Specialised industrial application
Klaus Eiche Diamantwerkzeuge GmbH (EICHE) is a leading manufacturer of diamond-tipped cutting tools. Its product range includes disks for cutting concrete, asphalt, clinker and ceramic. A unique forging technology allows EICHE to manufacture durable, low resonance disks that offer superior performance.

In addition to its own extensive product range, EICHE manufactures customised own label disks for other vendors. The steel surface of each disk is decorated with the appropriate vendor logo and with technical information, including the intended application, disk diameter and core thickness.

Innovative direct print solution
EICHE used a solvent-based print technology to brand the steel disks. Effectively a secondary manufacturing process, labels needed to be printed, cured, laminated and trimmed before they could be glued to the disks. The labelling process was labour intensive and time consuming.

Helping EICHE optimise its production process, Ricoh replaced the existing roll-to-roll solvent-based system with a Ricoh Pro™ TF6250 UV flatbed printer. Using the Pro TF6250, EICHE is able to print high quality colour graphics directly onto the surface of disks. Ricoh’s innovative solution is saving EICHE time and money.

“The Pro TF6250 has streamlined our finishing process. We use it to print colour graphics onto steel cutting disks. It is a one stop process. The graphics look superb and bond firmly to the steel surface.”

Michael Schwenk
Construction Manager
Space saving design
The Ricoh Pro TF6250 UV flatbed printer can print graphics directly onto a variety of industrial substrates, including wood, metal and glass, and display materials, such as Forex, Dibond and acrylic board. Ideal for EICHE’s application, Ricoh’s specially formulated UV inks have a wide colour gamut and exceptional adhesive qualities.

Installed alongside EICHE’s main production line, the Pro TF6250 is surprisingly compact. Because it has a stationary platen, it requires just 2.5m x 1.3m of floor space. And, unlike EICHE’s old solvent-based labelling system, it doesn’t need venting or require additional space for curing, cutting, lamination and gluing.

Simple one stop process
EICHE’s Pro TF6250 has a customised vacuum mount that holds up to 72 disks. Processing five colours in a single pass, the Pro TF6250 is able to print high quality graphics onto all 72 disks in under two minutes. The five colour process enables EICHE to print a white background layer and/or white graphics onto the disks.

The Pro TF6250 has transformed EICHE’s production process. The company uses the Ricoh system to print 1,000 disks per shift. Printing directly onto the steel disks has reduced EICHE’s production lead time and eliminated cost. The print quality is excellent and helps EICHE to present a professional image to its customers.

“We print 1,000 disks per shift. The Pro TF6250 has transformed our production process, reducing lead times and eliminating cost. In addition, the use of solvent-free inks has improved the production environment.”
Michael Schwenk
Construction Manager