

CUSTOMER CASE STUDY

Biopharmaceutical Industry

OPTIMIZING A GROWTH MEDIA FILTRATION SYSTEM USED FOR MYCOPLASMA CONTROL



Customer

A supplier to the biopharmaceutical industry, this site in Europe produces growth media to be used for cell culture in upstream bioprocesses.



Objective

To optimize the filtration train used to sterilize growth media into bioprocess containers with a requirement for Mycoplasma control.



Specification

- Capable of filtering a 2000L batch within 6 hours
- Suitable for two types of media (Oxoid Tryton Soya Broth and Vegetable Soya Broth)
- Reduce filtration train from current 5 stages
- Supplier data for Mycoplasma retention assurance
- Dual sterile filtration used in series as standard practice



Control



Requirements

The customer was currently using a filter train supplied by a competitor comprising 5 filter stages - 3 prefiltration stages and 2 sterile filtration stages. They were keen to optimize this by reducing the train to as few stages as possible.

A highly retentive filter (0.1µm) for Mycoplasma control was a requirement; however, our customer still needed to be able to process a full 2000L batch in less than 6 hours to reduce contamination risks.



Parker domnick hunter Solution

Parker domnick hunter's PROPOR MR 0.1 micron PES filters have been specifically designed for Mycoplasma removal and carry a retention claim (LRV > 10 for *Acholeplasma laidlawii*) that met the customer's requirements. Due to the increased capacity of the PROPOR MR owing to its integral prefilter layer, the filter train could be significantly reduced from five to only two stages, completely eliminating the need for prefiltration while still processing the batch in under 6 hours. Both stages were 0.1 micron filtration with PROPOR MR to satisfy the customer's requirements of double sterile filtration.

The customer cited Parker domnick hunter's technical support, the superior performance of the PROPOR MR, and the ability of our solution to reduce overall filtration costs, as the reasons for our success in this application.

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