 International Conference of MONBAN was held in Korea.  
 Oct.1991 The Highest Prize of New Business Grand-Prix was won by the New Business Conference.  
 Jan.1993 The inverter MONBAN was developed.

Oct.1994 The exhibition of KT series was held.  
 Nov.1994 The first Construction Study Session is held.  
 Oct.1997 Rolling-up type KU10 /20 was developed with inverter encoder control function and cyclo-engine.  
 Jan.1998 Manufacturing line of the sheet shutter MONBAN and function of the head office were changed place to Matsue factory.  
 May.1998 KU series was announced.  
 Sep.1999 The exhibition of OPTRON MONBAN was held. Sales of OPTRON MONBAN started.  
 Mar.2000 OEM contract with Bunka Shutter was canceled.  
 Jul.2002 MX series with sealing function and self-repairing system was announced.  
 Dec.2005 Total sales achieved to 100,000 sets. The ceremony was held at the head office.  
 Jun.2007 The business tie-up with Asahara Industry and manual type "SAWAYAKA MONBAN" was started.  
 Oct.2007 The Minister of Land, Infrastructure and Transport Prize was won by contribution to prevention of global warming.  
 May.2008 KV series with sealing function and high durable structure was announced.  
 May.2010 The exhibition of MONBAN GF series was held. In commemoration of inauguration of KOMATSU KOREA, the first-consignment-of-the-year ceremony was held in Sakaiminato.  
 Jun.2011  
 Feb.2012 Happy gate monban system won the Japanese Grand-prix Prize for an excellent work.  
 May.2013 The exhibition of lineup of happy gate monban system was held. Happy gate monban system was broadcast in WBS of TV Tokyo.



## "Compact and Integrated type" Easy size change and Relocation

### happy gate monban system

Happy gate monban system succeeded in miniaturization by building the control unit in the frame (or the shutter box) instead of installing it beside the sheet shutter. It is expected to become a defact standard of the industry. Happy gate monban system was exhibited as "New type of the sheet shutter which can create the space value" on the Machine Element Technical Exhibition held in Osaka in October of 2012 and it became the center of attention. It can be used widely as integrated system with the air shower, air cuitain and partition and so on.

Speed of the pipeless type G is 3m/sec..It has the self-repairing system that the sheet can re-set automatically by one time full-open operation after going out of the side frames in case of collision. The sheet reverses to open at low speed (0.5m/sec.) in case of collision and it reverses to open at middle speed (1.5m/sec.) in case of detection of the sensor. Lightweight structure makes

possible escape in case of emergency only by releasing and lifting up bottom of the sheet. Operation is possible in case of power failure with the optional battery for emergency.

### Integration with facilities creates the space value

The pipe type for outdoor is resistant to wind and gap caused by air pressure. Silent operation is realized thanks to the roller unit with rubber ring, which can protect abrasion of the sheet by friction.

Happy gate monban for the cold storage and freezer can be used for the partition of the cold storage of -25°C to +5°C. Happy gate monban controlled by the air was developed for the exposionproof area. And monban unit for integration with facilities which can be integrated with the air shower, air curtain, conveyer and elevator creates various kind of the space value.

<b>Indoor</b> Lightweight / Slim / Compact Pipe-less Type G052/012/104/014/109/209/GF16/21 Width 600~4500 Height 600~4500 <sub>mm</sub>	
<b>Outdoor</b> Pipe type (Wind-resist model) R054/109/209/309/409/RF50 R30W/40W/R30T/40T Width 600~10000 Height 1000~6000 <sub>mm</sub>	
<b>Cold Storage</b> G10F/R10F Width 800~3500 Height 1000~3500 <sub>mm</sub>	
<b>Explosion-proof Area</b> G10A/20A/30A/10E/20E/30E Width 800~4000 Height 2000~4000 <sub>mm</sub>	
<b>Unit type Monban for incorporating facilities</b> BUILT-IN	



Ruby was adopted in 2003.

**Cloud-based  
real time management**

やくも  
yakumo  
Suishin

水神

**Network**

The equipment replacement and the systems integration accompanying superannuation are important social problems. The system which is low cost, strong against disaster and equipped with many functions which exceed the central monitoring instrument, is "YAKUMO SUISHIN" Network. In April of 1995, this system won "The Selection as Remarkable Invention" from the Science and Technology Agency. In 2000, 6 years before cloud computing was announced by Google, we had announced the management and control system by the Internet. "YAKUMO SUISHIN" which Ruby, known as the computer language from Matsue in 2003, is adopted is the epoch-making system which infrastructure can be cross-over administrated on the Google Map.



remote control

## History of SUISHIN



1994 New SUISHIN was developed and announced.



1995 "The Selection as Remarkable Invention" was awarded by the Science and Technology Agency.

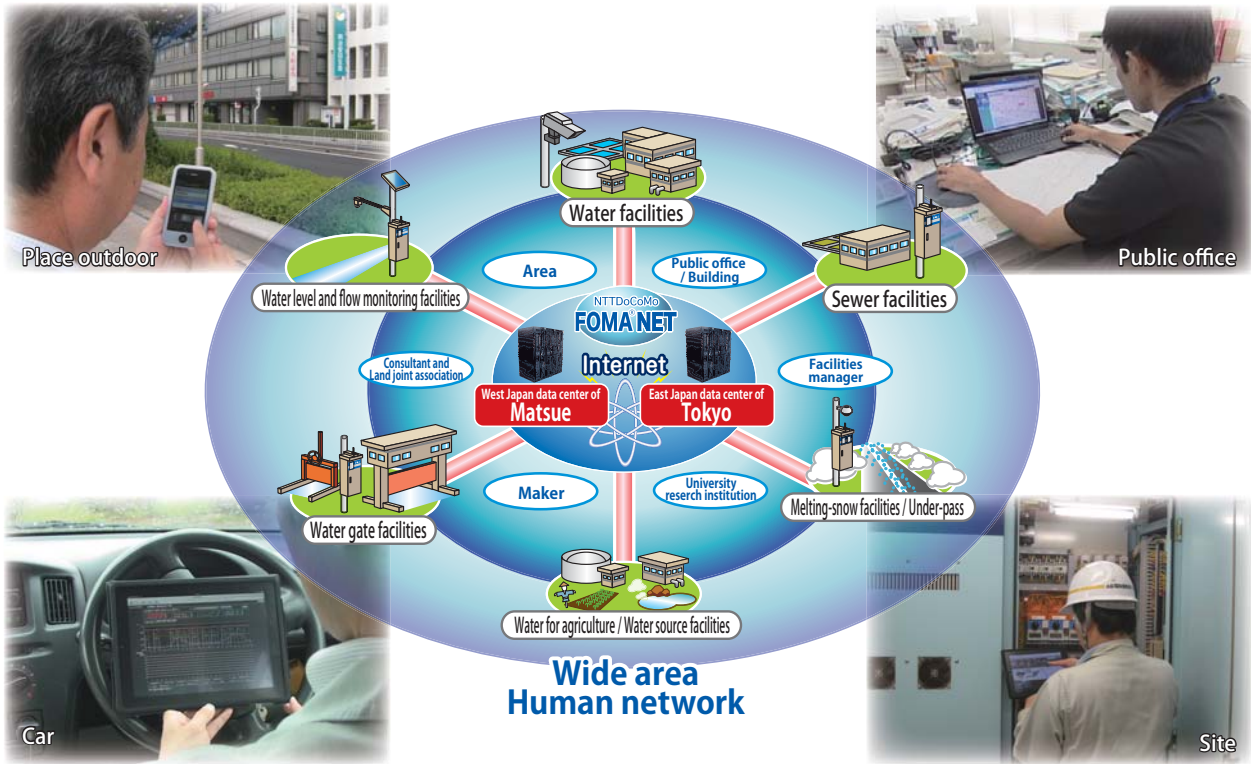


2010 YAKUMO SUISHIN G series was announced.

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| Mar.1977 | The remote monitoring equipment by the telemeter was supplied. (Misato-cho, Shimane)  |  |  |
| Mar.1984 | The remote monitoring and control equipment by the telemeter was supplied. (Koryo-cho, Shimane)   |  |  |
| Mar.1985 | The data logging equipment for water service institution monitoring was supplied for the first time.  |  |  |
| Mar.1988 | The data logging equipment was supplied. (Matsue-shi, Shimane)  |  |  |
| Mar.1988 | The monitoring equipment with the personal computer and general public circuit which was the original form of SUISHIN was developed and supplied. (Biwa-cho, Shiga)   |  |  |
| Mar.1990 | SUISHIN is supplied as uses other than a water-and-sewage institution. (Hirata-shi, Shimane / salinity concentration monitoring instrument)   |  |  |
| Sep.1992 | The remote monitoring system YAKUMO SUISHIN is developed.   |  |  |
| Sep.1992 | The board terminal was put on the market as a manhole pump monitoring instrument.   |  |  |
| Oct.1994 | New SUISHIN was developed and announced.  |  |  |
| Apr.1995 | "The Selection as Remarkable Invention" was awarded by the Science and Technology Agency.   |  |  |
| Nov.1995 | Package SUISHIN Ver1 was put on the market.   |  |  |
| Sep.1996 | Package SUISHIN Ver2 was put on the market.   |  |  |
| Oct.1996 | The water service institution monitoring and control system, Master SUISHIN was put on the market.  |  |  |
| Dec.1999 | The user setting type Web SUISHIN was put on the market.  |  |  |
| Jan.2000 | The manhole pump control panel of controller(SC200X) type was put on the market.  |  |  |
| Sep.2000 | After the IT charter of Kyushu-Okinawa Summit and e-Japan concept announced by Prime Minister Yoshiro Mori (that time) announced in Parliament, the internet and i-mode management and control system, YAKUMO SUISHIN Network was announced. Data communications service started. |  |  |
| Dec.2000 | SUISHIN Network system was exhibited at the Agriculture-and-Forestry Fishery Environmental Exhibition held in Makuhari Messe.   |  |  |
| Jul.2001 | SUISHIN Network system was exhibited at the Sewer Exhibition.   |  |  |
| Mar.2003 | The "Shinji Lake monitoring system" developed by industry, academia and government together was installed.  |  |  |
| Jul.2003 | The Tokyo data center of "New SUISHIN Network" was established in the NTT DoCoMo Yoyogi Building.   |  |  |
| Dec.2003 | The manhole pump controller full model change SC210 was put on the market.  |  |  |
| Dec.2003 | The data center is formed into 2 bases of east and west. Ruby was adopted to the system.  |  |  |
| Mar.2004 | Web net adaptor was put on the market. Development of the web management system of water service institution was completed.   |  |  |
| Apr.2004 | Attachable management terminal S210 was put on the market. Development of the snow-melting management system was completed.   |  |  |
| Mar.2005 | The water service management system was completed to change to web-monitoring.  |  |  |
| Apr.2005 | The camera monitoring system was developed and supplied.  |  |  |
| Nov.2006 | The multi-purpose management terminal SA210V was put on the market.   |  |  |
| Apr.2007 | The manhole pump controller SC210 and multi-purpose management terminal SA210 were changed to FOMA.   |  |  |
| Apr.2007 | The flow monitoring instrument used with the solar cell was put on the market.  |  |  |
| Sep.2009 | Technologies of SUISHIN was announced at the Ruby World Conference.   |  |  |
| Dec.2009 | The multi-purpose management terminal SA201E and 201X was developed and supplied.   |  |  |
| Mar.2010 | President Komatsu gave a lecture at the Data Communication Research institute (NTT think-tank).   |  |  |
| Jun.2010 | YAKUMO SUISHIN G Series was announced.  |  |  |
| Aug.2010 | Total introductions were achieved to 5500 facilities of 240 local governments of 43 prefectures.  |  |  |
| Apr.2011 | After the Great Earthquake of East Japan, the monitoring equipment with mass battery for a long-time power failure. Application for tablets of YAKUMO SUISHIN was developed.  |  |  |
| Jul.2012 | Total introductions were achieved to 300 local governments of 46 prefectures.   |  |  |
| Apr.2013 |   |  |  |

We face a social problem and create the new industry which spreads to the world.

# Wide-area Cross-over Management in the age of administrative reform



## System which continues evolving from introduction Dramatic reduction of incidence and cost reduction

"YAKUMO SUISHIN" Network system realizes dramatic reduction of cost and labor burden. It keeps to develop without giving stress to a user, which is different from the old system which is getting out of trend after the time of introduction. Thanks to an ideal operation of environmental institution, it is operated in various kinds of 6600 institution of 305 local government, for example, management of water and sewage, industrial water, water gate, meltin-snow, hot spring water, river, and dam.



Water and sewage facilities  
monitoring and control panel



Manhole pump  
control panel

## Cloud-based real time management

Remote monitoring, management and control of water related facilities can be done by the personal computer, tablet like iPad, and smartphone.

## Monitoring and Reporting Equipment



MAseries



XPseries



PAseries

Management information is sent through electric wave network of the mobile phone for 365 days for 24 hours. In case of emergency, warning mail is sent to more than one person in charge who have been specified in advance. Changing data like stored water volume can be real-time monitored. Since there is no fear of disconnection, it is useful for continuous monitoring in case of emergency like an accident or disaster. And emergency restoration can be performed smoothly. Data is administrated in both data centers of east Japan (Tokyo) and west Japan (Matsue). High security system is prepared. GoogleMaps is used as the map screen. All water service institutions and underground pipelines in the area are displayed on one screen. Advanced functions can be used easily, like reflection of facility pictures which is took by users and display of the destination to the facility.



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