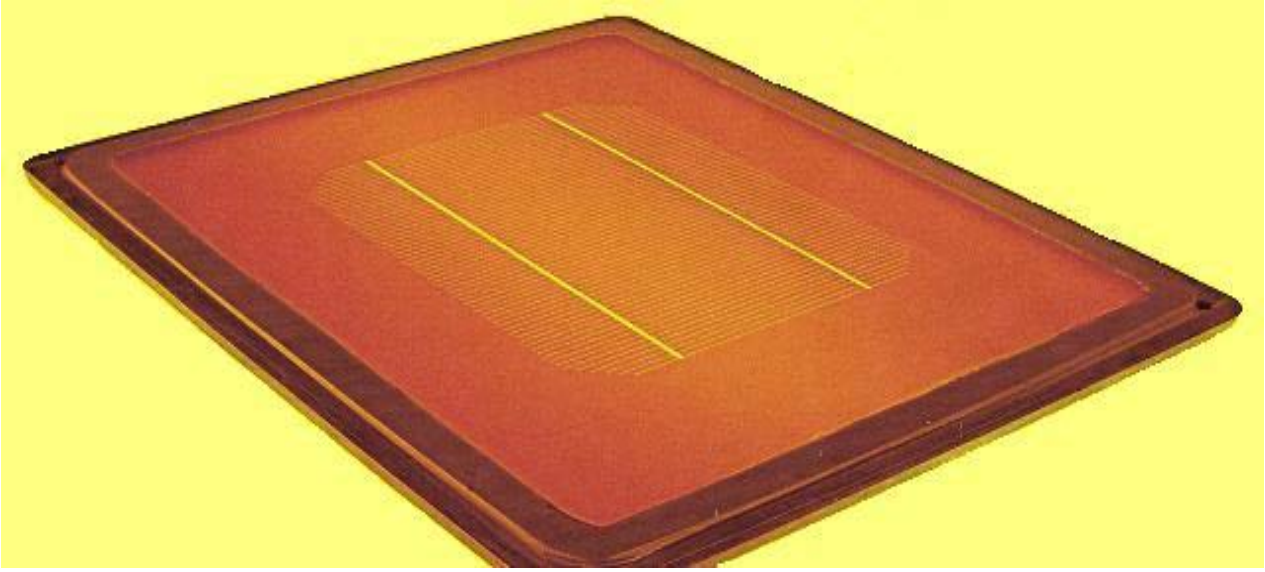
Type HT High-Tension Mesh



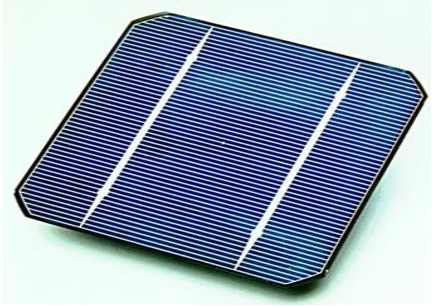
Deposition of ink is one of the major quality aspects of the printing process. This deposition is controlled by transferring the ink onto the wafer through the screen mesh and emulsion.

MicroScreen is now manufacturing screens with new HT stainless steel mesh. Produced from specially-developed wires and woven on state-of-the-art looms, the HT mesh is a high-tension mesh capable of achieving tension values much higher than traditional meshes.

The HT mesh allows us to stretch your screens tighter to a higher tension. This will allow a much lower off-contact providing less screen stretch during the print stroke with less image distortion and screen fatigue.

Screens fabricated with HT mesh show improvements in the separation of the ink from the mesh. Ink clears the mesh opening much easier producing better print consistency and image quality, increasing your cell efficiency.

Benefits of Using the Type HT High Tension Mesh Screens



Less Image Distortion

The Type HT High Tension Screens will allow you to lower the off contact distance on your screen printer. The screen will stretch less during the print stroke resulting in less image distortion.

Better Printing Consistency

It is easier to get consistent results when the screen has a high tension. The quality of the print image will be much higher. As we know, poorly tensioned screens produce irregular ink deposits because of the unpredictable accumulation of ink on top of the screen during the print and flood cycle.

When a certain level of ink accumulates in the mesh openings, it will suddenly pass through on a single print stroke. Under the weight of the ink, a screen with low tension tends to simply distort itself.

This distortion changes as the ink slowly leaves the screen, print after print (this is even more evident in large format printing). This extra ink weight modifies the off contact/snap off relationship due to the ink weight inside the mesh openings.

Higher tensioned screens require less off contact, and less pressure on the squeegee is needed to pass ink through the mesh openings. Faster printing can also be achieved due to less time for the ink to accumulate in the mesh openings.

Less Wear on the Screen and Squeegee Edge

There is less wear on the screen and squeegee with the higher tensioned screens. The higher tension reduces the “traction” on the mesh and diminishes its stretching. It also produces less squeegee drag and allows a thinner ink deposit.

With a lower off contact, there is less ink retention in the mesh openings.

Improved Quality Image

Less off contact and quicker snap off of the ink behind the squeegee improves print quality and allows you to increase your cell efficiency.