

## ◆ Properties

	Density	Fracture Toughness	4 point Bending Strength	Young's Modulus	Hardness Hv	Thermal Expansion Coefficient	Thermal Conductivity	Thermal Shock Resistance	Volume Resistivity	Permittivity (1MHz)
	$\times 10^3 \text{kg/m}^3$	$\text{Mpa}\sqrt{\text{m}}$	MPa	GPa	GPa	$\times 10^{-6}/\text{K}$	W/m·K	K	$\Omega\cdot\text{m}$	
SIALON	3.2	7.5	880	290	15.5	3.0	17	710	$10^{11}$	8.7
<b>Super SIALON</b>	<b>3.2</b>	<b>7.7</b>	<b>1,050</b>	<b>300</b>	<b>15</b>	<b>3.0</b>	<b>65</b>	<b>1,000</b>	<b><math>10^{13}</math></b>	<b>7.2</b>

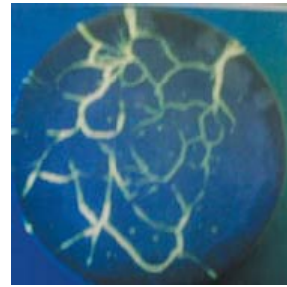
Note: The characteristic values of the table inside are not a guarantee value in the product.

### Thermal Shock Test

$\Delta T=800\text{K}$   
(Rapid water-quench test)  
Size:  $\phi 60 \times 20\text{mm}$

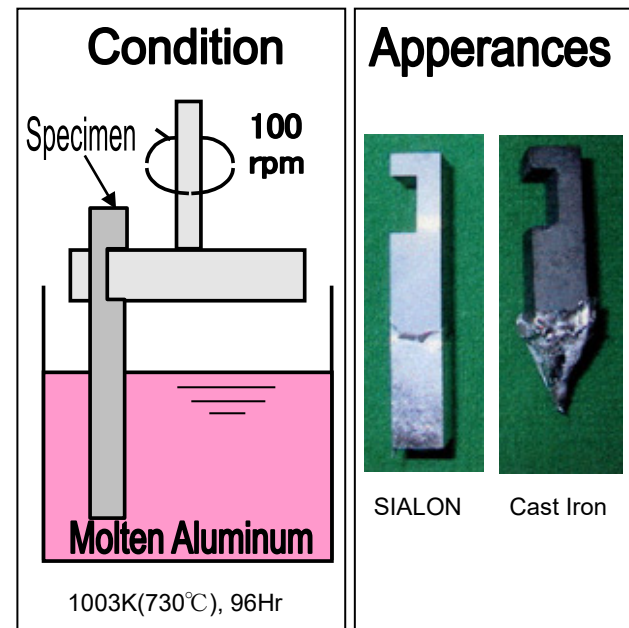


Super SIALON  
(No-cracking)



SIALON

### Wear Test in molten Aluminum



Note: It is not likely to be able to manufacture it according to the product shape and the application.

## ◆ Size

Outer Diameter	Length
Max $\phi 750\text{mm}$	Max 2,200mm

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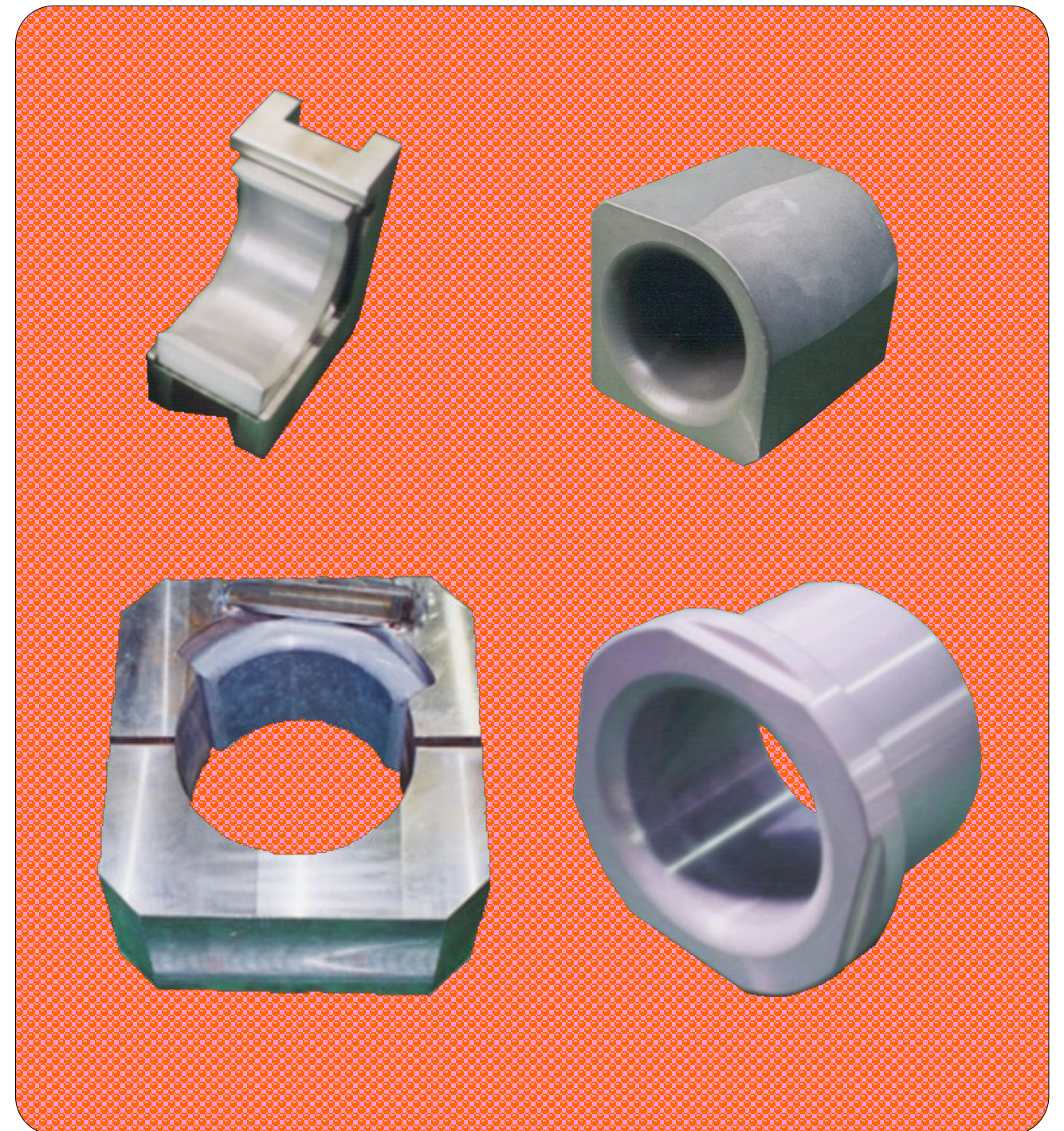
T-316

Materials Mag!c

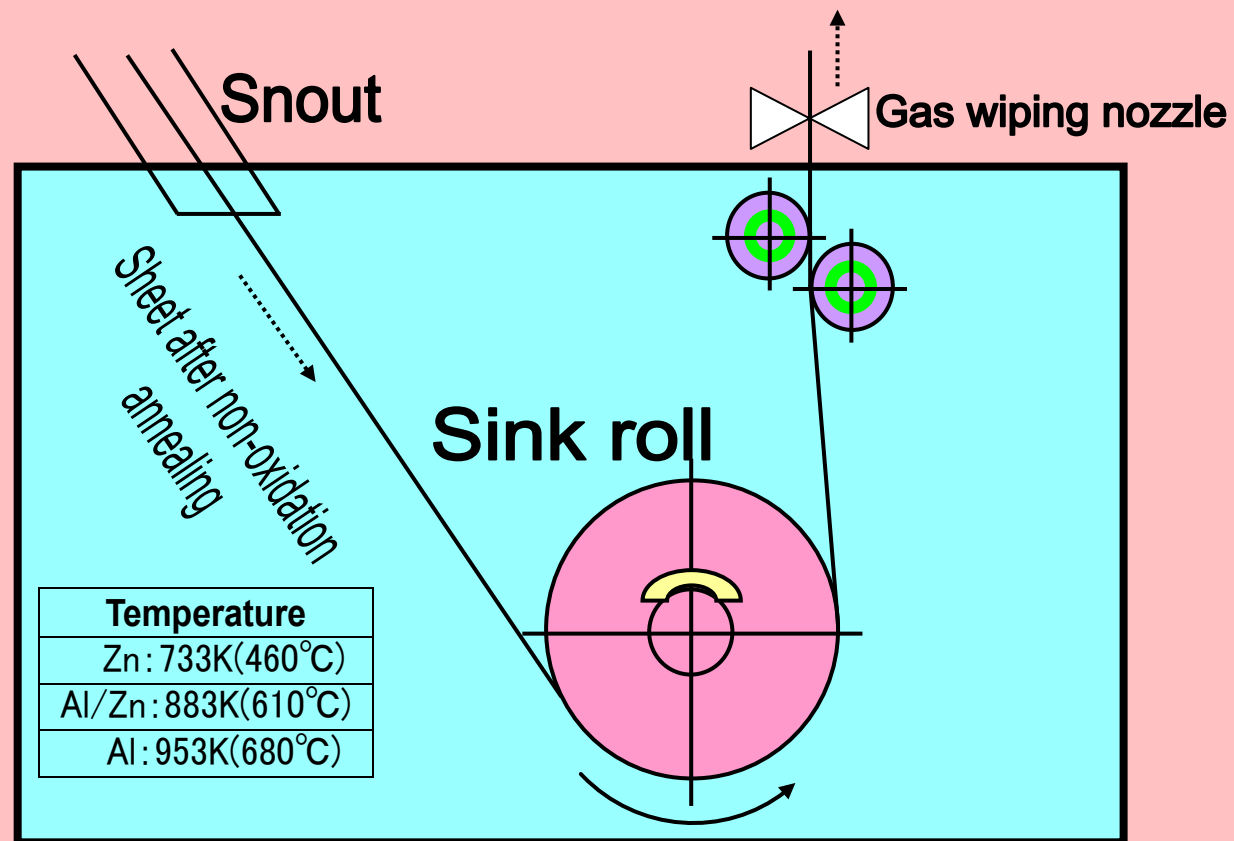
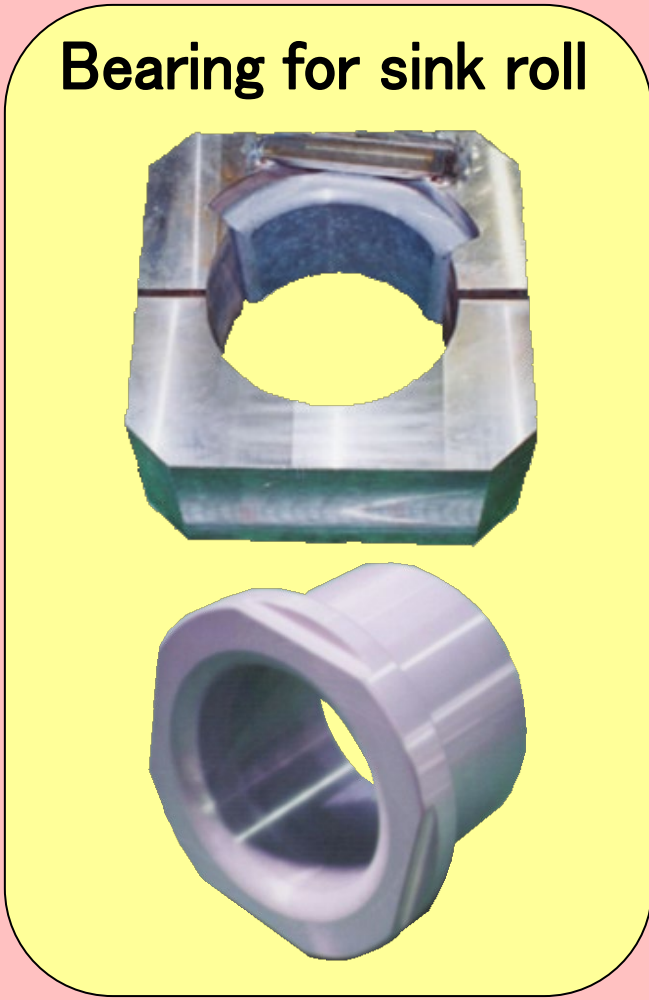
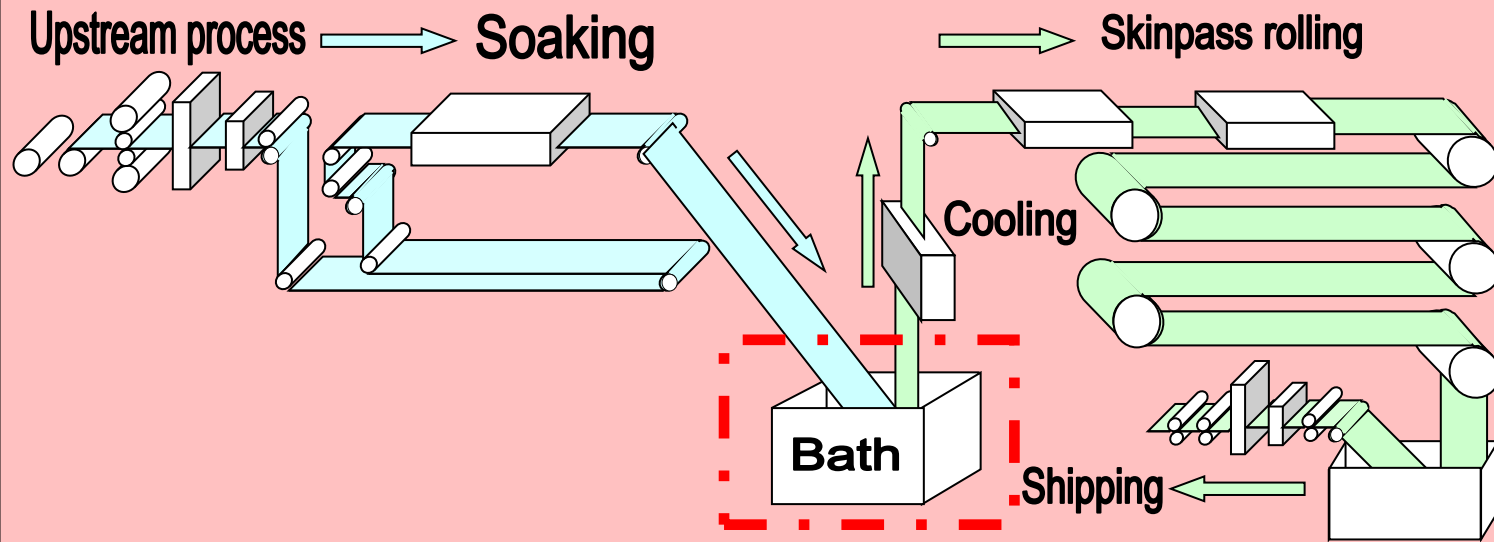
**HITACHI**

## HITACHI CERAMICS

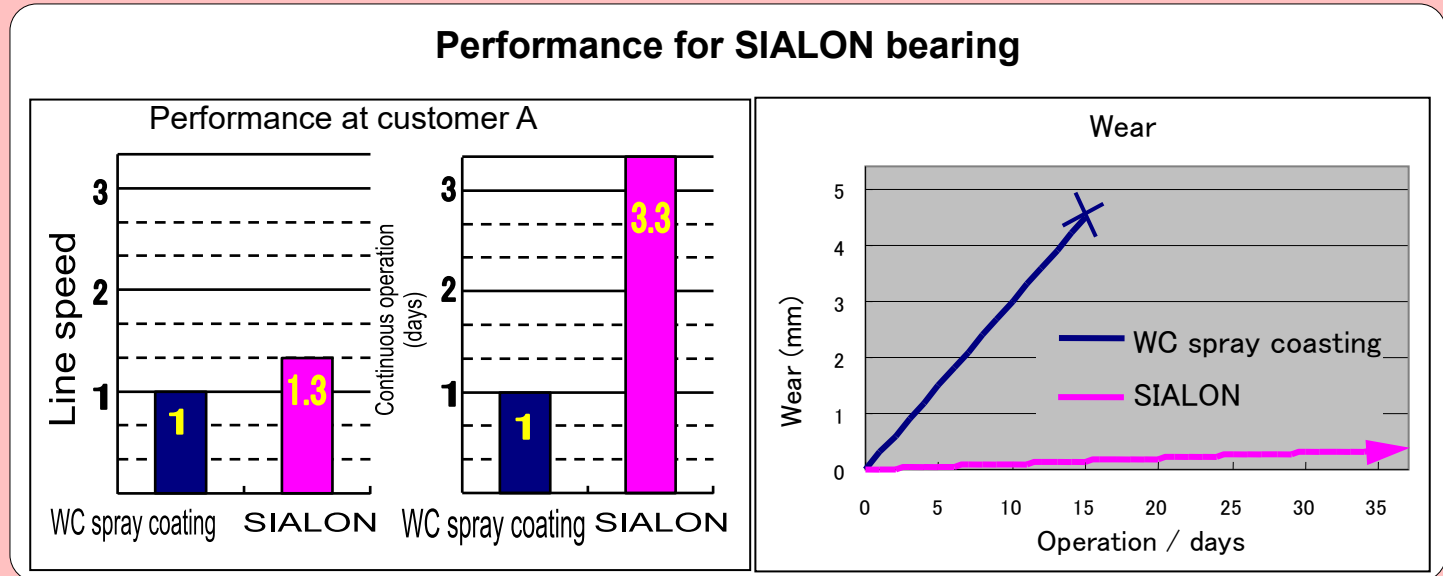
# Ceramics Application for Continuous Galvanizing Line (CGL)



Hitachi Metals, Ltd.



Layout of galvanizing bath



#### Advantage of Hitachi SIALON

- 1) Excellent wear resistance to molten Zn/Al
- 2) High corrosion resistance to molten Zn/Al
- 3) Low friction resistance
- 4) Excellent acid resistance
- 5) Reduction in strip marking
- 6) Light weight

#### Note

The data in this report do not constitute any kind of warranty or guarantee