



UPDATE - NEW SURFACES FOR GRAVURE

ERA ANNUAL CONFERENCE 2021 - THESSALONIKI



Our TRIPLE PARALLEL strategy

to secure a leading role for gravure printing in the future



ChromeXtend

OUR FUTURE STRATEGY FOR THE USE OF CHROMIUM TRIOXIDE



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Status of the CTAC authorisation

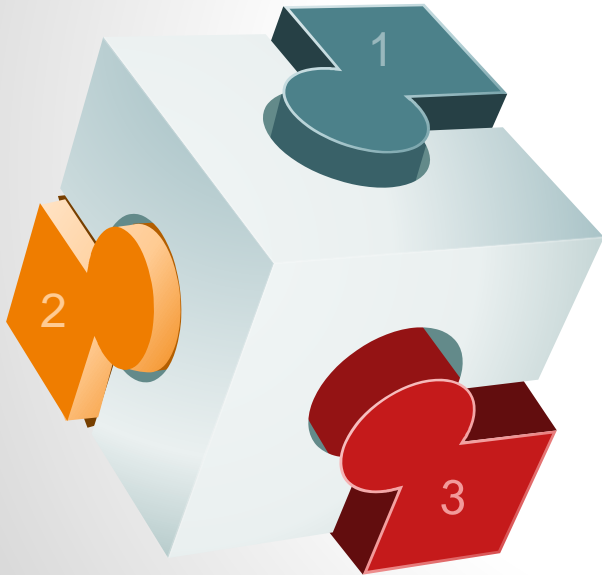
CTAC authorisation in effect since December 2020

- ▶ 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 authorisation valid until September 2024

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Steps and actions for CTAC in the EU



1. Notification of user at ECHA

Notify use with authorization number to ECHA latest 3 months after EU gazette notification 22/03/2021

2. Perform exposure measuring

Must be performed until 18th June 2021
Selection of rotogravure specific exposure scenarios

3. Notify measuring results to ECHA

Send results to ECHA until 18th December 2021

New reporting template available

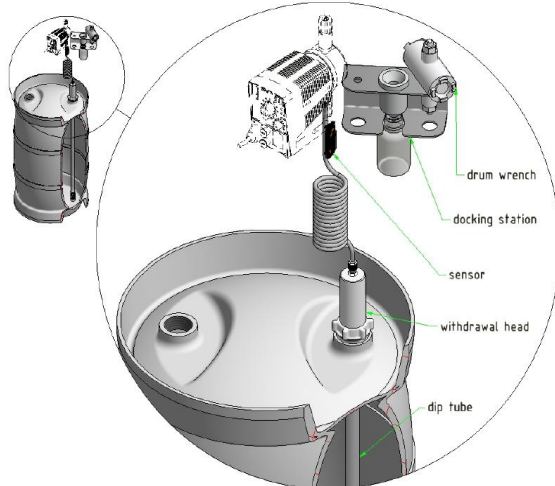
Perform annual exposure measuring

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The Environment Health & Safety package for all customers

Quick Connect

K.WALTER SYSTEM TO 1000L IBC AND 200L DRUMS FOR CHROME DOSING
V3 (SENSOR VERSION)
NEW KWALTER MACHINES



Chrome® Wetting Agent

FF

HelioChrome® REOX 3

HelioChrome® Rapid EC

FEATURES AND BENEFITS:

- Contains all additives* for an optimal chrome layer
- No further additives required
- No lead anodes needed
- User-friendly, safe handling
- Stable results every time

* Chromic acid, HelioChrome® Wetting Agent FF, HelioChrome® REOX3, HelioChrome® Rapid Catalyst

Further information is available at
Tel. +49 (0)89 785 96 0
serviceline@kwalter.de

IN-1 SOLUTION
NEVER BEEN THIS SIMPLE.

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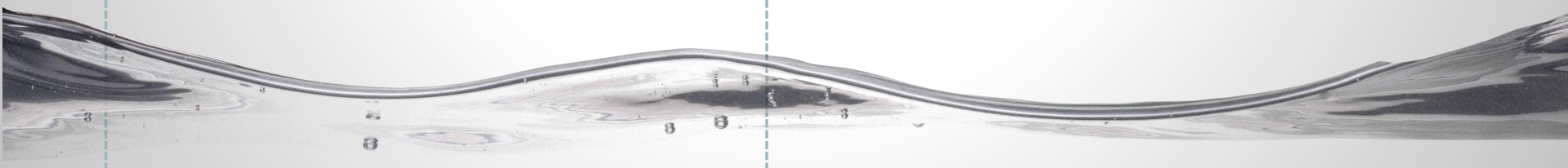
Our activities to ensure the use of Chromium Trioxide in the European Union

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 authorisation 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



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Timeline and current status





The CTAC autorisaztion until 2024



The K.Walter application for this decade



The save bridge to HelioChrome NEO

HelioChrome[®] NEO

THE FUTURE OF HARD CHROME PLATING

Huhtamaki

KWALTER
PLATING AND PROCESSING

KWALTER
PLATING AND PROCESSING

Huhtamaki

K.WALTER

Huhtamaki

KWALTER

HelioChrome® NEO

Trivalent Chrome Electrolyte

Substitution to actual Cr VI process

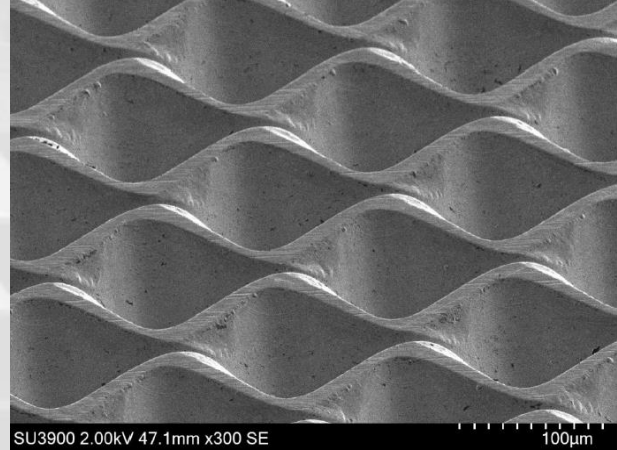
Seamless integration in process flow

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

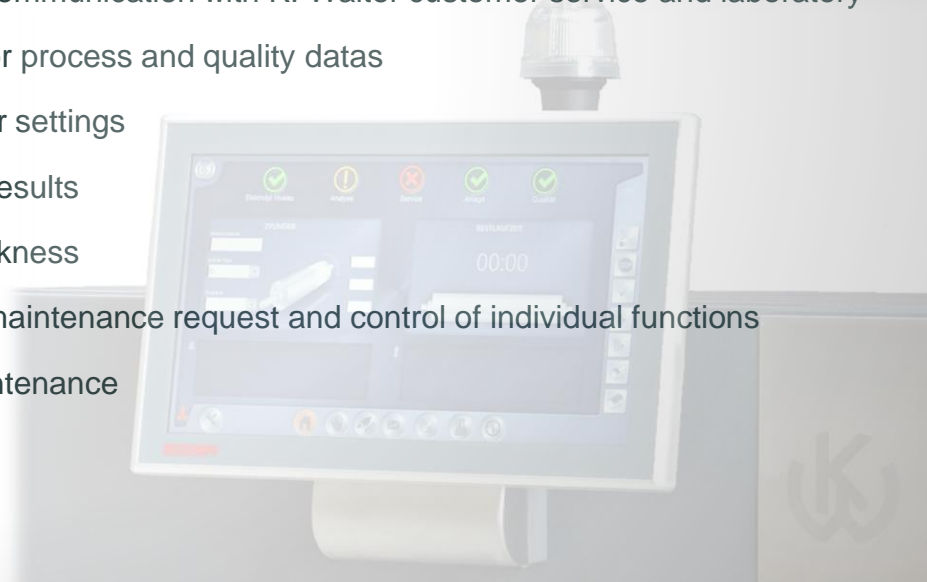


HelioChrome® NEO

New generation Slimline with HelioChrome® NEO at Huhtamaki AutoCON line



- Fully integrated process and quality control
- An evolutionary **H**uman **M**achine **I**nterface
- Our hardware and process know how as software solution for customers
- Direct mail communication with K. Walter customer service and laboratory
- Database for process and quality datas
 - Parameter settings
 - Analysis results
 - Layer thickness
- Automated maintenance request and control of individual functions
 - Daily maintenance



IMPRESSIONS





The future process for chrome plating



No ECHA authorization
no related expenses



Nontoxic process



Helio[®] Pearl

POLYMERIC – LASER ENGRAVABLE – MONOLAYER

Helio® Pearl

OUR DEVELOPMENT TARGETS FOR A NEW GRAVURE PRINTING FORM



FASTER



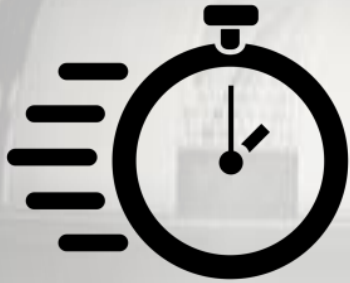
CHEAPER



BETTER

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THE SPEED APPROACH



REDUCTION OF OVERALL PROCESS STEPS

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THE PROCESS

polymeric

laser engravable

monolayer

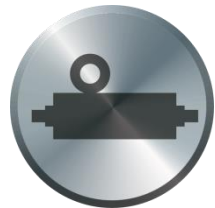
only 3 process steps

90 min. per cylinder

(1 additional step for recycling (cutting off image))



1. | Helio® Pearl Coating
(approx. 30 min/cyl.)



2. | Surface Finishing
(approx. 30 min/cyl.)



3. | Direct Laser Imaging
(approx. 30 min/cyl.)



REDUCTION OF INVESTMENT COST

REDUCTION OF WASTE

**UTILIZATION OF EXISTING PRESSES AND
PRINTING FORMS**

Helio® Pearl

THE CHARACTERISTICS

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

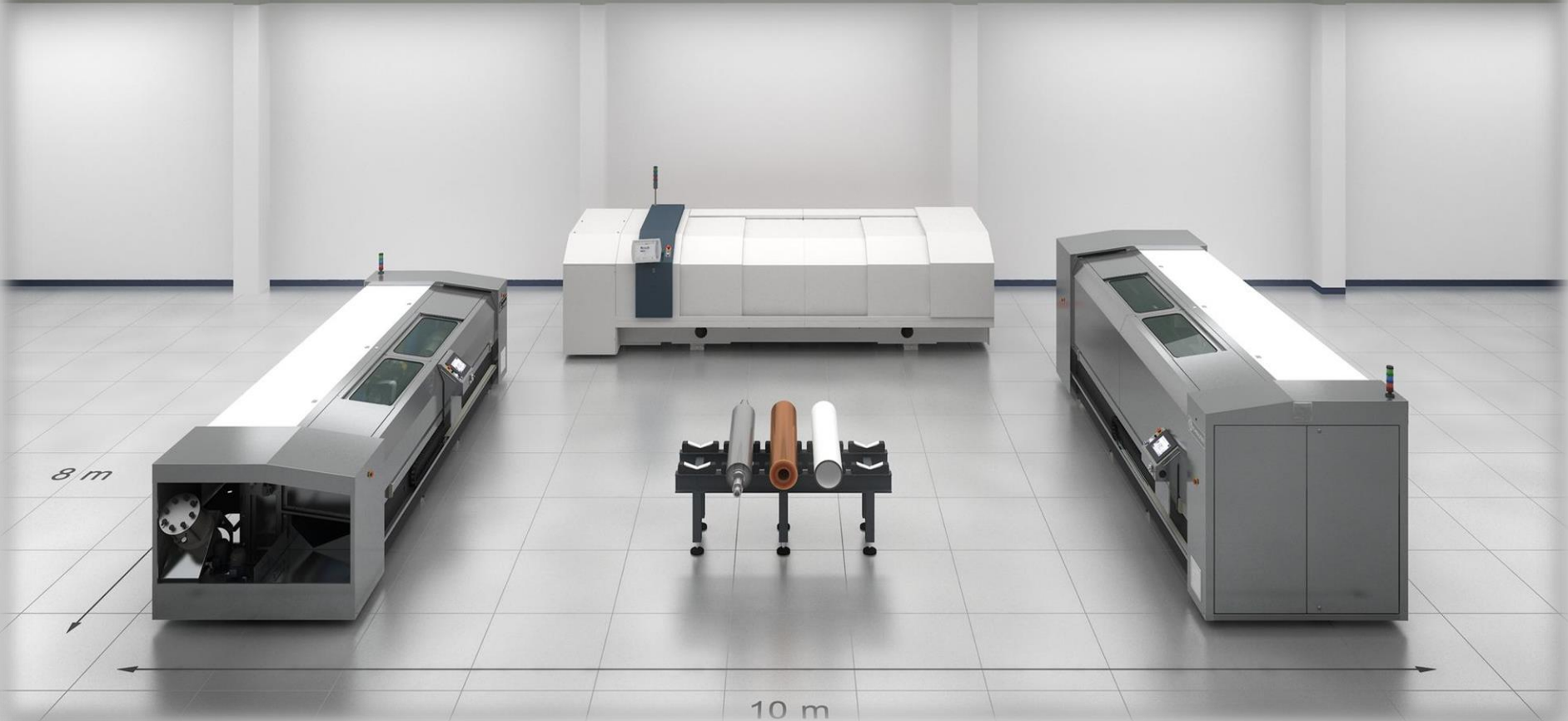


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A BASIC SETUP

8 m

10 m



Helio® Pearl

THE QUALITY APPROACH



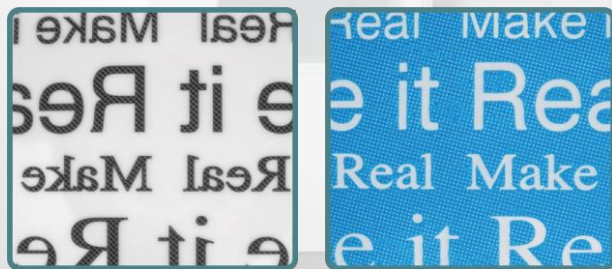
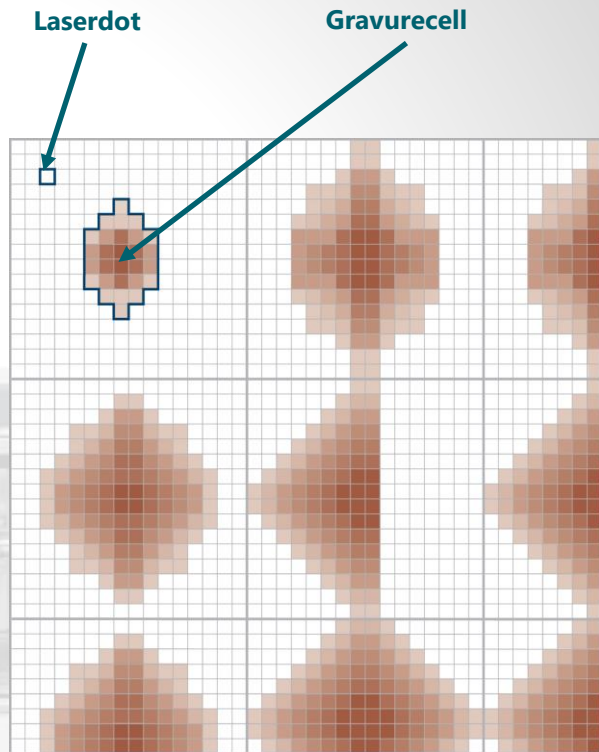
HD GRAVURE / CELLAXY

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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



Helio® Pearl

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



PRINT RUN @ HDM STUTTGART –2021



ChromeXtend 2033

dossier issued to ECHA February 2021
with review period of up to 12 years

HelioChrome® NEO the future of chrome
plating

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



THANK YOU!
STAY HEALTHY AND BE SAFE!