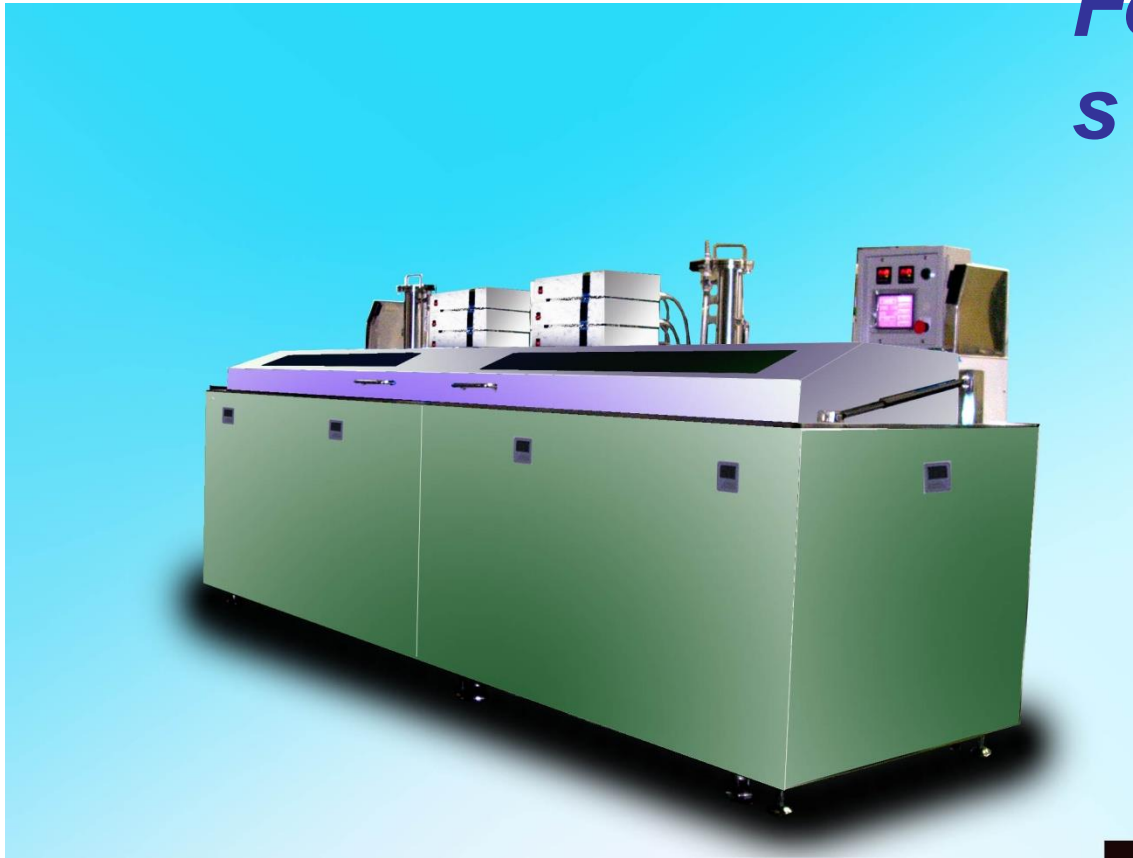


With Cavitation Enhancement System  
Cylinder ultrasonic cleaning equipment

# *Super-Multi-GS Series*

***Feature  
s of***



Blue Star R&D Co.

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Cylinder ultrasonic cleaning equipment

## *Super-Multi-GS Series*

Thorough control of cylinders in printing is accompanied by improved  
quality control,

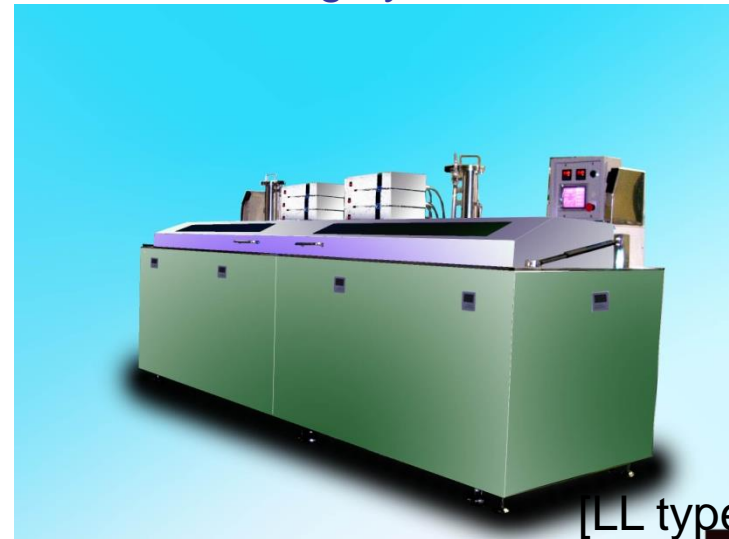
It has become an important theme.

Enables cleaning of inks with curing agents, whether water-based or oil-  
based inks

Proposal for cylinder, new, ultrasonic cleaning system.



[ L-shape  
standard ].



[LL type  
standard]

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## *Features of the Super-Multi-GS Series*

This is an overview of the case study.



[ Example of cleaning capacity ]

From  $\Phi 122 \times 600\text{mm}$

$\Phi 261 \times 1300\text{mm}$

Two gravure cylinders can be  
cleaned at the same time

Washable 1847mm with shaft on  
both sides Blue Star R&D Co.

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## *Features of the Super-Multi-GS Series*

Super Multi **Ultrasonic** 25KHz~535KHz

**Simultaneous wide-area multiple-wave oscillation (world's first) enables cleaning of adhered ink in cells.**



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## *Features of the Super-Multi-GS Series*

**Cleaning agent can be cleaned by water +  
surfactant dilution, realizing an  
environmentally friendly and low running cost  
system**

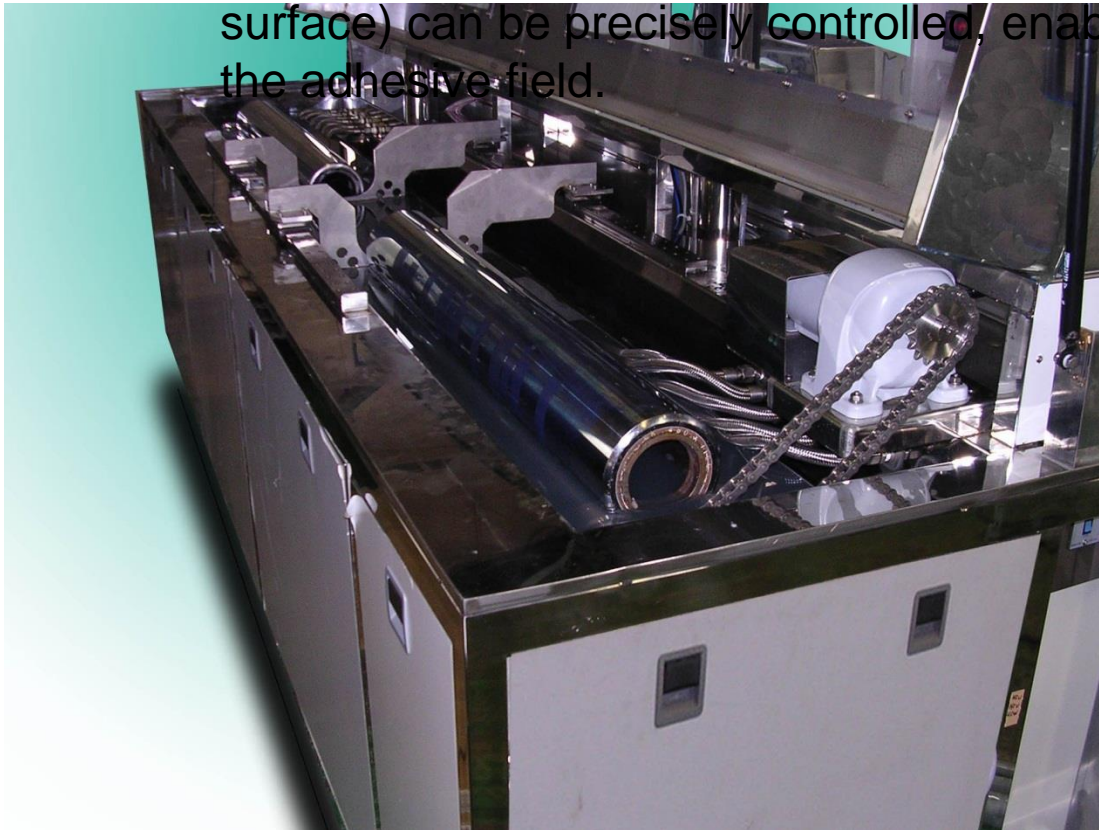


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## *Features of the Super-Multi-GS Series*

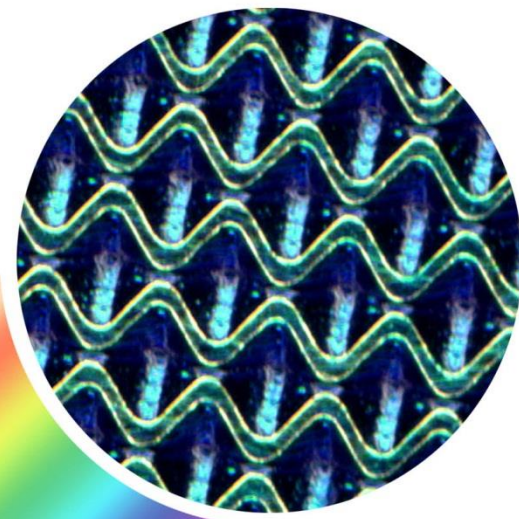
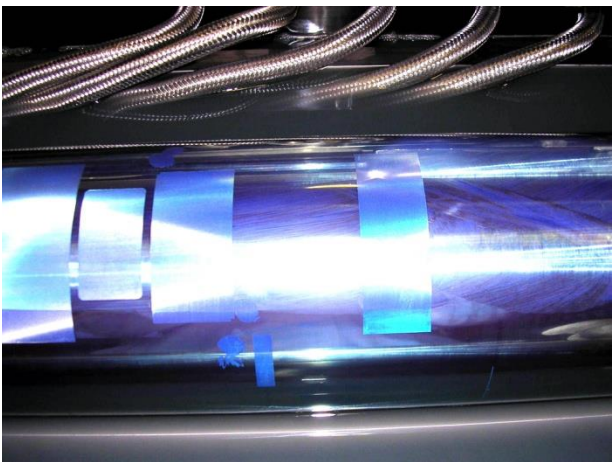
The ultrasonic oscillation density can be varied, and the distance between the ultrasonic wave and the object to be cleaned (liquid surface) can be precisely controlled, enabling cylinder cleaning in the adhesive field.



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*Features of the Super-Multi-GS Series*

Before cleaning. Ink with hardener.

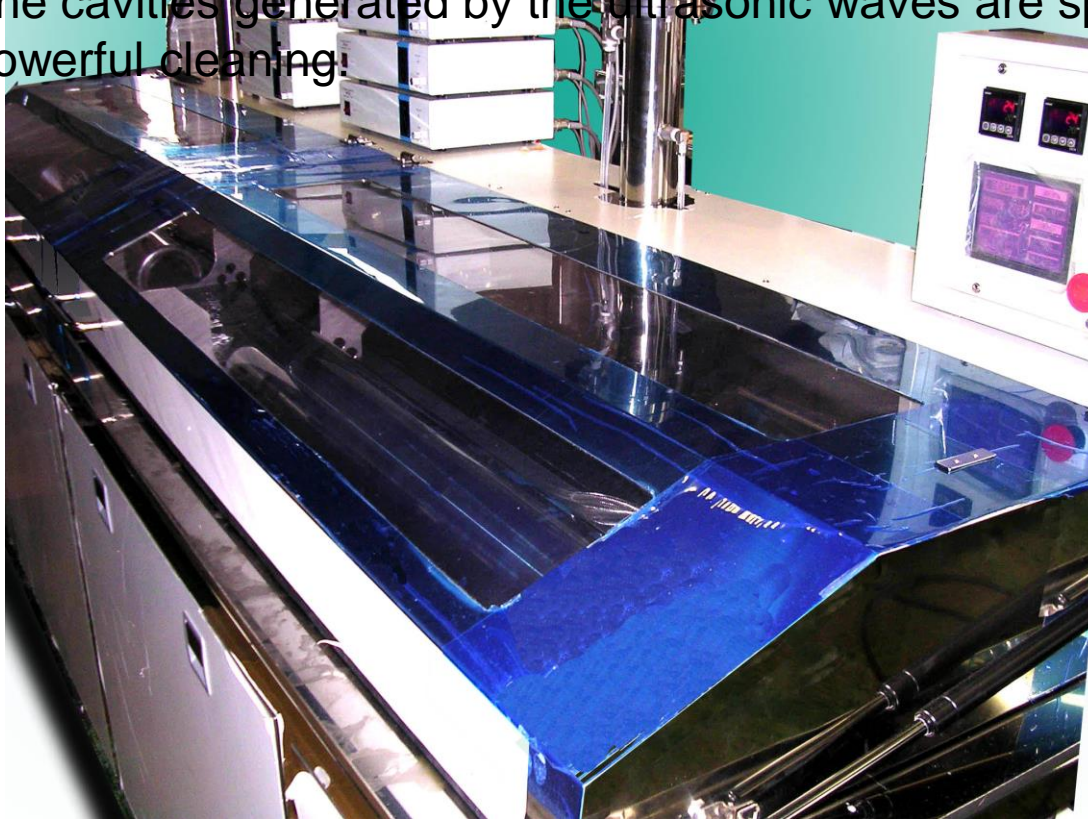


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Cylinder ultrasonic cleaning equipment

## *Features of the Super-Multi-GS Series*

Deaerate the cleaning agent to reduce the amount of dissolved oxygen in it to 2 mg/l or less.

The cavities generated by the ultrasonic waves are spherical to achieve powerful cleaning.



Built-in deaerator

Ultrasonic cleaning  
equipment.

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Cylinder ultrasonic cleaning equipment

### *Features of the Super-Multi-GS Series*

Source of cleaning power Cavities (microvacuum nuclei) are different!



[ cavities of other companies ]  
Sparse and weak



[ Star cluster cavity ].

Numerous and powerful

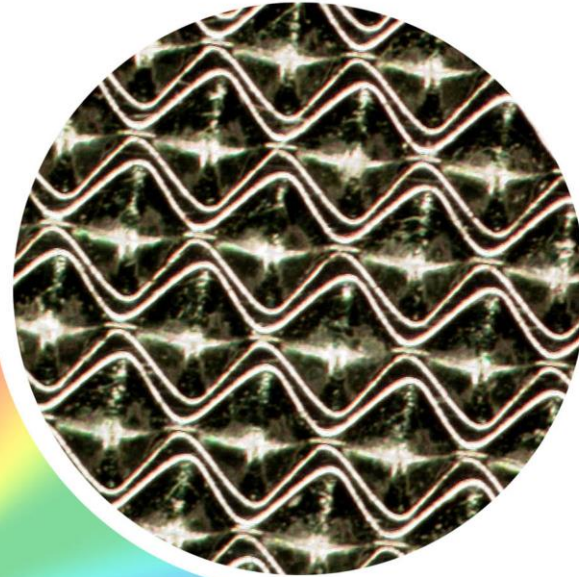
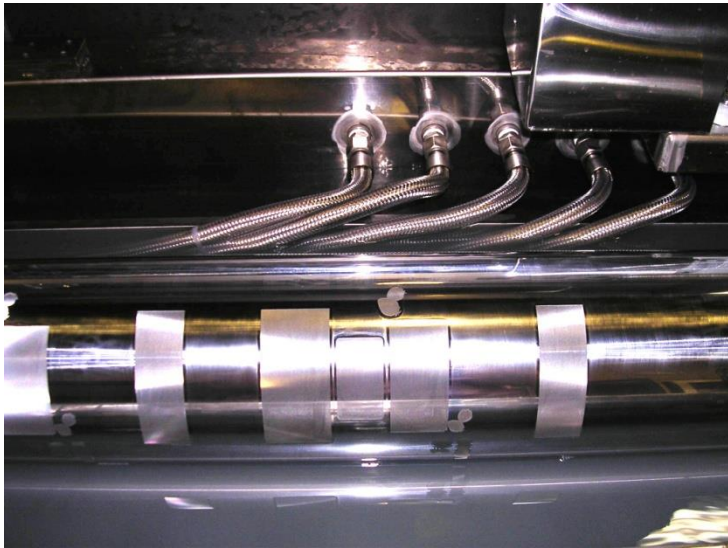


With Cavitation Enhancement System  
Cylinder ultrasonic cleaning equipment

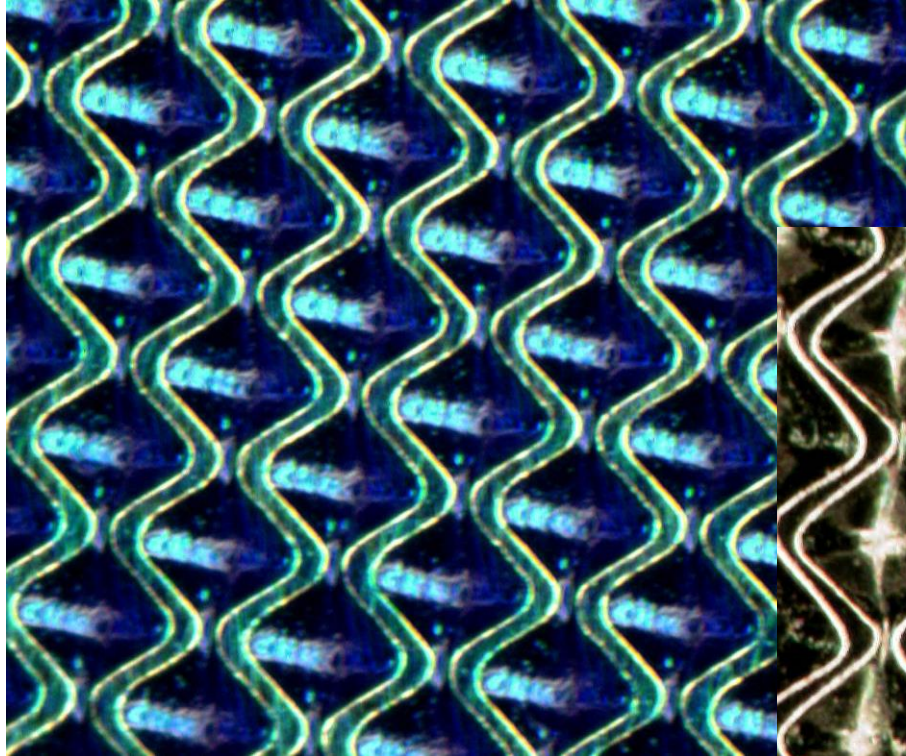
## *Features of the Super-Multi-GS Series*

After cleaning.

Stable and excellent cleaning effect.

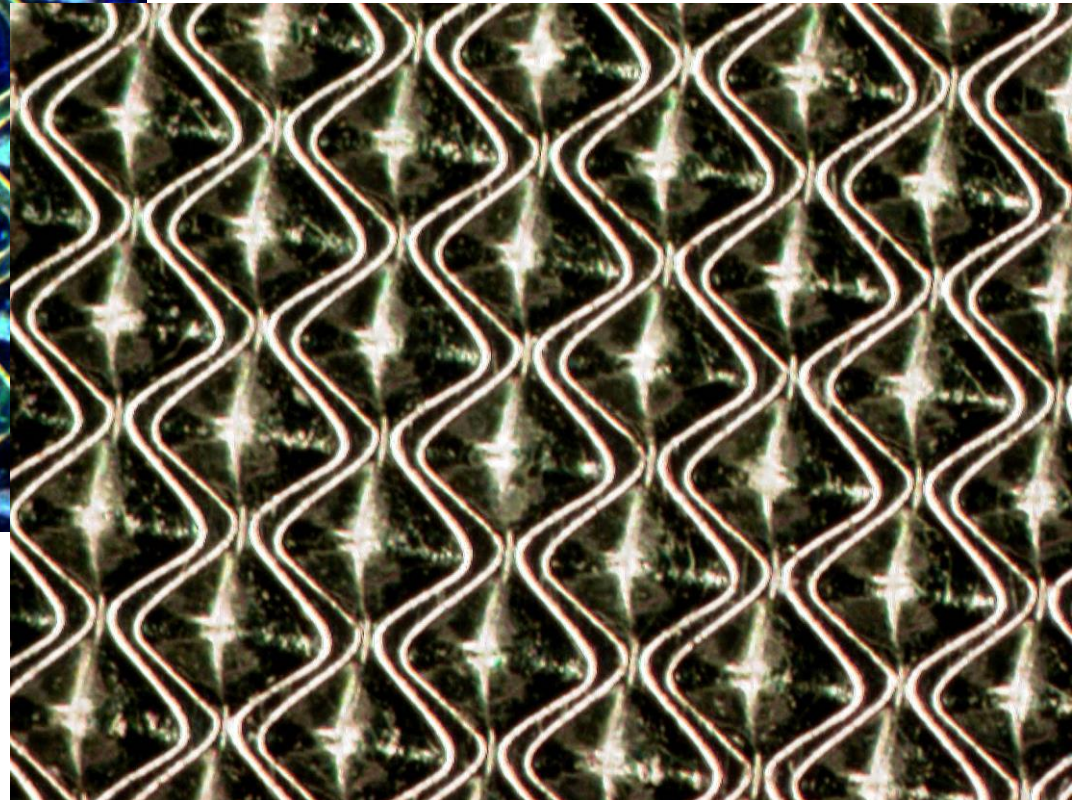


## *Features of the Super-Multi-GS Series*



[ Cells before  
cleaning ]

Please compare before and after cleaning.  
The inside of the cell shines beautifully.



[ Cells after cleaning ]

*Super-Multi-GS Series*  
*Advantages of utilizing the equipment[ 1 ].*

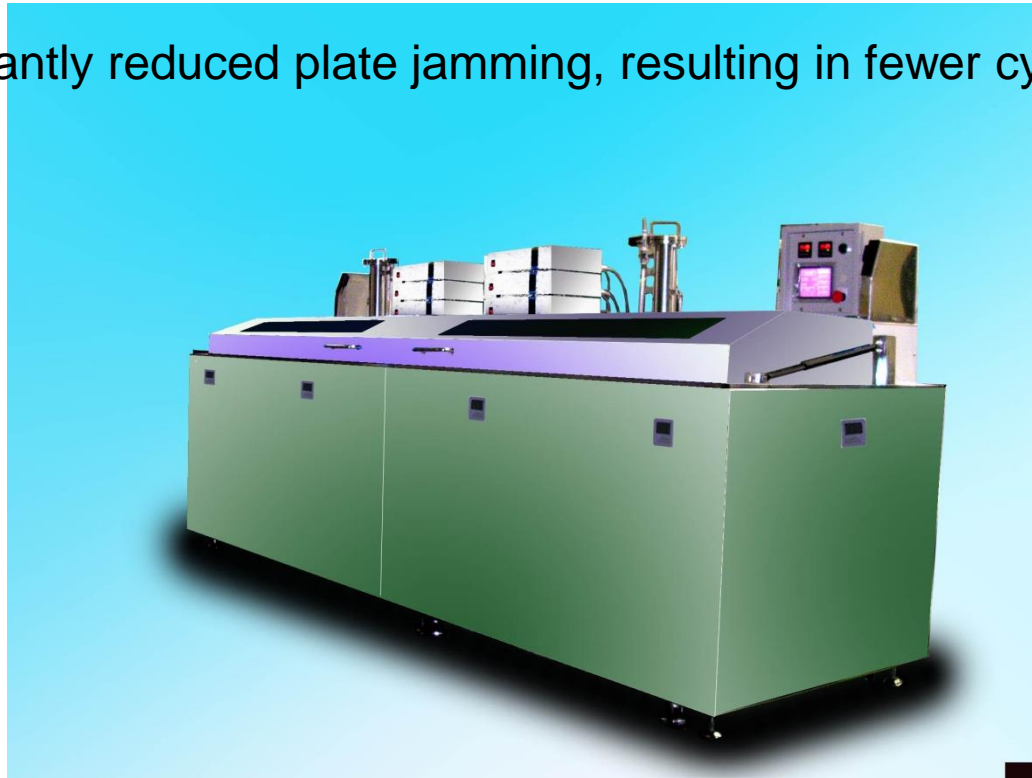
- 1, Printing errors due to plate clogging are reduced, contributing to a reduction in the printing loss ratio.
2. The working environment for operators is improved and mechanization is also made possible,

Anyone can start the cleaning process.



*Super-Multi-GS Series*  
*Advantages of using the equipment [ 2 ].*

- 3, Cylinders cleaned during the reprinting process for smooth operation.
- 4, Cylinder management work flow can be created and process standardization can be achieved.
5. Significantly reduced plate jamming, resulting in fewer cylinder rework cycles.



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[ 14 ]

## *Super-Multi-GS Series*

Dear Customer

Blue Star is,

We are a manufacturer of powerful and ultrasonic  
cavitation application technology.

We can respond to your needs.

Cylinder washers.

Using the world's strongest and most powerful ultrasound.

We will deliver.

Blue Star R&D Co.

