The choice of sputter coater has often been a compromise between either fine grain coating for SEM or the ability to rapidly deposit a wide range of materials for thin film and advanced EM applications.

Safematic has cleverly resolved this by developing two unique (patented) sputtering modules that quickly plug in to the CCU-010 HV turbo pumped coater base unit. The standard SP-010 compact sputtering module is ideal for many SEM applications, but if very rapid deposition is required, and/or more challenging sputtering metals are needed,
then the SP-011 fast sputtering rate module offers additional advantages.

The SP-011 uses a special sputtering magnetron geometry and power supply and is optimised for sputtering metals such as ferromagnetic material or indium tin oxide (ITO), which has recently emerged as an ideal coating material for correlative microscopy (CLEM) applications.

Safematic sputtering modules pack a lot into a very small space. Comprising a magnetron, target, shutter, process pressure regulator and compact power electronics in a unique plug-and-go format. There is a simple user interface to access the coating recipes and settings for power and gas supplies located in the CCU-010 sputter coater. Exchanging modules on the base unit takes seconds. Both sputtering modules include unique sputtering head cooling and monitoring to ensure high quality coating and allow very long process runs – alleviating the need for rest periods which are required with many other coating systems. Added functionality can be obtained with the CT-010 carbon coating module for TEM and SEM, featuring a patented automatic carbon fibre spooling system that allows up to 50 sequential carbon evaporation runs.

The Safematic compact coating unit CCU-010 HV has an integrated oil-free pumping system helping to give a class-leading vacuum performance (to 2 x10-6mbar) with the added advantage of a very small footprint (35 x 55cm).

Sussex-based Labtech International represent the full range of Safematic coaters in the UK and Ireland. Contact us to put the CCU-010HV to the test.