



Edwin Tafelmeier,  
Laboratory Manager

# INNOVATION

has a  
**New Meaning**  
**TP 318**

## DUAL CURING TECHNOLOGY!

The New Pad Printing Ink for Glass, Metal and Plastics

With this new development we offer another modern, future-oriented and especially environmentally compatible and user-friendly ink system. Although this is a completely new concept ink range TP 318 fits in very well with our existing pad printing inks portfolio – higher pigmentation resulting in a significantly increased colour intensity.

Compared to the standard mixing colours the colour intensity of the TP 318 C-MIX-2000 colours is 50% higher. This high colour intensity is a great advantage for prints applied on transparent materials such as glass. You will have much more possibilities when matching and mixing special colours. Additional colour concentrates are not required for TP 318 inks. Everything is possible: from highly opaque to transparent. Adding highly opaque white or varnish E50 is all you need to get the result you want.



## TWO NEW, MONO-PIGMENTED COLOURS

complement our C-MIX-2000 range

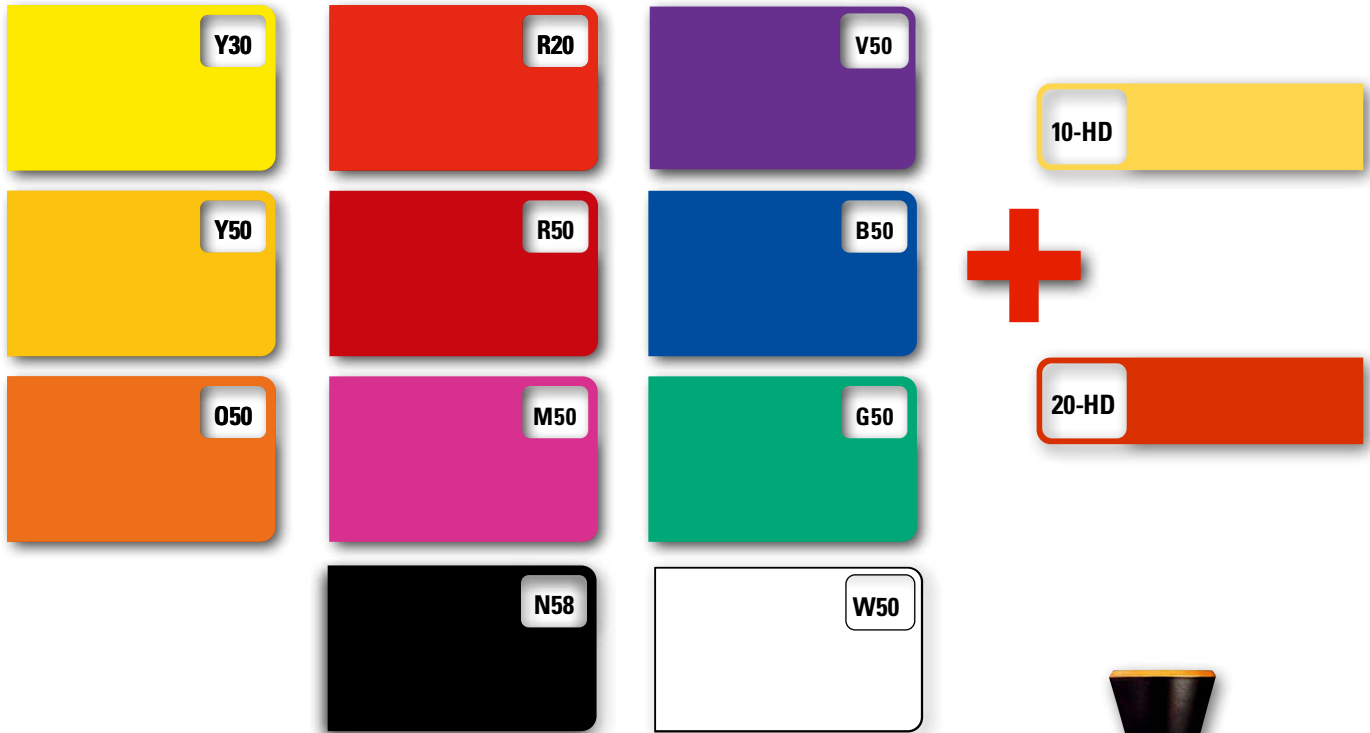
Our colour mixing system is complemented by highly opaque yellow TP 318/10-HD and highly opaque red TP 318/20-HD. You won't need any more base colours to mix all required colour shades\*.

Your benefit: Stock keeping is reduced to a minimum and you will still have all the possibilities. To date only the new TP 318 can offer this advantage.

\*except metallic colours and special effects

# TP 318 – PRODUCT OFFER

With 13 mono-pigmented base colours shades as well as two varnishes (E50 & E50-MT) all shades from a satin gloss to a matt finish can be realised (including standard HD).



## “MAKE TWO OUT OF ONE”

This magic formula really works

One ink range and two different types of hardener. Depending on applications and requirements you can choose the appropriate hardener. For glass and metal hardener TP 219/VCH and for most plastic substrates TP 219.

Please refer to our product data sheet for ink range TP 318 for all details about the variety of applications this system offers.



# AND ANOTHER NOVELTY

## You want a matter finish?

Another novelty is matt varnish TP 318/E50-MT offered in addition to standard TP 318/E50.

As the base colours are highly concentrated you will have many possibilities for mixing with varnishes.

This will not only save money but also offers various possibilities for altering the degree of gloss. Handling of matt varnish is easier and more convenient than handling of matting powder. Surely you know the unintentional

and unattractive traces (glossy traces) finger nails can leave on matt surfaces.

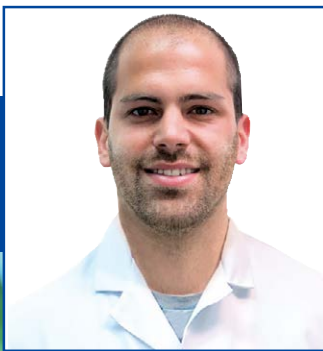
Matt surfaces achieved with TP 318/E50-MT have a higher resistance against such traces. Silicone: The TP 318 ink only contains levelling agents and other additives for surface treatment which are free of silicone. Silicone-content of such agents may cause problems in mirror applications or the like.

Especially environmentally friendly

formulation: Our intention from a technical point was to develop an ink only containing especially environmentally compatible raw materials to be in line with current safety requirements.

Flashpoint of TP 318 is "non-problematic" +45°C.

Surely these are good news for all responsible EHS managers in the printing companies.



**Patrick Uffinger**  
Laboratory: Pad Printing

## THE DEVELOPMENT TAKING A LOOK BEHIND THE SCENES

For the development of TP 318 we set ourselves highest standards.

**1)** First our team concentrated on a basic technology showing excellent mechanical and chemical resistances.

**2)** The second challenge: The system shall show excellent adhesion properties on as many substrates as possible. The raw materials used were supposed to have no or only a small risk potential, in line with our goal to offer new and environmentally compatible pad printing inks.





# NO COMPROMISES –

ink has to be better than good!

3) This, however, was still not all we wanted. In the final trials the ink had to meet high printability standards. We did not accept any compromises.

We wanted our new development to be as good or even better than our well-known and user-friendly TP 300 ink range.

It is not an easy task to meet maximum requirements of all crucial demands, such as obtaining a full transfer of ink from pad in slow and quick printing cycles. Whenever we did not meet all these criteria, we started again from scratch.



Our test runs



Flash curing with NIR

## AFTER MANY TEST RUNS: THE SUCCESS!

All requirements met!

After many test runs and a few set-backs, we finally did it: At last we had an ink, which met all the requirements we had in mind. The many positive responses from our customers made up for all the time and efforts:

“With this pad printing version we meet all requirements. To date no other ink system tested has succeeded in meeting all requirements”

- ✓ „Very good transfer“
- ✓ „To date we have never made 40.000 double hits with 5 N/cm<sup>2</sup> “
- ✓ „Good opacity on glass with one single print!“
- ✓ “Easy to process”

Dominik Koch (left) – supports our pad inks department.



Want to try out our new ink range TP 318?  
Just ask for wet samples and test for yourself.