# M1630 JET

**marking systems**

komax

M1630 Jet

komax

EN

# M1630 JET

Wire marking presents special challenges. To master those challenges with perfection, Komax offers a state-of-the-art, compact inkjet marker: the M1630 Jet. It is completely integrated with 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.

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

**User- and maintenance-friendly**
– Clean, faultless refills thanks to cartridges with RFID
– 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
– Single point of contact for printer and machine support

# 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 UK 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 recovery 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.

Design, manufacturing and maintenance have all been 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**
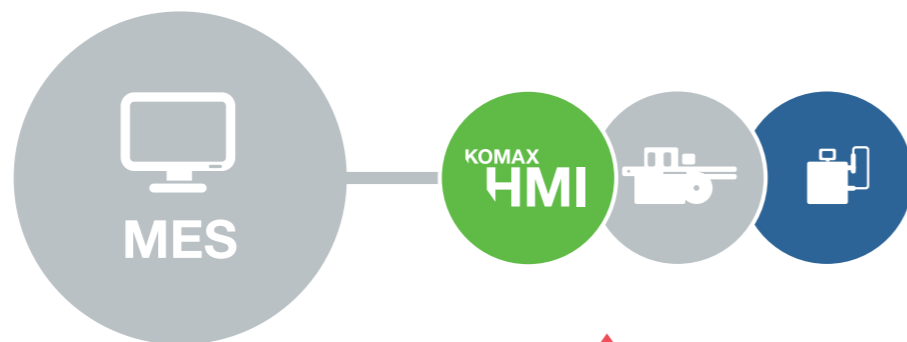
## Ready for the future

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.

**MES** — **KOMAX HMI**

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

### 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 mm²

**01**  **02**



**03**

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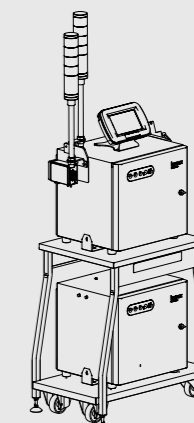**For local operation, color touch panels are available in 7˝ and 10.4˝ size**

## Technical data

| | M1630 Jet BC (Black Color) | M1630 Jet P (Pigmented) | M1630 Jet S (Small character) |
|---|---|---|---|
| Ink type [1] | 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 [2] [3] | Fast print 7.4 / 12 m/s Standard print 7.9 / 11.2 m/s Up to 21 % faster than previous product with 5x5 matrix | | Fast print 7.8 / 12 m/s Standard print 11 / 12 m/s |
| Character matrix [4] | 3 of 8×5 "fast print", 5×5, 5×5 (tower), 7×5, 7×5 (tower), 11×7 | | |
| Positioning accuracy | Typical ±1 … 2 mm + 0.1 … 0.2 % of wire length | | |
| Included options | Positive air, Make-up recuperation | | |
| Interfaces | RS232, Ethernet (TCP/IP) | | |
| Compatible with | Komax machines with TopWin 1, TopWin 2, TopWin 3 and Komax HMI | | |
| Connections | 1 × 110 – 240 V, 50/60 Hz, 40 W idle, 80 W in operation. No compressed air connection required. | | |
| Ambient conditions operation [5] | +5 to 45 °C, rel. humidity 0 – 90 %, non-condensing | | |
| Housing material, protection class | Stainless steel, IP55 (splash-proof), electronics IP 66 | | |
| Dimensions (W×H×D), Set-up | Marker with 7˝ touch panel 430 × 589 × 381 mm (16.9 × 23.2 × 15.0 in) Marker without touch panel 430 × 411 × 381 mm (16.9 × 23.2 × 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) | | |

[1] The appropriate inks for the marker configuration are presented in an ink list
[2] Lower value with width/height ratio of characters W/H = 0.7, higher value with stretched characters, max. speed with Alpha 550
[3] The indicated speeds are the possible values for the system. For optimal readability, significantly lower speeds may be required, especially for the M1630 Jet S.
[4] Depending on TopWin version
[5] Please observe the temperature range of the inks, if necessary use cooling units

## Options and accessories

| | |
|---|---|
| Operating panel | 7" or 10.4" |
| Tower light | Four color tower light and buzzer |
| 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, cable set, etc. |
| Sliding table | For marking piece goods |

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

As a pioneer and market leader in automated wire processing, Komax provides its customers with innovative solutions. Komax manufactures series and customer-specific machinery, catering to every degree of automation and customization. Its range of quality tools, test systems, and intelligent software and networking solutions complete the portfolio, and ensure safe, flexible, and efficient production.

Komax is a globally active Swiss company with highly qualified employees and development and production facilities on several continents. It provides local support to customers worldwide through its unique sales and service network and offers services that help them get the most out of their investments.

Komax AG
Industriestrasse 6
6036 Dierikon, Switzerland
Phone +41 41 455 04 55
sales.din@komaxgroup.com

**komax**
komaxgroup.com