



Range of Products

**Polygraphische
innovative Technik
Leipzig GmbH**

Managing Director:

Dr.-Ing. Felix Berg

Dr.-Ing. Peter Hofmann

MommSENstraße 2

04329 Leipzig

Phone: +49 (0) 341/2 59 42-0

Fax: +49 (0) 341/2 59 42-99

E-mail: info@pitsidleipzig.com

<http://www.pitsidleipzig.com>



Polygraphische
innovative Technik
Leipzig GmbH

Products and accessories

Contact Pressure	Application
1.1 „compress II“ Contact Pressure Tester	Check of nominal values of the contact pressure between bearer rings
1.2 Special Measuring Strips for „compress II“ Contact Pressure Tester	Strips are compressed during testing operation
Register	
2.1 LUCHS Register Measuring System	Measurement/evaluation/diagnosis of longitudinal, lateral and feeding register; measurement of the folding accuracy
2.2 AUTOLUCHS Register Measuring System	as under item 2.1., additional measuring of perfecting register and position of face printing and perfecting relative to the sheet edge
2.3 Test element for the LUCHS Measuring System	Test of the LUCHS Register Measuring System according to the SID Test Specification
Packing Height	
3.1 Packing Gauge S	as under item 3.2., but for short cylinders (cylinder length shorter than 350 mm)
3.2 Packing Gauge M	Measuring of the height of plate or blanket over bearer or measuring ring
3.3 Packing Gauge L	as under item 3.2., as well as measurement of the height difference between forme cylinder surface (varnish, flexo- and letterpress printing)
Alcohol Concentration	
4.1 IPA Measuring Device II	Measurement of the IPA volume concentration in the damping solution of offset printing presses
Product Quality	
5.1 Product control system	Monitoring of imperfect printed sheets in print finishing machines
Plate Punching	
6.1 Automatic Plate Punch	Punching of printing plates precisely to the print image
UV-Drying	
7.1 Inert-gas chamber for UV dryers	Hardening of UV inks in a nitrogen atmosphere with less heating of the substrate

The products have been developed by SID Sächsisches Institut für die Druckindustrie GmbH Leipzig with support of sponsoring projects by Bundesministerium für Wirtschaft und Arbeit (Reg.-Nr. 442/98; 150/99; 17/00;36/01; 1144/01; 174/02) and by Sächsisches Staatsministerium für Wirtschaft und Arbeit (Reg.-Nr. PT 3051; P 3127/519).

**Polygraphische innovative Technik
Leipzig GmbH**
Mommsenstraße 2
04329 Leipzig

Phone: +49(0)341/25942-0
Fax: +49(0)341/25942-99
E-mail: info@pitsidleipzig.com
<http://www.pitsidleipzig.com>



Polygraphische
innovative Technik
Leipzig GmbH

Contact Pressure Tester conpress II

Working principle:

- „conpress II“ checks for assembly and service work the contact pressure between bearer rings of printing presses.
- „conpress II“ opto-electronically evaluates measuring strips, which are inserted between the bearer rings of the cylinder group to be checked and compressed by throwing on impression.
- The transparency of the impact on the paper strip is the measure of the contact pressure between the bearer rings.
- The device evaluates line impacts and rolling impacts.



Your advantages:

- You determine reproducible values that can be compared with the nominal values for the pressure force.
- With rolling impacts the graphic display makes it even possible to evaluate the pressure distribution in the contact zone of the bearer rings.
- The adjustment of printing presses with „conpress II“ guarantees the print quality and a long service life of your cylinder bearings.



Contact Pressure Tester compress II

Technical data

Display	Reproduction of evaluation results: - numeric - graphic
Display range	200 to 2200 (uncalibrated display values) Display sensitivity according to individual agreement
Testing uncertainty	$\leq \pm 10\%$
Dimensions	190 x 150 x 40 mm
Weight	approx. 800 g
Voltage supply	Battery operation 6 x 1.5 V, type Mignon (AA) Network operation via delivered mains adapter
Measuring strip	Special paper 70 x 37 mm
Scope of delivery	Test device with batteries, Carrying case, Mains adapter, Set of adhesive tapes, 2 packages of measuring strips (400 pieces/package)

**Polygraphische innovative Technik
Leipzig GmbH**
Mommsenstraße 2
04329 Leipzig

Phone: +49(0)341/25942-0
Fax: +49(0)341/25942-99
E-mail: info@pitsidleipzig.com
<http://www.pitsidleipzig.com>



Polygraphische
innovative Technik
Leipzig GmbH

LUCHS Register Measuring System

Measurement with the LUCHS is

- more objective than the conventional vernier evaluation due to the automatic evaluation of special register marks,
- considerably faster and more efficient than a hand-held magnifier,
- more exact than everything that so far has been supposed to be exact in connection with the evaluation of the register accuracy of a printing press. Worldwide.

The patented register mark makes possible

- the simultaneous measuring of colour combinations in longitudinal and lateral direction,
- the simultaneous measuring in one measuring operation of all longitudinal or lateral register marks on a printing press with up to 10 printing units,
- to carry out one measuring operation in less than 2 seconds,
- to move the measuring head into a new measuring position while the fully automatic evaluation of the preceding measurement is still going on.

With the special measuring mark (optional) you measure

- the folding register, i.e. the position of the printed image relative to a fold,
- the position register, i.e. the position of the printed image relative to the paper edge,
- the perfecting register, i.e. the exact position of face printing and perfecting relative to each other,
- the image length, i.e. the distance between 2 measuring marks with the help of a scale.



The LUCHS control software allows

- „Automatic Measuring“, meaning fast and uncomplicated acquisition of measuring values by automatic recognition of colour and measuring position and measuring sequence,
- automatic generation of different user-defined measuring protocols in clearly structured diagram form.



LUCHS Register Measuring System

Technical data

Measuring uncertainty	<5 µm (<2 µm with strict adherence to the measuring instructions and with good printing quality)
Data logging/ Computation	Simultaneous register measuring in longitudinal and lateral direction, complete evaluation of up to 10 printing units with one measuring operation.
Operation	Completely controllable through coding (measuring head works as a kind of bar code reader), control software with graphic user interface for Windows 9x/2000/XP. „Automatic measuring“ means: - automatic recognition of the measuring area, - automatic recognition of the printing unit, - automatic recognition of the measuring operation
Measuring principles	Analysis of video pictures with highly effective mathematical procedures, correction of slur and doubling included.
Output of results	Freely programmable data interface: - protocol interpreter for the generation of ASCII data, - generation of „automatic graphic protocols“, - copying of measuring data into files/the intermediate storage, - output via standard printer, - automatic start-up of standard software or batch files through command lines.
Components of the system	Portable computer with special hard- and software, measuring head as an integral part of the PC housing, network connection, SCSI and USB interface.
Measuring head	Dimensions (w x h x d): 143 x 80 x 62 mm Weight: 500 g Supply voltage and power consumption: 12 V DC/200 mA

**Polygraphische innovative Technik
Leipzig GmbH**
Mommensenstraße 2
04329 Leipzig

Phone: +49(0)341/25942-0
Fax: +49(0)341/25942-99
E-mail: info@pitsidleipzig.com
<http://www.pitsidleipzig.com>



Polygraphische
innovative Technik
Leipzig GmbH

AUTOLUCHS Register Measuring System

Working principle:

- High-resolution measuring systems capture special measuring areas printed on the recto and verso sides.
- Highly effective mathematical methods for the analysis of video images together with the newly developed measuring software are applied to determine the position of the measuring marks relative to each other and to the edge of the substrate.



The **AUTOLUCHS** allows alternatively the automated measurement of

- transfer and feeding register,
- the exact position of face printing and perfecting relative to each other (for perfecting register) and
- the exact position of face printing and perfecting relative to the sheet edge (for position register).

The **AUTOLUCHS** is the most effective tool for the

- adjustment of offset printing presses,
- error diagnosis,
- evaluation and final tests of printing presses.

The **AUTOLUCHS** is interesting because

- the high level of automation makes register measurement very fast, effective and flexible,
- the perfecting register can be measured without damage to the substrate.



AUTOLUCHS

Register Measuring System

Technical data

Field of Application	automated measurement - measurement of transfer and feeding register in face printing on standard LUCHS measuring elements - simultaneous measurement of the perfecting and position register in longitudinal and lateral direction on a special measuring element
Printed sheets	Offset paper, size: 350 x 350 mm up to 700 x 1000 mm (larger sizes possible in dependence on the further development)
Positions of the measuring elements	for transfer and feeding register: any position but outside the transport track for measurement of position register (position of printed image relative to the sheet edge): - 12 mm (bleed) up to 2 mm for measuring across the paper edge - 12 mm (bleed) up to 100 mm from print start and from tail edge of print for measuring along the paper edge for measurement of perfecting register: - element edges must „face each other“ at a distance of $\pm 5 \text{ mm}^1$ - 12 mm (bleed) left side up to 12 mm (bleed) right side for lateral measurement - 12 mm (bleed) up to 100 mm from print start and from tail edge of print for longitudinal measurement
Measuring time	<1s for each measuring variant; positioning time: dependent on grade of paper and travel path of the measuring head
Measuring uncertainty	for standard register measurement: $< \pm 5 \mu\text{m}$ for relative measuring values ² , $< \pm 2 \mu\text{m}$ with good print quality, under compliance with the measuring directions for measurement of perfecting register: $< \pm 30 \mu\text{m}$ for relative measuring values ² , under compliance with the measuring directions for measurement of position register (position of printed image relative to the sheet edge): no data, because depending on defects, the shape and quality of trimming edges
Dimensions; weight	1260 x 350 x 350 mm (w x h x d) without tables; 45 kg
Power supply	85-264 VAC/47-63 Hz, 110-230 VDC; connections: 1 signal, 1 interface, 1 mains
Power consumption	< 150 W

¹ In special cases and with reduced measuring certainty it is possible to mount the measuring elements in print direction not „facing each other“

² Relative measuring values: All measured values which in the sense of register measurement have a direct relation to successive measurements and have all been measured with one and the same measuring system, i.e. the measuring results may include further absolute measuring errors (system-specific, dependent on material, temperature or process) which can be corrected with suitable methods.

Polygraphische innovative Technik
Leipzig GmbH
 Mommsenstraße 2
 04329 Leipzig

Phone: +49(0)341/25942-0
 Fax: +49(0)341/25942-99
 E-mail: info@pitsidleipzig.com
<http://www.pitsidleipzig.com>



Polygraphische
innovative Technik
Leipzig GmbH

IPA Measuring Device II

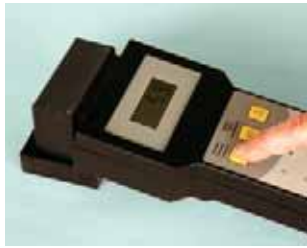
Measuring method:

- The measurement is based on the extraction of gas from a sample taken of the dampening solution.
- The precise and selective measuring of the volume concentration of the isopropyl alcohol (IPA) contained in the sample is effected with a special gas sensor.



Your Advantages:

- Uncomplicated check of the IPA content of the dampening solution directly on the spot.
- The precise determination of the IPA content avoids overdosing thus reducing your costs.
- Samples of your dampening solution can be taken at all accessible points of the dampening process.
- The battery-operated hand-held measuring device makes you independent from the mains.
- The IPA volume concentration is measured with a resolution of 0.1%.
- Corrective calculations regarding the temperature and density of the dampening solution are not necessary.
- No admixtures are required for the measurement.
- The device can be calibrated by the operator.



IPA Measuring Device II

Technical data

Scope of measurement	from 0 to 15 % vol. IPA
Damping solution temperature	between +8 and +25°C
Display	3 digits
Resolution	0.1% vol. IPA
Measuring uncertainty	< ±1% vol. IPA
Measuring time	90 s
Display size	48 x 20 mm
Voltage supply	Battery operation 6 x 1.5 V, type Mignon (AA) Network operation via delivered mains adapter (9 DC, 6 VA)
Dimensions	265 x 105/85 x 70/40 mm
Weight	approx. 650 g
Operating temperature	between 0 and +35°C
Auto. shut down	after 10 min. running without input
Scope of delivery	Measuring device with batteries, Jug, Syringe with plastic tube extension, Mains adapter, Carrying case, Operating manual

**Polygraphische innovative Technik
Leipzig GmbH**
Mommsenstraße 2
04329 Leipzig

Phone: +49(0)341/25942-0
Fax: +49(0)341/25942-99
E-mail: info@pitsidleipzig.com
<http://www.pitsidleipzig.com>



Polygraphische
innovative Technik
Leipzig GmbH

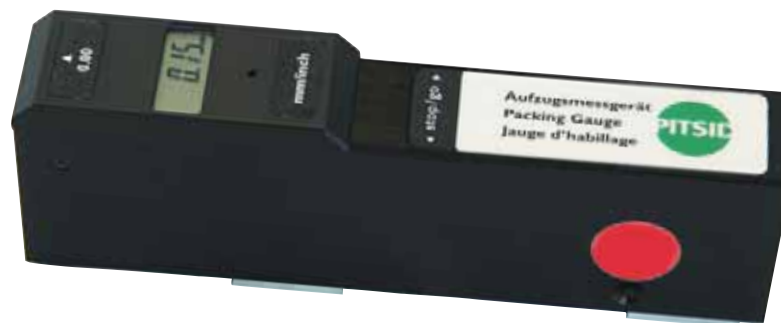
Packing Gauge S

With the Packing Gauge S you measure:

- the height of the blanket or the printing plate over bearer or measuring ring for cylinders shorter than 350 mm.

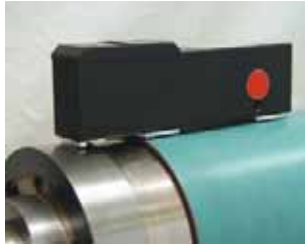
Your handling advantages:

- light, easy and simple to operate,
- simple calibration and fast measuring operation,
- digital display (switchable to mm or inches), readable in every position (with hold-function),
- immediate display of the height over bearer or measuring ring, correct mathematical signs.



Your application advantages:

- applicable both for blanket and plate cylinders with any diameters,
- applicable also with restricted access to cylinders,
- no damage to the blanket or the printing plate during the measuring operation,
- during the measuring operation no shifting or rolling of the gauge is necessary, only positioning and reading,
- concerning parallelism between gauge and cylinder axes, visual alignment is sufficient,
- pressure differences when positioning the gauge do not affect the measuring value.



Packing Gauge S

Technical data

Measuring range	-2.5 mm ... 2.5 mm
Measuring uncertainty	±1/100 mm
Sensor distance	sensor area – contact area: 42 mm
Dimensions	30 x 55 x 175 mm
Weight	300 g
Operating temperature	15 °C ... 30 °C
Storage temperature	5 °C ... 40 °C
Voltage supply	1.5 V battery, Mignon type (AA)
Current requirement	0.005 mA only, therefore device always in „on“ mode
Battery control	battery change if „B“ appears in the display
Hold function	with stop/go button („H“ appears in the display)
Unit of measurement	with mm/inch button (use a pointed object to press the button)
Zero position	with 0.00 button (use a pointed object to press the button, activation time at least one second)

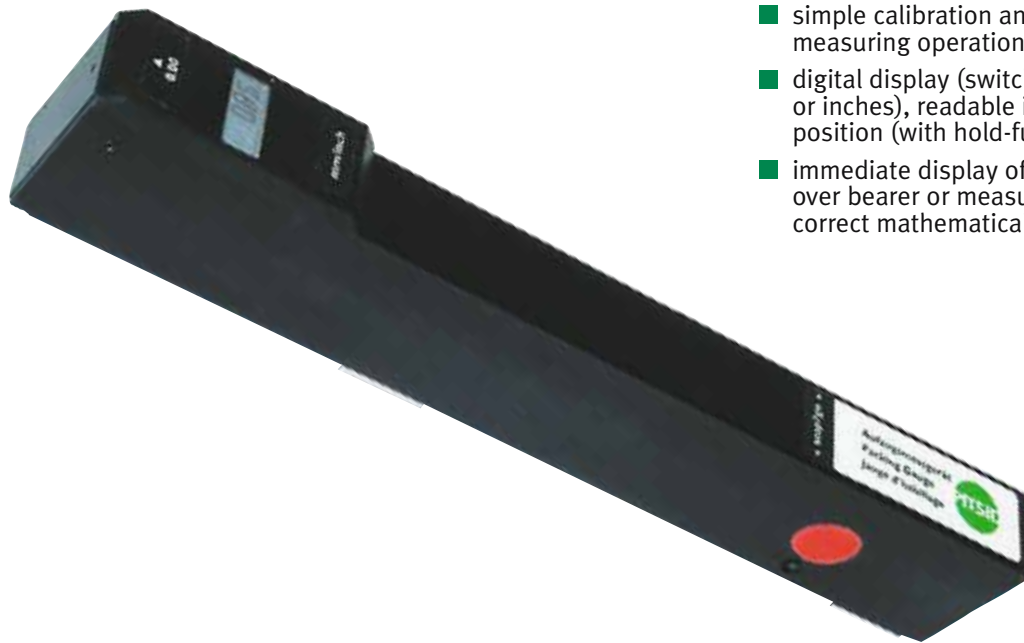
**Polygraphische innovative Technik
Leipzig GmbH**
Mommsenstraße 2
04329 Leipzig

Phone: +49(0)341/25942-0
Fax: +49(0)341/25942-99
E-mail: info@pitsidleipzig.com
<http://www.pitsidleipzig.com>



Polygraphische
innovative Technik
Leipzig GmbH

Packing Gauge M



With the Packing Gauge M you measure:

- the height of the blanket or the printing plate over bearer or measuring ring.

Your handling advantages:

- light, easy and simple to operate,
- simple calibration and fast measuring operation,
- digital display (switchable to mm or inches), readable in every position (with hold-function),
- immediate display of the height over bearer or measuring ring, correct mathematical signs.

Your application advantages :

- applicable both for blanket and plate cylinders with any diameters,
- applicable also with restricted access to cylinders,
- no damage to the blanket or the printing plate during the measuring operation,
- during the measuring operation no shifting or rolling of the gauge is necessary, only positioning and reading,
- concerning parallelism between gauge and cylinder axes, visual alignment is sufficient,
- pressure differences when positioning the gauge do not affect the measuring value.

The Packing Gauge M is an ideal tool and indispensable for quality printers.



Packing Gauge M

Technical data

Measuring range	-1.5 mm ... 3.5 mm
Measuring uncertainty	±1/100 mm
Sensor distance	sensor area – contact area: 95 mm
Dimensions	30 x 55 x 307 mm
Weight	450 g
Operating temperature	15 °C ... 30 °C
Storage temperature	5 °C ... 40 °C
Voltage supply	1.5 V battery, Mignon type (AA)
Current requirement	0.005 mA only, therefore device always in „on“ mode
Battery control	battery change if „B“ appears in the display
Hold function	with stop/go button („H“ appears in the display)
Unit of measurement	with mm/inch button (use a pointed object to press the button)
Zero position	with 0.00 button (use a pointed object to press the button, activation time at least one second)

**Polygraphische innovative Technik
Leipzig GmbH**
Mommsenstraße 2
04329 Leipzig

Phone: +49(0)341/25942-0
Fax: +49(0)341/25942-99
E-mail: info@pitsidleipzig.com
<http://www.pitsidleipzig.com>



Polygraphische
innovative Technik
Leipzig GmbH

Packing Gauge L



With the Packing Gauge L you measure:

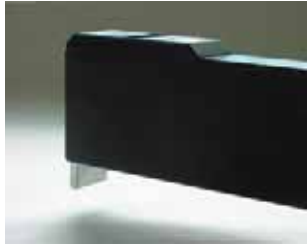
- the height difference between forme cylinder surface (varnish, flexo- and letterpress printing) and measuring ring surface as well as the height of the blanket or the printing plate over the bearer or measuring ring.

Your handling advantages:

- light, easy and simple to operate,
- simple calibration and fast measuring operation,
- digital display (switchable to mm or inches), readable in every position (with hold-function),
- immediate display of the height over bearer or measuring ring, correct mathematical signs.

Your application advantages:

- applicable for cylinders with any diameters,
- applicable also with restricted access to cylinders,
- no damage to the cylinder surface during the measuring operation,
- during the measuring operation no shifting or rolling of the gauge is necessary, only positioning and reading,
- concerning parallelism between gauge and cylinder axes, visual alignment is sufficient,
- pressure differences when positioning the gauge do not affect the measuring value.



Packing Gauge L

Technical data

Measuring range	-0.5 mm ... 13.5 mm
Measuring uncertainty	$\pm 3/100$ mm
Sensor distance	sensor area – contact area: 200 mm
Dimensions	30 x 65 x 500 mm
Weight	650 g
Operating temperature	15 °C ... 30 °C
Storage temperature	5 °C ... 40 °C
Voltage supply	1.5 V battery, Mignon type (AA)
Current requirement	0.005 mA only, therefore device always in „on“ mode
Battery control	battery change if „B“ appears in the display
Hold function	with stop/go button („H“ appears in the display)
Unit of measurement	with mm/inch button (use a pointed object to press the button)
Zero position	with 0.00 button (use a pointed object to press the button, activation time at least one second)

**Polygraphische innovative Technik
Leipzig GmbH**
Mommsenstraße 2
04329 Leipzig

Phone: +49(0)341/25942-0
Fax: +49(0)341/25942-99
E-mail: info@pitsidleipzig.com
<http://www.pitsidleipzig.com>



Polygraphische
innovative Technik
Leipzig GmbH

Product Control System



- for the online inspection of printed sheets in print finishing machines,
- to prevent the processing of imperfect printed sheets,
- for the inspection of the printed sheets immediately during sheet separation before they are further processed (e. g. die-cutting).

The Product Control System

- checks simultaneously at two points of the printed sheet (face printing or – optionally – face printing and perfecting),
- reduces waste,
- makes visual control and manual selection obsolete,
- checks directly in the printed image and needs no special printed measuring targets.

Data logging and measuring principle

- The measuring heads are directed on the product at a suitable place in the feeding area of the machine.
- Up to 2 measuring heads can be connected at the same time.
- Video images are analysed with highly effective mathematical procedures.
- Special lighting enables metal blockings to be controlled.



Product Control System

Technical data

Control routine

Position tolerance of the whole printed image: between 0.3 and 3 mm; non-compliance leads to the separation of the faulty sheet (manually or automatically, depending on the type of machine)
Control of metal blockings (silver and gold blockings)
Control of bar codes (without decoding)
Blind sheet control
Detection of missing sheets
Detection of areal print disturbances (scumming, smearing, missing solids, stains, scratches)
Contour checks (letterings, lines).

Operation

On the one hand the control panel (color display, keyboard and touch screen) presents the live image and the measured values in diagrams, on the other hand the user can enter the job-related data, like tolerances fast and problem-free.
 The control software runs under Windows 2000. The surfaces and protocols support English and German.

Short-cut keyboard

The three standard functions (Learning, Start, Stop) can be operated from this mobile keyboard.

Interfaces

Special: Sheet standstill signal, short-cut keyboard, machine stop or separation of faulty sheets
Optional: Printer port for the output of protocols, signal lamp for the visual control of the operating mode, acoustic signal

Measuring heads

Face printing: Measuring area: 50 x 70 mm. The top side of the substrate can be controlled with one or two measuring heads (the blue and/or the yellow one). A long-life white LED and a black-and-white video camera are integrated in the measuring head; connection via cable (inclusive) directly to the basic device, fixed with an adapted support with three degrees of freedom.
Perfecting (optional): Measuring area: 25 x 30 mm, control of the lower side of the substrate with an orange measuring head in which a long-life white LED and a black-and-white video camera are integrated. Connection via cable (inclusive) directly to the basic device. Fixed with an adapted support.

**Polygraphische innovative Technik
 Leipzig GmbH**
 Mommsenstraße 2
 04329 Leipzig

Phone: +49(0)341/25942-0
 Fax: +49(0)341/25942-99
 E-mail: info@pitsidleipzig.com
<http://www.pitsidleipzig.com>

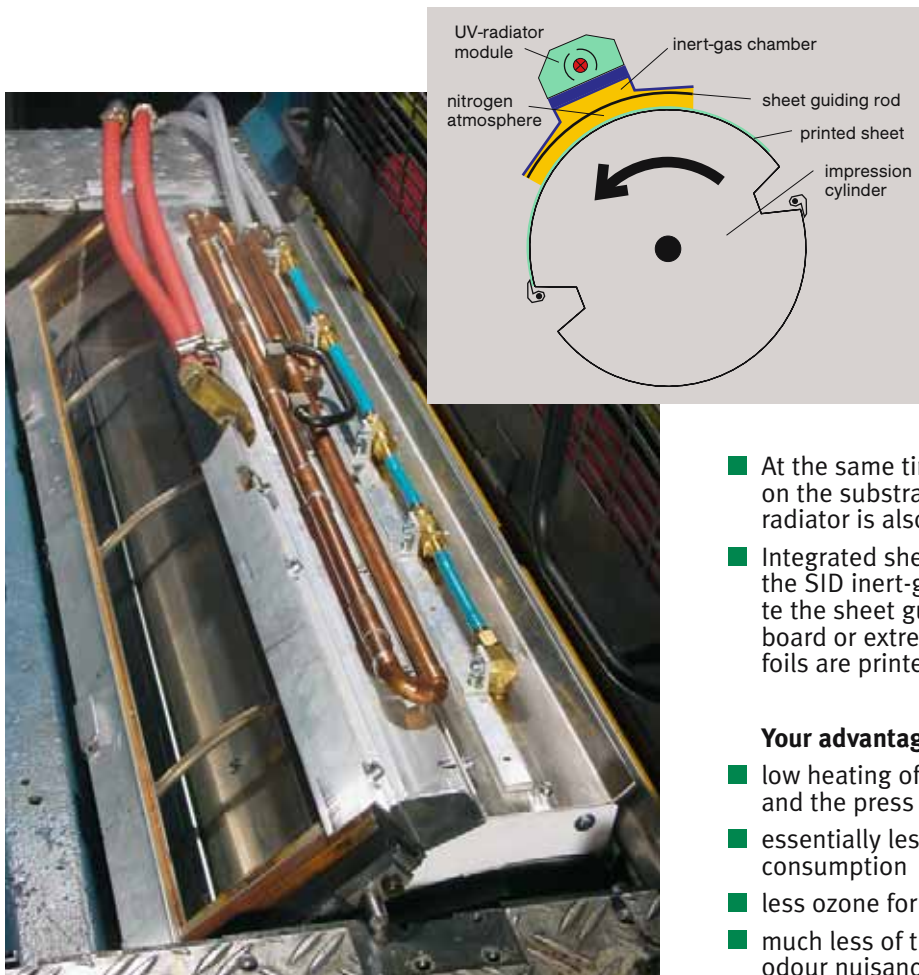


Polygraphische
innovative Technik
Leipzig GmbH

Inert-gas chamber for UV dryers on sheet-fed offset presses

Working principle:

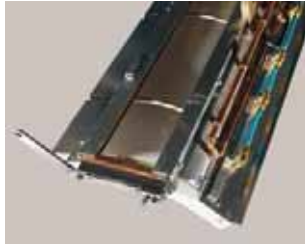
- UV-curing printing inks can be cured more effectively in an oxygen-reduced atmosphere
- Therefore the inert-gas chamber is mounted above the impression cylinder and flushed with nitrogen (inert-gas) this way expelling the atmospheric oxygen from the surface of the printing substrate passing by.
- Thanks to the more effective curing process the output of the UV radiator module mounted on the inert-gas chamber can drastically be reduced.



- At the same time the thermal load on the substrate caused by the UV radiator is also reduced.
- Integrated sheet guiding rods in the SID inert-gas chamber facilitate the sheet guidance even if board or extremely thick plastic foils are printed.

Your advantages:

- low heating of the substrate and the press
- essentially less energy consumption
- less ozone formation
- much less of the UV-typical odour nuisance
- inks with reduced photo initiator components can be used



Inert-gas chamber for UV dryers

Technical data

Dimensions	adapted to the sheet fed press
Inert-gas	nitrogen
Working pressure	5 bars
Nitrogen consumption per chamber	20 ... 50 m ³ /h
Substrate thickness	adapted to the sheet fed press

**Polygraphische innovative Technik
Leipzig GmbH**
Mommsenstraße 2
04329 Leipzig

Phone: +49(0)341/25942-0
Fax: +49(0)341/25942-99
E-mail: info@pitsidleipzig.com
<http://www.pitsidleipzig.com>



Polygraphische
innovative Technik
Leipzig GmbH

Test Element for the Register Measuring System

What for?

- The element is a testing medium for the supervision of the LUCHS Register Measuring System. It guarantees the uncomplicated checks of this measuring system, carried out e.g. as routine checks by the user.

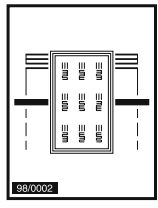
What do you get from us?

- test element on opal flashed glass stuck into a base plate,
- a carrying case,
- a test certificate for the test element,
- the test specification.



Certified?

- The test element is made by a manufacturer of optical precision equipment.
- At PITSID it is linked to a working standard through comparative measurement whose traceability to the national standard is guaranteed with a calibration certificate of the „Carl-Zeiss-Jena Prüfzentrum“, a calibration office of the German Calibration Service (Deutscher Kalibrierdienst).



Test Element for the Register Measuring System

What is tested?

- all measuring functions of the LUCHS
- the compliance of the measured absolute values with the measuring uncertainty specified in the LUCHS Operating Manual, i.e. the metric length values in μm .

How?

You just click the test software and measure the test element by positioning the LUCHS measuring head ten times on the test element. The test is documented by a printed test protocol.

When?

The use of the test element for the checking of the LUCHS is principally left to the user of the LUCHS. The check could be carried out once every year or as part of the routine examination of the measuring equipment.

The check is recommended after the change of the lamp in the measuring head or once every year.

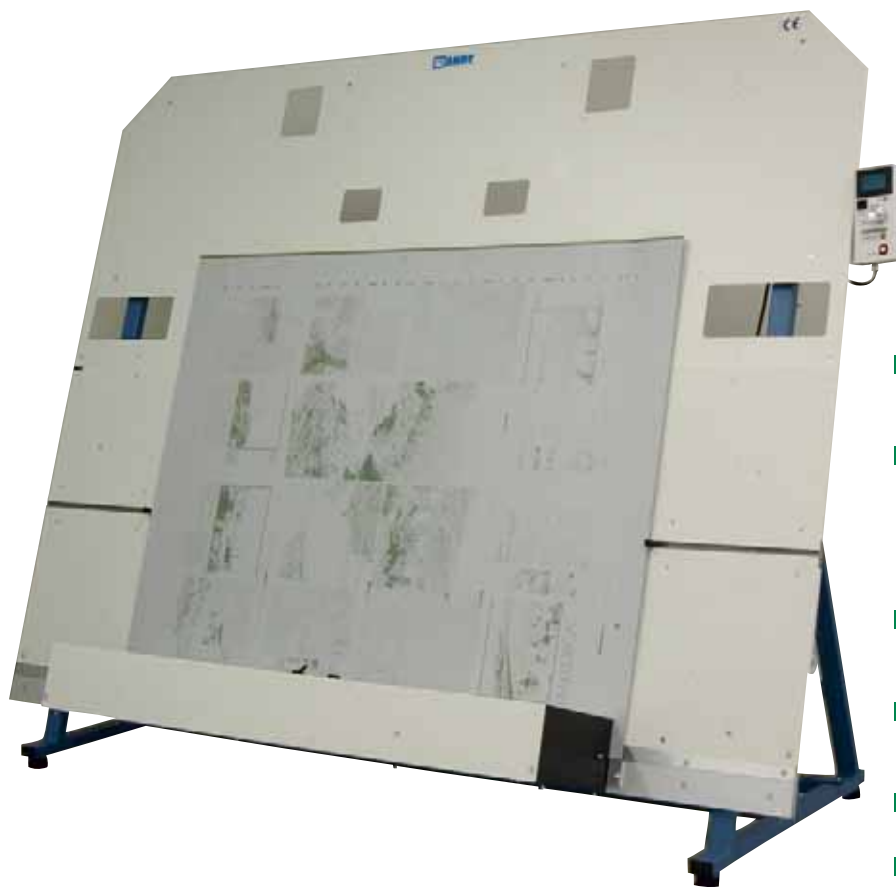
**Polygraphische innovative Technik
Leipzig GmbH**
Mommensenstraße 2
04329 Leipzig

Phone: +49(0)341/25942-0
Fax: +49(0)341/25942-99
E-mail: info@pitsidleipzig.com
<http://www.pitsidleipzig.com>



Polygraphische
innovative Technik
Leipzig GmbH

Automatic Plate Punch



For use in CTP systems the Automatic Plate Punch offers the following features:

- Register punches directly related to the printed image,
- Highly precise positioning of the print image and the punching tool to each other,
- Punching with a tolerance of $\pm 2 \mu\text{m}$.

Working principle:

- The measuring unit determines the exact position of the print image with measuring elements, which are arranged on the plate outside the print image.
- The IPC (industrial PC) evaluates the position information and computes positioning commands for the positioning unit.

- A triaxial positioning drive moves the plate iteratively into its optimum punching position.
- The punching operation is started as soon as the optimum punching position has been reached.

Advantages:

- Reduces the press proofing process thus saving time and waste after plate changes
- Punching of the plates precisely to the print image thus avoiding register errors and corrections.
- No errors due to dimensional variations of the printing plate.
- Register-true plate mounting on the cylinder.

Example:

- With a daily average of 4 CTP jobs the reduction of time and waste due to the use of the Automatic Plate Punch amounts to an annual cost-saving of 10,000 up to 15,000 € with a 5-colour medium or large-size Rapida sheet-fed offset press.



Automatic Plate Punch

Technical data

Measuring principle	- The position of the print image is determined by two video cameras - Measuring elements are evaluated with an accuracy of 0.1 µm
Printing plates	Size 1: = Plate format from 770 x 1030 mm to 1145 x 1430 mm Size 2: = Plate format from 1245 x 1630 mm to 1560 x 2060 mm Size 2K: = Plate format from 770 x 1030 mm to 1560 x 2060 mm
Positioning accuracy	± 2 µm
Punching after	A maximum of 20 seconds
Punching pattern	- small: punching tool distance: 780 mm - large: punching tool distance: 1200 mm
Measuring element	is delivered digitalized together with the Automatic Plate Punch (online or CD-ROM) and must be copied on the plate (size: 10 x 15 mm)
Positions of the measuring element	- At plate front edge outside the print image - Distance plate front edge to middle of the measuring element: 25 mm - Distance middle of the plate to middle of the measuring element: 490 mm
Components	Positioning cross-beam, electronic switchboard, operating unit, image sensors, format recognition sensors, operating system MS-WinXp, software package for position measurement installed on the industrial PC, manual, mains cable
Dimensions	Integrated in the dimensions of the respective punching machine
Weight	45 kg
Supply voltage	230 V/50 Hz
Power input	< 150 W
Operating conditions	Operating temperature: +5°C up to +30°C Storage temperature: -10°C up to +50°C Air humidity: 30 % up to 85 % non-condensing Shock load during operation: < 5 G during transportation: ≤ 25 G Vibration during operation: max. 0.7 G (at 5 to 200 Hz)
Measuring conditions	Operating temperature: +20°C up to +25°C Air humidity: 40 % up to 70 %

**Polygraphische innovative Technik
Leipzig GmbH**
Mommensenstraße 2
04329 Leipzig

Phone: +49(0)341/25942-0
Fax: +49(0)341/25942-99
E-mail: info@pitsidleipzig.com
http://www.pitsidleipzig.com