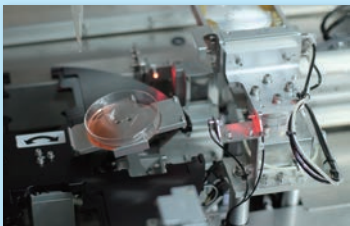


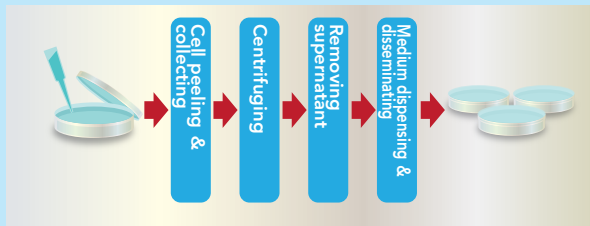


Creating the Future of Medical Care

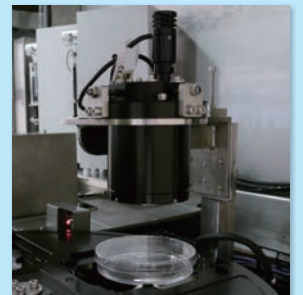
Equipment with diverse applications:



Automated medium change



Automated cell passage



Cell observation

What is Cell Cultivation?

① **Changing culture medium daily**

Suctioning and removing old culture medium, without peeling off cells, and adding new culture medium

② **Conducting cell passages every few days**

Uniformly disseminating proliferated cells into multiple culture vessels according to desired size and density

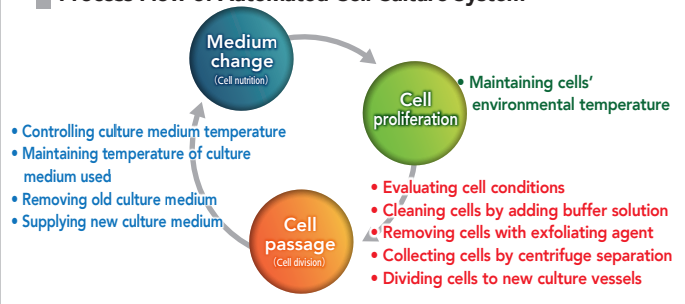
Requires much time for training

Requires continuous work

Significant burden on researchers

Automated cell culture system that continuously supplies cells

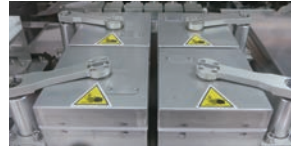
Process Flow of Automated Cell Culture System



Basic Functions for Automating Cell Culturing Processes



Clean cabinet
HEPA filter keeps clean and safe environment equivalent to class II safety cabinet



Refrigerator & Warmer
Refrigerators can store Max. 4 500-mL bottles at 4°C. Warmers are provided to warm liquid temporarily.



Incubator
Max. 60 100-mm dishes (or max. 27 6-well plates) can be stored in CO₂ incubator



Cell observation
Deep-learning AI technology leveraged to find cells' conditions or count cell number



Dispensing & Swinging
Special 10 mL pipette is suitable for separating cells. Swing equipment to blend suspension in a dish.



Centrifuging
A centrifuge is implemented for automated cell passage. Considering its effect on cells, it's placed far from the incubator.

Advantages of New System

Automating manual techniques



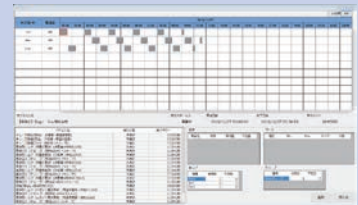
Reproducing techniques by thoroughly analyzing manual work and utilizing proposed manipulation control technique

Compact size



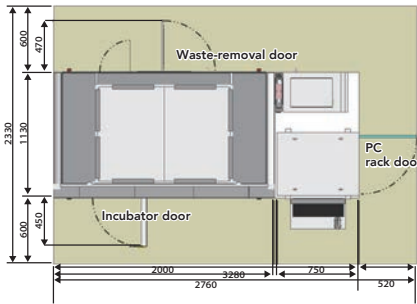
Achieved a compact size that easily fits into laboratories by designing a structure that is interchangeable with a standard clean bench

Scheduling



Automatically conducting preset movements and maintaining history records of each culture vessel

Size



Cultivating process	Culture medium change, cell passage, cell observation	Biohazard	Cabinet class II equivalent (Clean 100 equivalent within the unit) Partly evaluated according to our own standards
Target cell	Adhesive cell: ES/iPS cell (colony/single cell), etc.	Decontamination	UV irradiation, peracetic acid fumigation
Heat insulation	4-500ml bottles	Cell observation	Image storage, passage timing determination, cell count
Culture vessel	Max. 60 Φ 100-mm dishes (or max. 27 6-well plates) can be stored	Main unit dimensions	W 2,000 x D 1,130 x H 2,412 mm (main apparatus only, excluding PC rack)
Dedicated supplies	10mL pipettes (Max. 100 bottles)	Utilities	<ul style="list-style-type: none"> Three-phase 200 VAC, 30 A: One system 100 VAC, 20 A: One system 100 VAC, 15 A: Two systems (two 2-pin sockets with a ground) CO₂ gas supply : One system (outer diameter φ 12-mm hose barb fitting)
Cultivation plan	Cultivating process can be set using scheduling function		

⚠ Safety Cautions

- Please read the User's Manual carefully to familiarize yourself with safe and effective usage procedures.
- To ensure safety when using this equipment, all work should be performed according to that as stated in the supplied Operating Instructions. Read your operating instruction manual thoroughly.

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Inquiries...

Panasonic
Production Engineering Co., Ltd.

Zip code 571-8502
2-7 Matsubacho, Kadoma, Osaka, Japan;
TEL : (+81) 6-6905-4882
mail : business.dev@gg.jp.panasonic.com

