

## CERÁMICA · CERAMIC · KERAMIK · CÉRAMIQUE

The new ceramic plates developed by LITHOPLATE mean an important technological innovation with many advantages for the offset printer, replacing the traditional aluminium substrate electrolytically grained and anodized by an aluminium sheet, covered by several ceramic layers by means of an electrolytic process.

Compared to the "waterless" plates which print completely without water, the ceramic plates can be called "lesswater", benefiting from the high printing quality of the "waterless" plates but without its drawbacks.

### MAIN ADVANTAGES

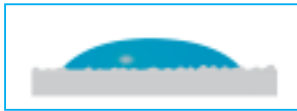
#### LESS WATER AND LESS OR NO ALCOHOL

The ceramics is a material more hydrophilic than the anodized aluminium, thanks to its better surface tension, and it improves the dampening of the non-image area.

The effectiveness of the dampening is enhanced by the special topography of the ceramic surface, formed by thousands of micro-spheres which increase the total surface and the effect of capillarity.



Raw aluminium



Grained aluminium



Aluminium with ceramic layer

#### BETTER PRINTING QUALITY

The decrease of dampening reduces the emulsifying of the ink and increases the ink coverage over the material to be printed, avoiding dimensional changes in the paper and, therefore, improving the register.

Furthermore, the fineness of its ceramic grain enables a high resolution of the halftone dots, between 1 and 99%.



Ceramic plate

Conventional plate

#### WITHOUT SCUMMING

Easier ink /water balance as they hardly catch up ink even when reducing the fountain solution to the maximum and can be cleaned easily only with water.

#### WITHOUT OXIDATION

Due to its inert nature, the ceramic substrate avoids the oxidation, therefore it is not necessary to gum the plates up during press stops or to storage them.

#### LONGER RUNS



Thanks to the excellent anchorage of the layer on the ceramic substrate and its extraordinary hardness, a much longer runs compared to any other non ceramic plate can be achieved, without baking. Once baked, runs longer than a million copies can be achieved with the advantage that the non-image area does not suffer abrasion, therefore the printing quality remains unchanged until the last sheet.

#### ECOLOGICAL PLATE

During its production, there is no dissolution of the aluminium, which makes the effluent treatment much easier. Furthermore, since the use of isopropylic alcohol is reduced or eliminated, it is more environment friendly.

#### TYPES OF CERAMIC PLATES

LITHOPLATE can supply positive ceramic plates with conventional coating and blank plates (without coating) for newspapers. Don't hesitate to request samples free of charge.

Within a few months we will be able to supply CTP thermal plates of our own technology, offering excellent performance due to its fast exposure and efficiency in the press.

All our ceramic plates are manufactured in the most modern facilities of their kind, strictly following the ISO 9001:2000 standard and are the result of a research and development effort carried out by a professional team with more than 30 years experience in manufacturing offset plates.



**LITHOPLATE, CONTINUOUS EVOLUTION AND IMPROVEMENT AT YOUR SERVICE**