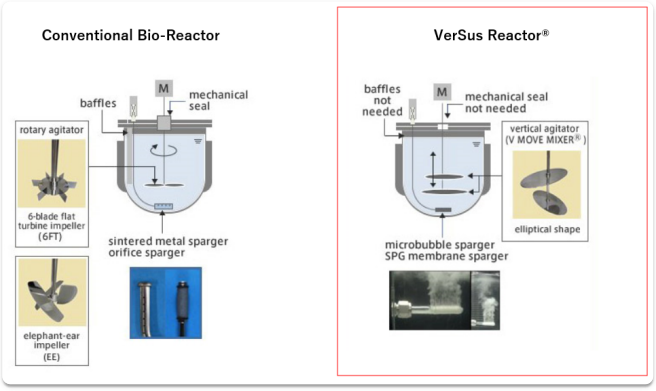
Mass culture technology of animal cells for biopharmaceutical production to combat infectious diseases / VerSus Reactor

Technology combination of the "Shirasu Porous Glass Membrane (SPG Membrane) Sparger" (jointly developed by JGC with Miyazaki Prefecture Industrial Technology Center) which generates microbubbles to achieve a highly efficient and uniform supply of oxygen to cells, and the "VMF Reactor", a vertical motion mixing bioreactor with a low shear / high efficiency uniform.
- VerSus Reactor helps minimize damage to delicate mammalian cells, thus increasing its productivity.
- It can contribute to the prevention of the increase in infectious diseases through early and stable production of biopharmaceuticals and improvement of manufacturing processes.

Photo (left):Conceptual diagram of Versus reactor, Photo (right):150L Scale VerSus Reactor



Company Name

JGC Corporation

Company Web Page

https://www.jgc.com/en/

Type

・Maintaining Health, Sanitation

Form

・Product

・System

Technology Web Page

https://www.jgc.com/en/business/tech-innovation/life_science/animal-cell.html

Sector - Category - Sub-Category

- Human Health
  - Countermeasures for infectious disease
    - Others

Cost Range (K USD)

- 1,000 - 10,000

Countries with Track Record

- None

Track Record

- Not introduced in developing countries yet

- Engineering

Potential User

- Policy makers
- Private sector

SDGs

- 3. Good health and well-being

Target of Adaptation

- Human Lives, Assets

Adaptation Measures Levels

- Protect

Time Scale

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