The Application

Conventional tool changer designs using a chain drive with guidance rollers running on angled steel sections have been a standard solution for many years. Designers seeking to simplify the arrangement and reduce manufacturing costs are increasingly turning to HepcoMotion track systems PRT2.

The need to fit the tool changer system into a smaller space envelope is becoming an issue as manufacturers are under pressure to make machines more compact. This application requires the system to be fitted into a space 1.2m x 0.5mm guiding and accurately positioning 24 tool carriers.

Product Solution

This solution is typical of the type of design being adopted by machine tool builders. The continuous track circuit with linked carriages can be driven a number of ways. A drive wheel on one end with rollers locating into the drive wheel is often the easiest solution to utilise space efficiently.

This principle can be extended to larger systems where tool weight is higher and is not restricted to the classic oval shape track circuit shown.

PRT2 provides designers with a flexible easy to design solution that will improve many tool changer designs. The added advantage is that the complete system uses standard PRT2 components, guides, segments and carriages.