Creating Platforms for Corrosion Protection Technologies

- 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.

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