



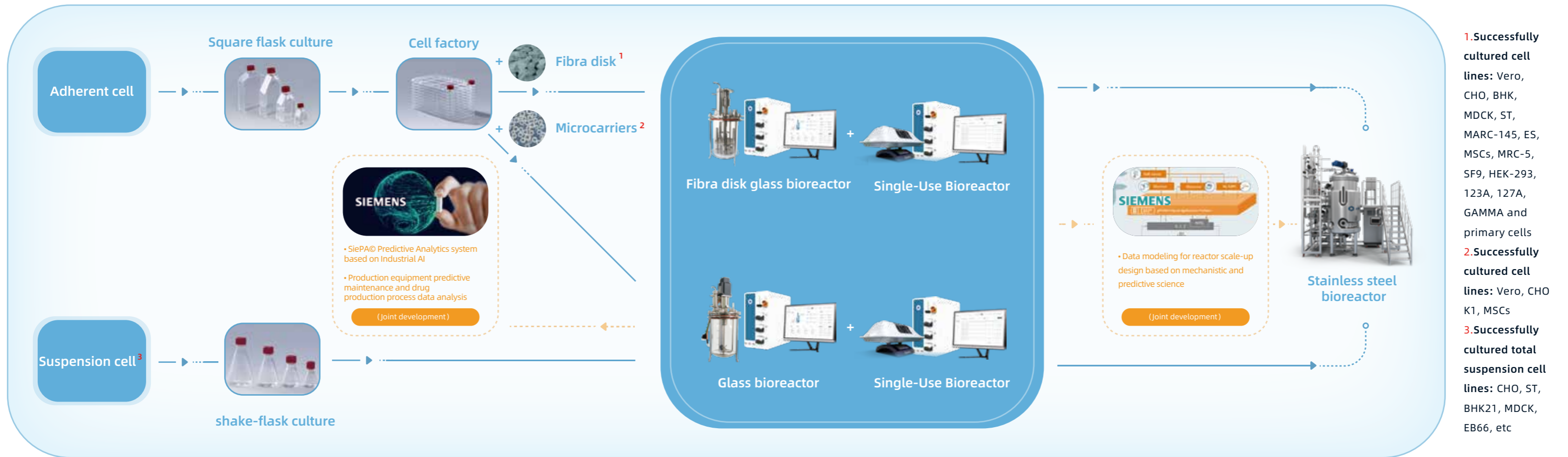
Cell culture

# One-stop Bioprocess Technology Solution



# One-stop bioprocess technology solution-Cell culture

Cell culture is a crucial link in the field of biopharmaceuticals, and high-quality culture equipment and consumables play an important role in the cultivation process. From the laboratory to production scale of cell culture amplification process, Jichen Bio-tech provides customers with a variety carriers required for suspension / adherent cell culture, equipment configuration, selection of commonly used consumables, and other dimensions of one-stop process technology solution, so that your cell culture becomes more assured and convenient.



## Fibra/Microcarriers



### Fibra disk

- 1.Can be autoclaved
- 2.Suitable for packed bed bioreactor, Single-Use Bioreactor, incubator blood, shaking bottle, etc
- 3.Multi-tensioned structure ensures full contact between nutrients and cells and facilitates cell growth.

### Microcarriers

- 1.Can achieve perfusion culture or continuous flow plus culture
- 2.Suitable for large-scale wave bioreactor, Single-Use Bioreactor, and shake bottle culture

## Wave Bioreactor



### Product characteristics

1. Suitable for most cell culture applications
2. Can be applied to batch culture, flow culture, perfusion culture
3. Suitable for suspension culture, microcarrier culture and Fibra disk culture
4. The use of single-use technology to ensure sterility greatly reduce the risk of contamination
5. 3 tray models to meet the different culture volume
6. Swing mode better gas exchange and low shear force
7. Single-use cell culture bag, ensure flexible switching between products, avoid cross contamination
8. Can be selected according to the needs of various sensors, software customization, single-use cell culture bag customization
9. Powerful and simple to learn the control system can provide accurate control of process parameters, process parameter record, comparison and other functions, to provide powerful help for users to optimize the process

## Fully automatic glass bioreactor



### 1. Flexible combination

A standard console can be docked to a number of different functional tanks to achieve a variety of culture processes. Standard functional tanks are 2L/5L/10L and other specifications, and can be customized.

### 2. Comprehensive functions

Equipped with a variety of parameters accurate detection and control, equipped with a variety of control strategies such as association control/cascade control/sequence control

### 3. Easy to operate

Modular design, ergonomic requirements; Man-machine interface introduces operation process design, easy to use, clear vision

## Fully automatic stainless steel bioreactor



### Product characteristics

1. Personalized customization
2. Siemens FLC controller /DCS control system
3. Mechanical/magnetic coupling mixing
4. 316L stainless steel tank with sight mirror, the top cover, the upper side of the tank, the lower side and the bottom are equipped with corresponding ports for ventilation, feeding, sensor interface, sampling and harvesting/draining, etc. Tank with pressure gauge and pressure safety device (burst disc)
5. Mirror polishing Ra<0.8μm on the outer surface of the tank: electrolytic polishing Ra<0.4μm on the inner surface of the tank and pipe
6. Optional automatic/manual in-place cleaning function (CIP)
7. pH, DO, temperature, cell density (optional), mixing, foam and other control circuits
8. Modular design and system flexibility, convenient for users to add functional modules according to the requirements of the process