

A decorative graphic on the left side of the slide, consisting of three overlapping diagonal bars: a yellow one at the top, a grey one in the middle, and a dark blue one at the bottom.

IST METZ GmbH & Co. KG



The future is bright – for the power of light



UVC

280nm

UVB

315nm

UVA

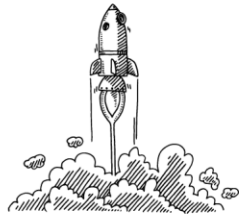
400nm

Visible

800nm

Infrared

IST METZ GmbH & Co. KG



FOUNDING YEAR

1977

PRESENT
ON-SITE IN

70

COUNTRIES

COMPANY FOUNDER

GERHARD METZ

14.256+

SYSTEMS SOLD

550+

IST METZ GROUP
EMPLOYEES

90 %

EXPORTS 2021



280+

IST METZ NÜRTINGEN
EMPLOYEES



82.000.000 €

COMPANY GROUP TURNOVER

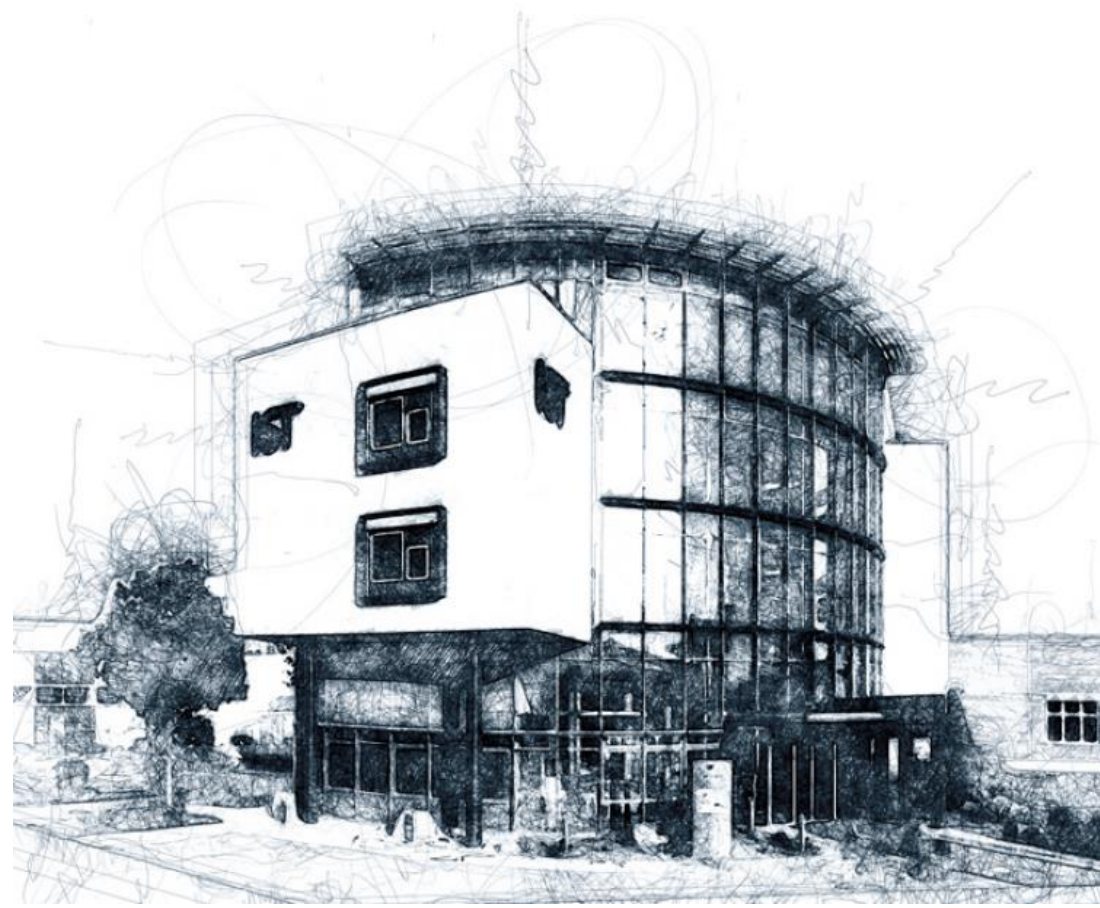
21.800 m²

SIZE OF
NÜRTINGEN SITE

12

OFFICES ABROAD

PRODUCTION LOCATION
GERMANY



IST METZ Group



IST METZ GmbH & Co. KG

Company network:

eta plus electronic gmbh
S1 Optics GmbH
IST Intech Ltd.



IST France sarl
IST (UK) Limited
IST America – U.S. Operations, Inc.
IST Italia S.r.l.
IST Benelux B.V.
IST METZ UV Equipment China Ltd. Co.
UV-IST Ibérica SL
IST Nordic AB
IST METZ SEA Co., Ltd.

The company group IST Metz



SHAREHOLDER

METZ HOLDING

GERHARD UND RENATE
METZ STIFTUNG

VALUE CHAIN
NETWORK



SALES & SERVICES
NETWORK



SHEETFED OFFSET
WEB OFFSET
GRAVURE PRINTING
FLEXO PRINTING
SCREEN PRINTING
INKJET PRINTING

PRINT
RINT
NT

PRINT and especially Packaging is the backbone of our business.

UV is in the meantime state of the art in all print applications and a dry sheet/product ensures a very quick turn around time

IND UST RIAL

UV being a cross-sectional technology is widely used in many industrial processes being it for curing, cleaning, bonding, purifying or other aspects which improve the characterisc of the product or the process.

PRODUCT DECORATION
CONVERTING
SILICONISATION
HOTMELT APPLICATIONS
BONDING
ENCAPSULATION
CLEANING
MATTIFYING
AIR OR WATER PURIFICATION

SERVICES

With our global network we take perfect care of our customers needs

**INSTALLATION
TRAINING
SERVICE
MAINTENANCE
REPAIRS
SERVICE CONTRACTS
SPARE PARTS**

UV Daily

- Folding boxes
- business reports
- Labels & in-mould-labels
- blister packaging
- plastic cards
- banknotes
- Automotive industry
- Anti-scratch coating for plastics
- UV powder coating
- Cosmetic packaging
- Varnishing of steel pipes
- Polymerisation of Hotmelt PSA
- Siliconisation
- PVC-floor-varnishing
- Decorative paper coating
- And many more

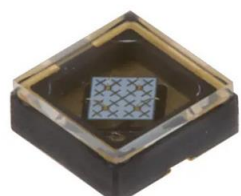




Our Mission:
Your **ULTRAVIOLED** SPECIALIST

Introduction

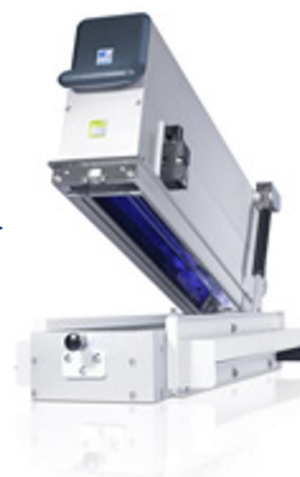
UV light definition



Integration



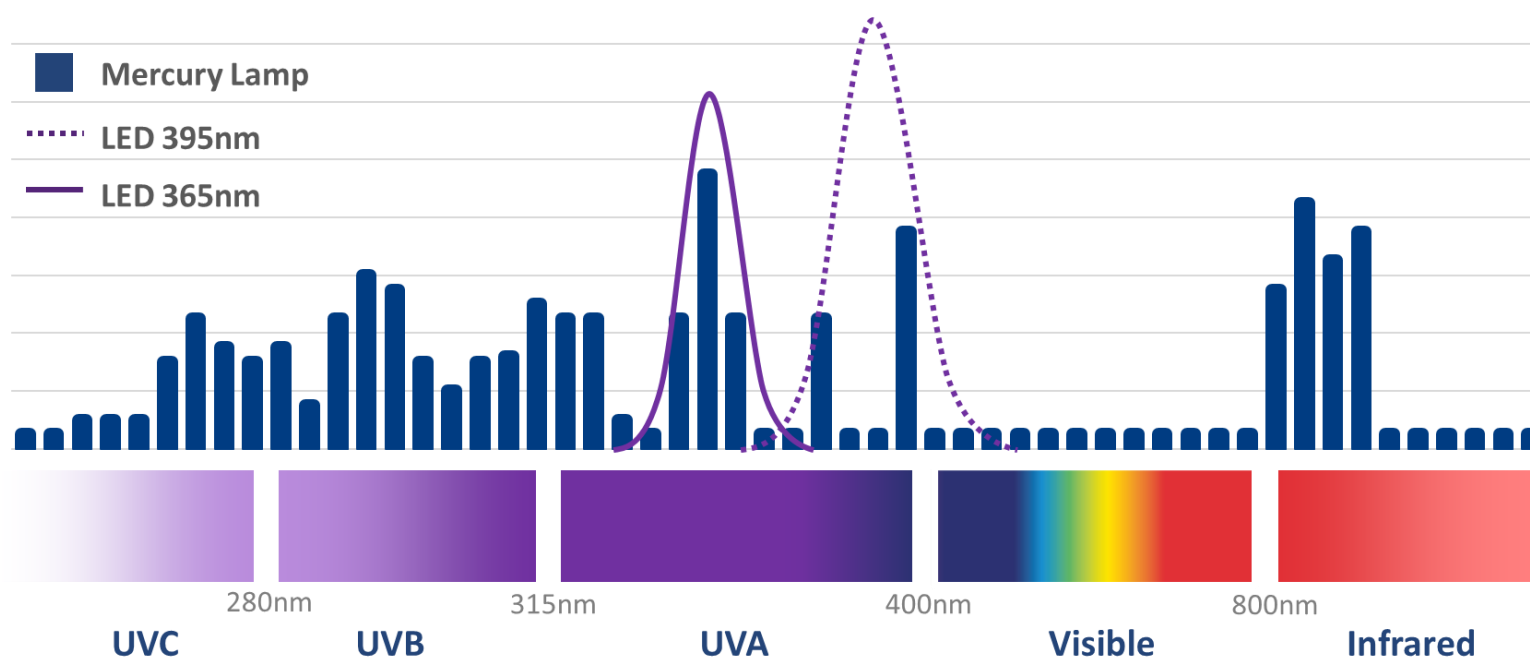
Integration



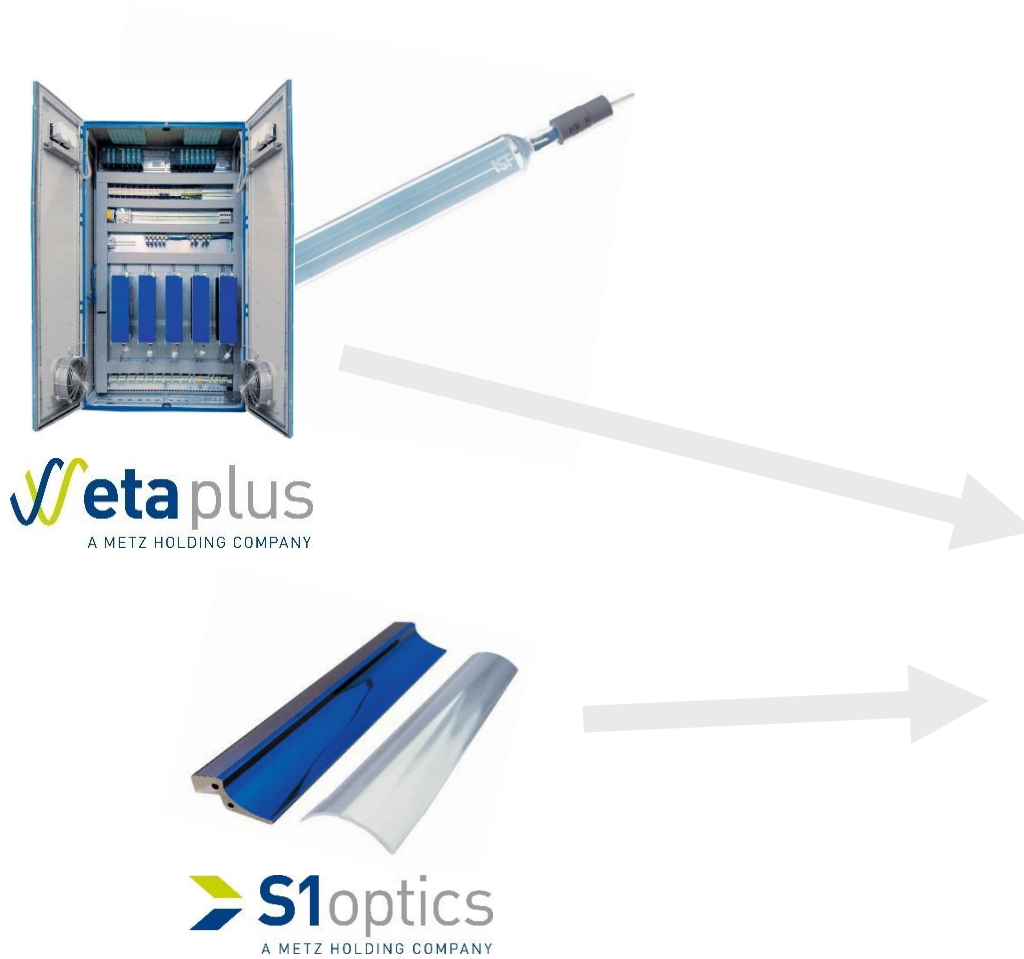
Introduction

Mercury lamp vs LED

	Mercury Lamps	UV LEDs
Spectral Emission	IR + VISIBLE + UVA + UVB + UVC	405nm / 395nm / 385nm / 375nm / 365nm
Chemistry Availability	Developped	In development



UV core competences



In-house development and manufacturing of all core components:

- lamps
- reflectors
- power supply devices



UV lamp / Electronic Power Supply ELC®



UV Lamp

- in-house development and production
- adapted emission spectrum (mercury, gallium, iron, lead)
- individual quality certificate

Electronic Power Supply ELC®

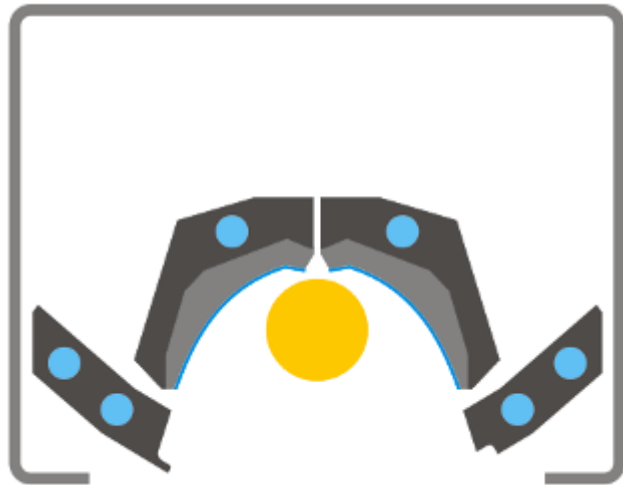
- area for output reduction: 30 – 100 %
- efficiency up to 10% increased
- the lamp output can be steplessly adjusted depending on the print speed
- compact and light construction
- compensation of variations in the network voltage
- automatic reduction of the lamp output in stand-by operation



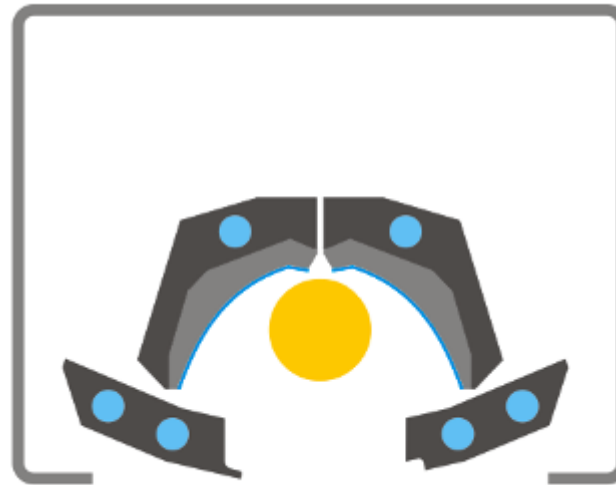
Flexible Shutter Positioning (FSP)

- Wide range of power output
- Optional: Stepped shutter drive

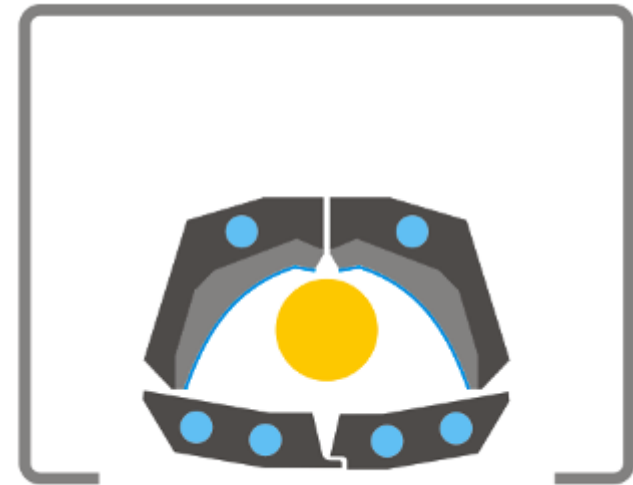
- Inlay technology
- Optional: Reflective surfaces at the shutter edges



**Shutter opened,
wide opening angle**



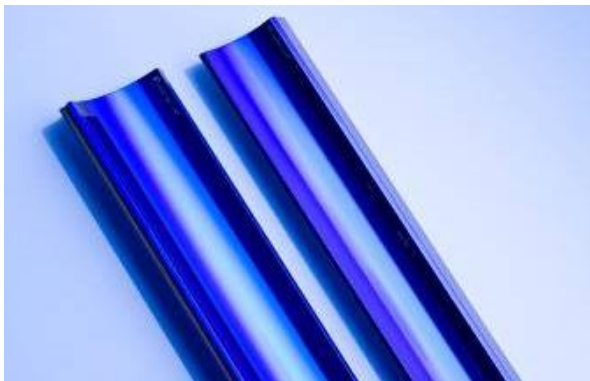
**Shutter in intermediate
position, reduced radiation,
(optional)**



Shutter closed

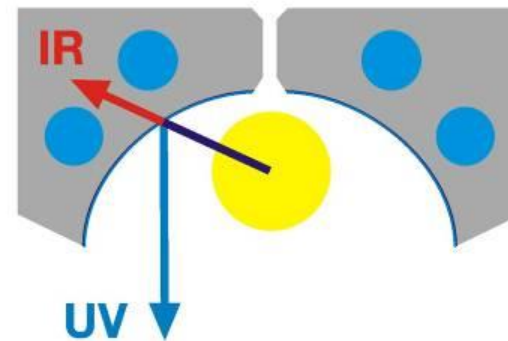
URS[®] reflector

- A system of dielectric layers is applied on an aluminium profile whose geometry is adapted to the respective application in an optimum way.
- only UV light is reflected; the IR rays pass through to a strongly heat-absorbent layer. From this layer the heat is transmitted quickly and effectively to the air-cooled absorber profile.



Heatmanagement

- air and water cooling: emitted heat is evacuated and absorbed via an integrated cooling circuit.
- shutter technology: at machine stop, the shutters are closed automatically, thus avoiding overheating.







Our strategic approach is to develop and manufacture modular LED components for all applications

- Joint development of core components
- World-wide service and support
- Trouble shooting etc.



Background of the Company



2020

- Under the new sales brand "modulux" (modularity = building block; lux = luminous intensity), LED UV units will in future be sold that are specifically intended for use in label printing presses.
- LED systems under the "modulux" brand will be offered as a lean and cost-effective alternative for the label market. The products dispense with all non-essential services and the components are offered via an online shop.

Product portfolio



**UV
LAMPcure**



**LED
LEDcure**

Narrow Web	MBS-C		modulux		
Wide Web	BLK	MBS-C		LUV	
Digital	MBS-Li	SubZero	Pincure	VZ	NC
			SZ	SC	MZ
			VZX		
Sheetfed	BLK	LE UV	LUV		
Industrial	BLK	MBS-C	LUV	AreaCure	Pincure
			SC	VZ	VZX

IST

ITL



Digitization

UV Analyzer



FutureReady

by remote repair



HISTORY

Background of the Company



1968

Development of impulse radiation curing at the Hildebrand Company in Oberboihingen.

1977

A new company is founded with the participation of Werner & Pfleiderer: Werner & Pfleiderer - Hildebrand Strahlentechnik GmbH.

1982

Takeover of all company shares by Gerhard and Renate Metz: IST Strahlentechnik metz GmbH. The trademark "IST" is mentioned in the company name.

1985

Establishment of the head office in Nuertingen-Zizishausen.

Background of the Company



2000

- The group now has 300 employees and a turnover of DM 86 million. It was only a matter of time before the extension built in 1997 would need to be enlarged.
- Further expansion with a new 5,200 m² building was finally completed in June 1999.
- In September 2000 inauguration of the four-storey building with production and administration facilities.
- A subsidiary was also established in October 2000 in the Netherlands: IST Benelux B.V., now in Apeldoorn.

Background of the Company



2002

- IST Metz opens the UV Transfer Center in Nuertingen as part of its “more than UV” philosophy.
- IST is the first UV systems manufacturer in the world to invest in its own UV printing press and offers unique facilities for customers and industry partners for UV tests and training.

2003

- The IST Metz Group increases its know-how in surface coating technology with the takeover of the company VTD Vakuumtechnik Dresden.
- IST Metz establishes its very first representative office, situated in China. The full name is IST Metz China, Shanghai Representative Office.

Background of the Company



2005

Further expansion and different production methods require additional production and office space:

- Batch production
- Product group 3 (industrial applications)
- Spare parts / After Sales
- R&D
- S1 Optics
- Casino

2009

More than 600 visitors of more than 30 countries visited the 4th UV Days in Nuertingen.

Background of the Company



INTEGRATION TECHNOLOGY



2011

- IST Metz GmbH created a strategic alliance with the English company Integration Technology Ltd (ITL)
- IST Metz founded a new subsidiary in Bangkok, IST Metz SEA Co., Ltd.

2013

The especially for the UV DAYS developed and printed packaging will be awarded five times afterwards, the renowned Red Dot Award: Communications Design 2015 amongst the prizes.

2014

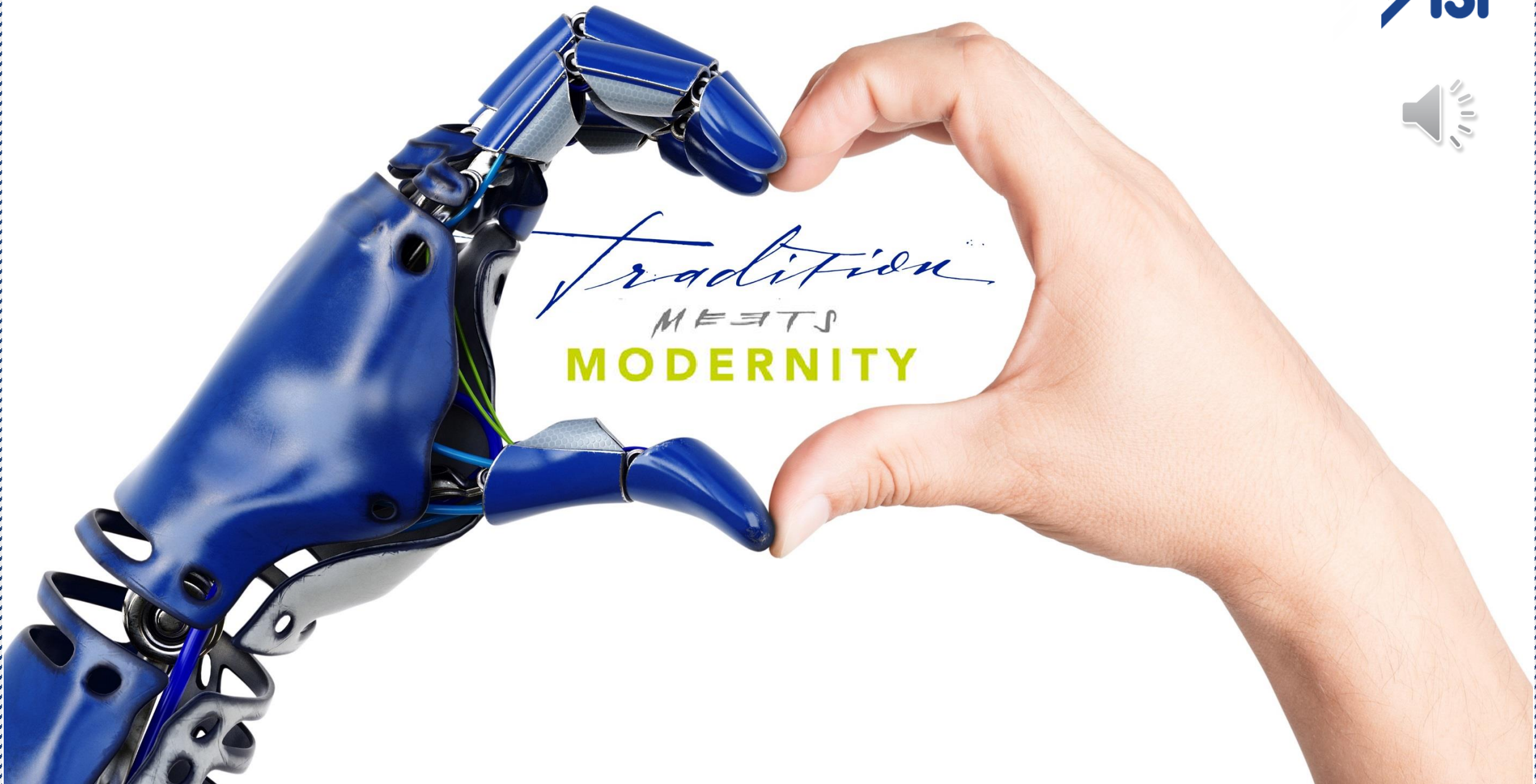
IST Metz founded a new subsidiary in Tokyo, IST Metz East Asia KK

Background of the Company



2020

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Tradition
MEETS
MODERNITY

Tradition

MEETS

MODERNITY

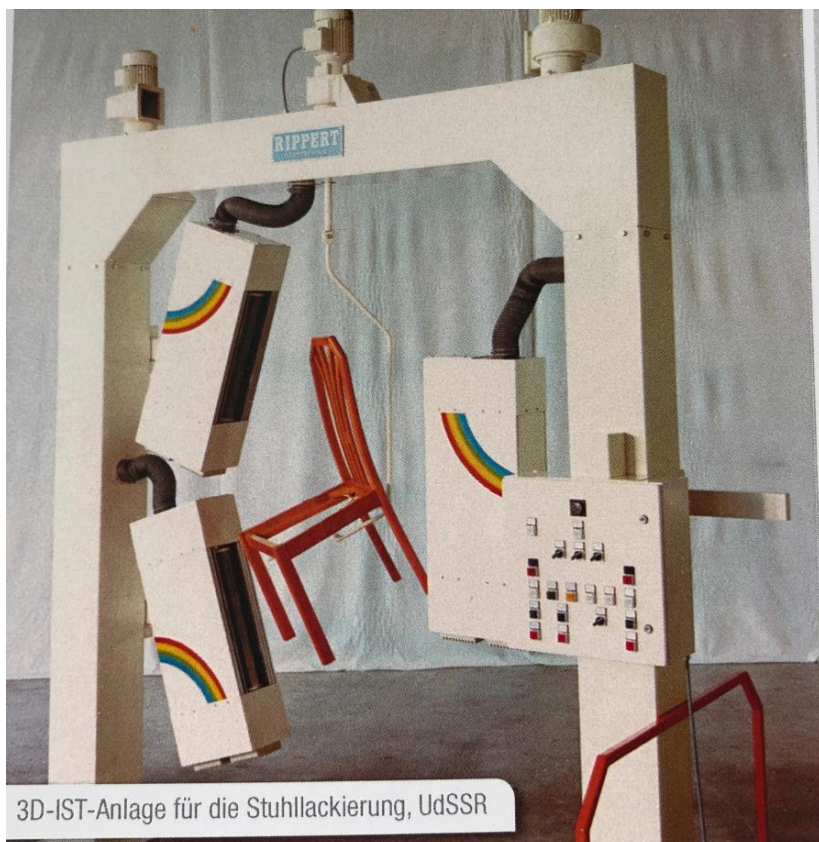


Transformation in business models:
From B2B to B2C, and for some products also digital sales channels gain more and more importance

Tradition

MEETS

MODERNITY



3D-IST-Anlage für die Stuhllackierung, UdSSR



Transformation in applications:
Established and well-known markets gain new momentum by groundbreaking technologies

Tradition

MEETS

MODERNITY



Transformation in consumer behaviour:
Analog and digital application co-exist and both are lucrative applications for us

Tradition

MEETS

MODERNITY



Transformation in technology: From arc lamp to LED technology
Currently both technologies exist side by side with specific advantages but the transition to LED is going on

PRINT

UV applications in the graphic arts industry



UV packagings



UV labels



UV commercials



UV specials

UV applications in Sheet Fed Printing

Applications:

- Folding boxes, business reports, labels, in-mould-labels
- Blister packaging, plastic cards (identity, credit and phone cards)
- Banknoten

Benefits:

- Immediate curing of inks varnishes, immediate processing
- No powder spraying required
- Solvent-free ink and varnish systems
- Printing of non-absorbent materials



UV applications in Web Fed Printing



Applications:

- Forms
- Mailings
- Cheques
- Lottery tickets
- Labels
- Packaging

Benefits:

- Immediate curing in the press
- In-line converting
- High ink coverage at high speed
- Low temperature load onto the web
- Oxygen-reduced operation possible (inertisation)



UV in the Narrow Web Field

Applications:

- Labels for food, cosmetics and pharmaceutical products
- Hologram labels

Benefits:

- Extremely short curing times
- High scratch and abrasion resistance
- Immediate converting
- High resistance to chemicals
- High ink brilliance, high gloss degree



UV in the Metal decorating

Applications:

- Metal packaging (boxes, cans)
- Bottle tops
- Screw lids

Benefits:

- Immediate curing in the press
- Low temperature load onto the plate
- Lower energy consumption compared to hot air drying
- Solvent-free ink and varnish systems, environmentally friendly



Applications for LEDcure



- Label printing on all materials
 - Wet glue labels
 - In mould label
 - PS labels
- Packaging in general
 - Wet glue labels
 - In mould label
 - PS labels
- Commercial prints
 - Flyers
 - Business prints- reports- name cards-
 - Photo books



INDUSTRIAL

UV for industrial Applications



- Automotive industry
- Anti-scratch coating for plastics
- UV powder coating
- Cosmetic packaging
- Varnishing of steel pipes
- Polymerisation of Hotmelt PSA
- Siliconisation
- PVC-floor-varnishing
- Decorative paper coating



Siliconisation

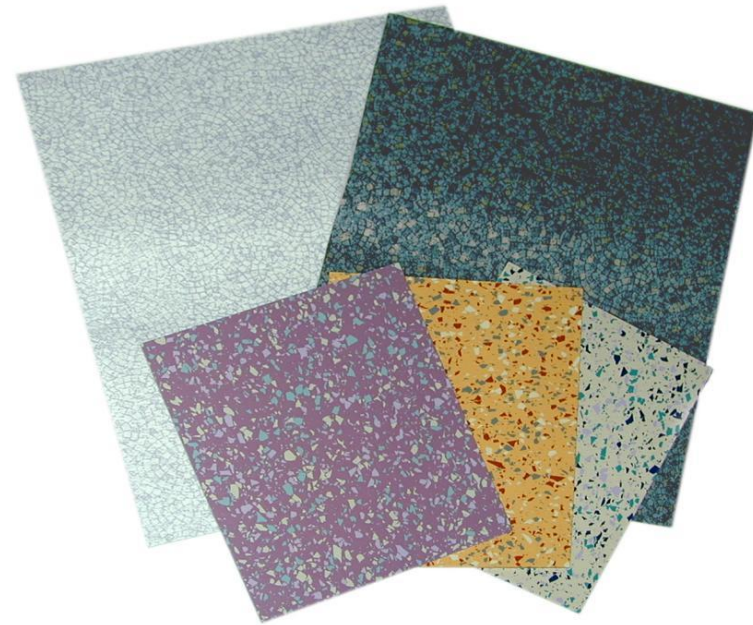
- Inerted design for the cross-linking of Goldschmidt-silicones (residual oxygen proportion less than 50ppm)
- Standard UV-unit design for the cross-linking of GE and Rhodia UV-silicones



PVC Floor Varnishing

For varnish curing of web widths of up to 4.000 mm, matt to high gloss (gloss degree control)

- UV-varnish (100%) precuring/postcuring
- UV-water-based varnish
- Inerted and non-inerted UV-unit design



UV in the Automotive Industry

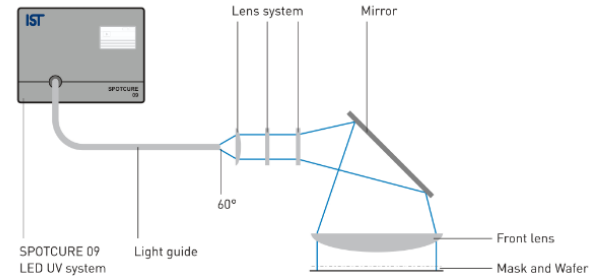
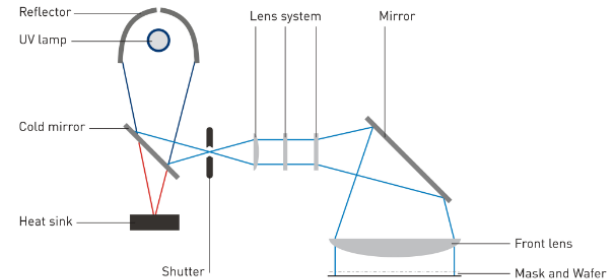


- Head lights
- Wood veneers
- Al-rims
- Dash boards
- Screen printing for instruments
- Protection strips for external applications
- Windows
- Cylinder head gaskets
- Electronic components
- Adhesive tapes
- Black parts
- Priming of plastic components



Composite and bonding

- UV-GFK Composites – Resin Transfer Moulding
- Wafer exposure
- Functional coatings in the pharmaceutical industry
 - Highly cross-linked migration-free barriers Syringe bonding, wound cloth coatings, hydrogels...
 - Hydrophilisation
- high-performance adhesives
 - detectors
 - Medical devices





SERVICES

IST Metz service world-wide



- Highly-qualified staff
 - Factory-trained
 - Regular training courses to the highest standards
- World-wide services network
 - Ten offices in France, England, Italy, the USA, the Netherlands, Spain, Sweden, China, Thailand and Japan
 - Germany: team of service engineers at the headyuartes in Nuertingen, three more engineers at strategic locations
- On-site cusomer care world-wide as required

- Benefits
 - Short reaction times
 - Professional assistance if required
 - Always a high level of system availability

Mobile UV measuring

- UV measuring with portable measuring device UMS-2
- adapted to the unit design two different measuring heads are available
- UV inspection measuring for the control of the lamp output during the production process



UV Transfer Center



- Best technological support for our customers before/during and after their investment in our technology
- Being in contact with associations, business partners and manufacturers



UV Transfer Center

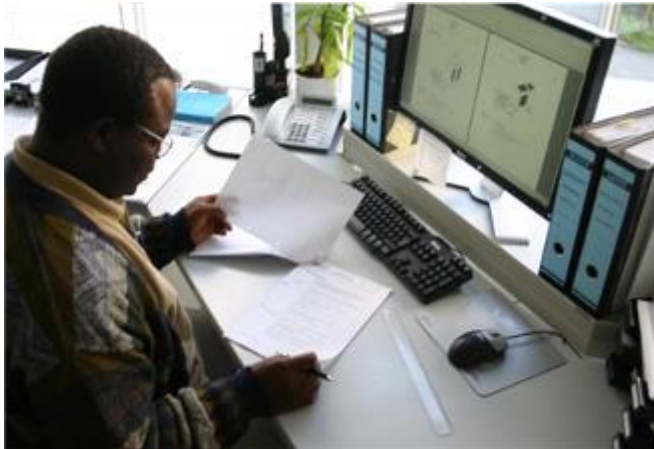


Documentation

- Manuals
- Internet & CD ROM
- Translation

Laboratory

- Curing tests
- Developments
- System improvements
- Design UV units





THANK YOU FOR YOUR ATTENTION!