

CASE STUDY—ACB REPLACEMENT

The Problem

Mauri Products in Kingston-Upon-Hull are leaders in the production of yeast products. The 24-hour a day 7-days a week operation relies on a continuous electrical supply. Any interruption of supply would be disastrous to their business with major cleaning out of production equipment as well as loss of revenue to consider.

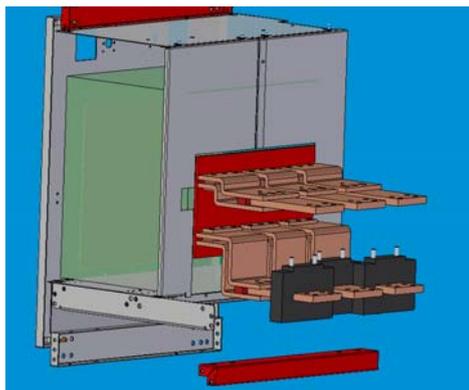


The main LV switchboard was some 15 years old and utilised Ellison GEA air circuit breakers. Whilst the ACBs had given years of good service they had encountered a number of problems with difficulty in closing and failure of the CPR relay fitted. There were also considerations made as to the problems in the supply of spare components in the event of future problems.

The Solution

Following consultation with [ExEllison Switchgear Services Ltd](#) Mauri Products embarked on a programme of replacing the ACBs with a modern units including integral protection units.

[ExEllison Switchgear Services Ltd](#) utilises the latest 3D solid modelling CAD systems to design its products to ensure a first-time fit every time. We have developed standard arrangements for a wide variety of ACB replacements. In this case ABB SACE ACBs were utilised. The interface was designed to allow installation into the existing panel with the minimum of modification and down-time. A full assembly kit was supplied with no need for *cutting and carving* of parts to suit on site. Only the experience [ExEllison](#) have can guarantee a first-time fit without the need for a shutdown in advance of the installation.



Note that [ExEllison Switchgear Services Ltd](#) does not install an ACB into an existing ACB chassis. There is little point in replacing an ACB whilst still relying on aged contact finger clusters. We take the old ACB out completely right back to the basic connections. This weak point is removed to ensure the integrity of the new assembly.

CASE STUDY—ACB REPLACEMENT

Typically the removal of an old ACB and the installation of a new replacement ACB is completed within an 8-hour shutdown. In this case the two main incoming ACBs were replaced in a 12-hour shutdown. ExEllison's knowledge of the standard wiring loom enabled the existing metering to be easily utilised with the new ACB. The CTs were relocated in the new ACB copperwork.



Internal shrouding is fitted to make the ACB module complete. A fully shuttered Cassette is used to ensure the operators safety.

The installation is completed and the equipment returned to service following ACB testing. The equipment is now suitable for continued use at a fraction of the cost of a replacement switchboard and all of the associated civil and cabling works.



For Further information on ACB replacements or our other services contact us at enquiries@exellison.co.uk or Tel 01902 632639.

ExEllison Switchgear Services:

ACB Replacement
Spares
Extension Panels
Retrofit metering
Maintenance
Transformer replacement
PFC Panels

Protection replacement
Switchboard modifications
Emergency response
Control panels
Installation Services
Substation equipment
Operational Information