

# Mineral Sands



**Uses:** Minerals sands consist of 2 major mineral groups. The titanium minerals – ilmenite, leucoxene and rutile and zircon. Titanium minerals are mainly used in pigments while zircon is used in the production of ceramics.

**Factors influencing demand:**

The demand for these products is strongly related to overall growth of the economy





## Yokogawa's involvement with mineral sands

We have control systems in these mines



### Yaraman and Enterprise mine.

Located on the North Stradbroke Island, Queensland. This operation dredges 50m tonnes of sand each year to product 70k tonnes of rutile, 50k tonnes of zircon and 150k tonnes of ilmenite each year. A Yokogawa Centum DCS controls the processing plants on both mines as well as Sibelco's further processing plant at Pinkenba.

### Yokogawa Instrument Users

- **Tronox's integrated titanium dioxide mine, mill and pigment plant** - Western Australia
  - Yokogawa AXF flow meters, EJX pressure transmitters and analytical products.
- **Iluka Resources** – operations across Australia
  - Yokogawa AXF flow meters, EJX pressure transmitters and analytical products
- **Sibelco Australia**
  - North Stradbroke operations Queensland
  - Yokogawa AXF flow meters, EJX pressure transmitters and analytical products
- **Murray Zircon**
  - Mindarie Sands project South Australia
  - Yokogawa analytical products
- **Mitsubishi's Cape Flattery Silica**
  - Cape York Queensland
  - Yokogawa AXF flow meters and EJX pressure transmitters
- **Cristal Mining**
  - Ginkgo and Snapper mines, Broken Hill separation plant and Bunbury processing plant
  - Yokogawa AXF flow meters , EJX pressure transmitters, analytical products and UT controllers