# Coating methods of brazing materials and their lineup

**Wide variety of brazing products**

<table>
<thead>
<tr>
<th>Coating method</th>
<th>Product</th>
<th>Illustration</th>
<th>Characteristics</th>
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</thead>
<tbody>
<tr>
<td>Spray coating</td>
<td><strong>Flux containing</strong> NHP-115-32F</td>
<td><img src="image" alt="Spray coating illustration" /></td>
<td>• Suitable for the bent or curved surface coating</td>
</tr>
<tr>
<td>Flow coating</td>
<td><strong>Flux containing</strong> NHP-X1002-39F</td>
<td><img src="image" alt="Flow coating illustration" /></td>
<td>• Make it possible to coat partially to the parts</td>
</tr>
</tbody>
</table>
| Roll coating   | **Flux containing** NHP-X1001-50F | ![Roll coating illustration](image) | • Suitable for the flat surface coating  
• Good evenness  
• Good yield |
| Dispense coating | **Flux containing** NHP-X109-50FG  
**Metal containing** NHP-X1600 | ![Dispense coating illustration](image) | • Make it possible to feed properly to the part  
• Good yield |

※Handle a lot of brazing products except the above.
Paint flux for roll coating
Reduction of flux consumption and improvement of working space

What is roll coating?

Coated parts (Aluminum tube)

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 makes it possible to coat by optimum flux amount.
Anti-corroding Clad-less Brazing Paint (ACBP)  
Cost reduction by using bare fin and tube

**Clad and clad-less**

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

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

**Expensive as cladding parts**

**Inexpensive as single material**

⇒ But supply of Al-Si alloy is needed

**To make full use of clad-less fin**

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**ACBP**

**Clad-less fin**

**Ingredients and functions of ACBP**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Functions</th>
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<tr>
<td>Si</td>
<td>Joining</td>
</tr>
<tr>
<td>Zn</td>
<td>Anti-corroding</td>
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<tr>
<td>Flux</td>
<td>Removing oxide film</td>
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<tr>
<td>Binder</td>
<td>Adhesiveness</td>
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<td>Solvent</td>
<td>Controlling viscosity</td>
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Make it possible to provide not only joining but also anti-corroding.