

TAJHIZ TEB RAIMAND CO.LTD

BIOREACTOR INFORMATION SHEET DESIGN & PRODUCTION CELL CULTURE & MICROORGANISM BIOREACTOR

ISO 13485 TCL ASTURALLIA

Fermenter -Make Volume 2 - 1000 L

FERMENTOR - Make TAJHIZ TEB RAIMAND

Model:

Country of Origin:

Cap 10 LTRS(WORK VOLUM 7.5 L).

TR 10 B benchtop

IRAN

Basic Components:

Control Cabinet

Touchscreen PC

Vessel

Thermowell & RTD

Impellers

Probe Kits (i.e., pH, DO, Foam, Level)

Motor

Filters & connectors

Inoculation/Addition System

Harvesting System

Sparging System

Bearing Housing

MATERIAL CONSTRUCTIONS

TWO JECKET VESSEL &STAINLESS STEEL 316L TOP PLATE.

THICKNESS GLASS

5mm

WORKING TEMPERATURE

121 C

Vessels:

The system has been designed for the growth of microorganism .

It design an all-purpose stirred tank bioreactor vessel, with a total volume of 2.5, 5.0, 7.5 liters.Industrial bioreactor mae of STAINLESS STEEL 316L tank.

Each vessel consists of a stainless steel headplate and a water-jacketed vessel body. Ports are provided in the headplate for the following purposes:

	<p>inoculation; base addition; a thermowell for a resistance temperature detector (RTD); a foam probe; a sparger; a harvest tube; a sampling tube; an exhaust condenser; and dissolved oxygen (DO) and pH electrodes, Rushton Blade Impeller</p>
AGITATOR SYSTEMS	<p>The motor can provide a speed range from 50 to 1500 RPM. Automatically control , with auto alarm function.</p>
Temperature Control	<p>the range from 5°C above coolant temperature to 80°C ($\pm 0.1^\circ\text{C}$). Pt 100Ωtemp. Sensor system with electrical heater to control the temp inside vessel You will regulate the airflow rate by inputting values flowmeters air & O₂ Manually .</p>
Aeration	
PH Controller	<p>Measure pH from 0-12 .there are 2 peristaltic pump for injection acid & base.(Hamilton Sensor)</p>
DO Controller	<p>Online check and measure DO is controlled in the range of 0-200% ($\pm 1\%$).(Hamilton Sensor)</p>
Foam Control	<p>Stainless steel electrode check, peristaltic pump automatically add Automatically control and automatically alarm;</p>
Other Feature	<p>Pump & Valves controlled Automatically. Output data are Graph & table . With controller set-points, data: logger, pid, knigview software or touchscreen.</p>
PC	
sterilization:	<p>Should sent to autoclave for sterilization</p>
Feed pump :	<p>Peristaltic pump automatically feeding as well as for for routine addition .</p>
PERISTALTIC PUMP	<p>Model: OEM 10-GJ110/TH15</p>





Software upgrade, A fully computerized control system.

Inside surface is 0.2 micron by mechanical polishing, Outside surface is 0.4.

Two ix-blade Rushton impellers.

Parameters of temp,pH,DO, can be automatically controlled, recorded, stored and printed.

Vessel of borosilicate glass with 316 L stainless steel headplate.

Guarantee services with high quality.

