

Édition Compteurs TPX 221



Industry Demands:

Watch dials no longer serve as an instrument for telling simple time. An increased amount of indicators adorn high-quality watch dials, as well as inform us about seconds, tenths of seconds, weekdays, battery level and dates, etc. and they have even taken over the role of the stop watch and calendar. The importance of today's watch face has markedly increased. The wide range of designs from simple elegance to elaborate adornment have one thing in common: all watch dials require maximum printing precision.

Industry Challenge:

In addition to the added display indicators, the demands for the print quality are also expanding: more and more print images of the highest quality must be reproduced on to the watch dial. The already finely printed images on the actual watch dial are then augmented by even smaller print images, which require the same printing precision.

Industry Solution:

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





Details:

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 on to defined positions on the watch dial. In order to meet the high demands of the watch industry for printing, 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.

With this unique system, three high quality "compteurs" can be printed in just one single print cycle. Depending on the requirements, just one or two compteurs can be printed as well.

The watch dial is positioned in the tooling fixture with the help of positioning pins and held in the correct position with 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.

The unique pad arrangement also demonstrates a positive effect when used together with the integrated automatic pad cleaning device: eventual 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. In addition to printing compteurs with the TPX 221 *Édition Compteurs*, the watch dial itself can be printed as well.

Technical Information:

Machine:

- ▶ TPX 221

Colors:

- ▶ up to three print images with 1 color

Drive:

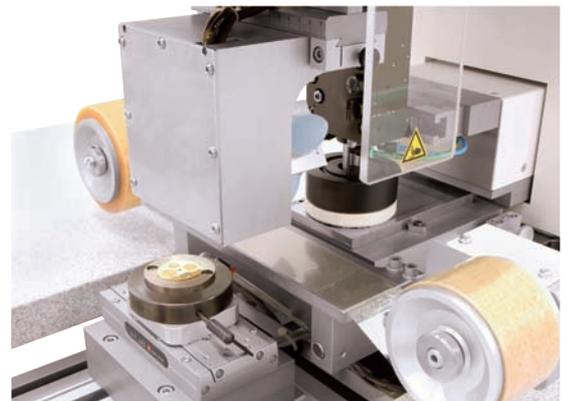
- ▶ electro-mechanical, 5 servo-driven axes

Control:

- ▶ modular PLC with touchscreen

Details of the Printing Pads:

Teca-Print offers high quality printing pads for printing compteurs and watch dials. The T1325 blue printing pad is pictured. Only use pads with a max. base diameter of 47mm and a max. base height of up to 45mm. The pads are mounted to an M6-threaded pin. We would be glad to make a recommendation regarding the best pads for your application.



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