

INNOVATIONS INROTOGRAVURE CYLINDER MANUFACTURING BETWEEN EU REGULATIONS AND DIGITALIZATION

THE OUTCOME OF EU REGULATIONS AND DIGITALIZATION



IMPROVED ENVIRONMENTAL SAFETY



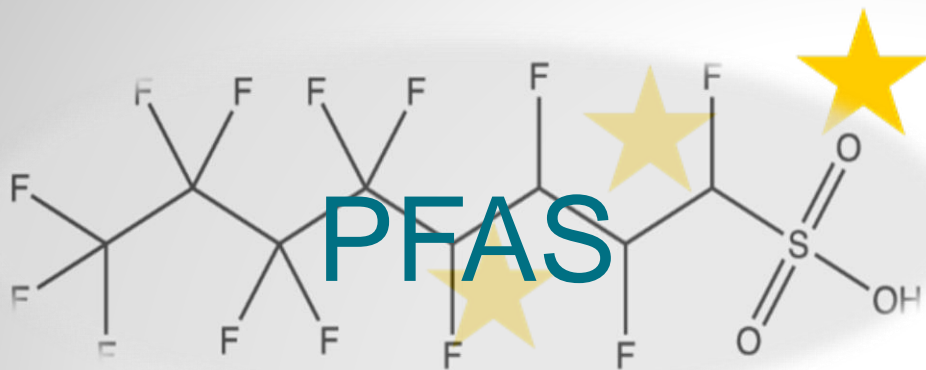
IMPROVED QUALITY



IMPROVED HUMAN SAFETY



IMPROVED COST

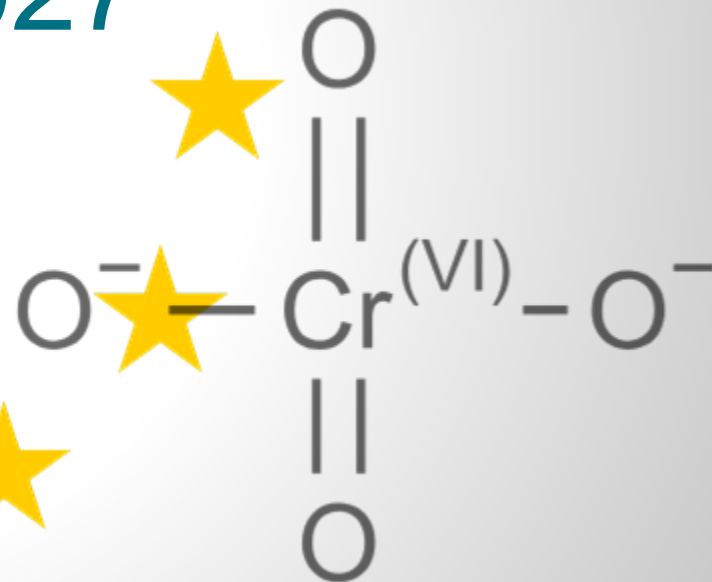


2032

2027

ANEX14

ANEX17



PFAS the forever chemicals



PFAS is used in Wetting Agents of todays Chrome VI electrolytes, and is so far without alternatives for this application

- The EU plans a strong regulation with bans for the substances in the industrial use 2027 as starting point of a today unpredictable timeline
- K.Walter, with support from GRA and ACIMGA gave a comment to the public consolidation on the REACH restriction for PFAS.

Status of the CTAC authorization



**CTAC authorization in effect since December 2020
was annulled by the European Court of Justice**

- All CTAC oriented regulations will end in 2024
- ECHA plans to move Chromium trioxide from a forbidden substance to a restricted substance
The process, the timeline and the details are not defined yet

ChromeXtend

Status of the K.Walter authorization



The voting by EU Commission in February was positive

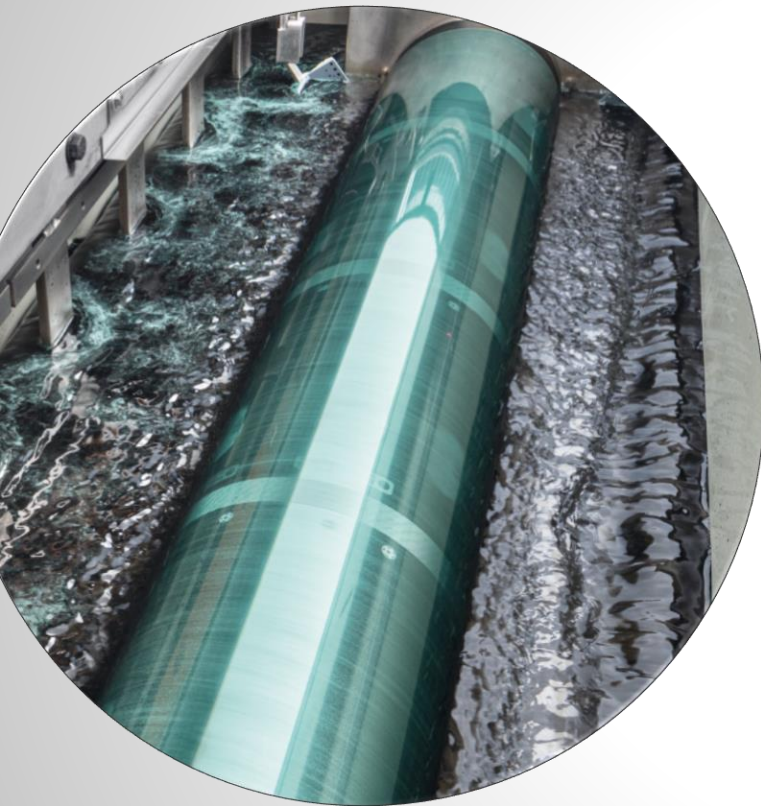
- Representing the whole European rotogravure and embossing industry with 117 European production sites
- Authorization until December 2032 granted
- Use is with liquid replenishing, no more Chrome acid as salt / flakes
- For horizontal and covered plating tanks
- The new authorization number is C(2024) 2880

ChromeXtend

All of K.Walter efforts ensure the transition period

TRANSITION PERIOD





SUSTAINABLE AND SAVE

HelioChrome® NEO

The sustainable solution for chrome plating

- 15% Faster chrome plating process
 - 30% Less energy consumption
 - 50% Less water consumption
- 24% Less CO2 footprint vs. HelioChromeRapid



HelioChrome[®] NEO

Process

- Plating time for 7 µm Chrome layer 12min
- Process temperature 40°C
- Chrome hardness up to 1500HV
- Three additives for bath maintenance
- Chrome metal as replenishment



HelioChrome® NEO

HelioChrome® NEO with digital supervision

- Fully integrated process, quality and maintenance control
- A revolutionary **H**uman **M**achine Interface
- Process know-how as software solutions for user
- The system knows what and how things needs to be done
- The software guides the user





HelioChrome® NEO



No chemicals with “special” EU regulations in use



Improved environment and workers safety



Fully digital supervision of machine and process

HelioChrome® NEO

The future of chrome plating is present

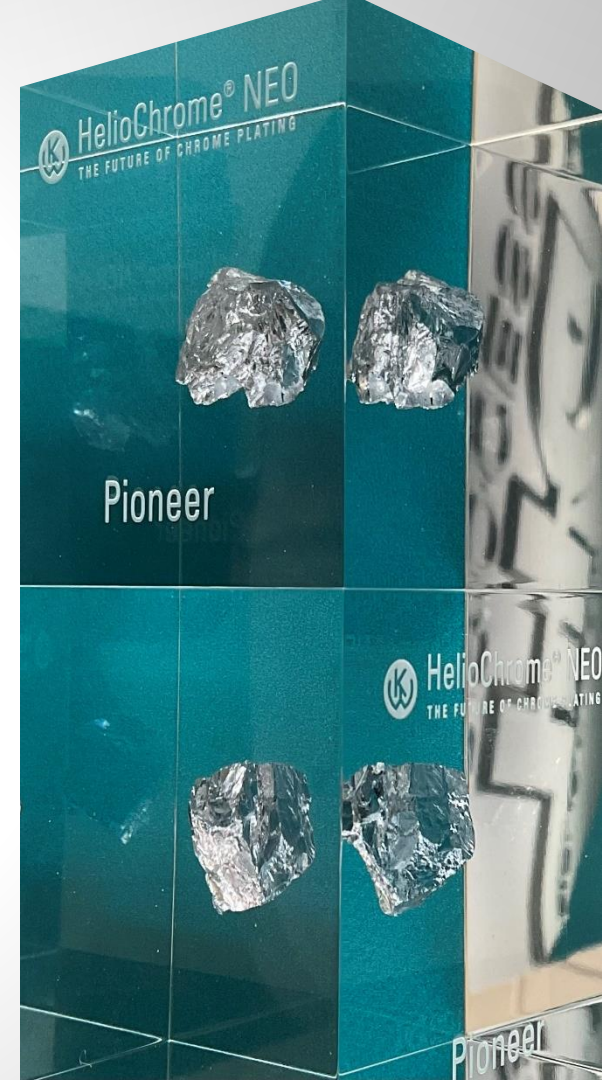
With the Huhtamaki beta site, in production since June 2023

At GPI in Graz, in production since April 2024

At 4Packaging in Dissen, in production since May 2024

And sold to Schattdecor, intallation CW45 2024

Manufactured production cylinders 1500





Print at Bobst Innovation Center in San Giorgio

- 7C extended color gamut
- Speed of 300m/min
- 55.000 linear meter



Daetwyler
SwissTec





A production proved technology

A better process for all users

**A sustainable solution for Chrome
plating**

TO SECURE A LEADING ROLE FOR GRAVURE PRINTING IN THE FUTURE
OUR TRIPLE PARALLEL STRATEGY

ChromeXtend



Temporary solution
for Chrome VI



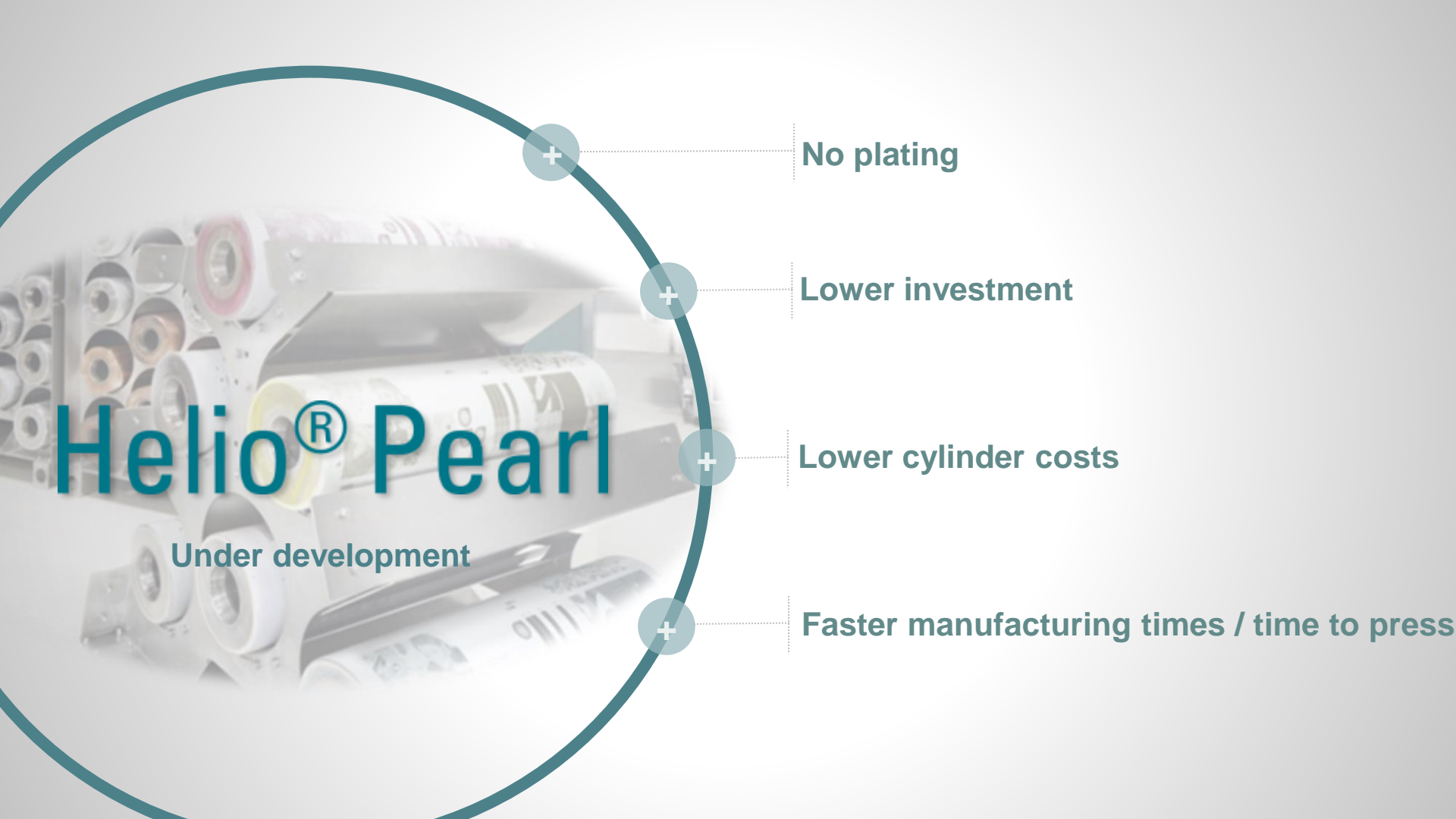
HelioChrome® NEO



Proven substitution
of Chrome VI

Helio® Pearl

R&D project



Helio[®] Pearl

Under development

+

No plating

+

Lower investment

+

Lower cylinder costs

+

Faster manufacturing times / time to press

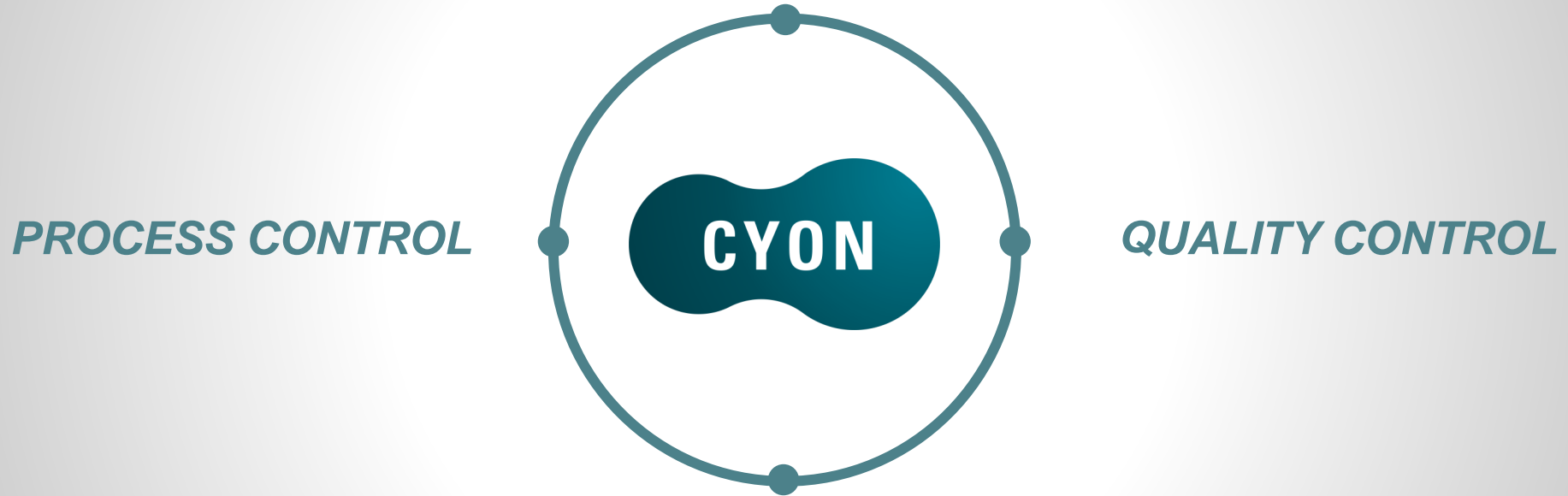


CYON

CYlinder ONline

DIGITAL GRAVURE CYLINDER PRODUCTION

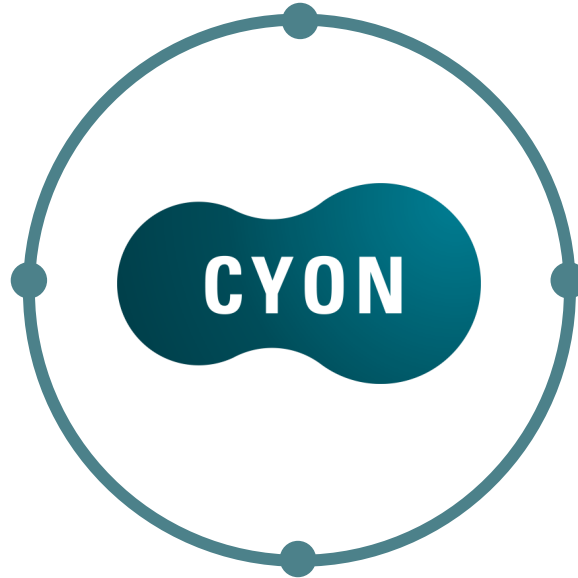
PRODUCTIVITY MANAGEMENT



CYLINDER DOCUMENTATION

HIGHER CYLINDER OUTPUT

BETTER QUALITY



LOWER COSTS

HIGHER STANDARDISATION & TRANSPARENCY

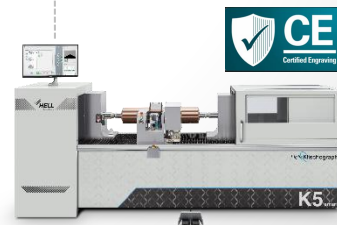
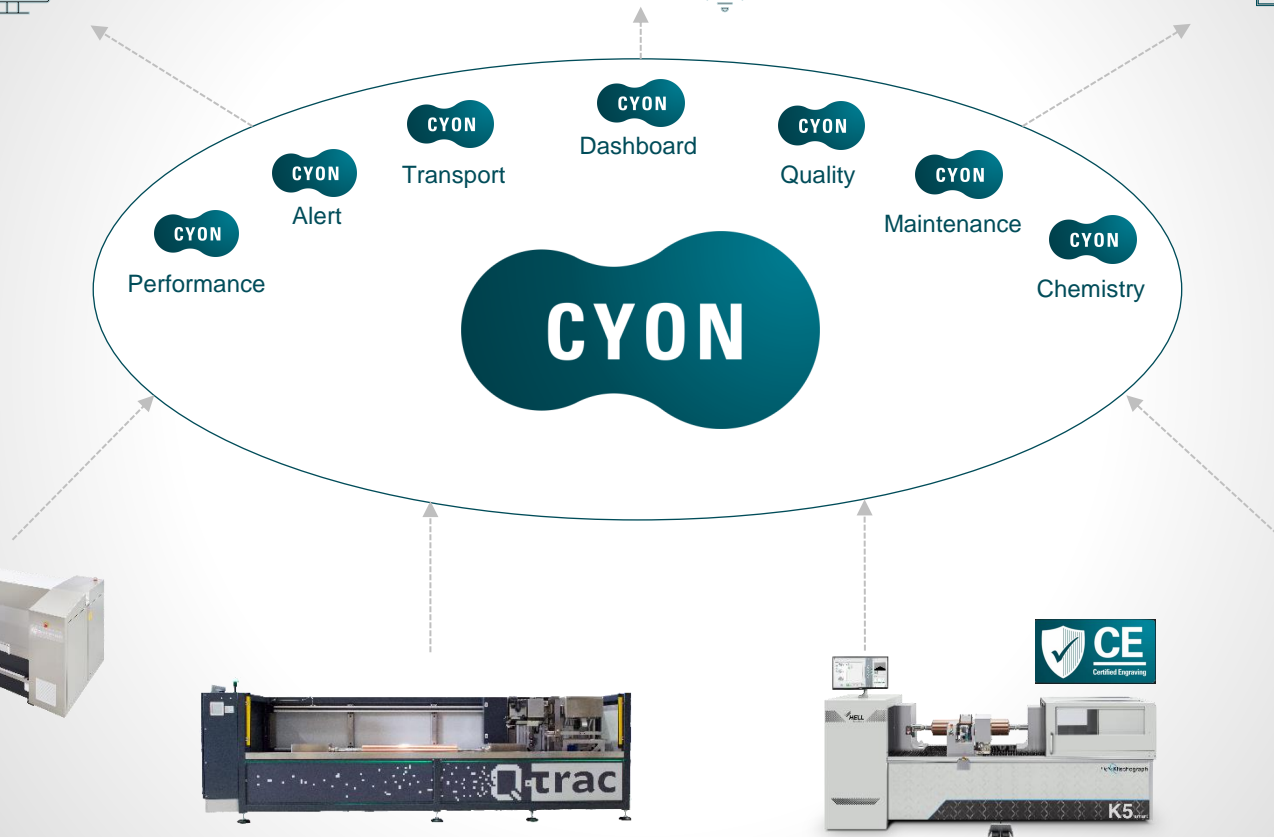
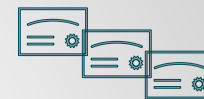
Visualization



Analysis & Guidance



Certificates



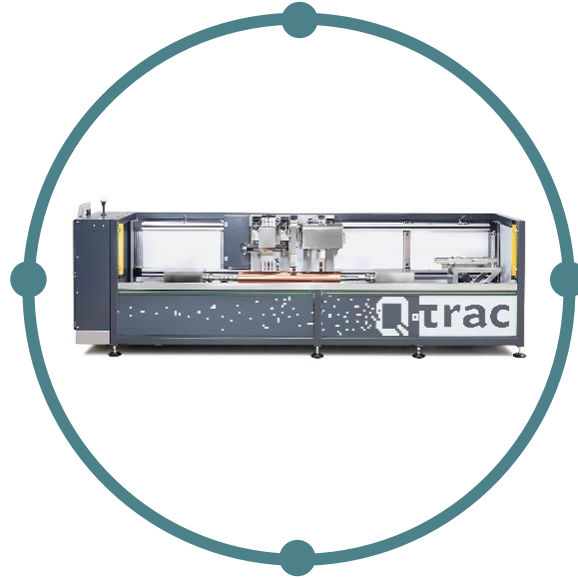


Q·trac

INTELLIGENT QUALITY INSPECTION

*AUTOMATED MEASUREMENT OF DIAMETER,
ROUGHNESS AND ENGRAVABILITY*

*INTEGRATED & AUTOMATED
CALIBRATION*



*AUTOMATED SURFACE SCAN WITH
INTELLIGENT ALGORITHMS*

CYON

FULLY DIGITAL LINK TO CYON IN REAL TIME

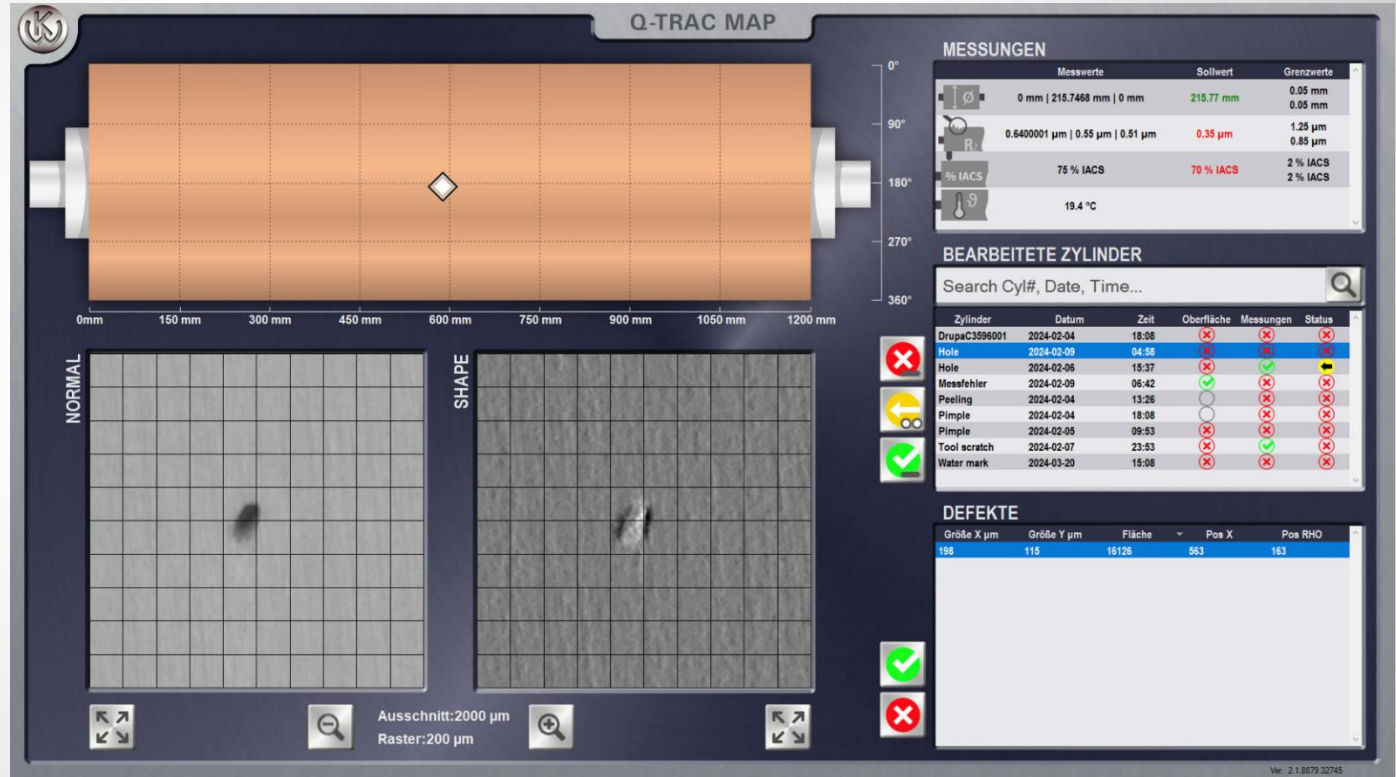
Intelligent Quality Inspection System

Q-trac Map

All copper surface imperfections will be shown in the Q-trac map on a separate screen

Intelligent algorithms evaluate the imperfections automatically and only detect production relevant defects

Q-trac map is a data base application to record and archive all results



*The combination of Q-trac, CYON and CE
will lower the cylinder defect-rate drastically
and may let customers wonder,
whether proofing is actually needed*

Q·trac

CYON

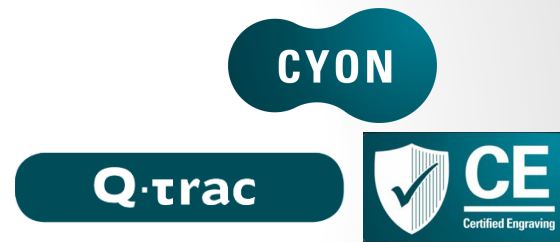


THE OUTCOME OF EU REGULATIONS AND DIGITALIZATION



MAGGIORE SICUREZZA AMBIENTALE

MAGGIORE SICUREZZA DEI
LAVORATORI



QUALITÀ MIGLIORATA

COSTO MIGLIORATO

THE OUTCOME OF EU REGULATIONS AND DIGITALIZATION

Thank you for your attention
Grazie per l'attenzione

CYON



HelioChrome® NEO
THE FUTURE OF CHROME PLATING

Q·trac



MAGGIORE SICUREZZA AMBIENTALE

MAGGIORE SICUREZZA DEI
LAVORATORI

QUALITÀ MIGLIORATA

COSTO MIGLIORATO



GRUPPO ITALIANO
ROTOCALCO
By Acimge

