



SPRAY LUBRICATION SYSTEM PROMAX

PROMAX APPLICATION FIELDS

The Promax system is conceived for **progressive stamping, production of small metal parts and fine blanking application** (for material with blank width ranging from 100 up to 800 mm)

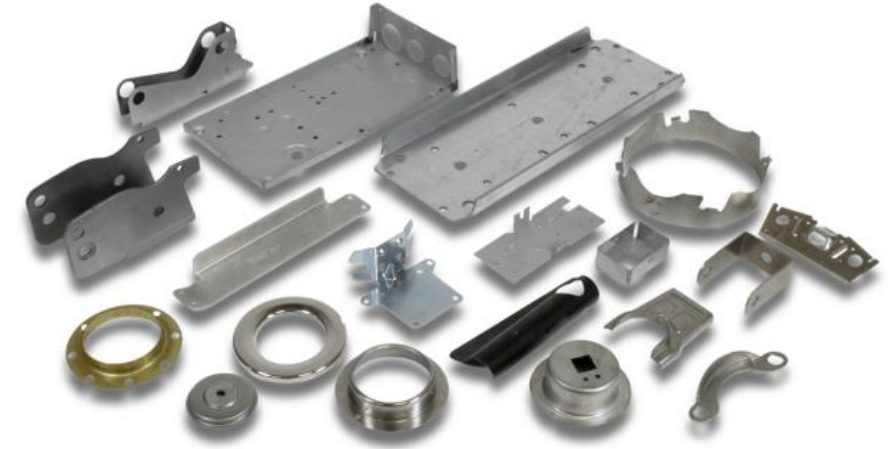


Image 1 & 2 –
Progressive
stamping
products and
progressive
stamping
production line



PROMAX STRIP SPRAY LUBRICATION MACHINE

- The PROMAX controlled spray lubrication system consists of **two spray heads** (one upper and one lower), connected to an **oil tank** for the lubricant supply. As an optional, the system can be integrated with an **oil mist suction system** and/or a **plastic tank** to collect the lubricant from the spraybox.
- A 7-inch control panel allows to set up all the main lubrication parameters.
- The system allows **lubrication in strips** and is synchronized with the material feeding. The **oil dosage can be adjusted from 0.5 to 5 g/m²**.





SPRAYHEADS

- The spraybox consists of **two sprayheads** (one upper and one lower) which can be **extracted from the side** to carry out the main maintenance operations.
- The spraying heads are made up of a variable number of nozzles depending on the **material width (from 200 up to 800 mm)**.
- The electro-pneumatic LVLP spray valves allow a controlled and uniform product distribution on the overall surface.

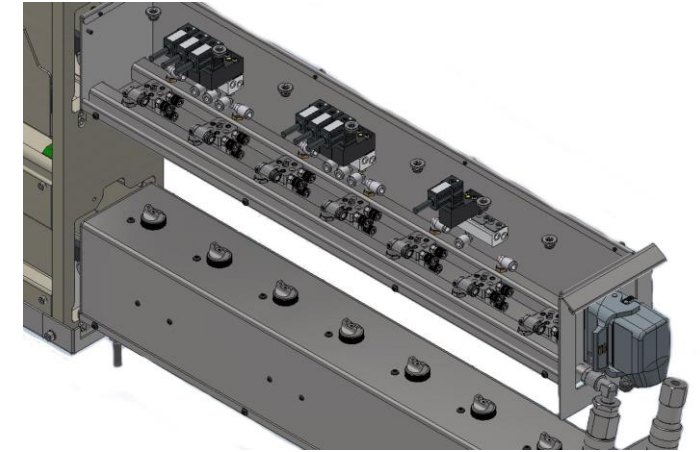
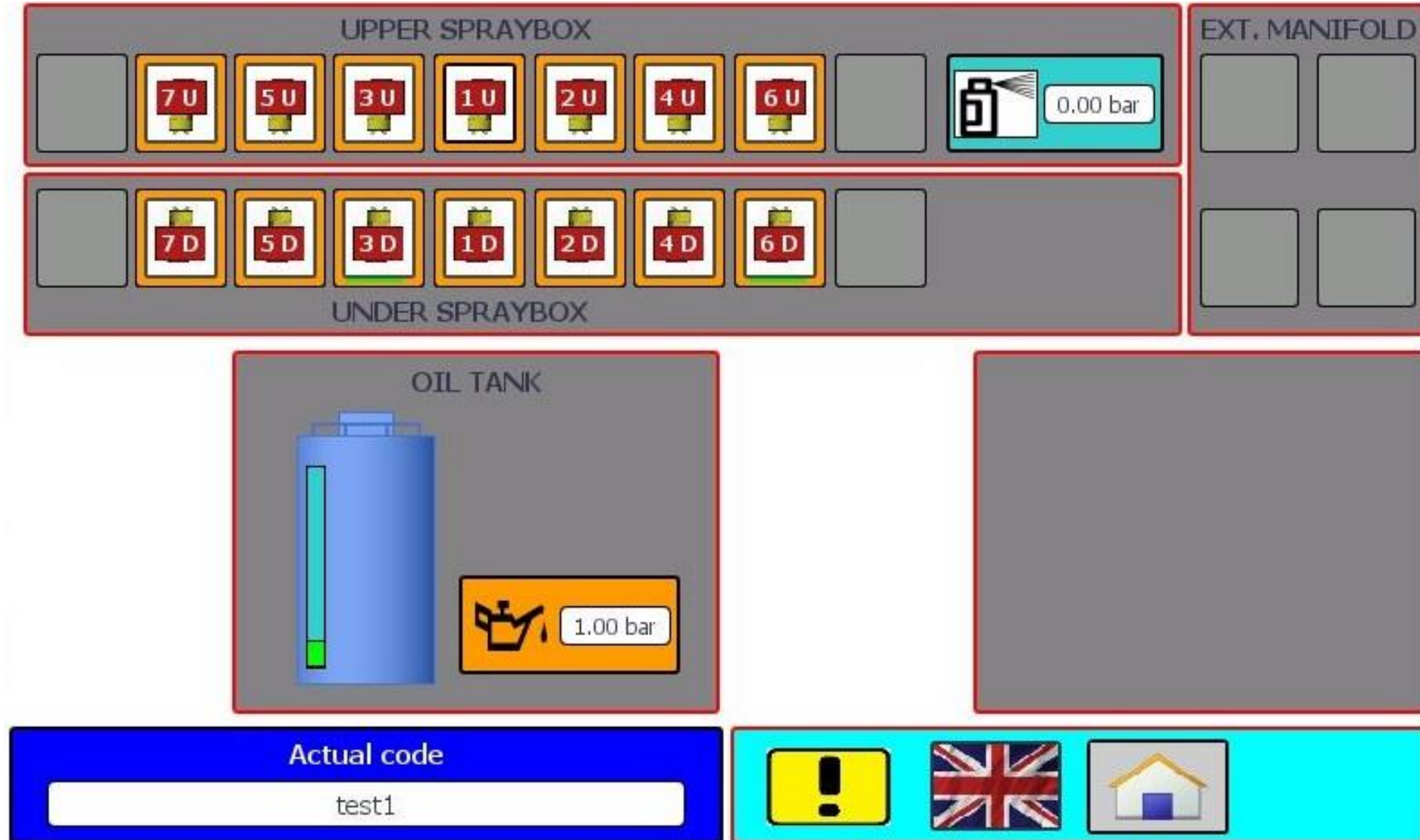


Image 4 – Promax extractable sprayeads

CONTROL BOARD



RECIPES SAVING


Possibility to save specific recipes with the related lubrication parameters, recall them or modify them if necessary

Data Record Name:

test1 ▾

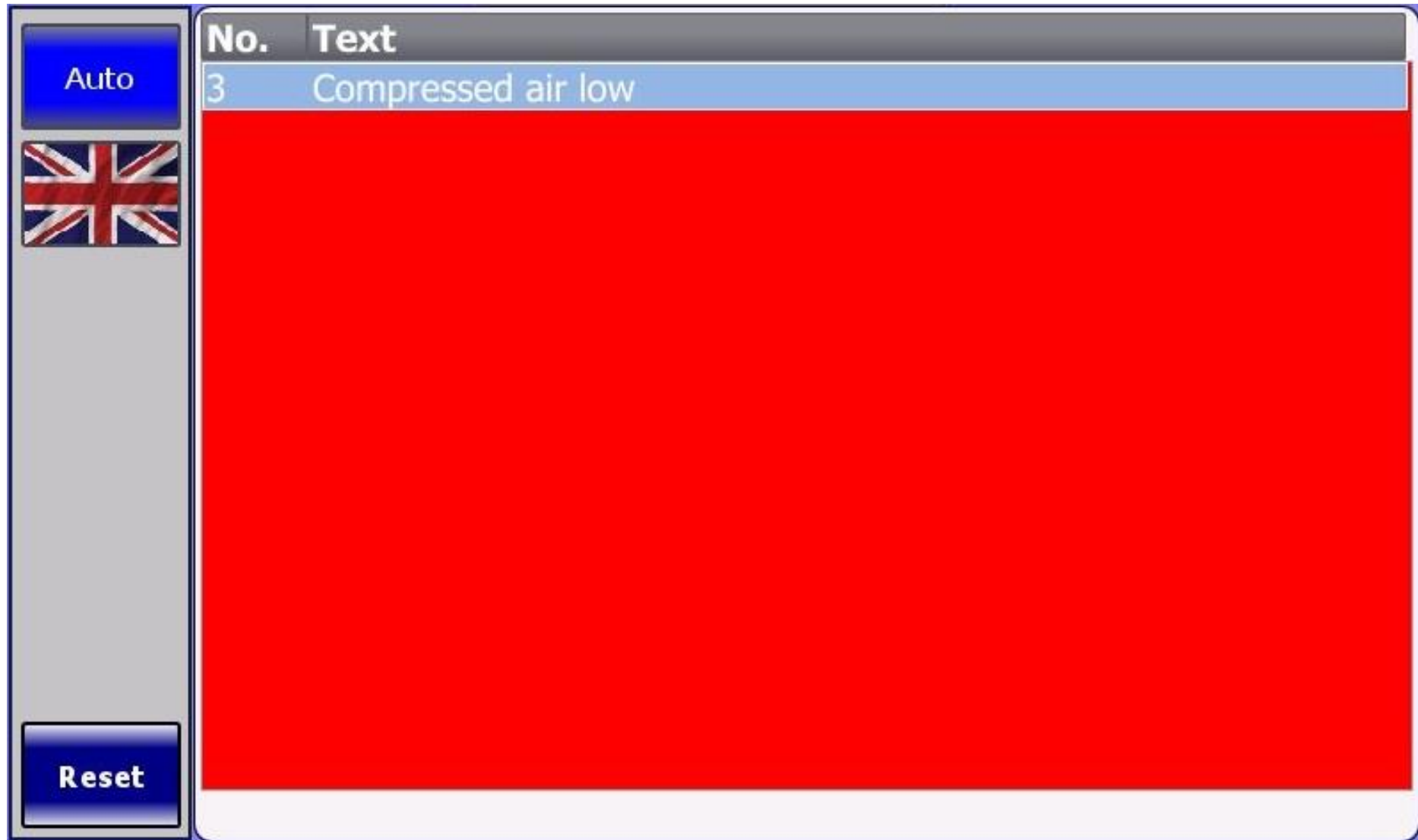
Comparison completed

Change **Save** **Delete** **New** **Call**

 **Auto**

ALARM DIAGNOSTICS

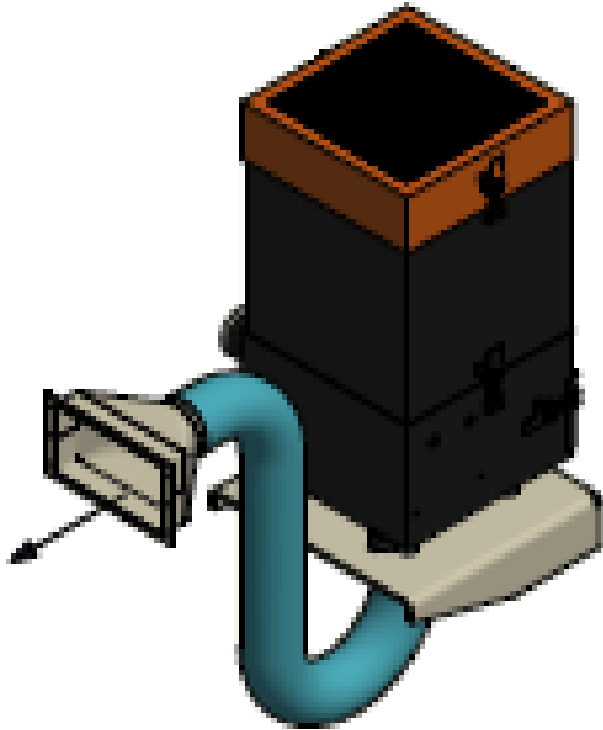
Display of any
alarm and system
malfunctioning
accessible from
the operator
panel



The operator panel display features a vertical sidebar on the left and a main display area on the right. The sidebar contains a blue 'Auto' button at the top, a Union Jack flag icon in the middle, and a blue 'Reset' button at the bottom. The main display area has a header with two columns: 'No.' and 'Text'. Below the header, the first row is highlighted in light blue and contains the text '3' under 'No.' and 'Compressed air low' under 'Text'. The rest of the main display area is a solid red color.

No.	Text
3	Compressed air low

OIL MIST EXTRACTION SYSTEM



To minimize the presence of oil mists on the inside of the spray chamber, as an optional our systems can be provided with an *oil mist extraction system* with *high efficiency filter*.

An *analogic pressure gauge* ensures the *monitoring of the filter lifetime*.

Image 5 - As an optional an Oil Mist Extraction System can be supplied with the machine, in order to reduce oil mists

OIL MANAGEMENT



- The Promax, as well as the other DieTronic systems, are designed to **work with most oil-media** (*pure oils with low, medium and high-viscosity, as well as water-based oils*)
- Besides the standard tank for the first oil, if it is required to handle a second lubricant, **an additional tank** will be provided
- Each tank is supplied with a **visual and an electric oil level indicator**, displayed also on the touch-screen panel

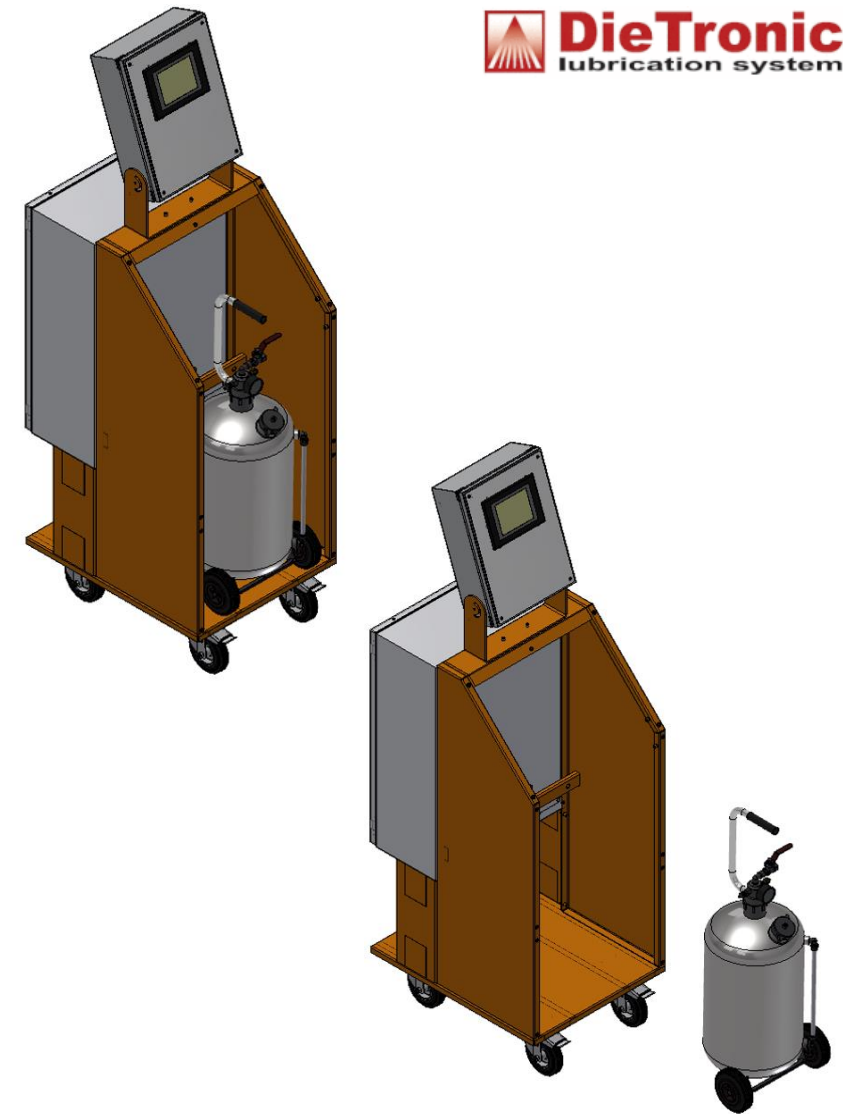
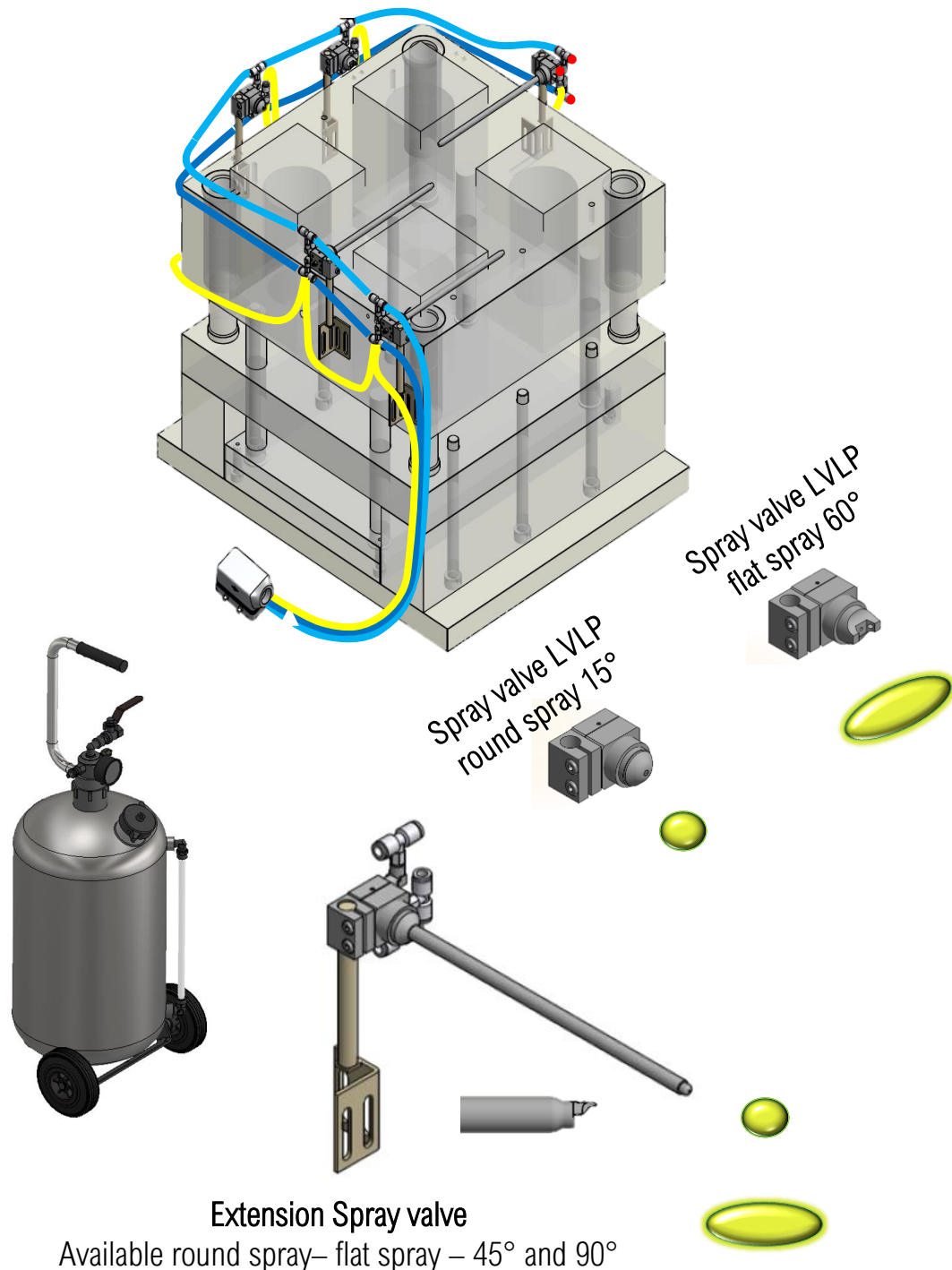


Image 6 - Single and Double Tank configuration according to the number of oils employed

DIE LUBRICATION

(optional)



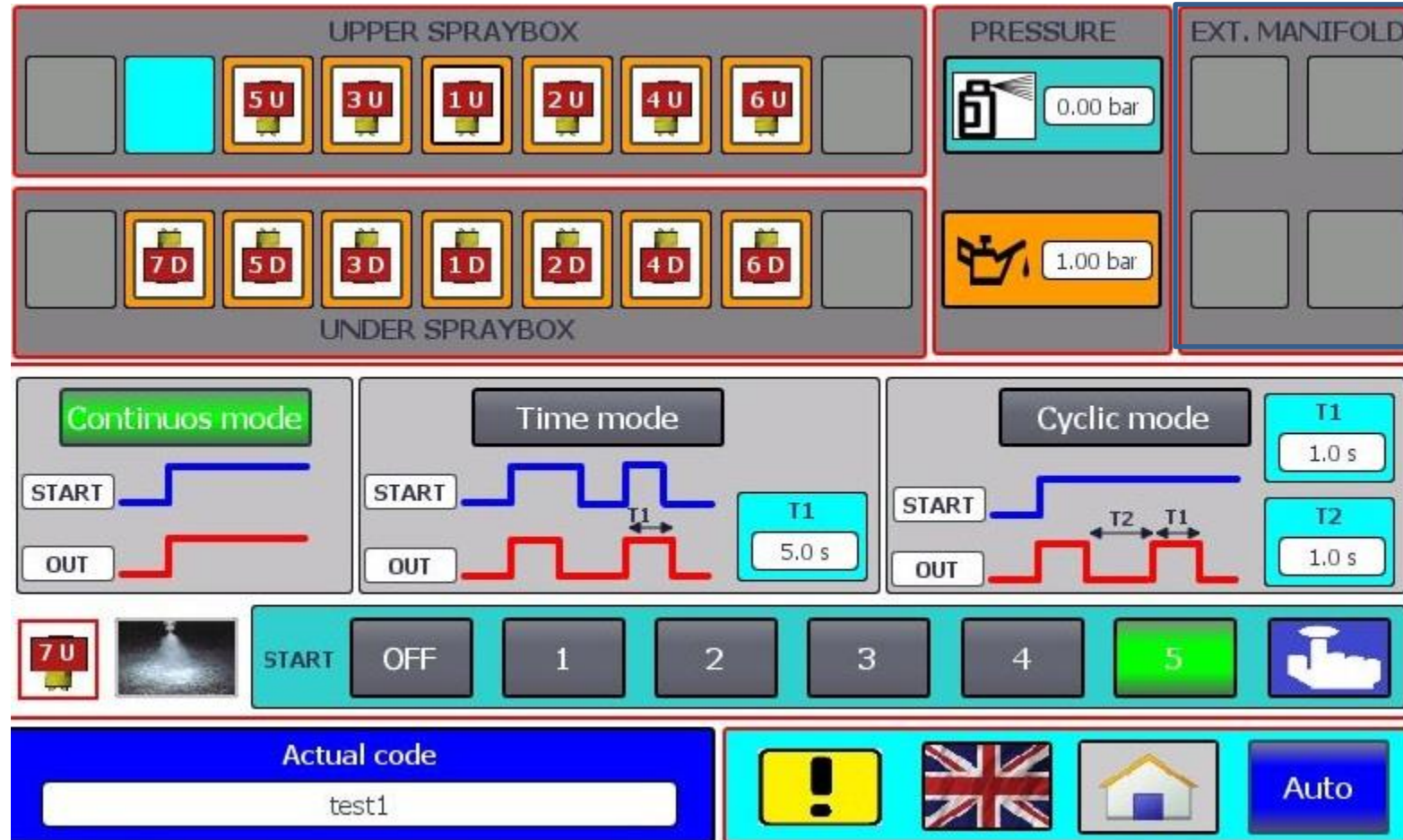
As an optional, the Promax System can also be connected to an additional set of **4 LVLP spray valves** for the re-lubrication of specific points on the die. In this case, the spray valves are connected to an additional tank, while their management is integrated into the Promax control.

It is also possible to use this system separately from the Promax control but the management of the valves for the spraying activation should be integrated into the line by the customer.

The tank is provided with a visual level indicator.

PROMAX DIE CONTROL BOARD

Continuous mode



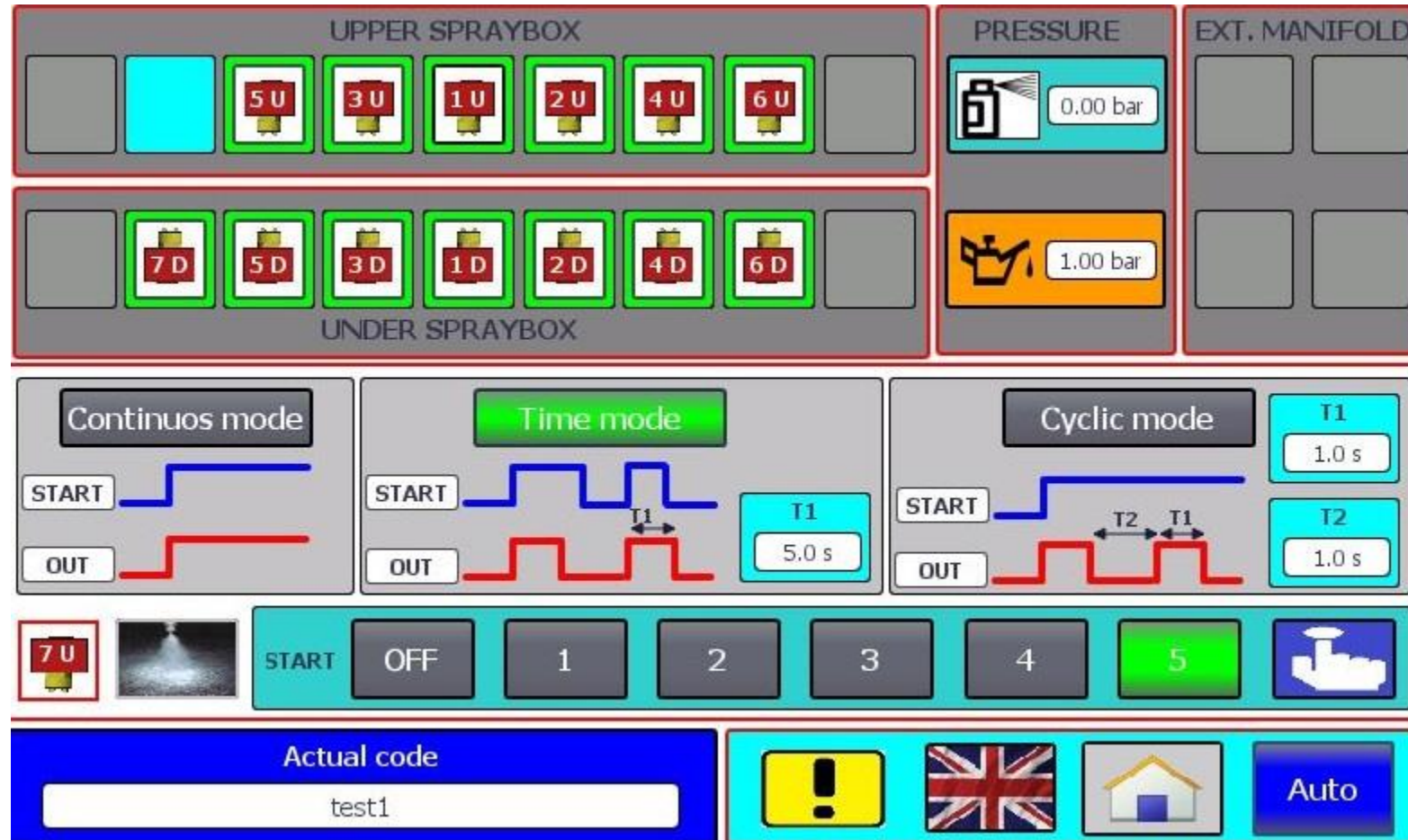
The screenshot displays the control interface for the PROMAX Die Control Board in Continuous mode. The interface is organized into several sections:

- UPPER SPRAYBOX:** A row of seven spray nozzles labeled 5U, 3U, 1U, 2U, 4U, and 6U. The 5U nozzle is currently active, indicated by a cyan light.
- UNDER SPRAYBOX:** A row of seven spray nozzles labeled 7D, 5D, 3D, 1D, 2D, 4D, and 6D.
- PRESSURE:** Two pressure gauges. The top gauge shows 0.00 bar with a spray nozzle icon. The bottom gauge shows 1.00 bar with a crown icon.
- EXT. MANIFOLD:** Two empty rectangular slots.
- Mode Selection:** Three mode buttons: "Continuous mode" (highlighted in green), "Time mode", and "Cyclic mode".
- Timing Diagrams:** Three graphs showing the relationship between START (blue) and OUT (red) signals for each mode. The Continuous mode graph shows a single pulse. The Time mode graph shows a pulse with a duration T1 of 5.0 s. The Cyclic mode graph shows a series of pulses with a cycle time T2 and a pulse width T1 of 1.0 s.
- Control Panel:** A row of buttons including a "7U" nozzle icon, a spray nozzle image, "START", "OFF", and numbered buttons 1 through 5. The "5" button is highlighted in green.
- Actual code:** A blue bar with a white input field containing the text "test1".
- Footer:** A row of four icons: a yellow warning sign, the United Kingdom flag, a house icon, and a blue "Auto" button.

Working mode connected to the external start signal

PROMAX DIE CONTROL BOARD

Time mode



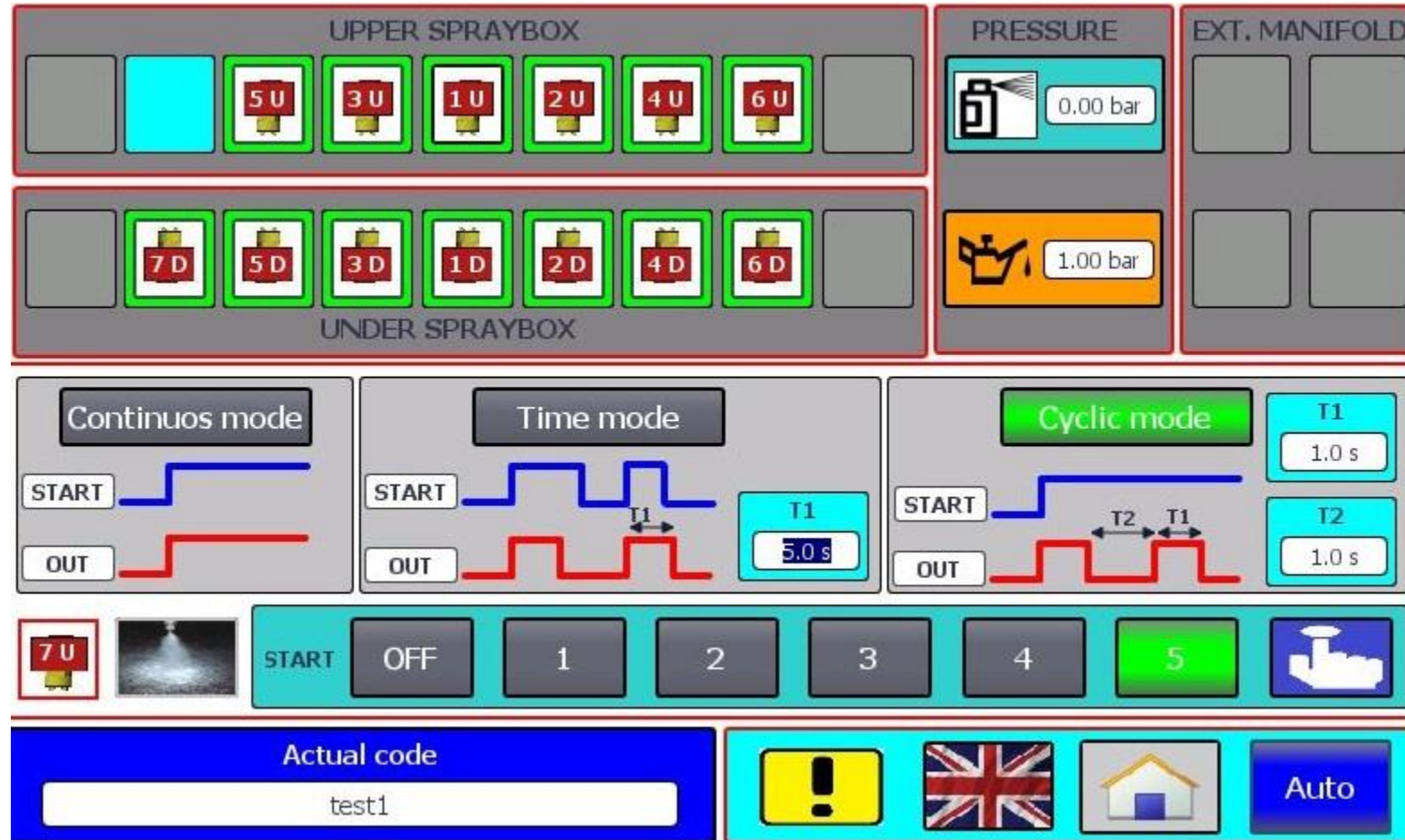
The interface is divided into several sections:

- UPPER SPRAYBOX:** A row of seven nozzle icons labeled 5U, 3U, 1U, 2U, 4U, and 6U. The 5U nozzle is highlighted with a green border.
- UNDER SPRAYBOX:** A row of seven nozzle icons labeled 7D, 5D, 3D, 1D, 2D, 4D, and 6D. The 7D nozzle is highlighted with a green border.
- PRESSURE:** Two pressure readouts. The top one shows 0.00 bar with a spray nozzle icon. The bottom one shows 1.00 bar with a crown icon.
- EXT. MANIFOLD:** Two empty rectangular slots.
- Mode Selection:** Three modes are shown: Continuous mode (grey), Time mode (green, selected), and Cyclic mode (grey). Each mode has a corresponding pulse diagram for START and OUT signals. The Time mode diagram shows a single pulse with duration T1. The Cyclic mode diagram shows a series of pulses with duration T1 and interval T2.
- Timing Parameters:** T1 is set to 1.0 s and T2 is set to 1.0 s.
- Control Panel:** Includes a START button, an OFF button, and numbered buttons 1 through 5. Button 5 is highlighted in green. There is also a spray nozzle icon.
- Actual code:** A blue bar containing the text "Actual code" and a white input field with "test1" entered.
- Footer:** Includes a warning icon (exclamation mark), a UK flag, a home icon, and an "Auto" button.

Working mode set according to the activation and deactivation of the nozzles working cycle

PROMAX DIE CONTROL BOARD

Cyclic mode



The interface is divided into several sections:

- UPPER SPRAYBOX:** A row of seven spray nozzles labeled 5U, 3U, 1U, 2U, 4U, and 6U. Nozzle 5U is highlighted with a green border.
- UNDER SPRAYBOX:** A row of seven spray nozzles labeled 7D, 5D, 3D, 1D, 2D, 4D, and 6D. Nozzle 7D is highlighted with a green border.
- PRESSURE:** Two pressure gauges. The top one shows 0.00 bar with a spray gun icon. The bottom one shows 1.00 bar with a die icon.
- EXT. MANIFOLD:** Two empty rectangular slots.
- Mode Selection:** Three mode buttons: "Continuous mode", "Time mode", and "Cyclic mode". "Cyclic mode" is highlighted in green. Below each mode is a graph showing the START (blue) and OUT (red) signals over time.
- Timing Settings:** Two input fields for timing: "T1" set to 1.0 s and "T2" set to 1.0 s.
- Control Panel:** A row of buttons: "7U" (with nozzle icon), "START" (with spray gun icon), "OFF", and cycle number buttons "1", "2", "3", "4", "5" (with "5" highlighted in green), and a "Home" button (with house icon).
- Footer:** A blue bar containing "Actual code" with a text input field showing "test1", a yellow warning icon, a UK flag, a home icon, and an "Auto" button.

Working mode related to the setting of the spraying time and cycle number

LOCAL TECHNICAL SUPPORT WORLDWIDE



- Our Team is available worldwide for:
- Technical Support
 - Periodical Maintenance Programs
 - Possibility of remote assistance (h24)
 - Spare Parts Stock, completely available in
 - ✓ Italy
 - ✓ US
 - ✓ China
 - ✓ Brazil

References Automotive OEM



General Motors



References Automotive T1 and T2



References Integrators



GÜDEL

SCHULER
Member of the ANDRITZ GROUP

FAGOR



HYUNDAI
Rotem

Nidec
ARISA

MECFOND S.p.A.

CAVENAGHI & RIDOLFI
PRESSE OLEODINAMICHE DAL 1922

IMV PRESSE MECCANICHE
PRESSE



SANGIACOMO
presse

MOSSINI PRESSE

OMERI
Nel mondo, nel tempo

ZANI presse

GALDABINI
1890

NORDA

Hydraulicco

CoilTech
Press Feeding Systems



qs group
Integrated Industrial Automation

saronni s.p.a.

DIGIEMME

ASSERVIMENTI
ALL'IMPRESA

NOVASTILMEC Sp.A.
Coil Processing Equipment

TIMAC
since 1975

References Appliance

FRANKE

B/S/H/

 **Electrolux**

 **Whirlpool**

 **REGINOX**

 **smeg**

 **Indesit**

bticino

 **APELL**
soluzioni inossidabili

 **CM**

ELKAY

AGA RANGEmaster

gorenjegroup
Gorenje GAIO, d.o.o.

Amica

 **arçelik**

VESTEL



📍 Via Madre Teresa di Calcutta 9-13,
Z.I. Malpensata, 26866
Sant'Angelo Lodigiano (LO) – IT

☎ +39 0371 210 129

☎ +39 0371 214 321

✉ sales@dietronic.eu

💻 www.dietronic.eu &
www.tubesurface.com



NUMERO VERDE GRATUITO
800 947 397

NUMERO VERDE GRATUITO
+39 0371 070075

THANK YOU FOR YOUR ATTENTION