

LEIBINGER

RAPID
High-speed
Coding

100%
protection
SEALTRONIC
trouble-free startup,
every time



Speed**UP** your marking process

JET3 UP

RAPID

High-speed Inkjet Printer

1

Do you need...

- ... an industrial marking system for high-speed applications?
- ... a fast, flexible and easy method to mark products?
- ... maximum efficiency and cost transparency in the labeling process?

2

Are you tired of...

- ... having an inkjet printer that just doesn't measure up to the high speeds of your production line?
- ... losing valuable production time because your inkjet printer has to be cleaned often, is not available or because the ink in the printhead has dried?
- ... being unable to sell your products due to faulty or poor-quality coding or even having these problems result in expensive recall measures?

3

Do you expect...

- ... a high-speed printer that is ready for use at any time and is 100% reliable?
- ... German name-brand quality and plenty of practical functions?
- ... fast, fair and transparent service – worldwide?



Continuous inkjet printer (CIJ)

LEIBINGER inkjet printers code **all conceivable products and materials**, such as plastic, glass, wood, metal, ceramic, technical composite material, cardboard and paper **without making contact** using **fixed and variable data**. Examples of applications include expiration dates, LOT/batch numbers, serial numbers, barcodes, 2D codes and graphics. **Special inks** are used that dry in less than one second. **Various product surfaces** do not pose a challenge for the LEIBINGER inkjet printer, regardless of whether they are convex, concave, rough, smooth, flat or structured. Non-contact marking and fast product processing make CIJ technology the most flexible, versatile and cost-effective method of marking products.

LEIBINGER
has the answer:

THE INKJET PRINTER
JET3up RAPID

The reliable solution for
high-speed applications

Up to 40% faster – marking at 1000 m/min (60 km/h)

The **JET3^{up}** RAPID is the revolution in industrial inkjet printing. This is because using the new **LEIBINGER** high-speed printer means that the speed of your production line is no longer limited by the rate of your marking system.

Start utilizing the full potential of your production line right now and increase its efficiency many times over.

Marked products such as cables still have **clearly legible characters**, even at **production speeds of 1000 m/min (60 km/h)**!

Up to **40%** higher **printing** and **production speeds** thanks to the new, innovative **LEIBINGER printhead technology**.

More than 3550 characters/minute.*

*Depending on print type and content.

Up to 5 lines in various fonts and languages. Fixed and variable data.

Depending on print head and printing speed.

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Your advantages at a glance

The JET3^{up} RAPID

Marking up to 40% faster

Marking at 1000 m/min (60 km/h). New, innovative LEIBINGER printhead technology. More than 3550 characters/minute.*

Measurable increase in productivity

Acceleration of the production process through extremely fast marking. Increase in the efficiency of the production line and considerably increased value creation.

A HIGH LEVEL OF PRINT QUALITY

Clearly legible imprinting of letters and digits, even at the highest print speeds.

Maintenance-free starting without cleaning – guaranteed!

Automated **Sealtronic** nozzle seal. No drying out of ink in the printhead. Ready to print immediately, even after long shut-down periods.

Reliable production

Consistent prevention of downtime. No daily service work, no forced stops due to scheduled service intervals. Highest availability.

German name-brand quality

Development and production in Germany. Highest level of inhouse production. Decades of experience in precision engineering. German engineering ingenuity. High-quality materials. Premium industrial product.

No wait times – ready for operation immediately

The **Clean Instant Start and Stop Technology** is used to make the JET3^{up} RAPID ready for printing in only a few seconds. Always a clean printhead with any number of start and stop cycles.

Intuitive operation

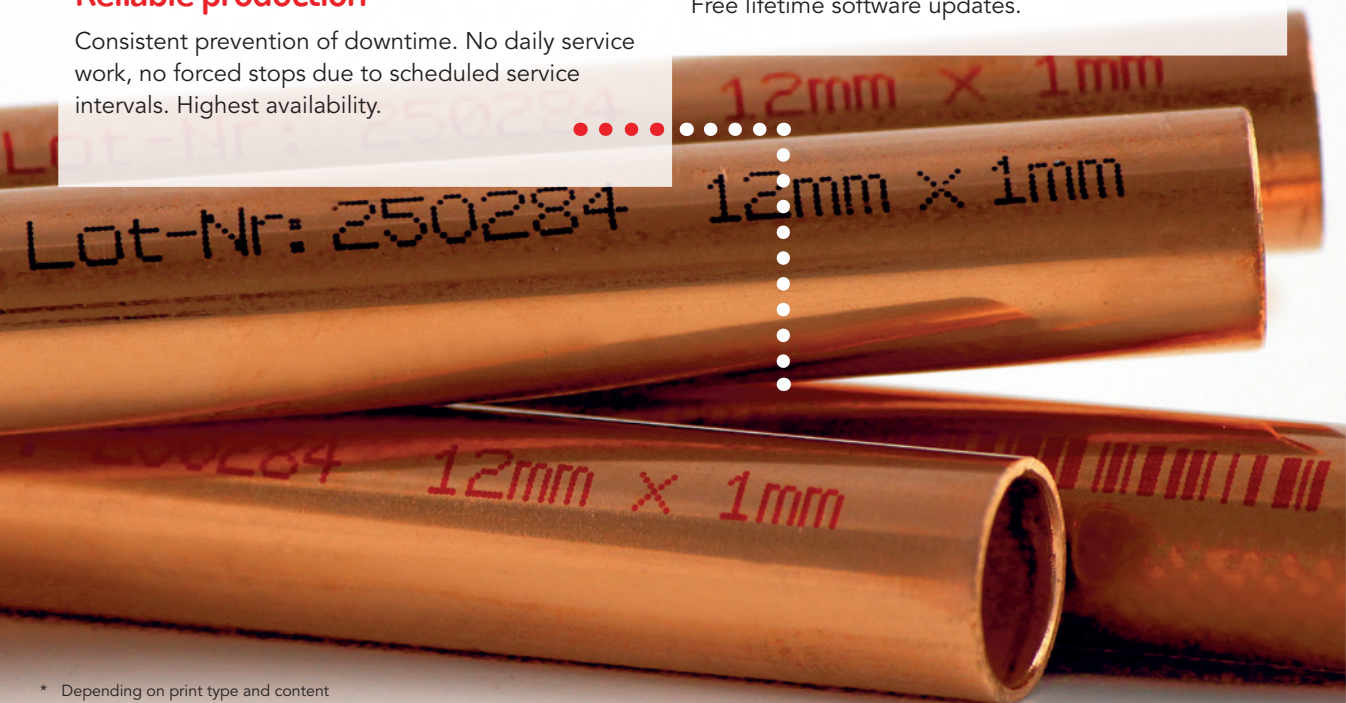
Easy and fast, like your computer at home. Color 10.4" touch-screen display. Windows-based, customizable user interface. Optimized menu navigation.

Low operating costs

No solvent consumption during production shutdowns using Sealtronic. Low maintenance costs. No replacement of expensive modules.

Wide range of functions without additional costs

All interfaces and software functions included ex works. Easy integration into the production line. Free lifetime software updates.



* Depending on print type and content

Do you have specific requirements? LEIBINGER is the customized solution

The JET3up RAPID adjusts entirely to your needs and production environment. For this purpose, LEIBINGER provides **three high-speed printheads** that are suitable for different applications and industries. But they all have one thing in common: They will substantially **accelerate your production process!**

Printhead version



RAPID Universal

Der JET3up RAPID with Universal printhead achieves its high print speed through an accelerated discharge of drops in the printhead. This makes the printhead able to code different surfaces and products with 2D codes, graphics, barcodes, or characters in 1 to 5 lines (32 drops) considerably faster than comparable printer models.



RAPID Highspeed

Der JET3up RAPID with Highspeed printhead was developed for extremely fast print applications up to a maximum font height of 2,5 mm (5x5 and 7x5 matrix or tower printing). It can be used flexibly for all product surfaces and materials.



Original print sample at 1000 m/min.

RAPID Wire

In order to meet the high demands of the wire and cable industry, Paul LEIBINGER offers a special cable printhead. Thanks to the innovative design in the printhead, cables and wires as well as other long, narrow products can be optimally positioned and marked. The result is cable printing that is even faster, more precise and more effective.

Options & Accessories

- » Various nozzle sizes and head versions
- » Expanded PC software solutions
- » JETmotion linear system
- » Product detector, shaft encoder, status lights

and many more ...



Sealtronic makes the difference

trouble-free startup, every time

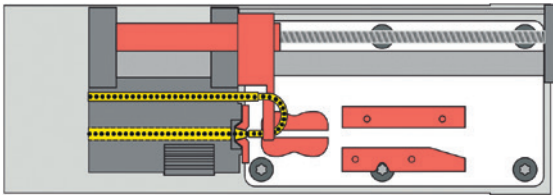
The automated Sealtronic nozzle seal is one of a kind

- » due to its accurate precision engineering.
- » in its operating principle.
- » in its effectiveness.

LEIBINGER printhead with nozzle seal

Shut down process

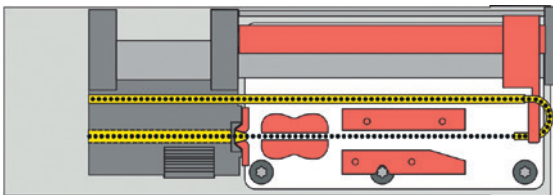
The gutter is moved to the nozzle automatically when shutting down the printer, forming a hermetically sealed, airtight circuit. **The result: 100% secure protection from ink drying out!**



Switched-off LEIBINGER printer

Startup process

First, the ink begins to flow in the sealed circuit creating a stable ink stream. The gutter then opens automatically. This happens within a few seconds and guarantees a fast and error-free start. **The printhead remains absolutely clean in this process.**

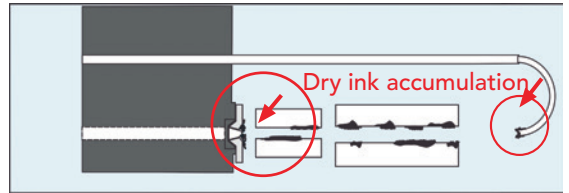


LEIBINGER printer after the startup process

Conventional printhead without nozzle seal

Shut down process

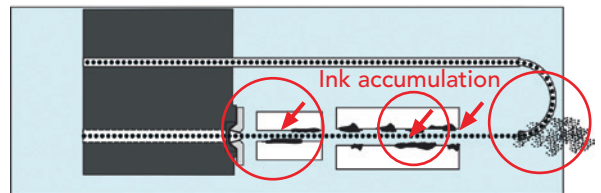
Nozzle and gutter remain open. The residual ink is exposed to the air unprotected and dries out. This causes problems the next time the printer is started.



Switched-off conventional printer

Startup process

The conventional design causes an unstable startup of the jet. The result: the printhead gets dirty regularly and thus drop charging is degraded right from the start.



Conventional printer after the startup process

The advantages for production

- » Immediate, reliable starting
- » No delays in the start of production
- » No cleaning cycle required
- » No production interruptions
- » Long availability - typically months between cleanings



The JET3up RAPID: Easy, intuitive and reliable

With its large 10.4" touch-screen color display and Windows-based user interface, the JET3up RAPID is just as easy to use as your computer at home:

- » Typical functions such as drag and drop
- » Illustrated operator instructions
- » User-defined interface with buttons for direct access



Increase your efficiency and lower your costs

- » Increase in production efficiency through high-speed printing
- » Extremely low energy consumption (A+++)
- » Easy automation integration through a wide variety of interfaces
- » 8 years guaranteed replacement part availability
- » Easy, cost-efficient maintenance and long service intervals
- » Minimal solvent consumption using **Solvent Saving Mode**, **Sealtronic** and the **EcoSolv** option
- » Consistent prevention of production interruptions using LEIBINGER technology
- » Free software updates

We are there for you – worldwide!

With over 100 LEIBINGER authorized dealers worldwide, we can guarantee you one thing: the best service on-site.



Technical specifications

PRINT PERFORMANCE/FUNCTIONS

- » Printing speed up to 17 m/s (1000 m/min)*
- » Printing height 1 to 10 mm, depending on nozzle size and head type
- » Country and industry-specific fonts: Arabic, Cyrillic, Chinese, Persian, etc.
- » Fonts: from 5x5 to 32x20, special fonts, user-programmable fonts, tower printing*
- » Multi-line fonts (1 to 5 lines)*
- » Fonts and graphics can be positioned and combined in the print jobs as desired*
- » Proportional function for all fonts*
- » Font height and font width adjustable
- » All major barcodes and DataMatrix codes (ECC200), GS1 DataMatrix (EAN/ECC), QR-Code, PPN-Code*
- » Time, auto-adjustable date, auto-adjustable expiration date, weekdays, calendar weeks, Julian calendar, shift identification
- » Replacements: all date, time and counter functions can be replaced and user-programmed
- » 32 individually programmable counters, consecutive numbering, production counter, meter marking with "Meter Go" function
- » User-programmable graphics/logos can be created in the integrated editor
- » Multi-stage contrast and bold function, print repetition, print delay, backward print, rotation/mirroring of font, inverse, reverse and alternating prints (object-related)*
- » Dynamic backward printing, for traversing lines
- » Programmable batch production and interlinking of multiple jobs
- » "External text" function via scanner or data interface
- » Printing variable data from external files via USB stick or data interface
- » Stop function after reaching preselected value
- » Product jam detection / monitoring of product alignment
- » Autostart function
- » Prompt function (fast edit)
- » Solvent Saving Mode
- » Self-test function

DATA ADMINISTRATION/SECURITY

- » Data buffer in case of power failure
- » File Explorer
- » Print jobs saved with printing data and machine parameters
- » Printer data logging, production run logging
- » Up- and download of jobs and graphics using USB stick or network
- » Job select (1023 jobs selectable from scanner or PLC)

OPERATION/DATA INPUT

- » 10.4" colour TFT touch-screen display (SVGA)
- » Creating and editing jobs during production
- » Customizable user interface
- » Available menu languages: European languages, Arabic, Chinese, Vietnamese, Thai, Korean, Cyrillic, Persian, etc.
- » Integrated font and graphic editor
- » Illustrated operator instructions
- » Alternative control using the data interface (serial or Ethernet)
- » Country-specific on-screen key pad
- » Operational available by mouse or keyboard
- » Comprehensive self-diagnostics and status display with easy-to-understand text, help function, printer status display
- » Storage of numerous jobs and graphics
- » Password function and service menu
- » Windows based interface, WYSIWYG, real-time updating of display
- » Remote control over VNC

INTERFACES, INPUTS/OUTPUTS

- » Product detector PNP/NPN 24V, FIFO buffer
- » Shaft encoder input for printing speed synchronisation (TTL 5V, HTL 24V, RS422, 5V)
- » 9 digital inputs and 8 outputs, user-selectable
- » Printer alarm, low fluid, print ready, print finished, external job selection etc.
- » Serial interface RS232 up to 115200 baud
- » USB port
- » Ethernet (industry standard M12D), script protocol
- » Sensor for product monitoring and speed measurement
- » Option: Special interface to connect several printers

LEIBINGER HYDRAULIC SYSTEM

- » Low maintenance, diaphragm pumps with optimized run time
- » Fully automatic viscosity and pressure control
- » Thermally isolated hydraulics
- » Automatic monitoring of compressed air (only with option IP65)
- » Automatic daily interval function (Auto ink circulation)

PRINTHEAD

- » Flexible umbilical, length: 3 m
- » Stainless steel cabinet
- » Fully automatic nozzle and gutter seal "Sealtronic"
- » Fully automatic drop charging, drop break off control
- » Nozzle size: 50 µm and 55 µm
- » Upside down - 360° operation
- » Safety switch for print head locking
- » External head ventilation, options: various print head versions
- » Automatic inkjet monitoring

FLUID RESERVOIRS

- » Capacity of the ink and solvent tanks are 1.3 liters, refillable while printing
- » Level gauge with fully automated monitoring
- » Remaining prints are displayed

INKS

- » Ink consumption: up to 200 million characters/l. (matrix 5x5/nozzle 50 µm)
- » Fast-drying solvents inks (<1sec)
- » Several dye-based inks*
- » MEK-free and ketone-free inks *
- » Halogen-free inks *
- » Ink colors: black, red and more on request *

WEIGHTS AND PROTECTION CLASS

- » Weight: print head 1.5 kg, cabinet 20.5 kg
- » Protection class: IP54, optional IP65

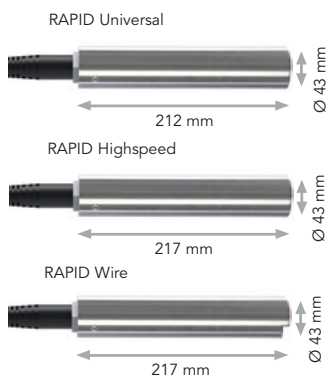
SUPPLIES AND ENVIRONMENTAL CONDITIONS

- » 100-240 V, 50-60 Hz, typical 20 VA
- » Temperature range +5°C to +45°C
- » Relative humidity max. 90%, non-condensing
- » Plant air connection (only with print head RAPID Highspeed and RAPID Wire): 1,4 bar / 20 l/min
- » Plant air connection (only with option IP65): 1,4 bar / 100 l/min

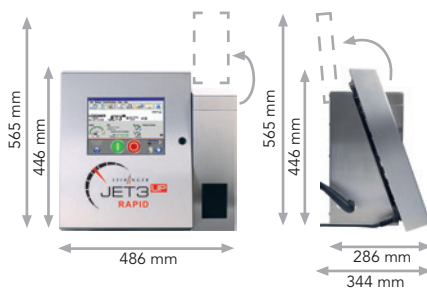
ACCESSORIES

- » Product detector, shaft encoders, printer stand, print head bracket, alarm lamps etc.
- » Software for remote control, multi-head control

*Depends on printhead version



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