

# Outstanding Return on Investment with the xpress® qPCR Thermal Cycler



There are many benefits to the xpress® qPCR thermal cycler, one very attractive quality being the outstanding return on investment (ROI) it provides. This is an important factor for many institutions when looking to invest in a new piece of equipment for their laboratory. It is essential to consider not just the initial purchase cost, but also the long term running costs. Equipment like thermal cyclers have a long life, so it is important to know that a good investment is being made for both the short and long term.

## Competitive Pricing

The initial cost of purchasing the xpress® qPCR thermal cycler checks in very competitively when compared to other thermal cyclers - always a bonus when buying in a new piece of equipment!

Additionally, you can be sure that your unit will always be running the latest version of software as regular updates are provided, all **completely free** of charge. BJS Biotechnologies have committed to continue providing these updates for free for the lifetime of the xpress®.

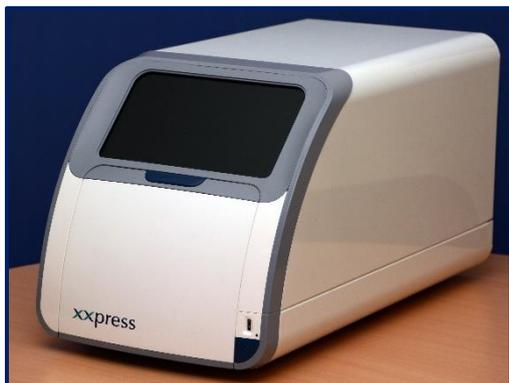


Figure 1: the xpress® qPCR thermal cycler.

## Lower Reaction Volumes

The xpress® qPCR thermal cycler has a dedicated consumable known as the xplate™ SBS. It comes in 3 sizes (24 well, 54 well and 96 well) and is completely unique to the xpress®, bringing several benefits with it. xplates™ are made of a lightweight piece of aluminium and coated in a very thin layer of polypropylene with the wells moulded on top.



Figure 2: a 24 well, 54 well and 96 well xplate™ SBS.

The wells are smaller than on a microtiter plate meaning that the volume of reaction mixture per PCR can be reduced. Using smaller reaction volumes has the knock-on effect of reducing the volume of enzyme that is used. As enzymes are the most expensive reagent when running a PCR, this can result in the running costs reducing dramatically, by up to **90%**! When using small PCR reaction volumes with the xpress®, the excellent efficiency remains because the large surface area of the wells enables optimal heat transfer.

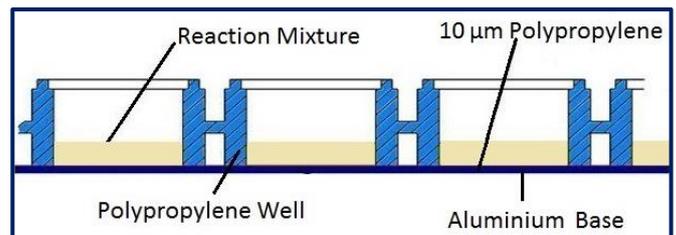


Figure 3: the cross-section through an xplate™ SBS.

## Higher Throughput

xplates™ are very light and have a low thermal mass. This enables ultrafast ramp rates to be achieved by the xpress® qPCR thermal cycler, **10°C/sec during heating and 8°C/sec during cooling**. The ultrafast run times achieved by the xpress® means that experiment results are obtained faster, and more runs can be completed per hour. On average, 1 xpress® does the work of up to 6 standard thermal cyclers!

## Cost Per Run

It is the combination of spending less money on reagents (by using smaller reaction volumes) and completing more runs per hour (due to the faster run times) that results in an excellent cost per run. The money saved quickly accumulates to a large value annually.

The xpress® website features a **cost saving calculator** which can work out just how much money a user would save by switching to this thermal cycler. Data is entered including the cost of the enzyme kit used, the cost of the current microtiter plates, and the volume of reaction mixture currently run. The

calculator will then work out the savings **per run** and **annually**. The example in figure 4 is a modest case to demonstrate how the calculator works and the scale of the savings.

### Return on Investment

When the value saved annually is considered, it quickly becomes clear why the xpress® qPCR thermal cycler provides an **excellent ROI**. The xpress rapidly pays for itself and then begins to save additional money which becomes available to fund other work.

To find out just how much money you could save by switching to the xpress® qPCR thermal cycler, visit the cost savings calculator on the xpress® website at [www.xpresspcr.com/qpcr-cost-saving-calculator/](http://www.xpresspcr.com/qpcr-cost-saving-calculator/).

For more information please visit:

[www.xpressPCR.com](http://www.xpressPCR.com)

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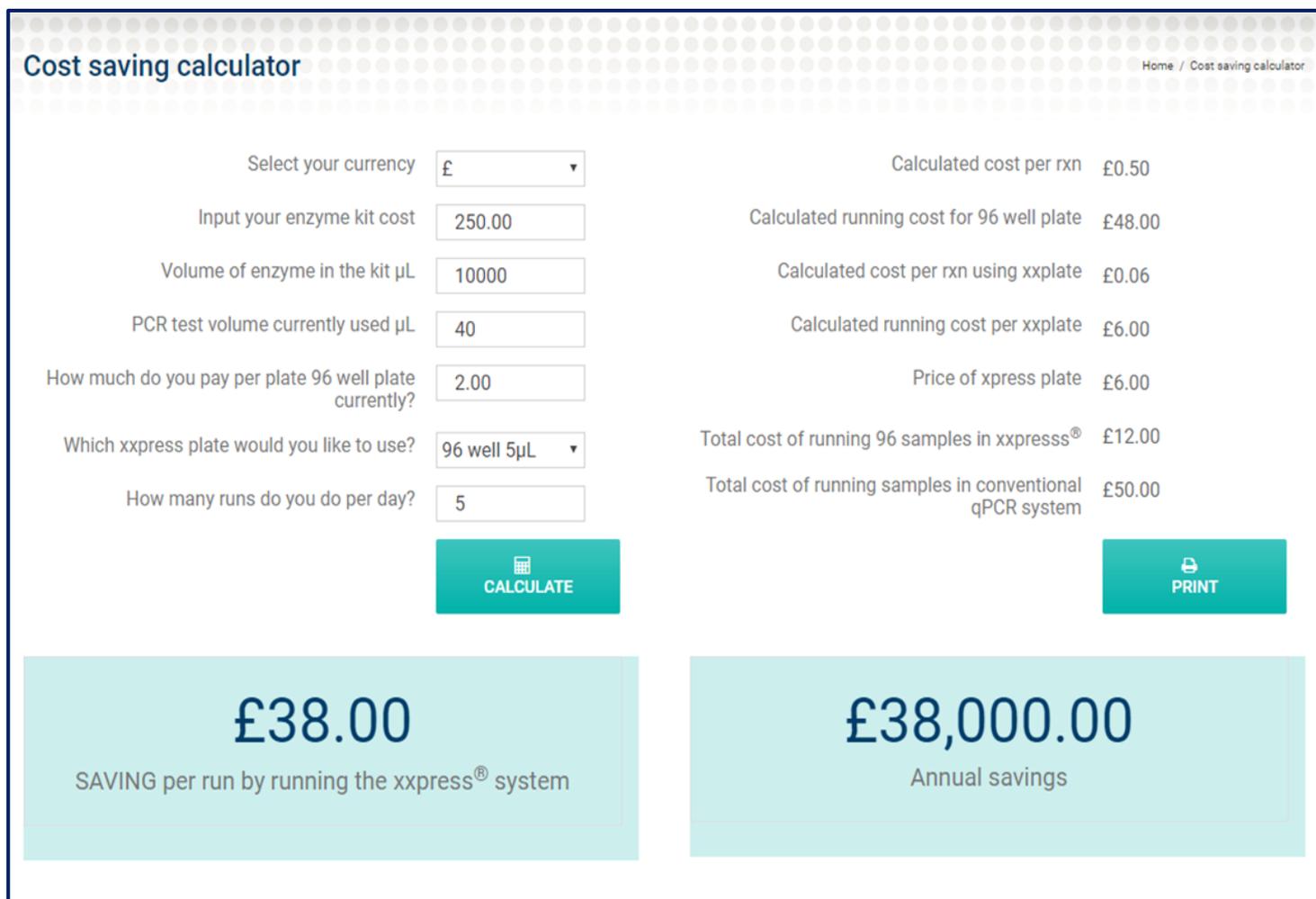


Figure 4: an example of the savings calculated by the xpress® cost saving calculator.