Close up of flat table screen print. Demonstrating the 100% opacity of the inks, as the yellow is laid on top of the red and the red laid on top of the black without any show-through. It also shows that where on the finished wallpaper the lines look clean, it’s actually a zig-zag edge, created by the inks going through the mesh of the screen.

Introduced as a means for printing wallpaper in the early to mid 1940’s – later being introduced into Britain, from America, in the late 40’s. Short run lengths were again possible. Although it was slow to produce, low origination costs and cheap labour at the time made this a cost effective proposition. Particularly useful at the time for printing full-wall murals with no regular pattern repeat.

Traditionally, screen printing was called ‘silk screen printing’ because, rather obviously, the stencil screens were made of silk. This term has carried over into modern times even though nylon is commonly used. It is a relatively simple process that produces wallpaper with a wonderfully rich depth of colour.

The screen is a rectangular frame with a fine polyester nylon woven mesh stretched across it. To create the design it is first necessary to completely coat the screen with a photosensitive polymer, the stencil of the design is then placed flat onto the mesh before the screen is ‘photo-exposed’ under special lighting.

This exposure hardens the polymer into an impenetrable lacquer. The area that was masked by the stencil remains fluid and once the screen is washed the stencilled off area once again becomes open mesh. This allows the printing inks through.

To print the screen is placed face down onto a long flat table that has a length of wallpaper laid tight against it from one end to the other. A typical table would be 2 metres in width and 31 metres in length. (Because of this rolls of
wallpaper are often supplied as a single ‘triple’ roll that is three times the length of machine printed roll; 30 metres instead of the standard 10).

The thick water based inks are applied to the back of the screen and are drawn across the mesh using a rubber *squeegee* (imagine a car windscreen wiper blade), forcing the ink through the areas of open mesh in the shape of the design. Once the colour is laid the screen is lifted and moved along to the next position, where the process is repeated. It is important that the inks are allowed to fully dry before any subsequent screens are placed on top, this is to prevent the screen potentially picking off the previous colour laid down, smudging the design. To counter this potential problem it is normal to print every alternate screen, before going back and filling in the gaps once the inks have dried.

The opportunity to use a limitless amount of strong, rich opaque colours, makes these wallpapers very desirable.

However, the process is labour intensive and demands constant vigilance. As such, wallpapers produced this way tend to be comparatively expensive and are therefore generally aimed at the top end of the market.