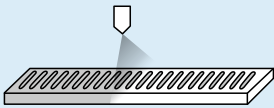
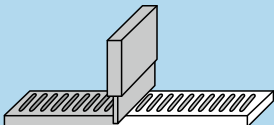
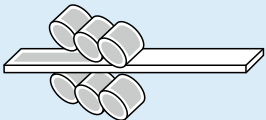
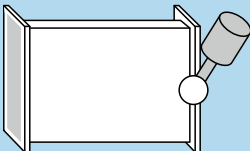


# Brazing materials and their lineup

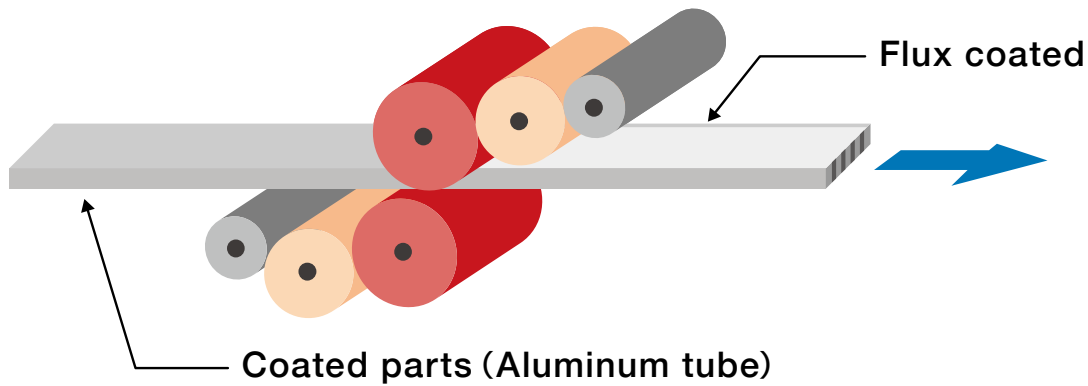
We propose Brazing products to meet a wide variety of coating method.

Coating method	Coating method	Characteristics
<p><b>Flux containing</b> NHP-NV112</p>	<p>Spray coating</p> 	<ul style="list-style-type: none"> <li>• Suitable for the bent or curved surface coating</li> </ul>
<p><b>Flux containing</b> NHP-X1002-39F</p>	<p>Flow coating</p> 	<ul style="list-style-type: none"> <li>• Make it possible to coat partially to the parts</li> </ul>
<p><b>Flux containing</b> NHP-X1001-50F</p> <p><b>Silicon containing</b> NHP-X1003-50FS(EX)</p> <p><b>Zinc containing</b> NHP-X2200-50Z</p>	<p>Roll coating</p> 	<ul style="list-style-type: none"> <li>• Suitable for the flat surface coating</li> <li>• Good evenness</li> <li>• Good yield</li> </ul>
<p><b>Flux containing</b> NHP-X109-50FG</p> <p><b>Metal containing</b> NHP-X1600</p>	<p>Dispense coating</p> 	<ul style="list-style-type: none"> <li>• Make it possible to feed properly to the parts</li> <li>• Good yield</li> </ul>

※Handle a lot of brazing materials except the above.

The paint flux provides good adhesiveness and excellent thermal decomposition derived from Harima developed binder.

### What is roll coating?



The technology of making evenness coating by roll printing

### Paint flux for roll coating

Harima original



Thermal degradable binder  
Functions; adhesiveness and good degradability



Flux (Potassium fluoroaluminate)  
Function; removing oxide film on Aluminum surface



Paint flux for roll coating  
Functions; suitable viscosity for coating and making strong coated film

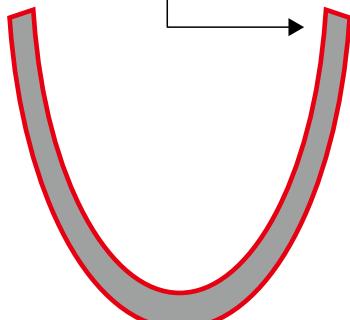
Paint flux for roll coating makes it possible to coat by optimum flux amount

# ACBP ~Anti-corroding clad-less brazing paint~

The brazing paint allows clad-less brazing as well as provides corrosion resistance on Al surface after brazing.

## Clad and clad-less

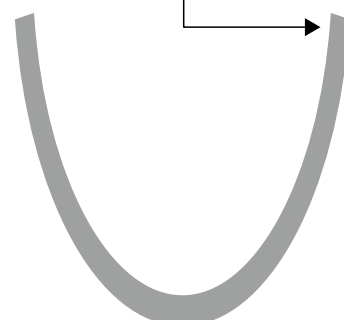
**Clad fin**  
Outer; Al-Si alloy (for brazing)  
Inner; Al-Mn-Cu alloy



Aluminum tube

Expensive as cladding parts

**Bare fin (Clad-less fin)**  
Al-Mn-Cu alloy



Aluminum tube

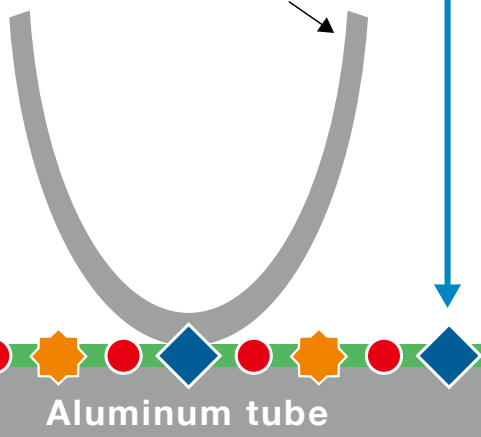
Inexpensive because of single material,  
→ But supply of Al-Si alloy is needed

costsaving

**ACBP**

To make full use of bare fin

Clad-less fin



Aluminum tube

## Ingredients and functions of ACBP

Ingredients	functions
★ Si	Joining
● Zn	Anti-corroding
◆ Flux	Removing oxide film
■ Binder	Adhesiveness
Solvent	Controlling viscosity

Make it possible to provide not only joining but also anti-corroding