ROTO4ALL

22ND OF OCTOBER, FIRENZE





Our TRIPLE PARALLEL strategy

to secure a leading role for gravure printing in the future



OUR FUTURE STRATEGY FOR THE USE OF CHROMIUM TRIOXIDE



Status as of today for the CTAC authorization

CTAC authorization in effect since December 2020

- Successful implementation within the industry
- Webinars about compliance on a country-by-country basis
- Guideline documents from K.Walter
- Established industry standard for worker exposure measurements
- First compliance checks within the industry have been successful

CTAC authoriszation valid until September 2024

Our activities to ensure the use of Chromium Trioxide in the European Union

K. Walter supply chain application for rotogravure and embossing

- Representing the whole European rotogravure and embossing industry with 117 European production sites
- Applied for 12 years of authorization (until 2033)
- Completely funded by K.Walter
- Supported by economic and chemical risks data from the industry

Effects of the new authorization for the industry

- ▶ No "membership" or special actions required
- Companies have to become part of the supply chain
- Similar regulatory conditions as CTAC expected
- Only liquid CrO₃ formulations
- Coverage of all closed, horizontal chromium baths

Timeline and current status





The CTAC autorization until 2024

K.Walter's application to secure the use for this decade

The "save bridge" to HelioChrome NEO

HelioChrome[®] NEO

THE FUTURE OF HARD CHROME PLATING

HelioChrome[®] NEO

Trivalent Chrome Electrolyte Substitution of actual Cr VI process Seamless integration in process flow Seamless integration in printing process

Lower energy consumption

Lower health risks

No ECHA authorization / no related expenses



HelioChrome[®] NEO

Converts an actual toxic, carcinogen and highly regulated process

Into a nontoxic process



HelioChrome® NEO

New generation Slimline with HelioChrome® NEO at Huhtamaki AutoCON line



- An evolutionary Human Machine Interface
- Our hardware and process know how as software solution for customers
- Database for process and quality datas
 - Parameter settings
 - ✓ Analysis results
 - Layer thickness
- Automated maintenance request and control of individual functions
 - ✓ Daily maintenance







The future process for chrome plating

No ECHA authorization no related expenses

Nontoxic process

POLYMERIC – LASER ENGRAVABLE – MONOLAYER



OUR DEVELOPMENT TARGETS FOR A NEW GRAVURE PRINTING FORM



BETTER

THE SPEED APPROACH

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REDUCTION OF OVERALL PROCESS STEPS

Helio[®] Pearl THE PROCESS

polymeric laser engravable

monolayer

only 3 process steps

90 min. per cylinder

(1 aditional step for recycling (cutting off image)



Helio[®] Pearl THE COST APPROACH



REDUCTION OF INVESTMENT COST

REDUCTION OF WASTE

UTILIZATION OF EXISTING PRESSES AND PRINTING FORMS

Helio[®] Pearl THE CARACTERISTICS

COMPATIBLE WITH ALL EXISTING CYLINDERS AND ROTOGRAVURE PRESSES

- > All existing steel, aluminum and copper cylinders can still be used
- No modifications to printing presses needed
- > Open technology for alternative base cylinder structures

PROCESS FACTS

- No license for plating required
- No hazardous exhaust / no chemically polluted waste-water
- Approx. 80% reduction of energy cost
- Tremendous reduction of CO2 footprint











THE QUALITY APPROACH

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HD GRAVURE / CELLAXY

THE ADVANTAGES OF DIRECT LASER IMAGING

ONLY DIRECT LASER OFFERS

- Unlimited variety of cell shapes / specific cell shape for a specific color/ink
- Best possible adaptation characteristics for 7c extended color gamut
- No saw-tooth effect / perfect line work
- 3D image setter with basically zero limitations
- ► HD Imaging Quality





THE STATUS OF THE DEVELOPMENT PROJECT

- ► Test installation @ K. Walter
- > Several successful print runs at WuH and HDM
- > Run stability of 100,000 meters
- Industrialization of the complete process
- Frequent print runs at HDM Stuttgart with different inks & substrates
- Continuous production of test cylinders





ChromeXtend 2033 dossier issued to ECHA February 2021 with review period of up to12 years

HelioChrome[®] NEO the future of chrome plating

Helio[®] Pearl the step *beyond* ChromeXtend and HelioChrome[®] NEO



