

Production terminals for Bilthoven Biologicals



In the past IDT, acquired by MH in 2007, supplied the Dutch Vaccine Institute (Nederlands Vaccin Instituut) with production terminals. In 2012 the Dutch Vaccine Institute was partially privatized and the production facilities are now in hands of Bilthoven Biologicals.

Bilthoven Biologicals offers fully biological production processes for sterilization, preparation and production of vaccines for Dutch and international vaccine programs. The supplied terminals were still used in the production lines for various vaccines but had reached the end of their performing life.

The Challenge

Because of the very high standards for the production environments the new terminals needed to be easy to clean and free of sharp edges or corners. The previous solution consisted of terminals with an 18" touchscreen display inside a stainless steel IP65 casing. An integrated, flat keyboard and trackpad was used for user input and the twistable Rittal-connection provided universal mounting.

Since the previous manufacturer of the terminals had to close down its doors, the task for Mulder-Hardenberg was to supply the customer with terminals with the same form-fit-function and mounting option. This was crucial for the customer to prevent a re-design of their production equipment.

The Solution

To comply with modern day standards some new requirements were requested. First of all, the casing had to achieve a supersmooth surface for cleaning purposes. After some research by Mulder-Hardenberg engineers we discovered that the best way to achieve the right surface smoothness for the casing was electrolytic polishing, which would achieve a surface smoothness of at least 0,8 micron.

For the touchscreen our engineers choose a full-glass, resistive touchpanel. The membrane keyboard with integrated trackpad was manufactured by another supplier of Mulder-Hardenberg. Altogether the solution secured an easy to clean end-product.

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Finally, it was also very desirable to use standardized hardware. Which meant replacing the original KVM extenders with thin-clients that were supplied by the customer. This was done to guarantee full compatibility with the applied hard- and software.



KSTP105F Industrial Keyboard

The Implementation

For the implementation it was crucial that the terminal was designed to provide housing for both the thin client as well as a redundant power supply and that the surface smoothness and ‘cleanability’ was checked and measured thoroughly. Mulder-Hardenberg made sure that the tests were performed and that all of the various components from different manufacturers fit together perfectly.

The result

Because Mulder-Hardenberg could supply the full form-fit-function Bilthoven Biologicals did not need to make adjustments to their existing production lines. Also the same mounting options were used, which provided for a quick replacement of the old terminals and less production down-time.

By further meeting the customers’ wishes, by using their own thin-clients, uniformity and exchangeability was a fact. And with the improved surface smoothness the terminals were easier to clean than ever before!



Rugged construction

Our Websites



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