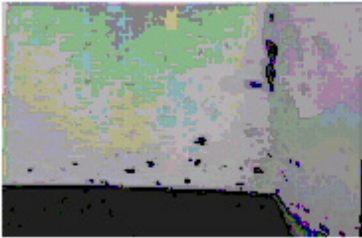


Fluid dynamics and printability of solids

The primary goal of DigiCap is to improve the visual appearance of solids. In some cases, DigiCap can also enable the optimum ink film thickness for printing of solids. This will ensure the highest possible maximum density (D-Max) for solids, as measured by a densitometer. DigiCap helps to overcome the physical problems of fluids and flat surfaces by moderating hydrostatic forces and surface tension of the ink film.



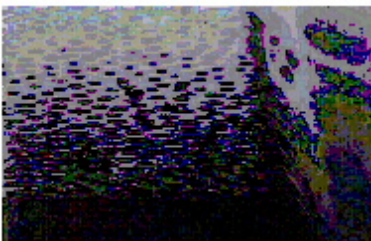
On solid flat surfaces, surface tension causes ink to pool

Ink pooling can cause undesirable artifacts—sometimes referred to as *worm tracks*.

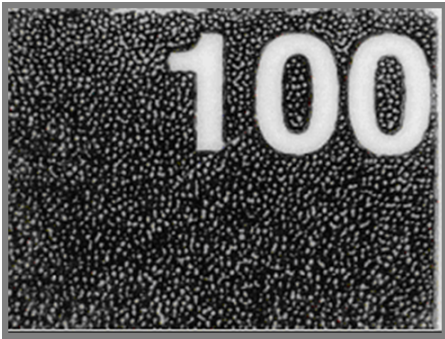


Solid area on poly shows undesirable artifacts, and a halo effect around reverse type, as a result of pooled ink

The application of DigiCap textures the surface of solids, improving the physics of ink transfer.



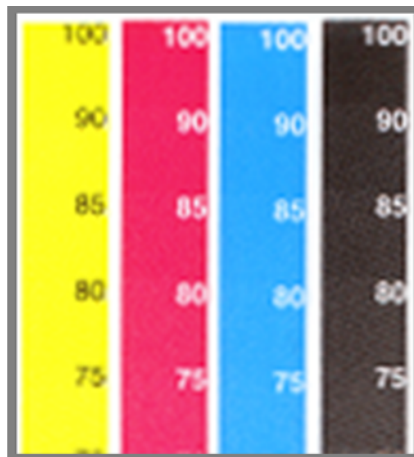
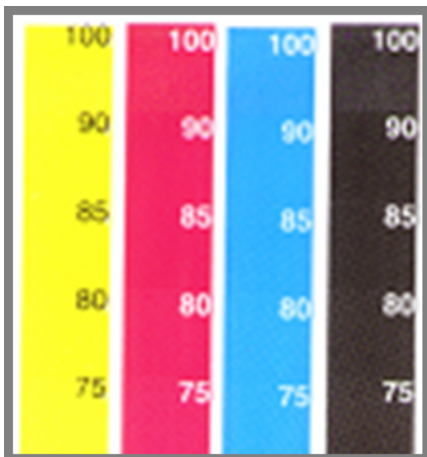
The microscopic texturing of solid areas with DigiCap can equalize hydrostatic forces, leading to better ink laydown on the surface of the plate



Solid area DigiCap shows improved ink laydown

Note: The size of the artifacts is much smaller, with noticeable lessening of halo effect around reverse type. At normal viewing distance, these solids look smoother.

The primary benefit of using DigiCap is to improve the visual appearance of solids. In some cases, it may be possible to achieve higher D-Max in solid areas, by using DigiCap. This is not a general rule, and is considered a secondary benefit to better solid appearance, but it is a possible outcome of using DigiCap.



Left: 100% Black tone patch without DigiCap is actually printing lighter than 90%, and has a density of 1.25; right: application of DigiCap shows 100% printing darker than 90%, and now has a density of 1.4