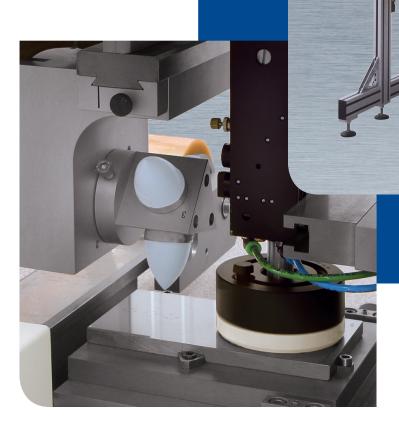
Pad printing technology for the watch industry





ÉDITION COMPTEURS

with TPX 221 pad printing machine



Watch dials no longer serve only as instruments to tell time. An increasing number of indicators adorn high-quality watch dials and inform the owner about seconds, tenths of seconds, weekdays, battery level, etc.

The importance of today's watch face has markedly increased and stop watch and calendar features are now standard. The wide range of designs from simple elegance to elaborate decorations have one thing in common: all watch dials require maximum printing precision.

In addition to the various display indicators, the demands regarding the print quality are also rising: more and more high quality print images must be reproduced accurately onto the watch dial. The already finely printed images on the actual watch dial are then supplemented by even smaller print images, that require the same printing precision.

The TPX 221 Pad Printing Machine Édition Compteurs was developed by Teca-Print specially for printing watch "compteurs", i.e. display indicators. With this unique technology, the watch dial's compteurs can be printed in a single print cycle.

Printing the "compteurs" with the TPX 221 Édition Compteurs is quick, easy and very precise. Up to three different images are picked up and deposited onto defined positions on the watch dial.

In order to meet the high printing demands of the watch industry a separate printing pad is used for each print image. The printing pads are mounted to a star-shaped pad changer and are moved into the exact position for ink pickup and deposit in just fractions of a second.

The watch dial is positioned in the workpiece holder with the help of positioning pins and held in the correct position by means of vacuum. Due to

the implementation of five servo-driven axes, i.e. vertical and horizontal pad strokes, inking mechanism, pad changer and x-axis displacement, all positions can be achieved with precision. As an additional option the rotation axis can be adjusted via servo-driven motors

The unique pad arrangement also shows a positive effect when used together with the integrated automatic pad cleaning device: possible ink residue from the various printing pads is deposited staggered in the x-axis, which minimizes the unroll lengths and saves cleaning tape.

A laminar flow is utilized in order to maintain a dust-free work environment.



TECHNICAL INFORMATION

MACHINE TPX 221

COLOURS

up to three print images with 1 colour

DRIVE

electromechanical 5 servo-driven axes

CONTROL UNIT modular PLC touchscreen

DETAILS TO THE PRINTING PADS
Only use pads with a max. base diameter of 47 mm and a max. base height of up to 45 mm. The pads are mounted to an M6-threaded pin. The T1325 blue printing pad is pictured.



