

REFERENCE CASE STUDY

System Extension at the Dorog Site of Gedeon Richter

Successful step-by-step upgrade to latest version of System 800xA



Headquartered in Hungary, Gedeon Richter Plc is an innovation-driven specialty pharmaceutical company. Vertically integrated, they are engaged in pharmaceutical manufacturing, research and development, sales and marketing. The 115 years of pharmaceutical manufacturing experience put Richter at the forefront of the global pharma sector. The company manufactures more than 200 drugs, and its product line includes original, generic and licensed products.

Since the very beginning, Richter has always made the outstanding quality of its products a primary concern, and has been committed to having its drug safety system comply with the highest possible official requirements. In order to achieve efficient operation of supply, the Company is constantly adapting to the current environment by regularly fine-tuning and improving the capacity of its production units, and installing the latest automation technology to support that. Richter focuses on developing and manufacturing central nervous system, cardiovascular and gastroenterological products, muscle relaxants and gynaecological products.

With more than 1,000 people in research and development, Gedeon Richter Plc has become the most important pharmaceutical R&D center in Central and Eastern Europe. Its outstanding innovative activities have been recognized on numerous occasions.

The Company's pharmaceutical manufacturing segment is showing stable growth every year. The production volume of steroids, their other products and active ingredients is also increasing from year to year. The Richter Group also began manufacturing new products in all of its production sites in 2012.

The regular quality inspections carried out by Hungarian and international authorities as well as business partners confirm that Richter's manufacturing activities are in good order and that their processes comply with technological standards. Their successfully performed audits encompass the entire manufacturing process and Richter is happy to report positive outcomes.

How process control helps to meet the challenges

In an extremely competitive market place Richter is continuously facing challenges, like

- strict regulatory requirements
- pressure to increased performance (More Quality, Efficiency and Compliance)
- driving technological innovation
- matching production capacity to market demands, increasing flexibility

Automation and process control is one of the key enablers to meet challenges.

Stepwise upgrade and extension

In 1997 ABB won the DCS Project of the Stereoid-2 Plant at the Richter Dorog Site, and installed a MOD300 system. In the last 15 years the system was upgraded and extended in several steps.

Now Richter decided again to extend the technology and the production hall of the Stereoid-2 Plant. The extension is delivered in the following steps:

- In 2015, the existing DCS was upgraded to the latest version of 800xA
- In 2016 three redundant PM864 controllers will be added to the existing 15 ones
- Because of the special layout and Ex-Zone certification, some remote S900 I/O cabinets and some Profibus DP/PA tools will be installed
- The number of I/Os will be increased by 2,500

- As a basic platform of the application software, ABB's Process Control Device Library (PCDeviceLib) and PCEquipmentLib (PCEL) is used to develop the local units. The system complies with the Standard S88, and supports production by Batch recipes.

“As the existing ABB system is extended, we will be able to utilize the existing application software, so the whole project can be implemented in one year under full validation”

says Mr. Jenő Fodor, the Project Director of the Richter Dorog Site.

ABB's supply

Basic components of the new system are as follows:

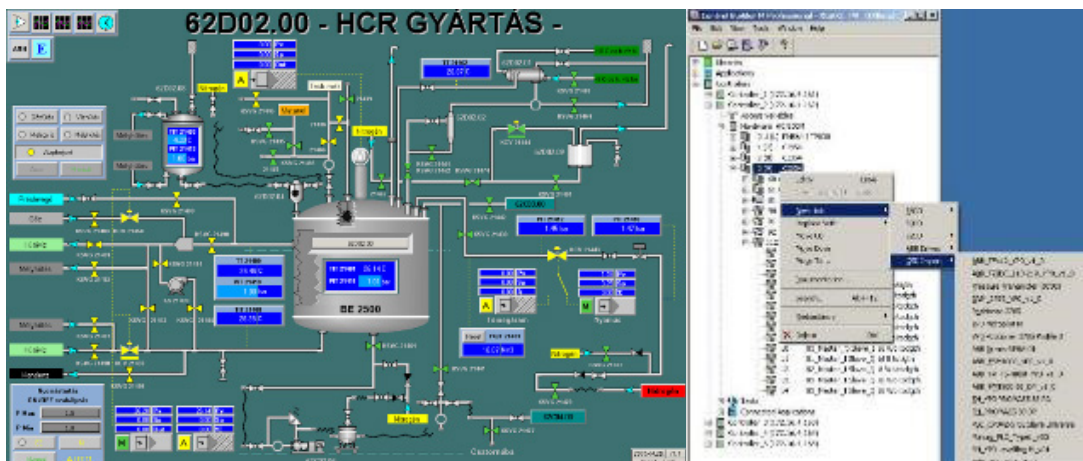
- 1 DNS Server
- 3 redundant Aspect Servers
- 3 x 2 pcs of redundant Connectivity Servers
- 2 Information Management (IM) History Servers
- 1 redundant Batch Server
- 28 Operator Workstations

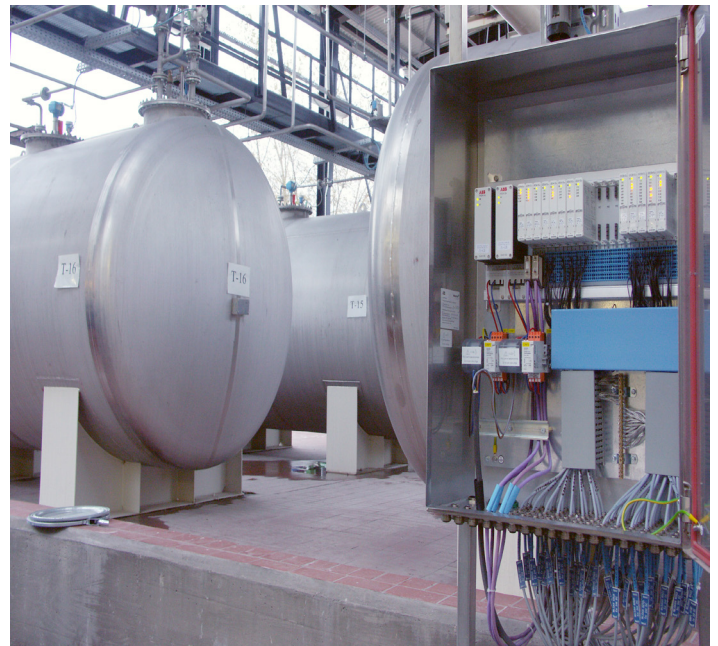
Since 2015, the entire 800xA system has been operated in a Vmware-ESXi based virtual environment on powerful HP Servers.

Additional components:

- S900 Remote I/O for hazardous area
- AC 800M controllers, PM864
- PCDeviceLib and PCEquipmentLib for development of the application software

01 Some control application details





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02 The control room
at the Dorog site of
Gedeon Richter Plc
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03 Remote Terminal
and Control Cabinet
within the hazard-
ous area (Zone 1)
—

04 Control Cabinet with
S900 I/O in Zone 1

About Gedeon Richter Plc

Founded in 1901 by the pharmacist Gedeon Richter, the Company is now present in more than 38 countries with five manufacturing facilities, 29 representative offices, and 38 sales subsidiaries and wholesale companies.

The Company's main goal is to develop its product portfolio to be able to continuously offer innovative and outstanding products at affordable prices.

More information: <http://www.richter.hu>

ABB Control Technologies

abb.com/lifesciences

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