



YOKOGAWA
Value
Propositions
1145

Measuring state of cells including pH and O₂



Yokogawa Measures State of Cells Including pH and O₂

- Yokogawa brings new products and services to this technological innovation and provides added value to the R&D and production activities of pharmaceutical companies. To that end, Yokogawa is currently developing technology for the stable and efficient operation of the cell culture process, which enables cells to produce biological products. Specifically, technology that monitors the state of cells in culture and the number of living cells, plus technology that predicts and controls the state of cells, are being developed.
- The normal cell culture process is carried out while monitoring the surrounding environment of the cells, such as the pH of the medium and the concentration of oxygen. Using the monitoring technology developed by Yokogawa, the state of cells in a culture tank can be known in real-time. Predictive control technology allows the change of state accompanying cell proliferation to be predicted, such that the necessary nutrients can be added when needed. This means that cells can always be cultured under optimal conditions for producing biological products. Yokogawa aims to provide cell culture systems integrating our proprietary technology that can be used as a bio production platform for everything from R&D laboratories to manufacturing plants.