Taisei Rotec Corporation

CORPORATE PROFILE

Our business is expanding beyond road construction From "road constructor" to "Comfortable environment Constructor"

Everyone changes. We are becoming a creator of comfortable environments. We create luxurious, natural environments for individuals and society.

Yoshinori Nishida
President

Taisei Rotec Corporation was founded in 1961. Since then, the company has engaged in developing the infrastructure centering on the “Road Construction”. The Taisei group’s slogan is “For a lively world”. As a member of “Taisei group”, based on this slogan, the company has deeply got involved in natural environments and society. This philosophy will not make our stance change.

Entering the 21th century, huge natural disaster has occurred frequently and social life has made a change compared with half a century ago. However, our road construction industry and society share a common goal: to think first about being more comfortable of individuals while cherishing harmony with natural environments. Keep “create social responsibility” in mind, Taisei Rotec corporation will continue conducting business activity to accomplish the role and mission that can be passed on to future generations.

We help build the infrastructure that provides comfortable living environments. We aim to be a creator of comfortable environments.

Our business encompasses many fields. We construct facilities related to people's daily lives such as sports and leisure facilities, as well as transportation networks and public infrastructures that boost the economy. We also develop and supply construction materials. And we help preserve national lands and protect the natural environment.

Our starting point is the construction of safe, comfortable, and convenient community roads that harmonize with nature.

Since community roads are closely linked to daily life and are the starting point for infrastructure development, we strive to accumulate new technologies and know-how, always keeping in mind our role in Japan's history of road construction.

Tokyo Station, Yaesu Entrance

National Route44 at Kushiro-cho

Saga Route 203 in Takuhara District

Hida Tunnel (cement concrete pavement)

We apply our long and varied record of accomplishment and reliable technologies to traffic networks that support social development.

Our continuous and wide-ranging R&D has increased the strength and service life of pavements and improved Transportation networks for highways, airports, etc. This experience will allow us to improve the Transportation networks that support social development in the future.

Tokyo International Airport (Pavement at Apron)

Shin-Tomei Expressway in Aichi Prefecture

Shimizu Port in Shizuoka Prefecture

Our contribution to industrial development and business productivity is based on total cost engineering, which takes into account production, distribution, and commercial facilities.

We have developed numerous construction methods to construct the facilities, including the TX method by which floors can be repaired and maintained without shutting down production lines, the RCCP method by which shopping malls can be renovated without suspending business, and the injection method by which roadways can be paved with natural stone at nominal cost. We provide a full range of cost engineering services, from techniques to reduce construction costs to methods that improve the productivity of facilities.

Marunouchi Nakadori Street

Cinecitta Kawasaki

Jinmon-Dori in Shimane Prefecture

We maintain a harmonious balance among nature, society, and individuals and help create a clean environment.

Our work in regional improvements includes land development, sewage systems, road improvements, bridges, dam seepage control, and river improvements. In helping to create a clean environment, we take into account the effects of our activities on the local residents, the community, and the natural environment, as well as the impact on roads, sewers, and other nearby structures.

Sarukawa Seseragi Park

Kanai Central Land Readjustment Project

Yokohama Motomachi Mall

We help improve the local infrastructures that make life more comfortable.

On the stage of daily life, a community's roads, parks, and open space the users play major roles. By improving these local infrastructures, we help to make the lives of their users more comfortable. We develop new technologies, construction methods, and materials by focusing on the users' perspective: How can we make the roads more comfortable, the pavements more user friendly, and the urban developments more respectful of community history and culture?

Kyoto Gion Street

Chikugo City Park in Fukuoka Prefecture

Hamana Lake Flower Expo

We help create safe, sophisticated sports and leisure facilities for people of all ages.

We have extensive experience in improving sports facilities. We helped build the National Stadium, where world records have been set, as well as the International Stadium Yokohama, which was the main stadium of the 2002 FIFA World Cup. We want to use our extensive experience and wealth of accumulated knowledge and technology, including in the fields of human engineering and sports medicine, to create safe and sophisticated sports facilities.

JRA Nakayama Race Course

Path by Ohyokogawa Shinsui Park

Ohkurayama Ski Jump Hill

International Stadium Yokohama（a Sports Field）

We protect the rich natural environment and irreplaceable national land so that future generations can enjoy them.

As part of our goal of creating a comfortable environment for people, we take a progressive approach to the preservation of the beauty and bounty of our natural environment. We take care to minimize the effects of construction activities on the natural environment and create habitats for living organisms. To help protect the environment, we are developing technologies to recycle construction by-products, reduce carbon dioxide emissions, etc.

Kohyasan Dam (Asphalt facing)

Prevention of Hazard in East Fuji Area (Asphalt facing)

Waste disposal site in Maizuru city

Our ecologically friendly technologies can be found all over the world.

All people everywhere want to leave their children a rich, natural environment and a clean sea. This is a vitally important theme for those of us involved in developing roads, dams, airports, and cities. We use our civil engineering and architectural technologies to develop rich, comfortable, natural, and healthy environments for people around the world.

National Highway Construction PJ in Pakistan

Cable-stayed bridge on the Second Highway in Taiwan
(pavement on the bridge)

New Iloilo Airport in the Philippine

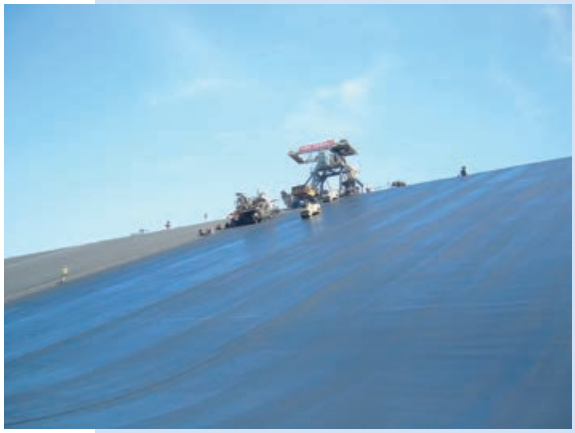
New Iloilo Airport in the Philippine

Colombo International Airport in Sri Lanka

National Highway No.5 in Vietnam

Arterial road in the Republic of Ghana

Xilongchi Pumped-storage Power Station in China



Zhanghewan Pumped-storage Power Station in China

1. Beijing Luxin Dacheng Exquisite Paving Corporation

Objectives: (1) Introduce advanced technologies and equipment into the special pavement market in China
(2) Reinforce special pavement business in the expanding Chinese market

Sphere of business: (1) Construction of special pavement, and production and sales of pavement materials
(2) Development, design, and consulting of road surface technologies

2. Beijing No.1 Municipal Engineering Co., Ltd

Objectives: (1) Technological cooperation for contracts received in China and overseas
(2) Support preparation of cost estimates to receive contracts for construction work

Sphere of business: (1) Contract to carry out construction and specialty works
(2) Lease of construction plants, equipment, and materials

Every division strives to create comfortable living environments.

As a creator of comfortable environments, our primary tasks are to research and develop technologies, propose plans, and design and construct comfortable environments using the developed technologies.

We foresee social needs and technology trends and appropriately reflect them in our designs and construction work.
- Technology Division -

Our lifestyles are undergoing dramatic changes, consequently, our social infrastructure is becoming more diversified and sophisticated. To meet modern needs, we collect and analyze various technological advances, particularly those related to road technologies. Our sales, design, and construction divisions use this information to develop the best possible solutions for each customer's needs.

We obtain customer satisfaction by proposing technologies best suited to customer's needs.
- Design Division -

We propose suitable technologies for the design works listed below that will gain customer's trust and satisfaction.

- Land development that is in harmony with nature
- Economical and functional road design
- Structural design giving full consideration to safety and life cycle cost

We develop and introduce new technologies.
- Research Division -

We carry out basic research into the essence of social needs, such as preserving and restoring the natural environment and creating comfortable social and living environments. We not only improve existing technologies but also develop new materials and construction methods that raise the level of technology.

Central Research Center

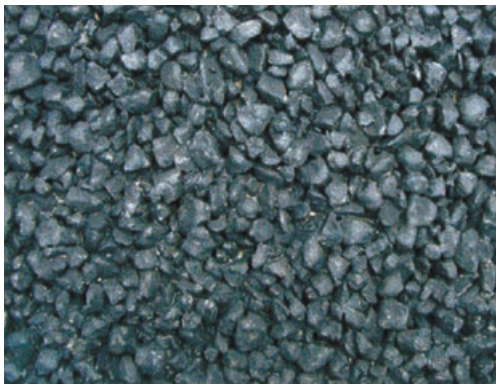
Porous Pave

Outline

Porous Pave is a paving method using highly porous asphalt mixture. Comfortable environment is created because of the following characteristics of this method.

- Rainwater seeps into the porous asphalt mixture of the surface course and flows in/down
- Reduces road noise

There are two types - drainage type and permeable type. The characteristics of each are as follows.



Drainage type Porous Pave

Drainage type

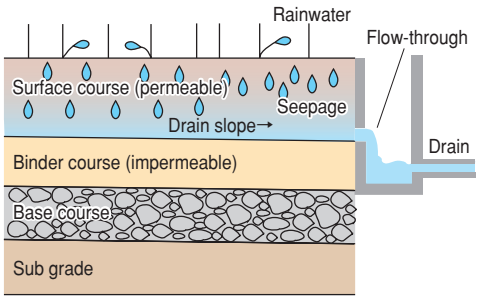
Rainwater seeps into the porous asphalt mixture of the surface course and flows down the drain slope (longitudinal and cross grade) of the impermeable binder course. The water then drains into the gutter along the road shoulder.

Features and effect

1. Prevents hydroplaning
2. Improves visibility by preventing water smoking
3. Improves visibility by eliminating light reflections on the road surface
4. Reduces traffic noise by absorbing sound

Applications

1. Inner-city roads
2. Highways
3. Parking areas, etc.



Cross-section of drainage type Porous Pave

Permeable type

Rainwater seeps into the porous asphalt mixture of the surface course and permeates the lower courses (base course and sub-grade).

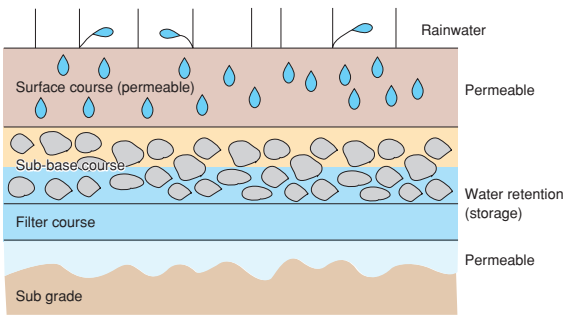
Features and effect

1. Improves walking comfort by eliminating surface water (promenade)
2. Groundwater conservation (planting strip)
3. Controls surface runoff and reduces loads on sewer mains during heavy rainfalls

Applications

1. Roads in residential areas
2. Sidewalks
3. Footpaths
4. Parking areas, etc.

Typical application of permeable type Porous Pave



Cross-section of permeable type Porous Pave

Solar Radiation Reflective Pavement

Outline

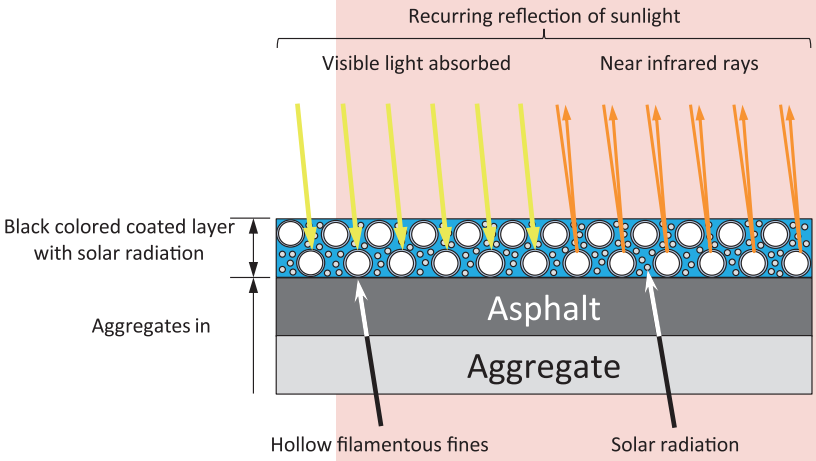
Technology to highly efficiently reflect near infrared rays by pasting solar radiation reflective material on the pavement surface, leading to lowering of surface temperature.

Features and effect

1.Lowering of road surface temperature by 10 in the daytime.
2.Improving roadside environment in summer.
3.Mitigating of heat island phenomenon.

Applications

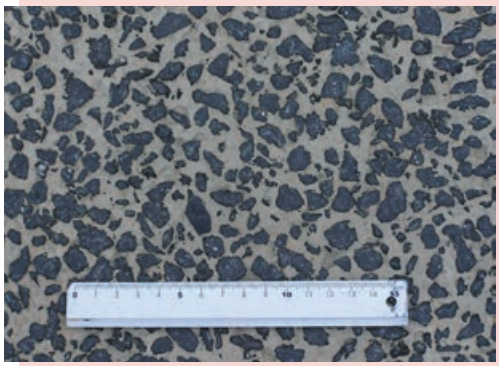
1.Main road
2.Community road
3.Cycling road
4.Jogging path
5.Bus stop
6.Parking lot



Water Retaining Pavement

Outline

Technology to prevent the pavement temperature from rising by evaporation of the water kept inside of the pavement by using water retaining polymer.

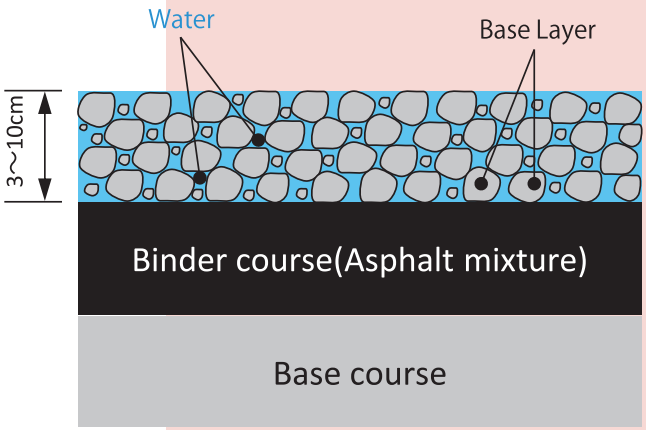


Features and effect

1.Lowering of road surface temperature by 10~20 in the daytime.
2.Improving roadside environment in summer.
3.Mitigating of heat island phenomenon.

Applications

1.Main road
2.Community road
3.Cycling road
4.Jogging road
5.Bus stop
6.Parking lot



Asphalt facing method

Outline

The asphalt facing method uses a slope paving machine and asphalt mixtures to face and line dams, regulating reservoirs, and reservoirs. The asphalt mixture wall constructed by the method is impermeable, flexible, and capable conforming to deformations. The method is more reliable than conventional seepage control methods using soil and/or sheets.

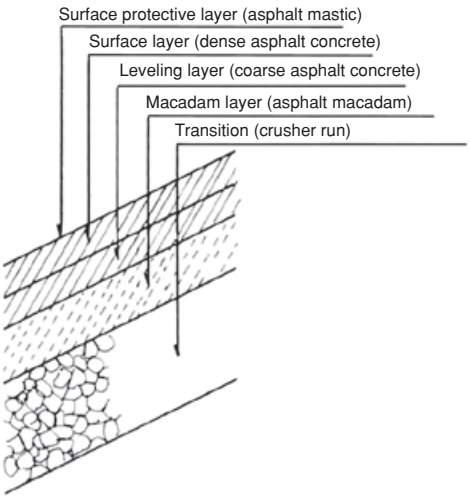
Features and effect

1. Impermeable
2. Flexible and capable of conforming to deformation
3. Can be repaired.

Applications

1. Dams
2. Regulating reservoirs
3. Reservoirs

Cross-section of asphalt facing wall



Super Flexphalt (Earthquake-resistant asphalt mixture)

Outline

Super Flexphalt is an asphalt mixture that was developed to withstand major earthquakes.

Super Flexphalt is a specially modified asphalt-based earthquake-resistant asphalt mixture.

This material has the characteristics of asphalt mixtures such as low elasticity and deformability, yet can sufficiently conform to deformation of dam body caused by earthquakes.

To enhance safety and quality, preserve the environment, and develop technology, you need superior personnel.

We concentrate our efforts on formulating a system to provide the customer with quality products and services at low cost.
Those who accept this mission are superior individuals with an entrepreneurial spirit. We strive to cultivate our staff, develop their skills, and improve the system.

We aim to protect the priceless global environment and create a rich and natural environment.

Our Environment Department specializes in environmental management. We help businesses that have the ISO14001 (environmental management system) certificate establish corporate-wide environment management systems. The responsibility for preserving the global environment lies with everyone, and so everyone is taking proactive action to improve the quality of the global environment.

The most important asset in our company is our people.

■ Environmental action guidelines

- Develop and introduce construction and manufacturing technologies
- Save natural resources and energy, recycle waste
- Implement measures to preserve and create a comfortable environment
- Develop programs for education and training in environmental protection
- As a community member, contribute to society through business and personal activities
- Respect the regional environment when visiting other countries for business

To earn and keep the trust of our customers, we continually improve measures relating to safety and health.

As constructors, our basic management policy is to improve safety and health. We thoroughly analyze and study various cases and data so that our construction and production activities will not cause anxiety or harm to either individuals or society.

■ Important control items

- Eliminate serious work-related accidents
- Improve and enhance construction management systems
- Train supervisors
- Create a comfortable working environment

We support construction and production through the development and operation of mechanical technologies.

Technical capability can help solve current problems and open new frontiers. Our Mechanical Technology Center analyzes the roles of machines in putting technologies to practical use. The Center fully supports the development of machines for new construction methods, the operation and maintenance of these machines, training programs for operation and construction technologies, and the backs up mixtures production plants.

Mechanical Technology Center

As a reliable supplier of high-quality mixtures, we can deliver our products anywhere in the country.

Production and distribution of mixtures

Our national supply network can quickly and accurately attend to every need.

Our supply network of approximately 60 production bases throughout the country can speedily deliver a wide array of products, particularly asphalt mixtures, to any location in the country. Satellite silos, mainly in urban areas, offer a convenient and reliable supply system.

We focus on research and development of special mixtures to meet new needs, including ecologically friendly drainage mixtures.

Recycling

Recycling construction debris is an effective method of using limited natural resources

We have installed recycling plants for construction/demolition material in major cities throughout the country.

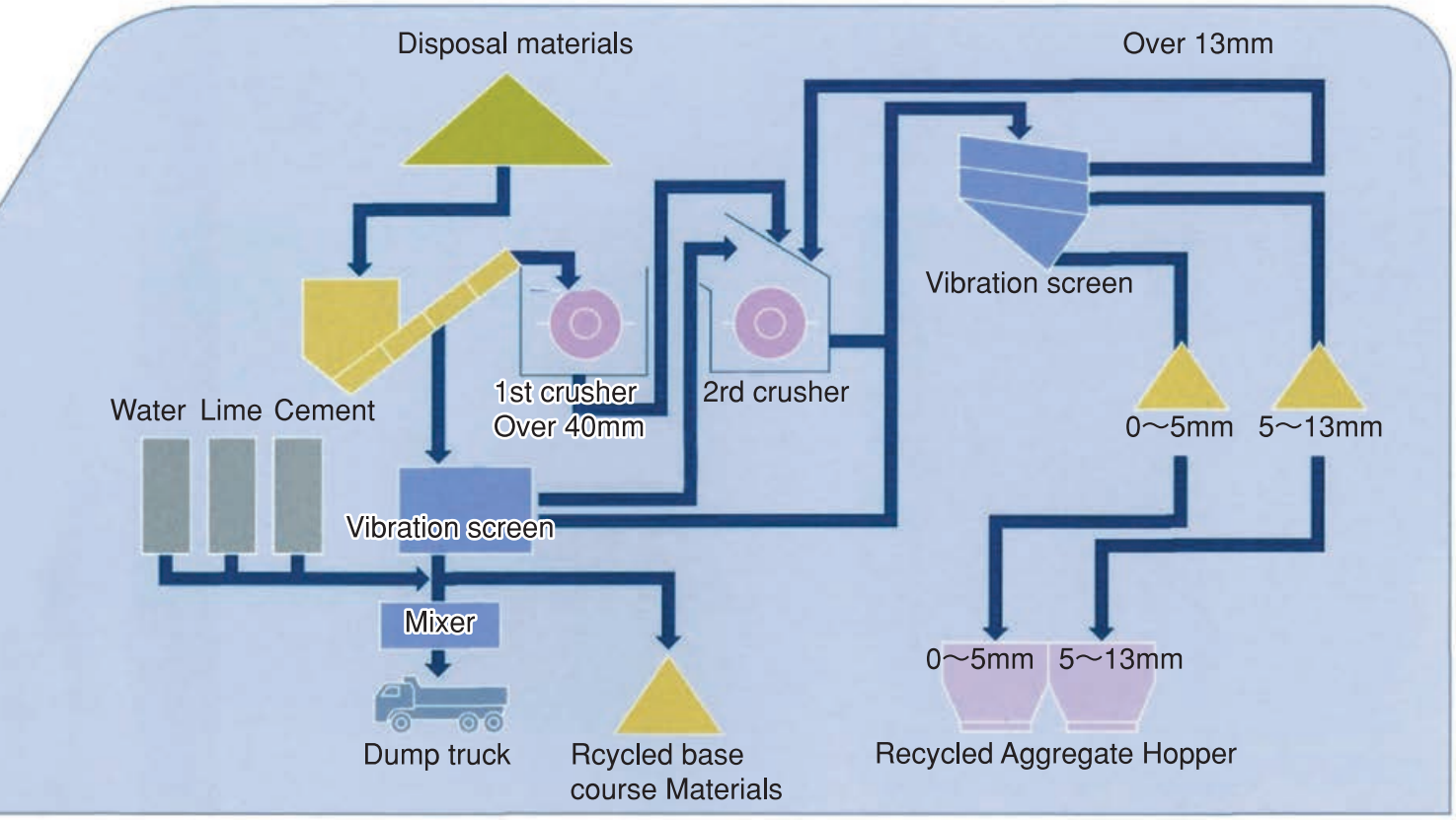
These plants recycle asphalt blocks, concrete blocks, and base course materials, and manufacture and supply recycled mixtures and sub-base course materials.

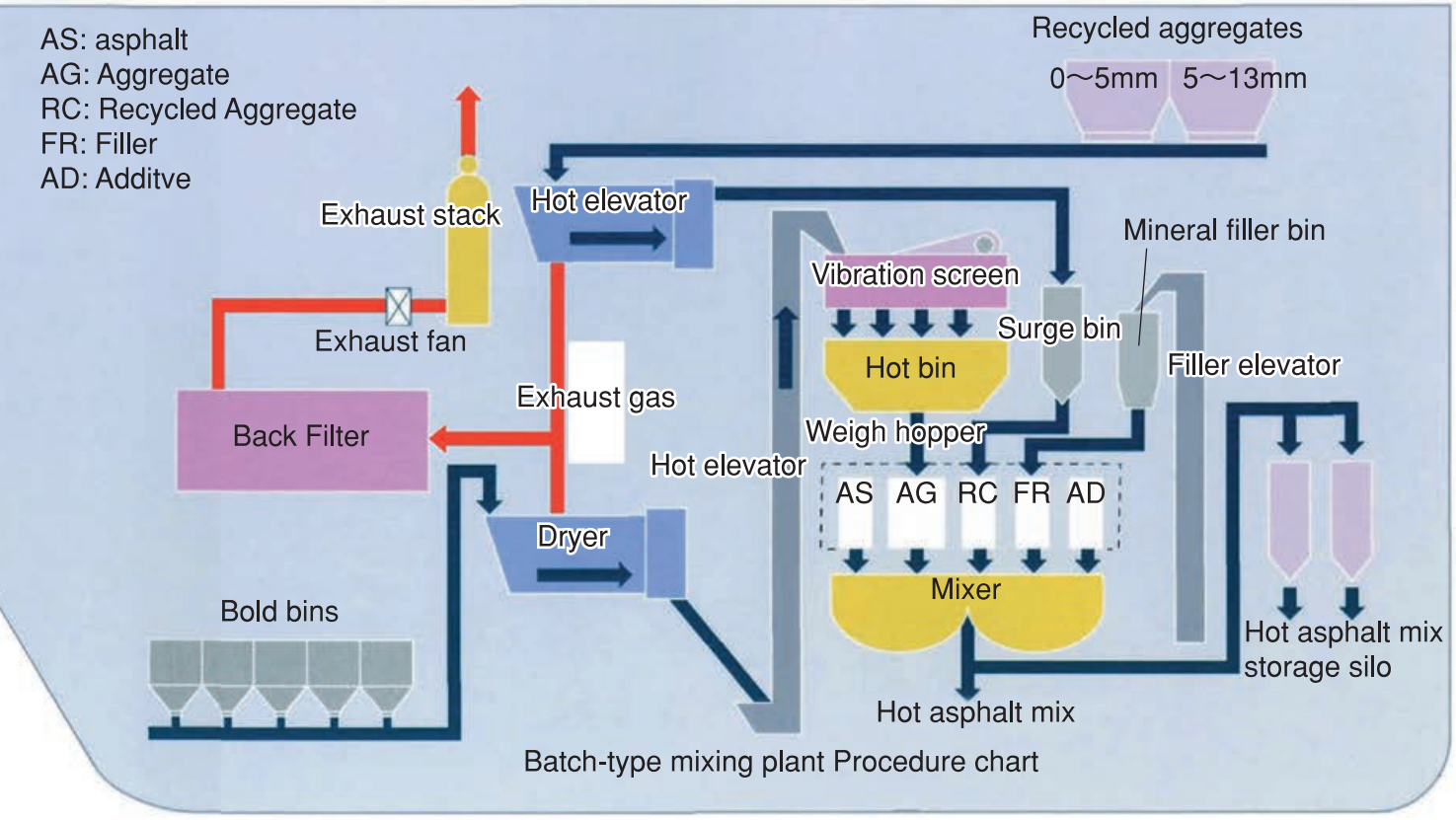
We help create comfortable environments by developing new products from recycled materials.

Features of recycled asphalt mixtures

Our recycled asphalt mixtures are manufactured using a batch plant system, which combines an ordinary batch type asphalt plant and a dedicated recycling plant. The batch plant system mixes recycled aggregate with new aggregate and asphalt to create recycled asphalt mixture. This new system separately heats the new and recycled aggregates, producing stable and high-quality recycled asphalt mixtures. The main characteristics of the system are as follows.

1. New aggregate is given a primary coating of old asphalt from recycled aggregate, then given a secondary coating of new asphalt along with recycled aggregate. This process produces stable recycled mixtures.
2. The quality of the recycled asphalt mixtures is easy to control because the batch plant system uses the same procedures that are used for ordinary batch-type asphalt plants.





Batch-type mixing plant Procedure chart

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