

The origins of pad printing

Starting from clock-face printing technique, pad printing is now the most used printing process on objects.

What is pad printing?

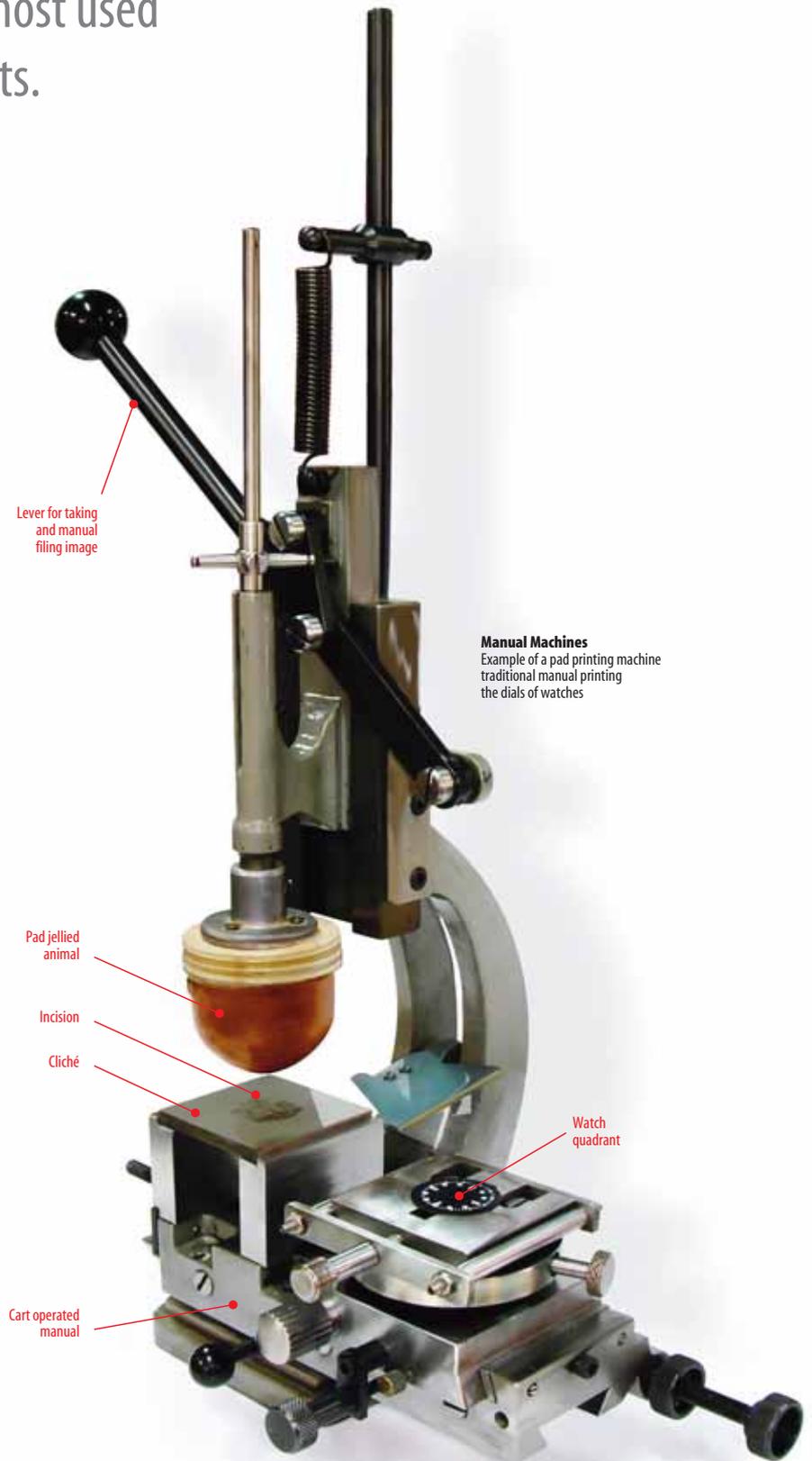
Pad printing is often compared to silk screening or hot press printing and frequently to offset printing; for however much the results of such techniques may seem similar, pad printing constitutes a process unique and diverse from all others. Thanks to the intelligent exploitation of the evaporation of the solvent contained in the ink, pad printing allows to transfer an image from an etched plate onto the object to be printed, by way of a soft, silicon pad.

Which are the origins of this printing process?

The most reliable hypothesis assert that the birth of pad printing rose from the need of some Swiss watch makers looking for a high precision printing method for their watch faces (in the fifties). Pad printing was initially limited to Europe, till the late sixties, when some Swiss watch makers started to export their products worldwide.

The real revolution which determined the development of pad printing process was the introduction of silicon pads and solvent based inks. The new printing technology made possible the "d2wet on wet" d3 print, as result the achievement of multicolour prints; moreover this new combination silicon-solvent based ink speeded up production compared to traditional printing systems. Pad printing imposed itself simultaneously with the coming of plastic materials.

For the whole decade and the following half, pad printing had to compete directly with the most traditional printing techniques such as hot stamping and industrial silk-screen; but as soon as the advantages came evident, pad printing enlarged its application fields, passing from a technique for dedicated application to be nowadays the most used printing system for all kind of products.



Lever for taking and manual filing image

Pad jellied animal

Incision

Cliché

Manual Machines
Example of a pad printing machine traditional manual printing the dials of watches

Watch quadrant

Cart operated manual