



# M1630 JET

marking systems



**komax**  
M1630 Jet

**komax**

# M1630 JET

Wire marking presents special challenges. To master those challenges with perfection, Komax offers a state-of-the-art, compact inkjet marker with the M1630 Jet. It is completely integrated in the machine control system and unlocks a variety of advantages with special functions, low operating costs, high availability and user-friendly operation. Komax creates the ideal conditions for meeting expanding requirements in the field of wire marking, such as ensuring the traceability of wire harnesses in autonomous vehicles. The M1630 Jet is the market leader's answer to the rising demand for marked wires.

## **User- and maintenance-friendly**

- Clean, faultless refills thanks to cartridges with RFID identification
- Minimal maintenance without service technicians
- Touch panel operation
- Self-regulating drop generator

## **Powerful interaction with the machine**

- For the best performance with Komax machines
- Fast setup and changeover
- Printing speed up to 21% faster than predecessor
- Special functions: stable character width, font centered on wire, reverse dimensioning

## **Cost-effective, sustainable investment**

- Low operating and maintenance costs reduce the costs per wire
- Compatible with current and future machine generations
- Long-term, future-proof investment
- Optimized ink system for reliable operation
- Central point of contact for printer and machine support

A close-up, macro photograph of a cylindrical metal wire. The wire is oriented diagonally from the bottom left towards the top right. On its surface, several sets of characters are laser-marked. The most prominent set in the center consists of the letters 'A', 'B', and 'C' arranged vertically. Each letter is formed by a series of small, dark, oval-shaped dots. To the left and right of this central set, there are other markings, including what appears to be the number '1' and some illegible characters. The background is a soft, out-of-focus light grey. In the bottom right corner, there is a dark grey triangular graphic element pointing towards the center.

**WIRE MARKING**  
**POWERFUL, OPERATOR-FRIENDLY,**  
**COST-EFFECTIVE**

# MAKE YOUR MARK WITH THE M1630 JET





### **Strengths of the continuous inkjet method**

The continuous inkjet method is particularly ideal

- When manufacturing costs are crucial
- With high unit volumes and critical machine performance
- With frequently changing print contents
- With wires that are not suitable for laser marking

### **Extremely user- and maintenance-friendly**

Inks and make-up can be refilled during ongoing operation. The RFID reader checks the modules and warns of errors. For local operation, 7.0- and 10.4-inch color touch panels are available. Multiple network-integrated printers can be operated simultaneously from a single panel – for instance two printers on one trolley. The printers can also be conveniently operated via internet browser from a console.

The printer is close to maintenance-free. Swapping out the i-Tech module\* for regular maintenance requires no outside assistance and takes just a few minutes. This significantly reduces downtime and eliminates external costs.

\* i-Tech is a brand of Domino Ltd. and stands for intelligent technology.

### **Powerful interaction with the machine**

Komax printers are tightly integrated with the machine control system. This enables fast setup and changeover as well as minimal data maintenance costs. All printing data is entered on the machine and stored in the machine database. It can also be transmitted via a network. The printer is automatically configured when the system starts.

Integration enables exceptional system performance: printing speed, for example, is up to 21 % faster than with the predecessor model. Special functions make the M1630 Jet the printer of choice for wire marking: dynamic time-of-flight compensation ensures consistent character width even during accelerated travel. Wire-centered fonts reduce setup times. Dimensioning from the wire end (reverse dimensioning) simplifies data entry.

### **Cost-effectiveness, investment security and high availability**

Optimizing operating and maintenance costs was a key priority in the development of the M1630 Jet. Because the operator can carry out the maintenance themselves, operating costs are roughly 50 % lower than for the predecessor model. Make-up consumption was substantially reduced and the make-up recuperation option lowers costs even further. These advancements reduce per-wire costs significantly.

Komax M1630 Jet is compatible with current and upcoming Komax machine generations. Mounting and changeover sets are available for all machines. This guarantees the long-term utility of the investment.

The design, manufacturing and maintenance concept are optimized for maximum availability. The number of parts and seals in the ink system has been significantly reduced with a central hydraulic block. Komax offers service and expertise for the entire system from a single source.



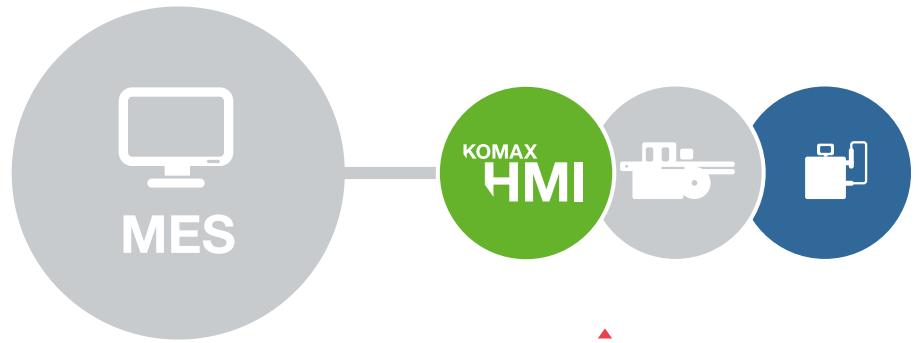
▶ Cartridges for ink and make-up as well as the i-Tech filter module\* – all with RFID check

### Ready for the future

The M1630 Jet is ready for use on machines of the Komax HMI Generation. Networked with a manufacturing execution system (MES), they provide even more efficient production.

The functions of the M1630 Jet have been expanded and optimized through the introduction of Komax HMI, which offers more special characters, fonts and bar code types depending on the resolution of the character matrix. The capabilities of the printers are continuously upgraded.

M1630 Jet can also, independently of a machine, be used to mark housings, connectors, circuit boards and other parts, thereby providing significant additional benefits.



### Available in three versions

1. M1630 Jet BC as the standard version for dye-based and lightly pigmented inks
2. M1630 Jet P for highly pigmented inks, e.g. white, gray and blue
3. M1630 Jet S for small fonts on wires up to 0.13 mm<sup>2</sup>

▲ **Integrated marking for networked production: Wire processing machines of the HMI generation with inkjet M1630 Jet.**



01



02



03

**01**  
M1630 Jet with optional trolley and tower lights  
**02**  
Marking head – compatible with earlier mounting sets  
**03**  
For local operation, color touch panels are available in 7" and 10.4" size



## Technical data

	<b>M1630 Jet BC (Black Color)</b>	<b>M1630 Jet P (Pigmented)</b>	<b>M1630 Jet S (Small character)</b>
Ink type <sup>1)</sup>	Dye-based ink and lightly pigmented ink	Highly pigmented ink	Small fonts, pigmented ink, currently only black
Ink cartridge content	825 ml	555 ml	825 ml
Make-up cartridge content	1200 ml	1200 ml	1200 ml
Min./max. character height	0.9 – 4.6 mm		0.8 – 4.4 mm
Min. wire diameter	1.1 mm		1.0 mm
Max. marking speed <sup>2)</sup>	Fast print 7.4 / 12 m/s Standard print 7.9 / 11.2 m/s		Fast print 7.8 / 12 m/s Standard print 11 / 12 m/s
Character matrix <sup>3)</sup>	3 of 8x5 "fast print", 5x5, 5x5 (tower), 7x5, 7x5 (tower), 11x7		
Positioning accuracy	Typical $\pm 1 \dots 2 \text{ mm} + 0.1 \dots 0.2 \%$ of wire length		
Interfaces	RS232, Ethernet (TCP/IP)		
Compatible with	Komax machines with TopWin 1, TopWin 2, TopWin 3 and Komax HMI		
Connections	1 x 110 – 240 V, 50/60 Hz, 40 W idle, 80 W in operation. No compressed air connection required.		
Ambient conditions operation <sup>4)</sup>	+5 to 45 °C, rel. humidity 0 – 90 %, non-condensing		
Housing material, protection class	Stainless steel, IP55 (splash-proof), electronics IP 66		
Dimensions (WxHxD), Set-up	Marker with 7" touch panel 430 x 589 x 381 mm (16.9 x 23.2 x 15.0 in) Marker without touch panel 430 x 411 x 381 mm (16.9 x 23.2 x 15.0 in) Space-saving construction of 2 printers on one trolley possible. See graphic below.		
Operating panel	Color touch panel, 7" or 10.4" version, usable for multiple markers		
Conduit length	3 m		
Weight (net)	22 kg (48.5 lbs)		

<sup>1)</sup> The appropriate inks for the marker configuration are presented in an ink list

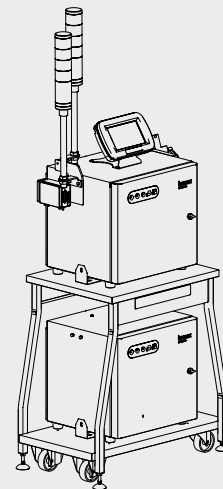
<sup>2)</sup> Lower value with width/height ratio of characters W/H = 0.7, higher value with stretched characters, max. speed with Alpha 550

<sup>3)</sup> Depending on TopWin version

<sup>4)</sup> Please observe the temperature range of the inks, if necessary use cooling units.

## Options and accessories

Operating panel	7" or 10.4"
Signalisation	Four color tower light and buzzer
Make-up recovery	Saves make-up
Trolley	Trolley for up to 2 markers, optional cabinet or cooling unit in combination with one marker.
Mounting sets for Komax machines	Marking head mount, wires, etc.
Displacement table	for marking piece goods



## Komax – leading the field now and in the future

As a pioneer and market leader in the field of automated wire processing, Komax provides its customers with innovative and sustainable solutions for any situation that calls for precise contact connections. Komax manufactures series and customer-specific machinery for various industries, catering to every degree of automation and customization. Its range of quality tools, test systems, and intelligent networking solutions complete the portfolio, and ensure safe and efficient production. Komax is a globally active Swiss company with development and production facilities on several continents. Komax uses its extensive distribution and service network, which includes local companies and their employees, to support customers across the world on site, thus ensuring the availability and value of their investments after equipment commissioning through standardized service processes.



### Market segments

**Komax offers outstanding competence and solutions for various areas of application and draws on them to generate the desired value-added for the entire process and optimize economic efficiency in line with customer requirements. The main markets of Komax are as follows: automotive, aerospace, industrial and telecom & datacom. With this breadth of experience, customers obtain expert knowledge for process optimization and access to the latest technologies.**

**40**  
**YEARS**  
CUTTING  
EDGE

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