

We herewith confirm the training of Mr. Akos Hadik, Sartorius Membran KFT, Hungary at Sartorius BBI Systems GmbH in Melsungen

Installation and Operation of Fermenter and Crossflow Systems Carried out at Systems for GlaxoSmithKline Biologicals Kft., Gödöllö

The training (4 weeks) contained the following items:

- Installation Check of Fermenter units 1210, 1220, 1230, 1240 Tetanus Line and units 5210, 5220 Diphtheria Line
- Installation Check of Crossflow units 1201, 1301, 1302 for Tetanus Line and units 5201, 5301, 5302 Diphtheria Line
- Piping and Instrumentation Checks of Fermenter and Crossflow units
- Training in Service and Maintenance of above Fermenter and Crossflow units
- Electrical Installations and I/O Checks
- Utility Checks and Loop Test for Start up and Operation
- Basic Operation of PLC Simatic S7-400
- Operation of systems via SCADA system
- Basis Checks of functionalities implemented in Fermenter and Crossflow units
- Control Loop Test on all Systems
- Phase Tests on all systems
- Verification of correct operation during FAT of Fermenter and Crossflow units

The training was held from May 23 to June 17, 2005, in Melsungen, Germany.

We herewith confirm that Mr. Akos Hadik is qualified for Operation, Service and Maintenance of all systems listed above and comparable Fermenter and Crossflow units.

Melsungen, June 17, 2005

H.-R. Keitel

(Service)

(Qualification) (Automation)

> Engineering by Sartorius BBI Systems