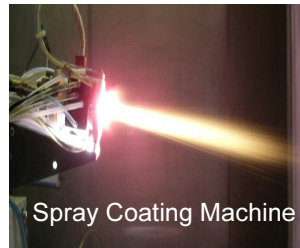


Plasma-resistant thermal spray coating

More and more, it seems that semiconductor parts have been upsizing according with upsizing of wafer size from 8 to 12 inches. Those tendencies make us difficult to manufacture them by using ceramics materials. We are suggesting the aluminum metal materials which are coated ceramics by our thermal spray method. One of our strong point is that our coating membrane is very minute, and has a character of high plasma-resistance. In addition, we can provide the high temperature specifications type whose membrane dose not come off under high temperature of 500 degrees.

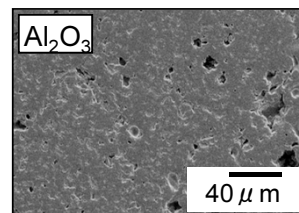
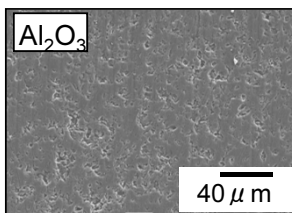
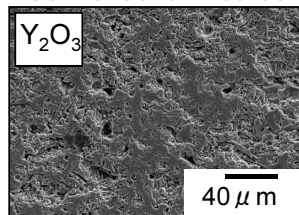
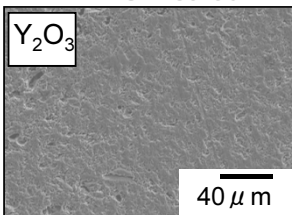


Characteristics

Micro structure of membrane (cross section)

NC method

Conventional method



Materials properties

		NC method	Conventional method
Coherence force	Y_2O_3	◎	△
	Al_2O_3	◎	○
Abrasion	Y_2O_3	○	△
	Al_2O_3	◎	○
Hardness	Y_2O_3	○	△
	Al_2O_3	◎	○
Density	Y_2O_3	◎	△
	Al_2O_3	◎	○

Use example

- Various semiconductor chamber materials (Especially, for chamber parts)
- Abrasion-resistant parts (Rolled materials, etc)
- Electro Static Chuck

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This product specification and the catalog value are the references,
and we may change of it without notice.

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