

# AC-Alox

## ■ Overview

- Composite material of aluminum / alumina
- As light as aluminum, Young's modulus higher than cast iron
- Excellent mechanical damping

## ■ Feature

- Has been adopted in a vacuum environment (medium vacuum  $10^{-1}$ Pa or less)
- Semiconductor manufacturing equipment cleaning Fluorine gas resistant
- Machining possible
- Easy surface treatment (electroless Ni plating, etc.)

## ■ Application

- Lifter pins for FPD manufacturing equipment  
Reason for adoption: Fluorine gas resistant that does not damage glass
- Movable stage for semiconductor measurement equipment  
Reason for adoption: Light weight, high rigidity, excellent mechanical damping

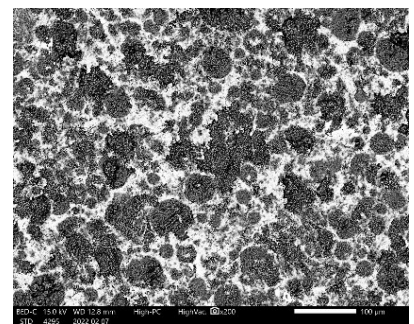
## Sample



## ■ Data

	<b>AC-Alox</b> (Al203/Al)	Aluminium <b>A5052</b>	Cast iron <b>FC250</b>
Young's modulus (GPa)	150	75	120
Coefficient of thermal expansion (ppm/K)	13	24	12
Thermal conductivity (W/m·K)	90	140	50
Tensile strength (g/cm3)	300	75	290
Bending strength (g/cm3)	450	—	
Density (g/cm3)	3.2	2.7	7.3

Structure photograph  
(optical microscope  
observation photograph)



\*The above data are reference values and not guaranteed values.

