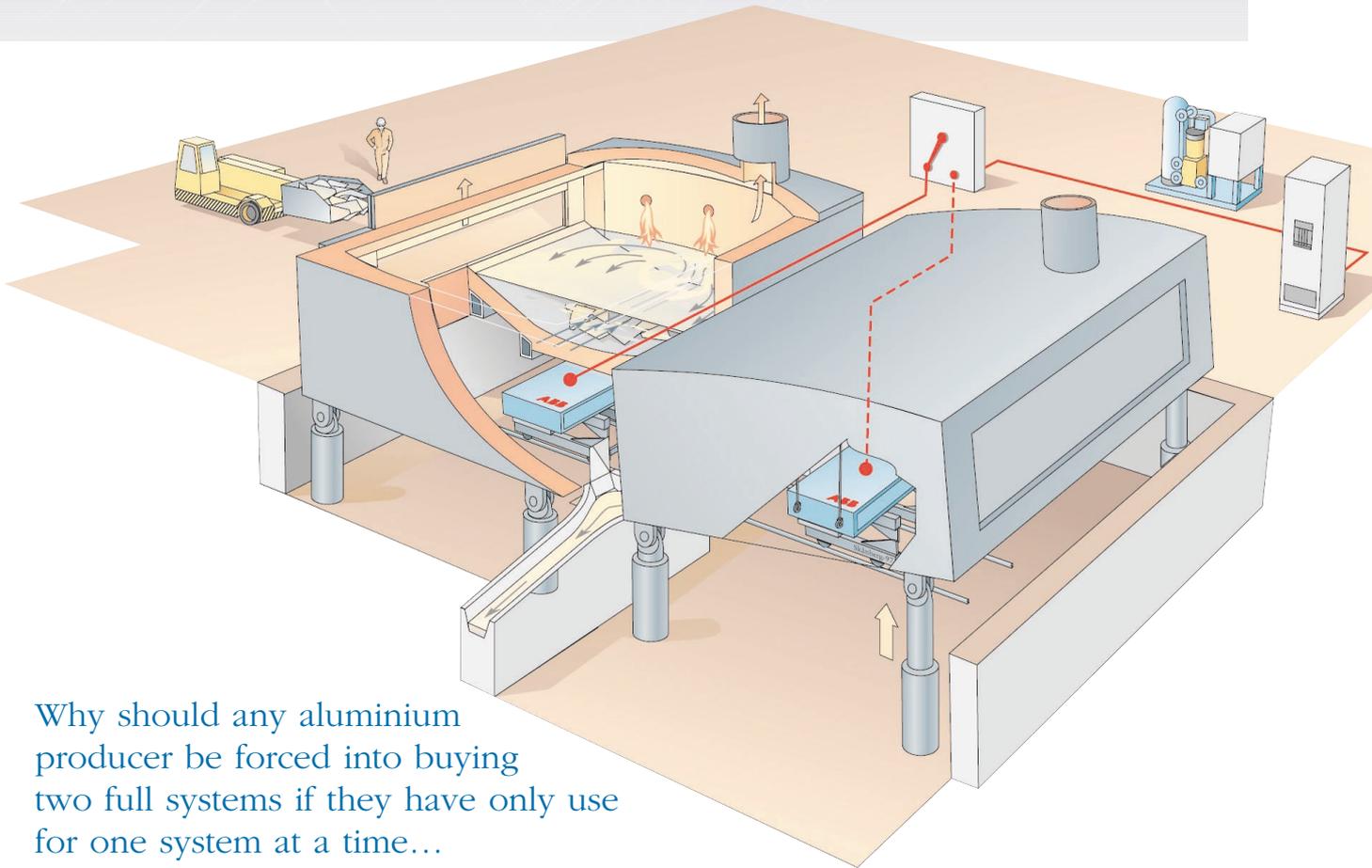


Optimizing your existing Casting Line



Why should any aluminium producer be forced into buying two full systems if they have only use for one system at a time...

Many casting lines in the aluminium industry throughout the world are supported by two melting, holding or mixing furnaces, to make it possible to cast continuously.

The process sequence at these plants has one furnace in an operational mode of melting, holding or alloying. At the same time, its "twin brother" is in a casting position as can be seen in the figure above.

For this purpose ABB has developed a very attractive solution AL-EMS, **MCC (Multi Coil Concept)**.

Most cast house managers know the importance of effective stirring, but are also very well aware that installing several systems requires a high initial investment that may be hard to justify even though the payback time in most cases are about a year or even less.

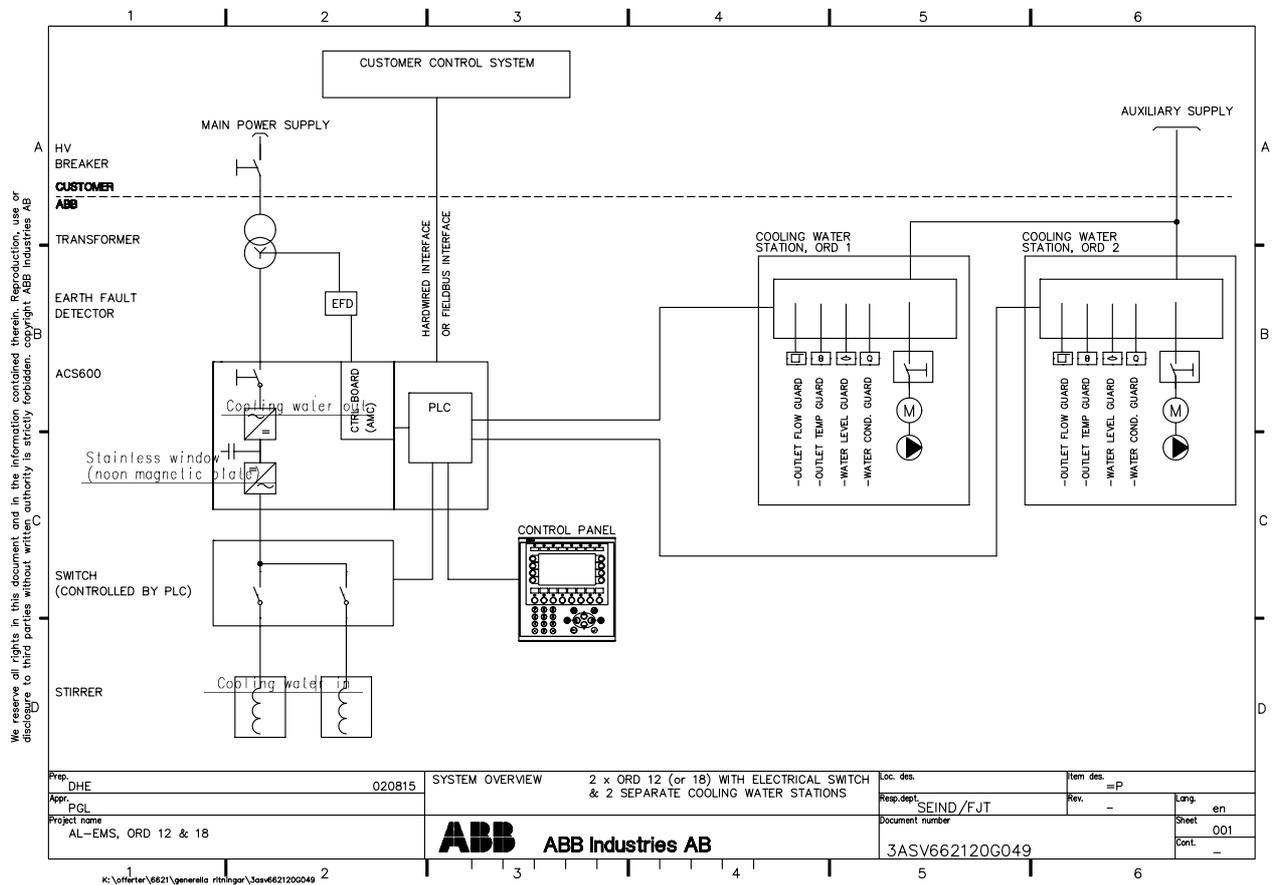
- **MCC** consists of one stirrer per furnace, but all other vital parts of the system, such as transformer, control system, water and power supply, are shared. This drastically reduces the price tag.

- **MCC** has an automatic switch that directs power to the stirrer coil that you want to operate. The power can then instantly be switched over to stir the other furnace.
- **MCC** makes it possible for the cast house manager to afford installing quality enhancing AL-EMS on more than one furnace, just by the utilization of single system components in a process optimized way.

ABB's electromagnetic stirrers (AL-EMS) ensure aluminium melting, alloying and refining operations to become more cost-effective and to obtain tighter tolerances. From ABB's vast knowledge in the field of metallurgy, we also know that the most decisive factor when it comes to achieving higher quality and productivity is the stirring motion in the melt.

Therefore, knowing the importance of having strong stirring, ABB designs the stirring system to circulate the entire melt in one minute or less. This has been proven time after time to be a winning concept.

Multi Coil Concept, System Overview



AL-EMS, MCC in short

- Over all control system
- Automatic switch
- Combined water supply
- Common transformer
- Common frequency converter
- 2 stirrer coils
- Attractive price tag

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