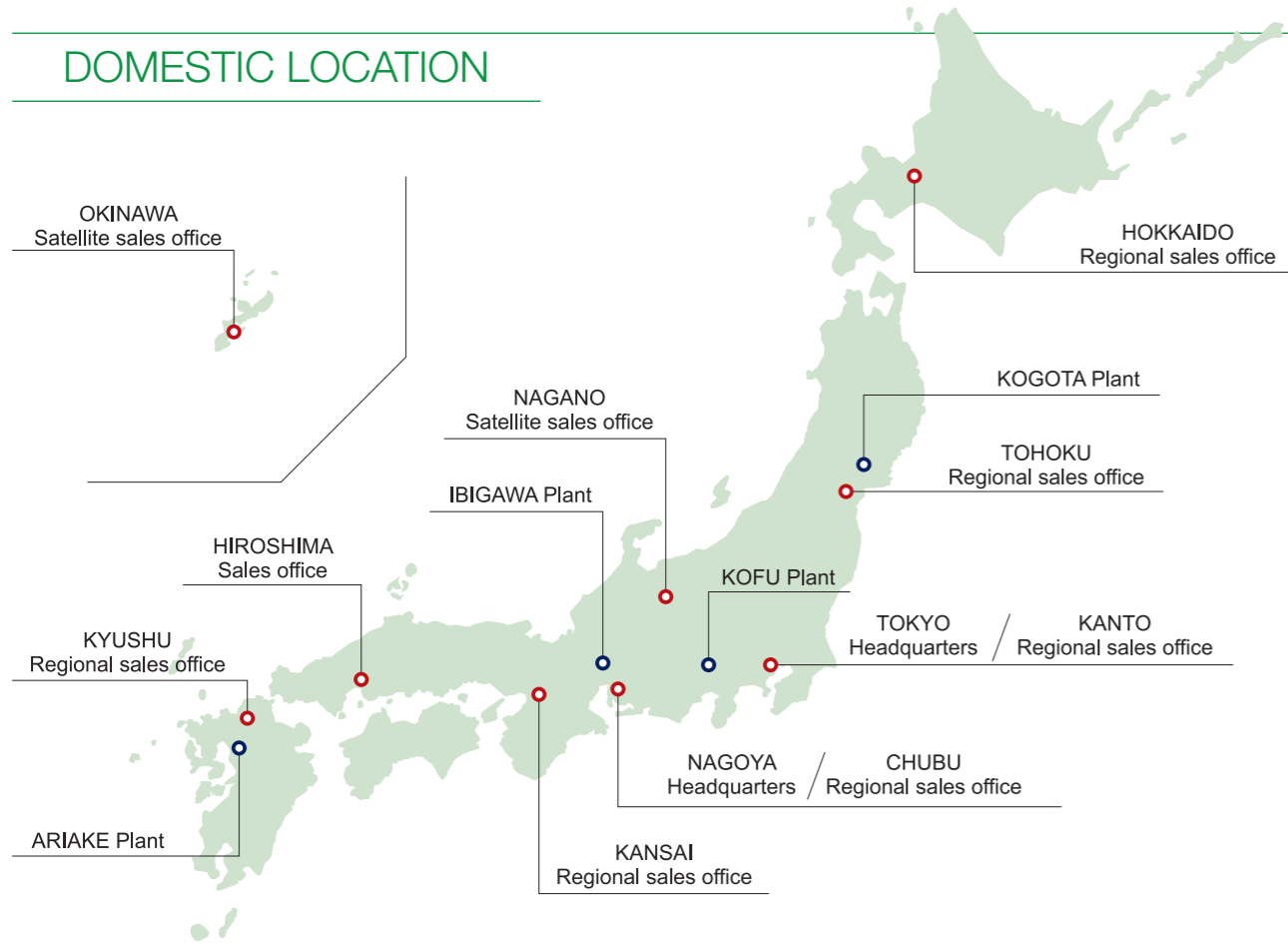
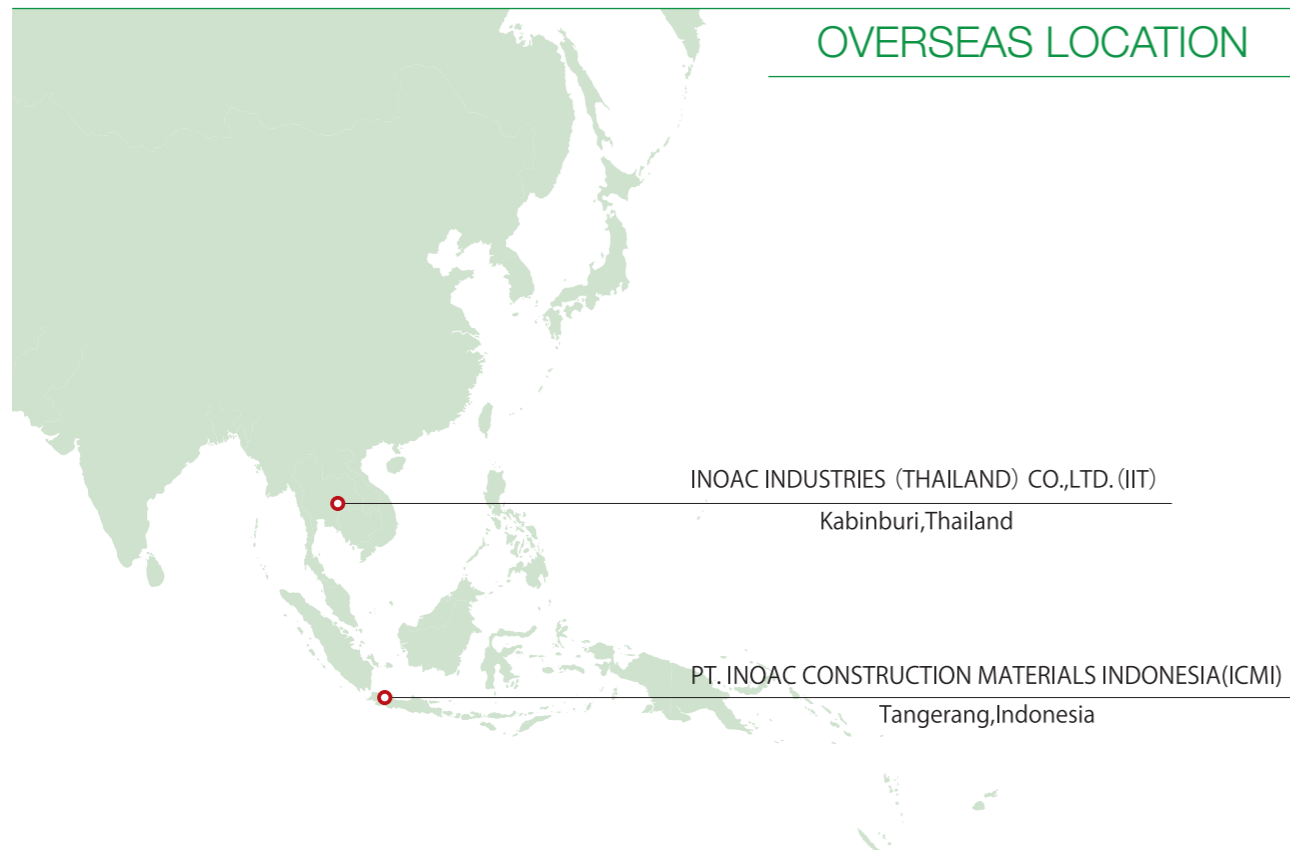


## DOMESTIC LOCATION



## OVERSEAS LOCATION



INOAC Housing & Construction Materials Co., LTD.

**CREATION for VALUE**

INOAC Housing & Construction Materials Co., LTD.

INOAC Hibino Bldg.2F, 4-9-27 Taihou, Atsuta-ku, Nagoya, Japan 456-0062

TEL: (+81) 52-684-0266 FAX: (+81) 52-684-0277

<https://www.inoac-juukan.co.jp/en>

Email: [jyuhp@inoac.co.jp](mailto:jyuhp@inoac.co.jp)



## COMPANY PROFILE

We are one of the core companies in INOAC group, specializing in housing, construction, civil engineering, and environmental business.

As one of INOAC members, we always continue the challenge with our basic philosophy of "Innovative & Action" which is the origin of our company name, with a innovative idea not to be confined by the traditional and a frontier spirit pursuing new fields.

Our company provides high quality wide range of products, and services globally to realize a safe and comfortable living environment.

Establishment

April 24, 1975

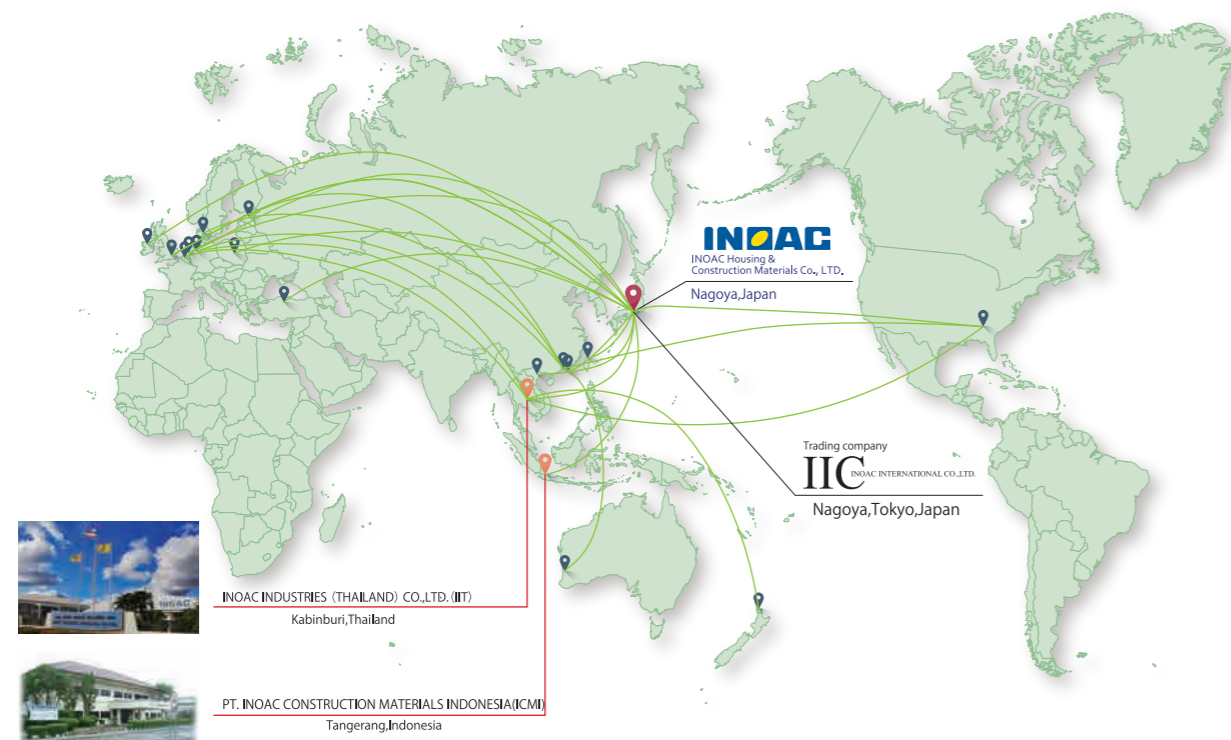
Business contents

Manufacture and sale of products related to living environments  
Survey, design, contracting, and supervision of construction work.  
Engineering and consulting related to the above mentioned.

CEO

Nobuaki Suzuki

## Global network



INOAC INDUSTRIES (THAILAND) CO.,LTD. (IIT)  
Kabinburi, Thailand



PT. INOAC CONSTRUCTION MATERIALS INDONESIA (ICMI)  
Tangerang, Indonesia

## SUSTAINABLE DEVELOPMENT GOALS

### Our effort for SDGs



Propose efficient energy use to protect limited resources.



Support industrial development by creating sustainable community and comfortable & safety living environment.



Provide water infrastructure, leading to safety water supply.



Improve infrastructure to support agriculture and fisheries for stable food production.



Aiming at creating an equal society for everyone.

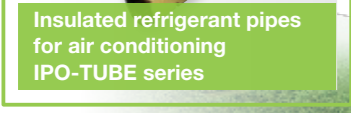
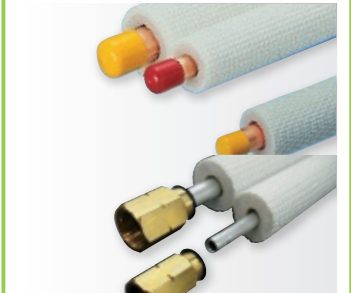
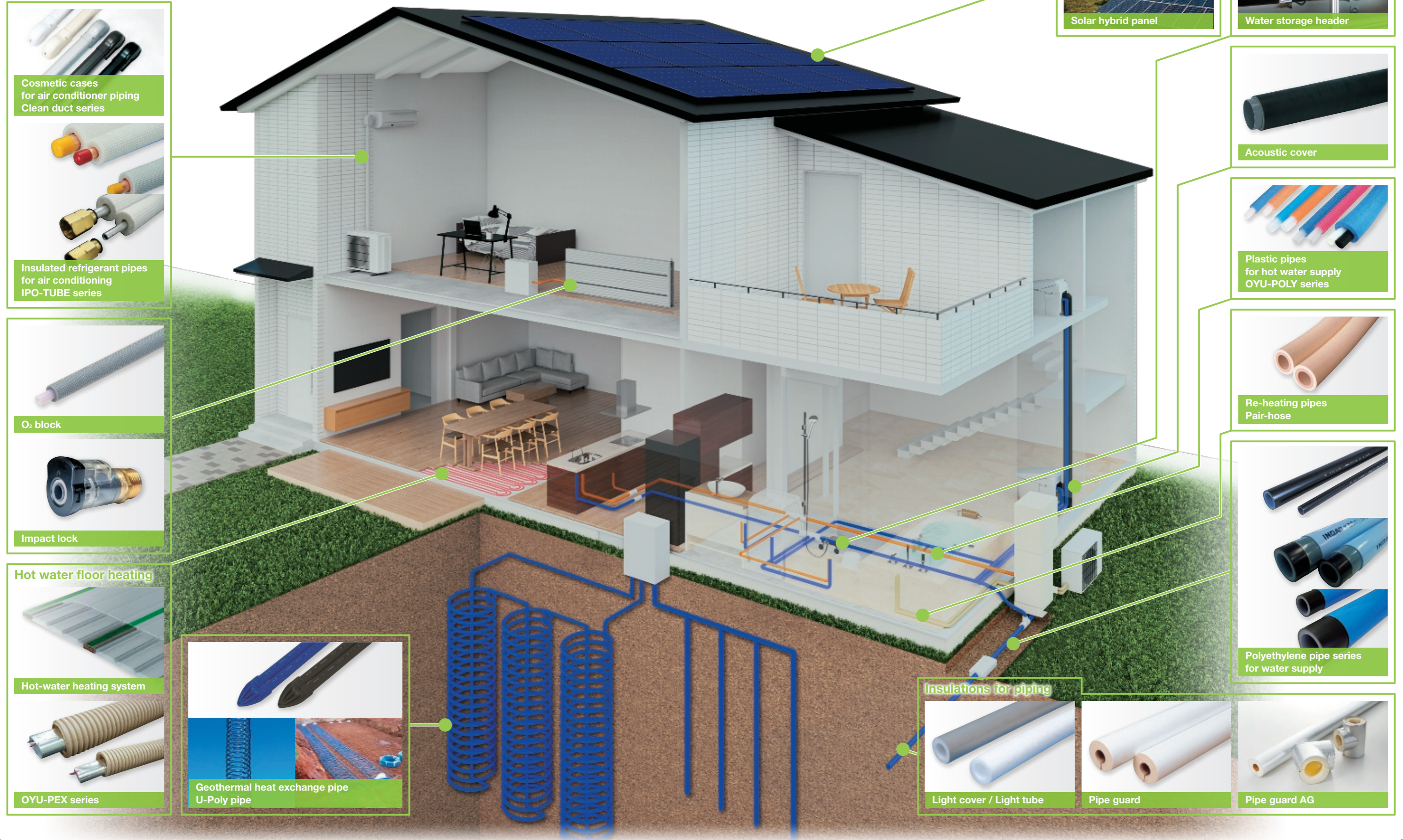


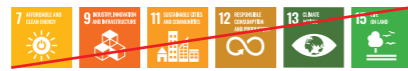
Challenge problem-solving deepening the cooperation with companies and local governments.



# Single-family homes / Apartments and condominiums

We provide a comfortable life with our product line-up that can realize "Energy-savings", "Eco-friendly", "Safety", and "High durability / Long life-span" required in future.





# Plant / Building & office

We support your business life by providing "Energy-savings", "Eco-friendly", "Safety", and "High durability / Long life-span" for various business situations.




LED line lighting  
J-RAINBOW LINE2



Linear expansion reduction pipe containing recycled carbon fiber



High-performance insulation T-FIT



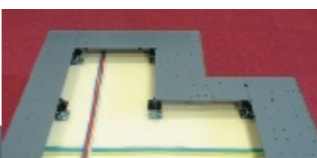
Piping for cooling water AIPOLY BROAD PIPE




Geothermal heat exchange pipe U-Poly pipe




High-performance flame-retardant insulation board Thermax




Raised access floor NeoFOSPA



Raised access floor NP type



Moisture proof/insulation system ceiling Swimlight



Large space ceiling Light ceiling system



Underfloor cavity filling On-site urethane foam method



Sprinkler piping OYU-POLY PB sprinkler



Sprinkler piping for general building Easy-SP

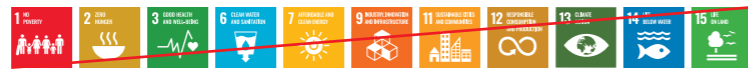


Insulated refrigerant pipes for air conditioning IPO-TUBE A series



Drain-up piping with insulation Drain hose LIGHT II

画像なし



# Infrastructure / Civil engineering

We support your safe life by providing our products with "Energy-savings", "Eco-friendly", "Safety", and "High durability / Long life-span" in the event of a disaster, such as an earthquake as well as daily life.



Polyethylene double-layer pipe for water supply



Culvert drain pipe



Filling the tunnel back cavity  
On-site urethane foam method

Snow-melting piping  
AIPOLY BROAD PIPE

Small hydropower  
AIPOLY BROAD PIPE



AIPOLY BROAD PIPE



Filling the back cavity of grating crib  
On-site urethane foam method



Recuperator unit for unused heat recovery  
G-HEX

Snow cannon/Mountain/Compressed air piping  
AIPOLY BROAD PIPE

Water supply  
AIPOLY BROAD PIPE

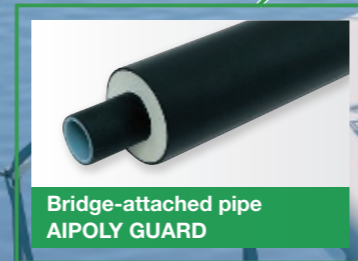


Hot spring/water connecting/supply pipe  
HOT PEX / ONSEN PIPE

Water and sewage piping  
AIPOLY BROAD PIPE



Fish-cage / Jetty Barge  
AIPOLY BROAD PIPE(Aqua float method)



Bridge-attached pipe  
AIPOLY GUARD



Wire coating cover



Floating structure internal filling  
On-site urethane foam method

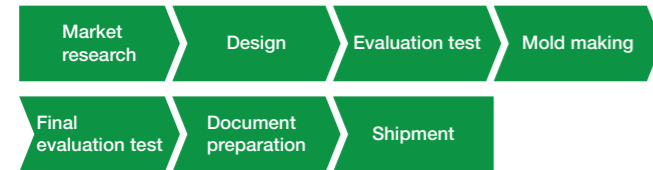
# We continue to challenge new possibilities that utilize our unique strengths to provide a safe and comfortable living environment for people all over the world.

Our strength is to develop products from materials, present our products with its engineering, and expand our market overseas by our development ability to create only one product.

## 01 Product development from materials

**We present what customers really need by the most appropriate way.**

We are developing products from materials, assuming various environments. We have a laboratory to meet our customers' request quickly, such as making a prototype production or safety quality control.



**We develop products, using various materials and technology of INOAC**



INOAC corporation has developed materials, such as urethane, resin, and rubber and by using these materials, they have developed products for automotive parts, industrial materials, and consumer products. Our company utilizes its material and technology to develop products to the residential field, which is required for longer product life cycle.

**We have many specialists in each field, which makes us make system proposals.**



We have many specialists in various fields such as housing, water supplies, factories, buildings, infrastructure, and civil engineering etc., and therefore we can make system proposals in corporation with its each field.

**We can make a prototype and evaluation speedily.**

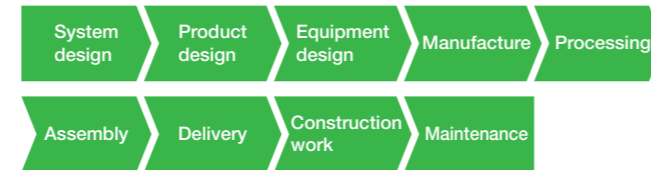


We can make a prototype speedily at our laboratory in Nagoya using 3D printer, lathes, milling boards, drilling boards etc. We also have a model house and thus we can measure a flow rate, hot water holding, and check a construction work.

## 02 Proposal for both products & its engineering

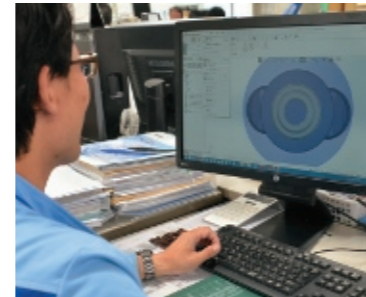
**Consistent total proposal from material design to construction and maintenance**

Aiming to create a comfortable space from industrial space to living space, we produce our products, implementing design, engineering, and do maintenance by ourselves.



**Product design**

We can make various designs from creating a drawing, structural calculation, quantity survey preparation to finite element analysis (FEM).



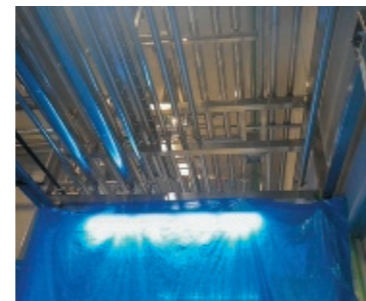
**Manufacture**

It is possible to do construction work with our in-house manufactured products. We are also developing products that meet the needs of our customers.



**Construction**

We have own construction system and skilled employees are responsible for the construction.



## 03 Development capabilities to produce only one product

**Innovation created by intellectual property**

With a history of more than half a century, our company has acquired a lot of domestic / foreign patents by meeting the various needs.



We develop our products by many molding technologies such as injection, extrusion (foaming), vacuum, hot pressure, and blowing etc.



We can produce a floating structure by a resin (PE) that is excellent in durability and workability. The maintenance work is not required and the running cost can be reduced which leads to shortening the construction period.



On site urethane foaming makes it possible to match any the mountain shape. It is also effective for the work on steep slopes, to reduce the earth pressure for buildings.

## 04 Global structure

**We can export all over the world from our factories in Southeast Asia.**

Mainly with the large diameter (up to OD 800) HDPE pipe business, we are working with local partners on leakage problems in water distribution in Indonesia. We also supply thermal insulations and air conditioning pipes from Thailand.



Employees in our Thailand factory.



Acquired SNI(= Indonesia ISO standard).



Thermal insulations are produced in Thailand.



We are the 1st Japanese company to produce HDPE pipes by our own factory in Southeast Asia. Our Indonesian factory is the export base of ODA projects in Southeast Asia.

## EXPORT PRODUCT LINEUP >

### Clean Duct / Cosmetic case for refrigerant pipes >

Wide range of accessories make it easy for installers to layout air conditioning pipes beautifully and perfectly in any condition.

#### Main features

1. Available in three colors; white, ivory and black.
2. No deformation or discoloration due to high temperature or UV
3. More than 25 types of abundant variations.

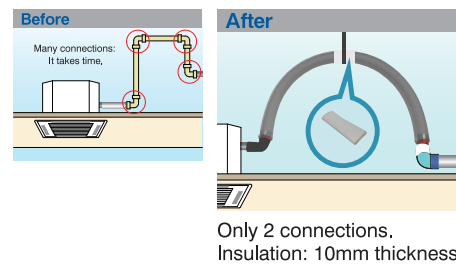


### Drain Hose Light II >

Drain-up hose with both an insulation & a fitting for packaged air conditioners.

#### Main features

1. Detachable fitting.
2. 360 degree rotatable fitting.
3. The red lock ring tells whether it was inserted properly.
4. Can be connected with PVC pipes and fittings directly.



### Accessories for air conditioner >

#### • Pair Hanger

Metal fittings to support insulated copper pipes and drain pipes.



#### • High-Drain / High Drain S

Excellent weatherability and mold resistance drain hose.



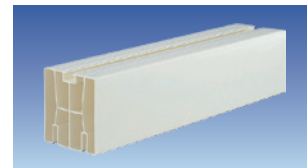
#### • PE Bender

Used into the copper pipe when bend it.



#### • Base Rock

Made of PVC resin. Sturdy outdoor unit stand.



### IPO TUBE ALIGHT & CONIC JOINT : Innovative aluminum tubes and fittings for air conditioners >

Aluminum tubes for air conditioners have many more advantages than those of copper tubes.

1. Aluminum is lighter than copper and has lower thermal conductivity
2. Aluminum is easy to cut / bend.

Aluminum tubes, however, were hardly used as refrigerant tubes because of a risk of galvanic corrosion when connecting with other metals and the leakage of refrigerant gases after the flaring (=aluminum is softer than copper in general and thus, it is rather difficult to make a good shape flaring).

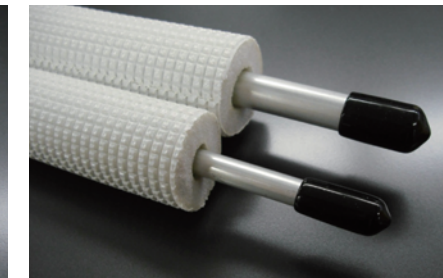
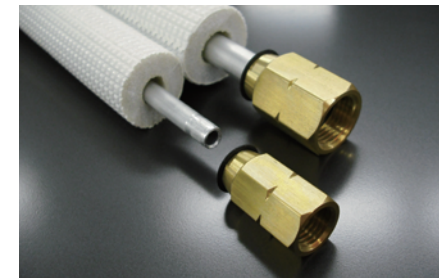
However, all these problems can be solved by Conic Joint, an innovative flareless joint for aluminum tubes, developed by INOAC.

#### Advantages

No more galvanic corrosion even if connected with other metals.

Flaring is no necessary for connecting.

In addition, the density of aluminum is one-third compared with that of copper, leading to a big weight reduction.



IPO TUBE ALIGHT



CONIC JOINT

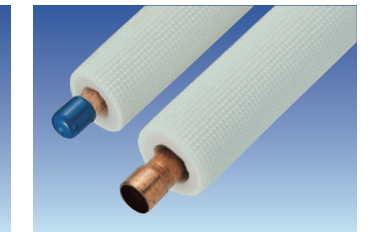
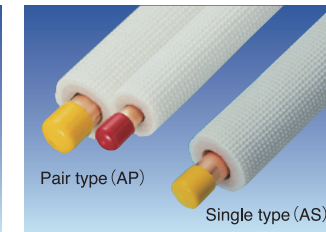
### IPO-TUBE / Insulated copper tubes for air conditioners >

Copper tubes for air conditioners

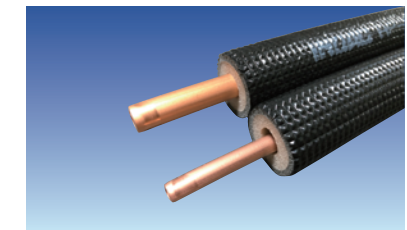
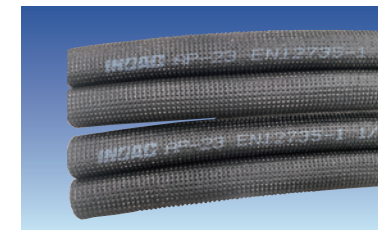
- IPO-TUBE AS · AP · ASFR · APFR · ASK · ASK-20

#### Main features

1. Surface pattern of the insulating foam eases the pressure and wrinkle when bending work.
2. Higher reliability of PE foam comes from our leading technology.
3. Wide range of choice (we have both straight type and coil type. We also have flame retardant type with BL-s1,d0).
4. New refrigerant (R32/R410A/407C) is OK.



### Black color coming soon >

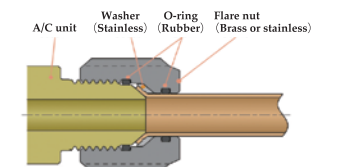
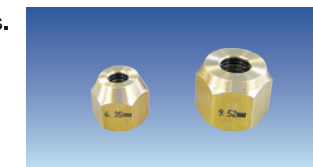


### Correct Flare >

New solution to flare deformation and minute refrigerant gas leaks.

#### Main features

1. Prevent pipe from disconnecting at connection.
2. Protects pipe flare against deformation.
3. No specialized tools required.



## EXPORT PRODUCT LINEUP >

### Sound Absorbing Cover II >

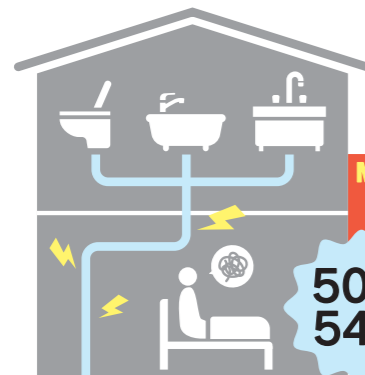
High-performance for sound absorbing

#### Main features

1. High sound absorbing effect.
2. Environmentally friendly.
3. Non-woven surface material prevents condensation.
4. Transparent fittings prevent forgetting to apply adhesive.
5. Compatible with a wide range of construction.

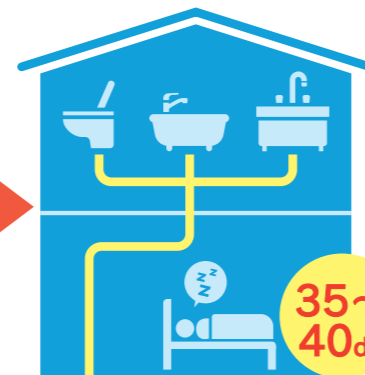


#### No sound absorbing



Max. **19dB** reduction  
50~54dB

#### Sound Absorbing Cover II



35~40dB

### Raised Access Floor >

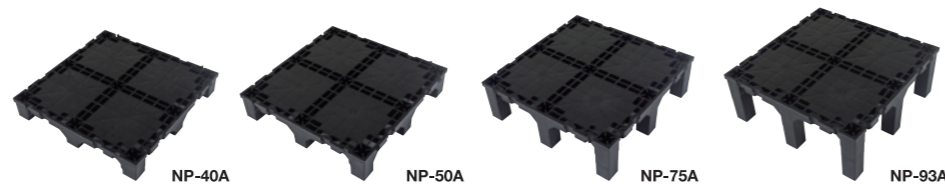
Raised access floor for a comfortable office space.

#### [ Product type ]

##### • NP series ( Plastic type )

#### Main features

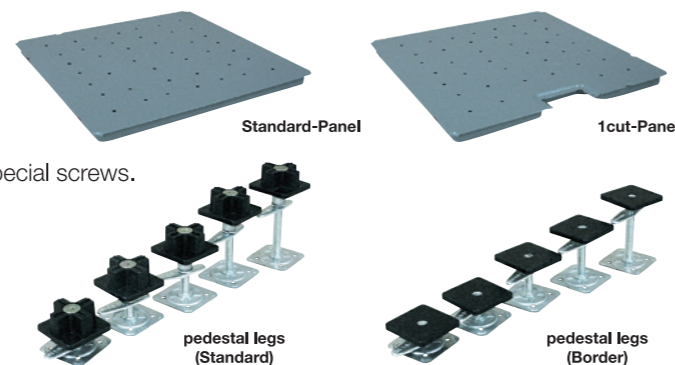
1. Lightweight (about 9kg/m<sup>2</sup>)  
Easy to carry and install.
2. Speedy installation.  
Since it is a stationary floor, installation is easy and speedy.
3. Panel height can be selected.  
Choose from 4 types according to the ceiling height and wiring capacity of the room.



##### • NeoFOSPA® series(Steel type)

#### Main features

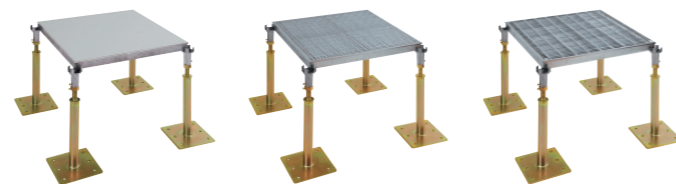
1. Nice walking feeling.  
Walking feeling close to a concrete floor.
2. Simple installation.  
Panels can be fixed on 4 sides with only one point fixing with special screws.
3. Selectable wide range of heights.  
Abundant support leg with (50mm to 150mm).



##### • Aluminum type

#### Main features

1. Non-magnetic material.  
The aluminum panel is not affected by the magnetic field.
2. High recyclability.  
100% recyclable
3. Lightweight  
Aluminum is lighter than iron, it is easy to attach and detach the panel after construction.

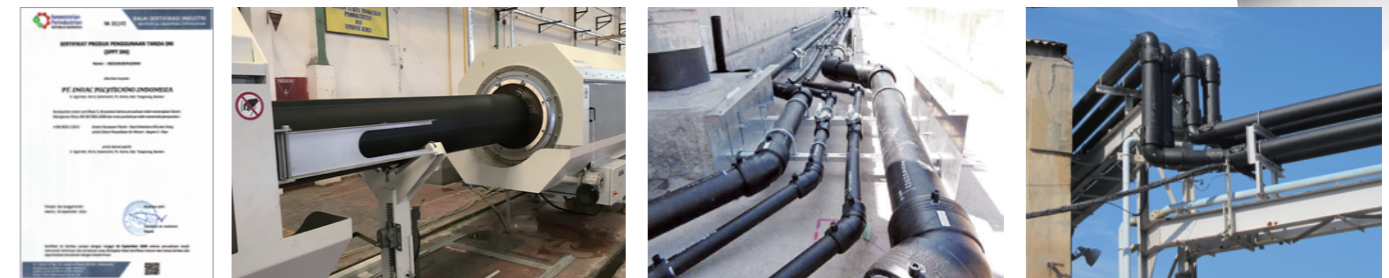


### AIPOLY BROADPIPE / High performance PE pipe >

AIPOLY BROADPIPE is made from high-density polyethylene certified as PE100 in accordance with ISO 9080. This material provides the world's highest level of long-term hydrostatic pressure strength. (The size is available up to OD1200.)

#### Main features

1. Earthquake resistance  
It has a great flexibility and can accommodate ground subsidence and earthquakes flexibly.
2. Workability  
Polyethylene is lightweight & flexible, easy bending / piping without tools.
3. Durability  
Long-term durability due to the use of a high-density polyethylene(PE100).
4. Pressure resistance  
EF and Butt welding joints can ensure tight seal against water and air.
5. Corrosion resistance  
Polyethylene is chemically stable and is not at risk of corrosion from soil.



### Oyu-Poly (ISO Size) >

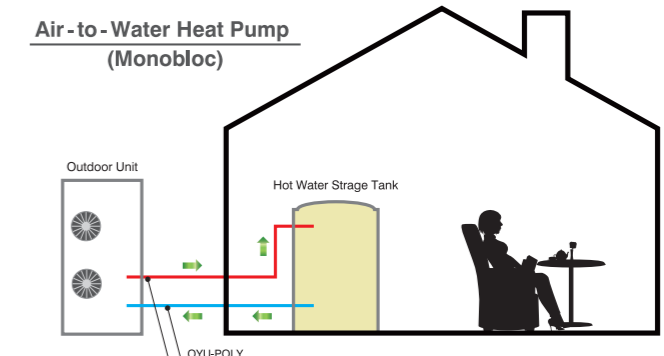
Oyu-Poly is made from cross-linked polyethylene (Pex Pipe) with superior cold/heat resistance.

#### Application

- Residential Hot & Cold Supply
- Connection Pipe for Air-to-Water Heat Pump (Monobloc)  
\*Between the Outdoor Unit and Hot Water Storage Tank

#### Features

1. Excellent Flexibility - Bendable by Hand
2. Excellent Pressure/Temperature Resistance
3. Easy to Connect
4. No Special Skill Required
5. Japan Quality, No Leakage.
6. Saving Installation Time and Cost.
7. Longer Life & Higher Reliability
8. High Weatherability Insulation  
- No significant deterioration such as cracks in appearance after weatherability test (Irradiation equivalent for 10 years)
9. Size: OD20mm, 25mm and 32mm (thickness of insulation: 20mm)
10. It conforms with EN921, EN579, EN 743 and WRAS.



### THERMAL INSULATION PIPE Series >

Various types of products based on function and application are available.

#### Main features

1. Three types(=materials) are available (PU, PE, EPDM)  
-Each material has its own strong points such as non-flammability, high temperature resistance, weatherability, or cleanliness.  
-Easy installation
2. Excellent function  
-Thermal conductivity : 0.024 W/m · K  
-Flammability : Max UL94 V0  
-Heat resistance : Max 155°C

