

**Colenta**<sup>®</sup>  
Labortechnik Austria

**LSH**  
Laser Systems Hannover

# Total Flexible CTP Technology

## YOU choose the plate

violet  
violetthermo  
violetthermo  
violetthermo  
thermo  
processless  
processless  
processless  
processless  
uv-conventional  
uv-conventional  
uv-conventional  
uv-conventional

ctp-platesetter  
**revolution 4**

**BASIC**

**COMFORT**

**PREMIUM**

revolution  
**BASIC**

## EASYgo

Revolutionary ease of operation.

All functions for the handling and precise positioning of each plate for exposure, are controlled by computerised electronics without the need for additional displays or controls.

## SPACEsaving

The revolution 4 BASIC requires only 0,7m<sup>2</sup> of floor space

## COSTeffective

Ctp-system **revolution 4 BASIC** is the most flexible external drum platesetter in it's class worldwide.

So you reduce costs of investment without loss of quality and speed.

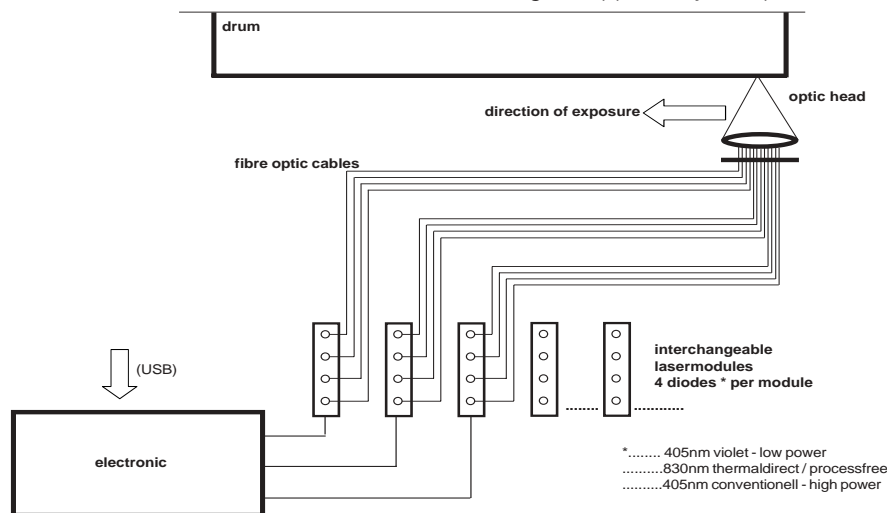


# OPEN *architecture* TOTAL *flexibility*

**LSH/COLENTA** offers a CtP exposure system incorporating external drum technology to be used with 3 different laser diode modules; different in power and/or wavelength and coupled by fibre optics to the focusing optics in the laser head.

Productivity is defined by the number of diode modules, their power and drum speed.

- 1) Thermal Diode Modules - 830nm/1W to expose all infra red sensitive thermal CtP plates, allowing the exposure of processless thermal plates (Thermal Direct Plates)
- 2) Low Power Violet Module with laser diodes - 405nm / 10mW to expose all normal violet sensitive photopolymer plates
- 3) High Power Violet Module with laser diodes - 405nm / 120mW offering the opportunity to expose conventional high speed PS plates.



## HIGH *speed*

The high speed, fully automated, flexible, high quality

**LSH/COLENTA revolution** platesetters from 2-up to 8-up size are designed to produce plates within the wide range of resolutions and screen parameters required by the print industry. The **LSH/COLENTA** proven external drum technology on the exposure unit combined with **COLENTA'S** long term experience in processing equipment is the state of the art solution for all your printing needs!

## EASE OF *operation*

An integrated punching system combined with control electronics ensures that each plate is correctly positioned and fixed to the exposure drum. The system provides an automated plate production facility that does not require expensive and regular operator tuning.

**LSH/COLENTA revolution** – An innovative easy operating system

## DUST *free*

Each plate is mechanically clamped onto the exposure drum - in a similar way as on a press.

This system eliminates the need to use vacuum which is prone to dirt related failures and generates unnecessary noise from vacuum pumps and blowers. **LSH/COLENTA revolution** – Safe & Clean

- A violet laser diode exposure system which offers a reliable low cost and low maintenance light source.

- All systems are fully supported through our world-wide network of service companies and dealerships working directly with our LSH Colenta factory in Hannover, Germany and Colenta Labortechnik Group headquarters in Wiener Neustadt, Austria.

## SMART *operation*

Connection and system controls are designed for modern USB 2.0 interface using data transfer rates up to 480Mbit/s. System regulation and monitoring is under the full control of the main workstation to ensure that the system performs correctly.

**LSH/COLENTA revolution** – An innovative CtP for reliable operation

## LONG *life*

The **revolution** exposure system has been designed with the minimal amount of moving parts - for example - without the use of mirrors which running at 30.000 r.p.m (similar to the systems used on internal drum and flat bed exposure units). The exposure system of the **revolution** incorporates an external drum and a violet laser light source that provides sharp details without requiring focus adjustments.

# SPACE *saving*

The **LSH/COLENTA revolution** solutions are designed to operate within the minimum of floor space thereby ensuring that important space remains free for other activities within your business premises.

**LSH/COLENTA revolution** – An innovative compact and functional design.

# COST *effective*

The **LSH/COLENTA revolution** Basic has a worldwide reputation as the »best in its class« for external drum exposure systems at an affordable price at all.

Additional feature and benefits including

# CONSISTENT *quality*

When searching for a CtP system that will provide your business with reliable and consistently high quality plates ready for press, then the

**LSH/COLENTA revolution** platesetters offer this and more!

**LSH/COLENTA revolution** – An innovative production safe system.

# MODULAR *design*

The **LSH/COLENTA revolution** CtP systems have been exclusively designed and manufactured for the specific requirements of the PrePress CtP market and with the total flexibility to operate within the framework of your business and the variations in your day to day production demands. We invite you to now discover our unique modular concepts.

**LSH/COLENTA revolution** – provides total flexibility.

# INTELLIGENT *exposing*

A clever system to maximize exposure speed and productivity that moves the laserhead faster over area of the plate where no exposure is required.

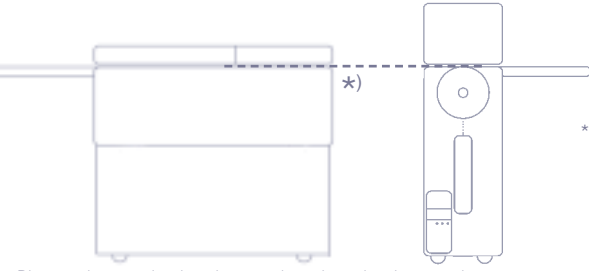


Diagram shows optional wash gum unit - to be ordered separately

# BASIC

\* optional online bridge available on request

**MODULAR systems**  
At any time your system can be upgraded in keeping with your production requirements and budget. This allows on-site upgrading of a **BASIC** model to either **COMFORT** or **PREMIUM** versions.

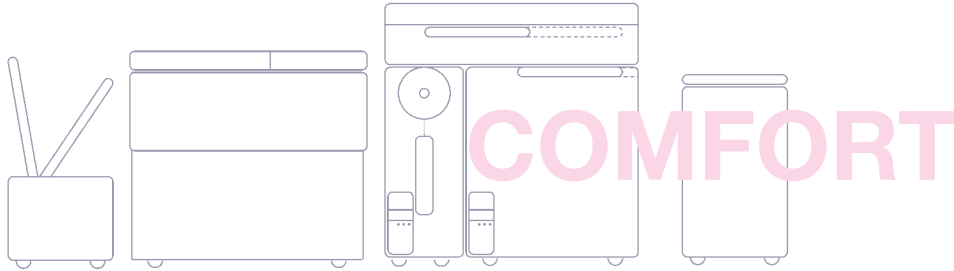


Diagram shows optional wash gum unit & Plate Stacker options - to be ordered separately

# COMFORT

**INTELLIGENT operation**  
All modules within the system i.e. Magazine feed, Autoloader or Exposure unit are interfaced directly via USB to the main computer workstation to provide a totally dependable and intelligent operating system, with the additional feature for the operator to communicate to the RIP via remote control.

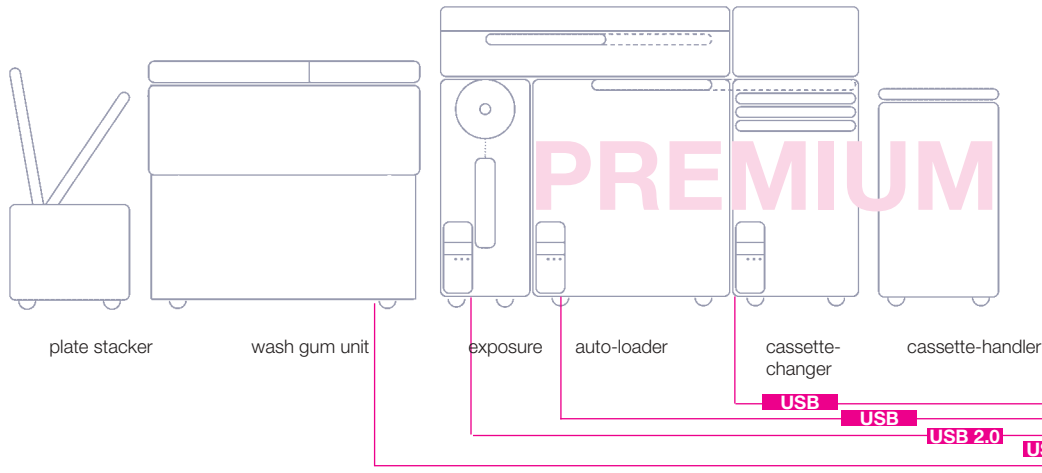
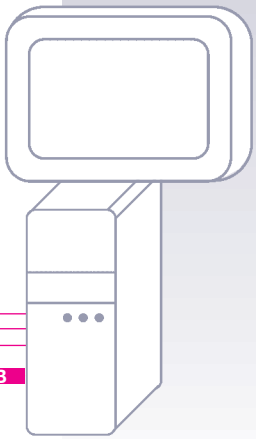


Diagram shows optional wash gum unit & Plate Stacker options - to be ordered separately

# PREMIUM



# Technical data/specifications of ctp-system **revolution 4**

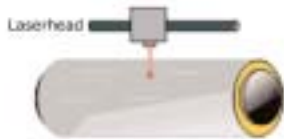
| general specifications         | BASIC                                                                                                                                                                                       | COMFORT                                                                                 | PREMIUM      |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|--------------|
| width                          | 1.240 mm                                                                                                                                                                                    | 1.240 mm                                                                                | 1.240 mm     |
| depth                          | 520 mm                                                                                                                                                                                      | 1.350 mm                                                                                | 2.150 mm     |
| height                         | 1.120 mm                                                                                                                                                                                    | 1.300 mm                                                                                | 1.300 mm     |
| dimensions of cassette handler | -                                                                                                                                                                                           | 850 x 770 mm                                                                            | 850 x 770 mm |
| weight                         | 150 kg                                                                                                                                                                                      | 270 kg                                                                                  | 400 kg       |
| exposure specifications        | BASIC                                                                                                                                                                                       | COMFORT                                                                                 | PREMIUM      |
| laser source                   | 120 mW violet laser diode, 405nm, Thermal 830nm and UV conventional                                                                                                                         |                                                                                         |              |
| exposing technology            | external drum                                                                                                                                                                               |                                                                                         |              |
| plate thickness                | 0,15mm, 0,20mm, 0,30mm                                                                                                                                                                      |                                                                                         |              |
| minimum plate size             | 340 x 200 mm                                                                                                                                                                                |                                                                                         |              |
| maximum plate size             | 760 x 678 mm                                                                                                                                                                                |                                                                                         |              |
| plate material                 | 830 nm IR sensitive thermal CtP plates, inclusive processless / processfree thermal plates<br>405nm violet sensitive plates (Photopolmer/Silver)<br>405nm conventional high speed PS plates |                                                                                         |              |
| technical specifications       | BASIC                                                                                                                                                                                       | COMFORT                                                                                 | PREMIUM      |
| plate exposure time            | 2540dpi                                                                                                                                                                                     | violet: 12 pl. (18), thermal direct*: 8pl. (12), UV conventional: 8pl. (12)             |              |
| (speed version)                | 2032dpi                                                                                                                                                                                     | violet: 15 pl. (20), thermal direct*: 10pl. (15), UV conventional: 10pl. (15)           |              |
|                                | 1800dpi                                                                                                                                                                                     | violet: 18 pl. (25), thermal direct*: 12pl. (16), UV conventional: 12pl. (16)           |              |
| point-to-point precision       |                                                                                                                                                                                             | 5 µm                                                                                    |              |
| resolution                     |                                                                                                                                                                                             | 2.540 dpi, opt. others                                                                  |              |
| RIP connection                 |                                                                                                                                                                                             | 1-bit-tiff from any data source (all RIPs, CTP Workflows)                               |              |
| online-processing              | optional                                                                                                                                                                                    | yes                                                                                     | yes          |
| punch                          |                                                                                                                                                                                             | plate is always aligned according to punch,<br>plate punch can be specified by customer |              |
| plate handling                 | manual                                                                                                                                                                                      | automatic                                                                               | automatic    |
| plates per cassette            | 0 plates                                                                                                                                                                                    | 50 plates                                                                               | 200 plates   |
| number of cassette             | 0                                                                                                                                                                                           | 1                                                                                       | 4            |
| slipsheet removal              | no                                                                                                                                                                                          | yes                                                                                     | yes          |
| working temperature            |                                                                                                                                                                                             | 18 .. 25 °C                                                                             |              |
| humidity                       |                                                                                                                                                                                             | 20 .. 80 %                                                                              |              |
| remarks                        | the <b>BASIC</b> systems are upgradeable to <b>COMFORT</b> or <b>PREMIUM</b>                                                                                                                |                                                                                         |              |

\* based on thermal direct AGFA Azura Plate

All technical data and specifications are correct at the time of publishing. It remains the right of LSH Laser Systems Hannover GmbH to change the specifications at any time in line with our policy of continuous product development. All rights reserved. 03/2008

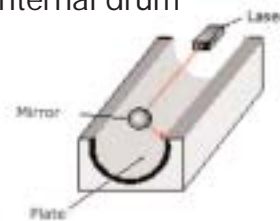
## Benefits: LSH External Drum Technology over Internal Drum systems

### external drum



- A short distance between light source and the plate surface ensures precise and sharp exposure quality without focus adjustment when handling 0.15 - 0.2 and 0.3mm plates
- No moving parts in the laser head - Low Maintenance Requirements - **LONG life!**
- On the models COMFORT and Premium, an integrated punch ( set to specific customer requirements) provides very precise and reliable plate handling when Punching, Positioning and Clamping each plate onto the exposure drum - in the same way as the plate is later mounted onto the press cylinder.
- No vacuum pumps are in operation which ensures trouble free operation
- ease of automation in synergy with the printing press automatic plate handling

### internal drum



- long path laser distances - introduces potential mechanical vibration interference during exposure
- high speed rotating mirrors generate unwanted vibrations and require regular cleaning
- vacuum pumps generate unnecessary noise within the working environment
- Heavy and bulky design requiring special installation needs
- Very limited automation potential
- Airborne dust and dirt entering the vacuum system can be deposited on a plate during exposure