

# Software control of hot-cells for mechanical operations and sample preparation

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## Abstract

The Laboratory for High and Medium Activity (LHMA) of SCK•CEN has a history of more than 40 years of hot-cell work. During this period, many different hot-cell control technologies have been used but non of them have been standardised and some have become obsolete. Due to this non-standardization, this could lead to problems for repair policies and future hot-cell exploitation.

The increasing need for irradiated sample preparation and the higher demands for precision of these samples led to the construction of a new dedicated hot-cell at LHMA. The electrical engineering department took advantage of this opportunity to design a very new electrical controlling system for this new hot-cell. This new electrical controlling system is based on PLC technology in combination with LCD windows-based touch screens. The system will gradually be implemented in all hot-cells of LHMA