

BUBBLE ELIMINATOR



OPUS SYSTEM Inc.

The “Specialists” in the Bubble Elimination Technology

Opus System Incorporated has over 20 years of success focusing on removing “bubbles” from fluids flowing in in pipelines. We have perfected the art of eliminating bubbles or the so called dual cyclone method, by installing a custom designed device with two inlets directly on the pipeline.

We custom design each bubble eliminator device based on the individual needs and specification set forth by each of our clients to ensure the highest level of bubble removal is attained. The choice of material for the device will also be selected to ensure the highest quality. We have recognized it important to keep communication with users to create new value, having intimate relation with research center of a university.

We look forward from hearing from you should you have a need to resolve any issues caused from “bubbles”.

Bubbles cause many problems in the fluid delivery process.
Some of the issues resolved are as follows:

Reduction of Surface Quality

Measurement Degradation for Liquids

Reduction of the Cooling Effect

Increased Fluid Heat Emission

Quality Degradation by Oxidation

Deterioration of Product Quality

Damage to Liquids

Damage to Components

Un-necessary Burden to the Environment

The following are liquid products that would benefit from installation of the bubble eliminator device:

Coating Materials

Film Adhesive Agents

Coolants

Liquids for Gilding

Resist Liquids

Lubrication Oils

Food Stuffs

Achievements

The bubble eliminator device has currently been installed thus benefiting our clients of more than 70 companies.

Types of the bubble eliminator

Opus System Inc. will design the bubble eliminator device based on your specific needs and configure the device to meet your requirements. Device size will start from a minimal 5L per minute to the largest pipe-lines existence.



Standard Type

Generally suitable for low to medium flow rate.



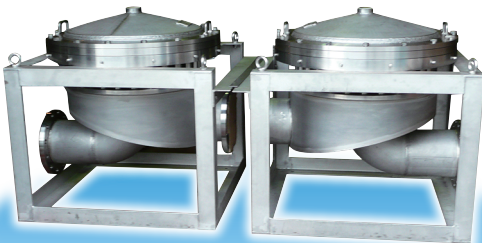
Inline Type

Medium to high flow rate.
Designed to be installed directly onto the pipeline without having right angle joints.



Sanitary Type

Designed mainly for food stuff that requires dissemblance and reassemblance to ensure a hygiene environment.
Jointing port is ferule fitting.



Coater Type

Used for paper coating machines to ensure easy maintenance upon color change.



Pump Combined Type

Feed pump and bubble eliminator device is assembled as a single unit.

Device Features

(A) Installed in combination with feed pump

- ① In installation bubble elimination device for fluids circulation, the device is tuned-up and ready for your circuit according to the flow rate of the pump.
- ② For fluids with low vapor pressure such as oils, the gas dissolved in the liquid can be removed by using a throttle valve located on the pump suction side of the device.
- ③ As the amount of gas dissolved in the liquid decreases, the rate of absorption of gas in the liquid will increase allowing the fluid to absorb more bubbles dissolved in oils.

(B) Installed directly into return or processing line

- ① A variety of components such as heater, cooler, filter and others can be incorporated.
- ② The bubble eliminator device can also be installed inside a reservoir to save space.

(C) Proof pressure of the bubble eliminator device

- ① The devices can accommodate up to 1.0MPa. We can design devices with higher proof pressure but the bubbles will become smaller or disappear under high pressure.
- ② Normal pressure drop range for the bubble eliminator device is 0.1-0.2MPa.

Test device lending

Opus System Incorporated will provide small bubble eliminator devices for experimental and trial use.

Test machine configuration:

- Please inform us in advance on flow rate and geometry

Direction in how the device will be installed:

- Please indicate preferred direction including horizontal or reverse vertical

Pressure Drop:

- Average range is within 0.1-0.2Mpa depending on the fluids used
- Please inform us beforehand if you need a lower pressure rate than above

Test Fee:

- Price Upon Request (for services within Japan)

Overseas agent

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●The specifications and the appearance change a part of mentioned to this catalogue without a notice for product improvement and performance enhancement.
Thanks for your understanding beforehand.

●By the convenience of the color of our device, it may look different from the actual color. Please understand beforehand.

●The contents of this catalog are things as of November, 2024.