

# CLEAN-UP GETS TECHNICAL



*In a unique project commissioned by Technical Surfaces Ltd, Loughborough University's Sports Research Laboratory is using an industrial robot to evaluate various cleaning brushes and their effect on a range of synthetic surfaces.*

A £70,000 industrial robot is helping to evaluate the design, composition and operation of powered brushes fitted to specialist cleaning machines used for the maintenance and renovation of synthetic sports surfaces.

Housed within the Sports Technology Institute at Loughborough University, the robot is assisting researchers with a unique project commissioned by leading synthetic surface maintenance firm, Technical Surfaces Ltd.

The results will be used by the company to develop equipment better able to maintain synthetic surfaces with minimum wear or damage to the surface and to the cleaning equipment itself.

Using a programmable robot to carry out replicated tests enables the researchers to easily measure the effect that various types of cleaning brush have on a range of synthetic surfaces when used at different rotational and forward speeds, working depths and operating frequencies.

A large amount of useful data will be collected during the project by the research team at

Loughborough University, all of which will be passed to Technical Surfaces to help the company take its synthetic surface maintenance services to a higher and more effective level.

Established in September 1998, Technical Surfaces has built a portfolio of more than 500 maintenance contracts on synthetic surfaces installed throughout the United Kingdom. These surfaces include hockey, soccer and rugby pitches, sports

training areas and academies, tennis courts and general sports and play areas.

According to the company's sales manager, Nick Harris, only 10 percent of its maintenance contracts are carried out on a weekly or bi-weekly basis. The remainder range from monthly to once-a-year visits paid by Technical Surfaces' specialist teams - the longer the interval, the greater the need for those responsible for looking after an

installation to ensure that the surface is properly maintained between activities or during the playing season.

"The majority of sports carpets use either silica sand or rubber granule infill and it's this infill which traps dirt and detritus, impairing drainage and reducing the playability of the surface," commented Mr Harris. "A recent study by Cranfield University showed that 10 hours of use requires around one hour of maintenance to keep the surface at its best while helping deliver a long and productive life."

To help sports clubs, schools and other establishments that cannot justify or afford frequent visits by a specialist maintenance firm, Technical Surfaces has launched an economical range of purpose-designed machinery to enable customers to do the job themselves.

Offered in a choice of two packages costing £3,670 and £2,840 respectively, Technical Surfaces' R.E.D. Series 3x and R.E.D. Series 3i comprise a 13hp ride-on power unit with hydrostatic drive suitably equipped to tow a range of brushing, raking and matting attachments selected to suit the specific application, the type of user and the budget available.

For the really serious professional user such as contractors and multi-surface sports clubs, the company can supply its dedicated SMG SportsChamp machines which come in standard and high-lift versions and have a starting price of around £17,000, including one attachment.

● [www.technicalsurfaces.co.uk](http://www.technicalsurfaces.co.uk)



*Priced at £3,670, the R.E.D. Series 3x maintenance system from Technical Surfaces comprises a petrol-engined power unit with trailed drag mat and Flexicomb attachments. The latter, shown here, has height-adjustable bristles able to drag brush and decompact synthetic surfaces.*