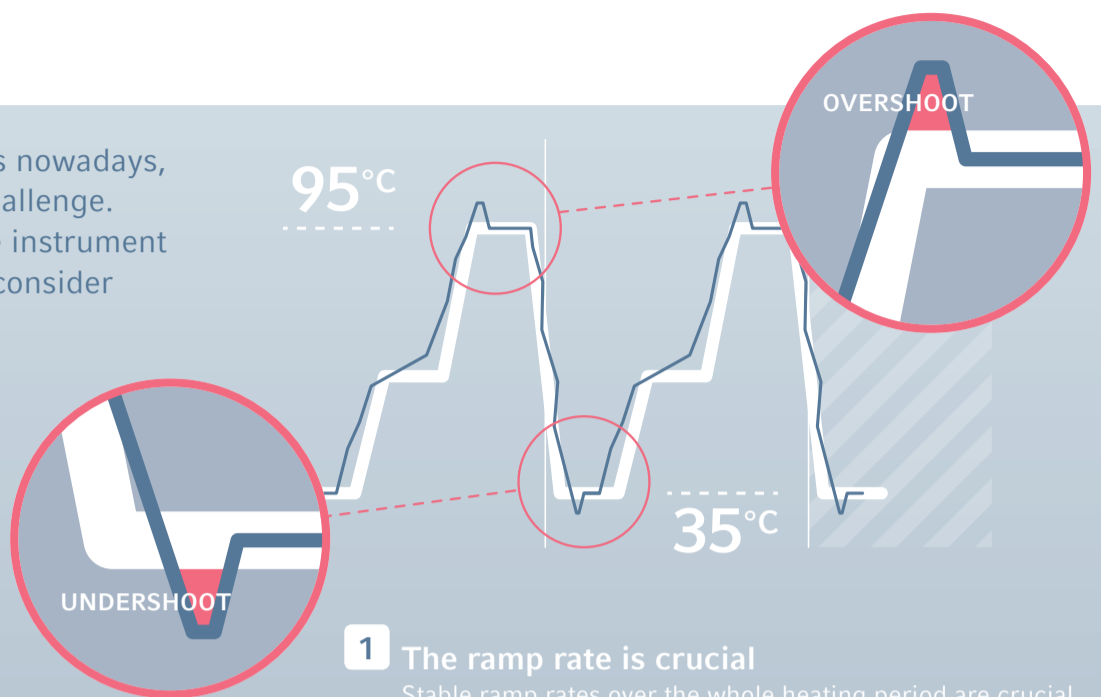
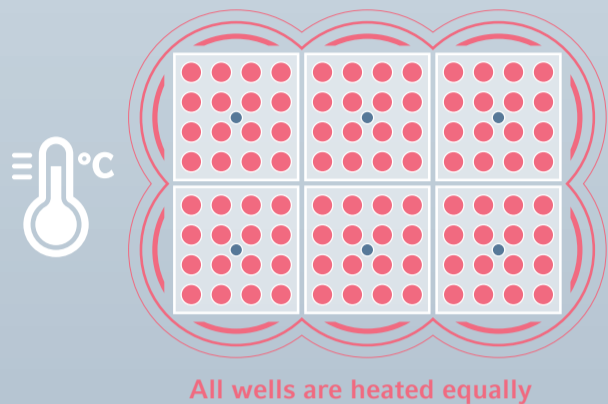


Stay Informed

# Reproducibility and Speed in PCR

Even if PCR is one of the most common techniques in labs nowadays, to achieve stable and reproducible results can still be a challenge. Especially for advanced applications such as fast PCR, the instrument performance is crucial. Below are some facts you should consider when purchasing a PCR cycler.



### 1 The ramp rate is crucial

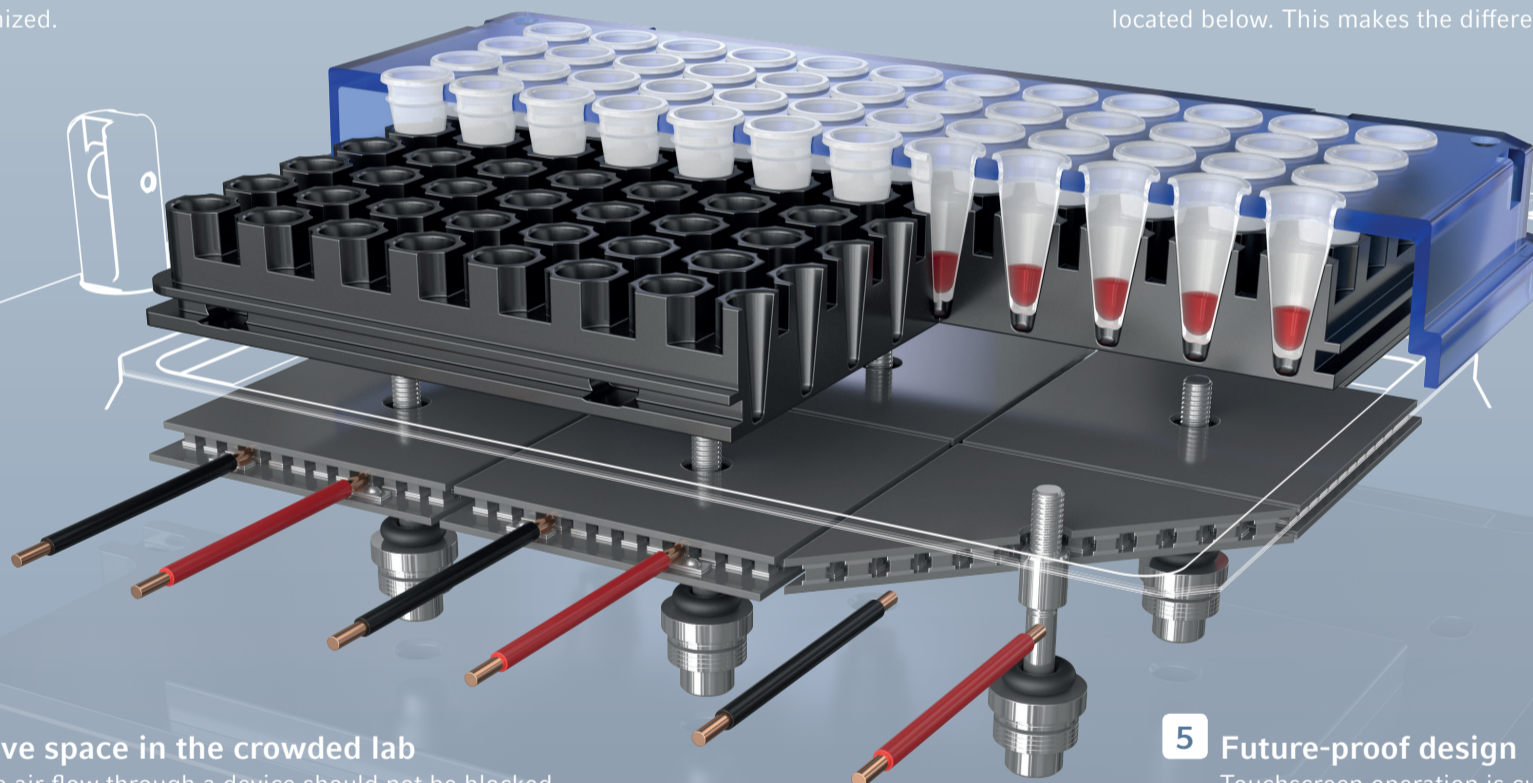
Stable ramp rates over the whole heating period are crucial to achieve reliable and comparable PCR results. Unregulated ramp rates or high temperature over-/undershoots could have an influence on the sample or enzyme integrity and thus on the result and sample yield.

### 2 Ever thought about what's under the PCR plate?

The upper part of the block is just a fractional amount. The technology and thus the heart of the instrument is located below. This makes the difference!

### 3 That's how Peltier elements are fixed

Fixing the peltiers elements in the center instead of at the sides minimizes mechanical stress and thus leads to a longer lifetime of the block. In addition, the non-heated fixing area is minimized.



### 4 Save space in the crowded lab

The air flow through a device should not be blocked to prevent an overheating of the instrument. Thus, instruments are often not placed side-by-side in the lab. This costs valuable bench space. If the ventilation is organized from the front to the back of an instrument, the bench space can be used more efficiently.

### 5 Future-proof design

Touchscreen operation is currently state-of-the-art for lab instruments. Nevertheless, there are big differences. The user interface should be optimized to touch operation to make navigation easy. Operation with gloves is a must in the lab and last but not least, additional features such as protocol documentation and user management can simplify the lab routine even further.

