

- **Establish technologies for water coolants**
with view to making power electronics products more compact and reliable
- **Increase reliability by rebuilding corrosion protection technology platforms**

Development content

- **Examine corrosion tolerances versus water coolants, establish guidelines**

(target products)

Water-cooled inverters, rectifier equipment etc.

(target)

10-year service life → Service life of 15–20 years

- **Establish design guidelines for corrosion life time**

(target products)

Aluminum/copper heat exchangers and inverters

- **Establish guidelines for surface treatment**

(items of guidelines)

Plating, corrosion inhibitors, coating methods



Water cooled inverters

Application example

Large capacity inverters, power stacks for wind power generation, EV etc.