IVF module for ICOmed

CO₂ incubator for in vitro fertilisation

Model sizes: ICO50med (56 litres), ICO105med (107 litres)
Temperature adjustment range: +18 to +50 °C | CO₂ concentration up to 20 %
Humidity adjustment range: 40 to 97 % rh | O₂ concentration 1 to 20 %

When it comes to in vitro fertilisation, efficient processes are very important not only from an economical perspective. The higher the clinical success rates, the higher the number of satisfied customers, and that in turn affects the reputation and the image of the IVF clinic. In close cooperation with IVF specialists Memmert has developed an IVF module for the CO₂ incubator ICOmed which fulfils all crucial conditions for embryo culture, especially controlled CO₂ and O₂ concentration as well as constant and high humidity. In order to keep the recovery times to a minimum, the Petri dishes are cultivated in separate slide-in units.

- Certified as a class IIa medical device for in vitro fertilisation and biosynthesis: every Memmert CO₂ incubator ICOmed complies with the basic safety requirements as stipulated in the European Medical Device Directive (93/42/EEC)
- Active humidification and dehumidification: minimal vaporisation in the chamber interior, no condensation, cultivation without oil overlay possible
- Quick recovery times: slide-in units to be opened separately guarantee minimal air exchange
- Easy, low-vibration and safe opening: slide-in units are pulled out to the front and have a pull-out lock
**IVF module for ICOmed**

the perfect solution for in vitro fertilisation

Controlled humidity thanks to active humidification and dehumidification

In common CO₂ incubators and in special IVF incubators, vaporisation and condensation are a major problem. The patented Memmert IVF module is used in a Memmert CO₂ incubator ICOmed. This ensures that the CO₂ content, O₂ content and humidity in the chamber interior can be controlled with absolute precision. The active humidification and dehumidification in particular keeps vaporisation to a minimum so that cultivation under oil is not required in addition.

The Petri dishes are placed on indentations for better heat distribution and cannot slip out of position when the slide-in units are pulled out. The media needed for cell cultivation can be placed and conditioned in special tube racks. Racks with indentations for 4-well dishes on demand.

<table>
<thead>
<tr>
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<th>Slide-in units</th>
<th>Petri dishes 60 mm Ø</th>
<th>Petri dishes 35 mm Ø</th>
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<tbody>
<tr>
<td>ICO50med</td>
<td>6</td>
<td>12</td>
<td>24</td>
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<tr>
<td>ICO105med</td>
<td>8</td>
<td>16</td>
<td>32</td>
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For loading, unloading and checking, you only have to pull out one slide-in unit. The low air exchange with the outside ensures fast recovery times for the CO₂ content and humidity.

Further safety features of the IVF module: easy-to-clean stainless steel, all slide-in units can be labelled individually, interior chamber including all installations can be sterilised at +180 °C in 60 minutes, and the low-vibration roller feed-throughs of the slide-in units work without lubricant.

**CO₂ incubator ICOmed with TwinDISPLAY**

- Battery-buffered ControlCOCKPIT: the operating display, protocol software and CO₂ control are fully functional even during a power failure (option)
- Visual and acoustic alarm as well as alarm notification to mobile phones if the individually adjustable temperature, CO₂, O₂, humidity ranges are exceeded (option)
- Sterilisation programme: 60 minutes at 180 °C
- Reliable data logging of temperature, CO₂, O₂, humidity, open door time conforming to FDA

The IVF module is an accessory for the Memmert CO₂ incubators ICO50med/ICO105med, which can even be retrofitted. It is simply inserted into the interior and can be removed completely for cleaning. For detailed technical data about Memmert CO₂ incubator ICOmed, please refer to the Memmert incubator brochure or visit www.memmert.com/en/icomed.