AIRTECT

Plastic Leak Alarm System

DETECT YOUR NOZZLE AND HOT RUNNER LEAKS EARLY!

Plastic Leak Detection Solutions Supplied by:

PLASSTEZE

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Tel: 011-43738825 HP: +91-9810299598
email: plassteze@plassteze.com URL: www.Plassteze.com

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WHAT IS AIRTECT?

The AIRTECT Plastic Leak Alarm System is a unique device which assists in preventing damage caused by leaking molten plastics material at the main IMM Injection Nozzle and also within Hot Runner Moulds.

Tiny volumes of low pressure air are supplied through Stainless Steel and Silicone Rubber Sensor Tubes and when the airflow is restricted or stopped, electronic flow sensors combined with embedded micro-controllers indicate this. The systems are 'auto-tuning' to cater for all IMM machine and Hot-Runner Mould sizes. Various programmable operational settings allow the systems to be set for optimal customer performance.

It is being used worldwide by many well known companies such as IAC, VALEO, MAGNA, BD, HELLA, POLYPIPE…and many more.

AIRTECT Products are designed and manufactured in Ireland, sold and supported worldwide

IAC International Automotive Components

Valeo

LINPAC

Polypipe

HELLA Technology with Vision

GRUPO ANTOLIN

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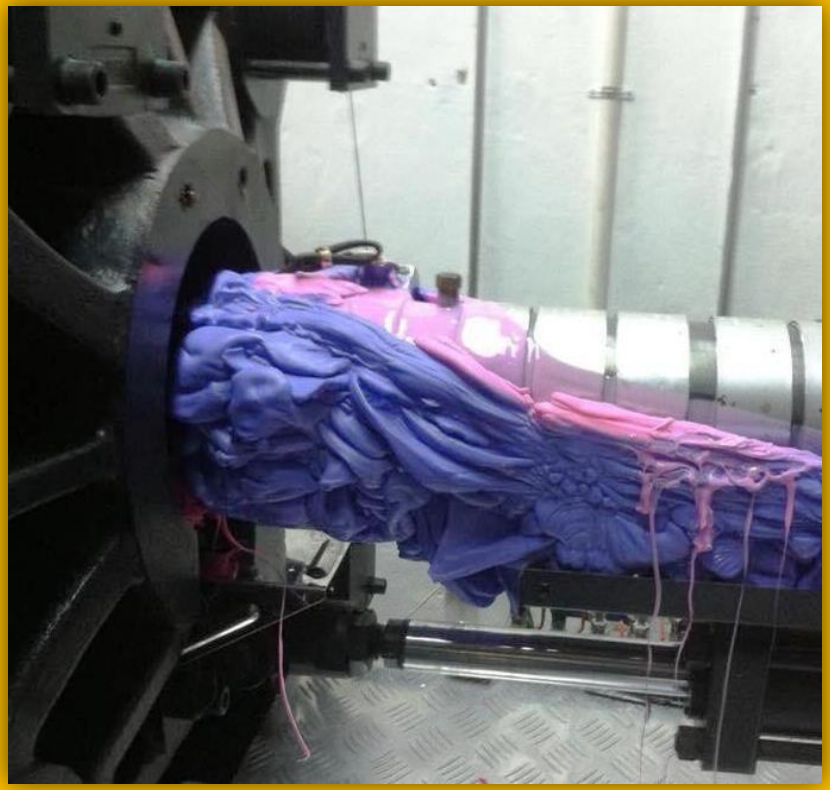
WHY USE AIRTECT?

Because of an industry wide problem…..Leaks of molten Plastic Material at the Main Injection Nozzle and within Hot Runner Moulds:



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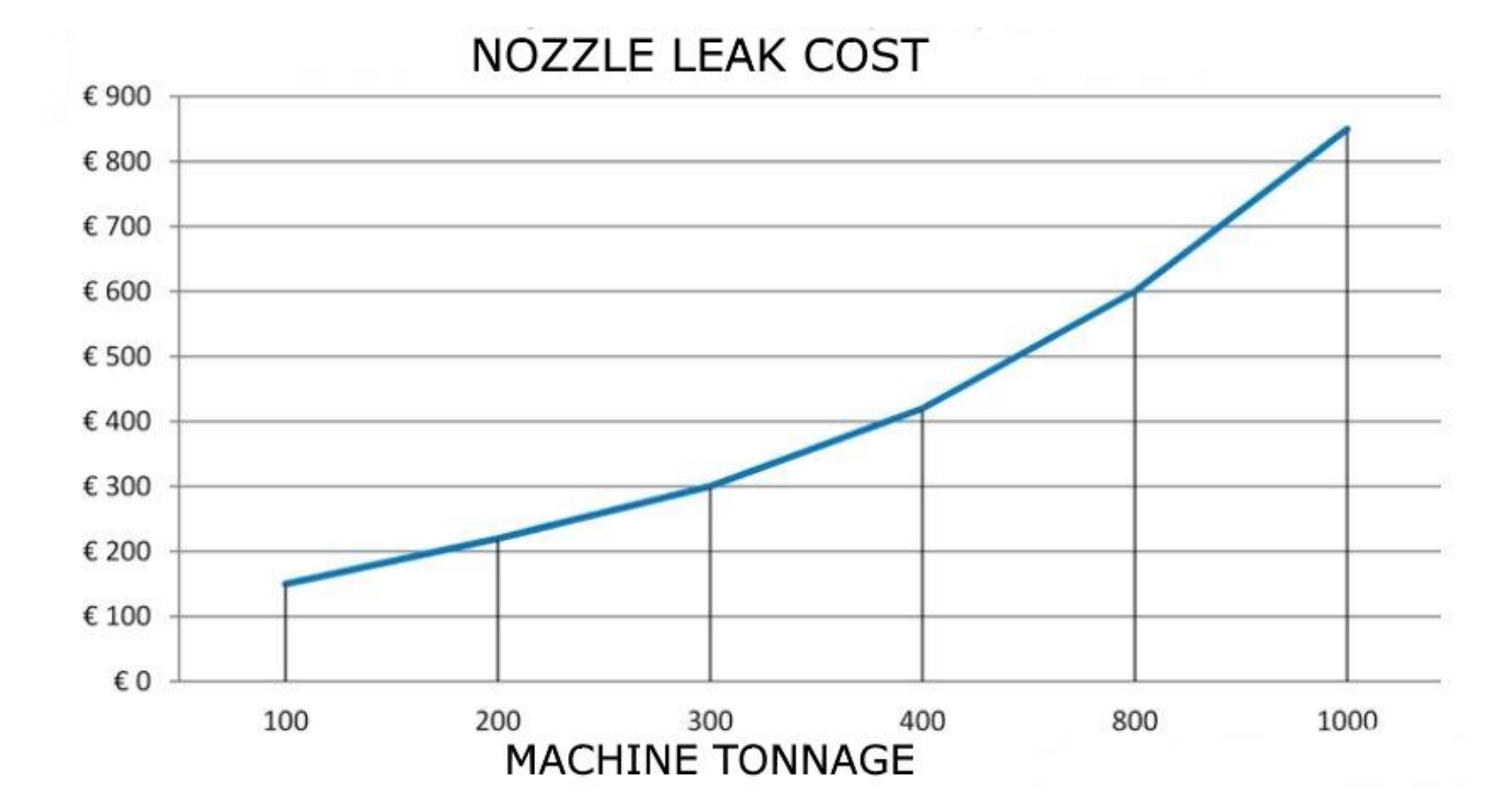
WHY USE AIRTECT?

Typical cost of a Nozzle Leak



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BECAUSE OF THIS!

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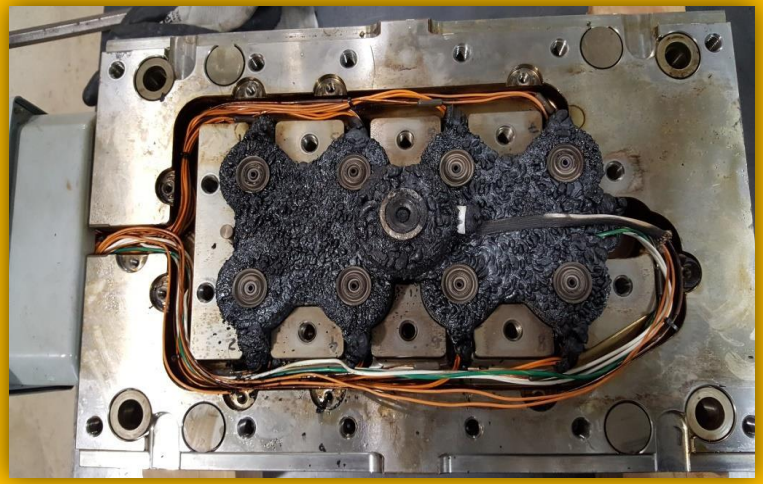
AND THIS…..!



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IS THERE ANY SOLUTION? TRY THESE ☺

A PROVEN EFFECTIVE SOLUTION TO REDUCE THE DAMAGE AND COST OF THESE LEAKS…..

LA500

Nozzle Leak Detection + Control/Display Module

LM2050

Nozzle Leak Detection + Control/Display Module

- Nozzle and Barrel Protection ☺
- Significantly Reduced Budget for Maintenance Items ☺
- Increased Health and Safety ☺
- Reduced Downtime ☺
- Peace of Mind for Unattended Machines ☺

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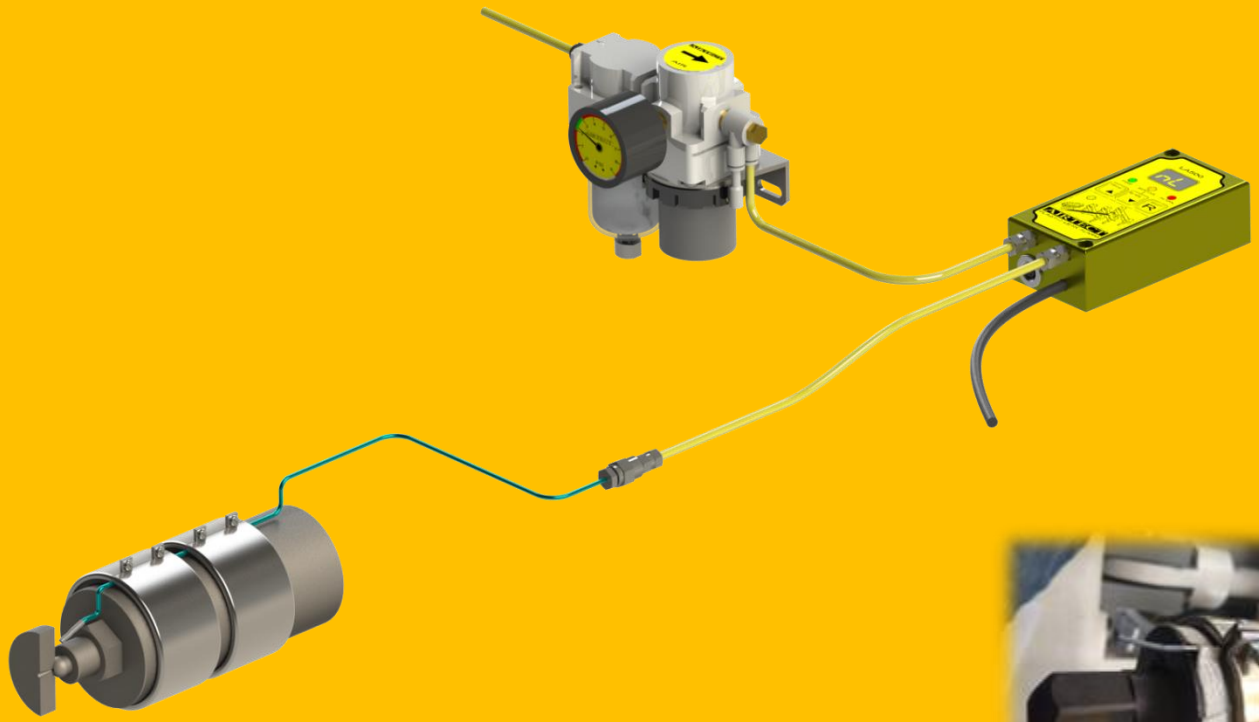
LA501 INSTALLATION

(for nozzle only leak detection)



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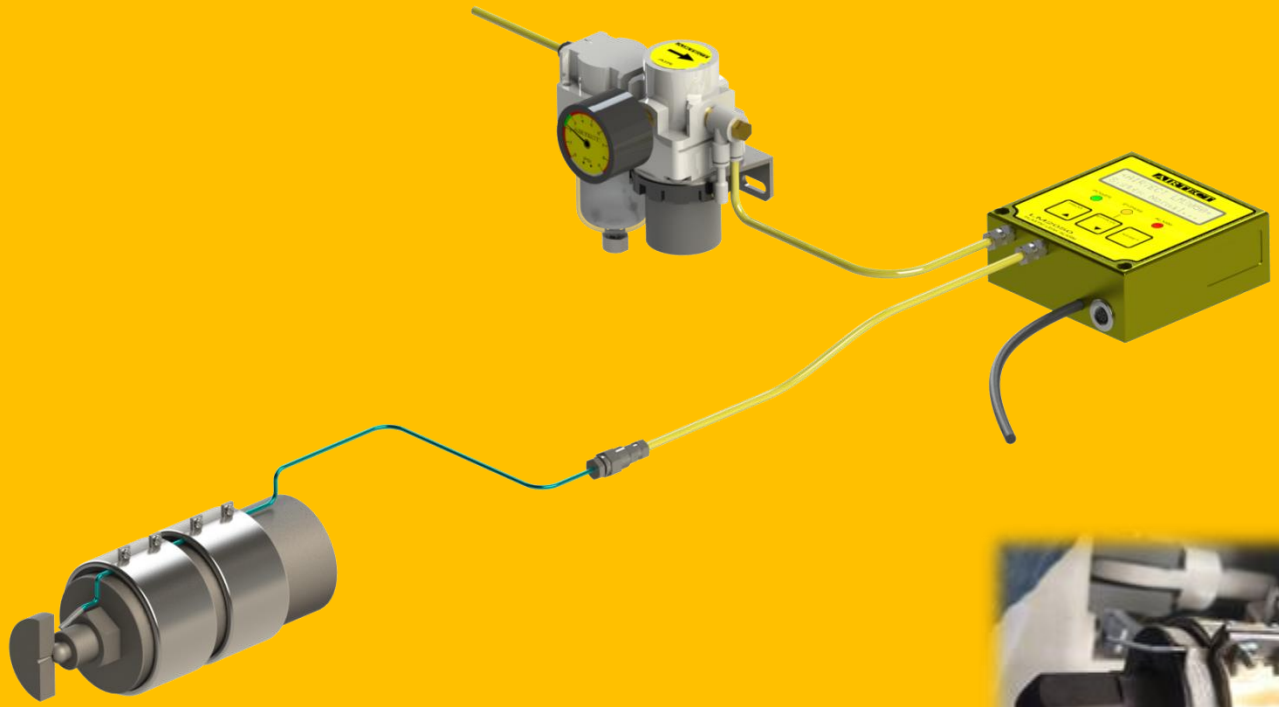
LM2050 INSTALLATION

(for nozzle only leak detection)



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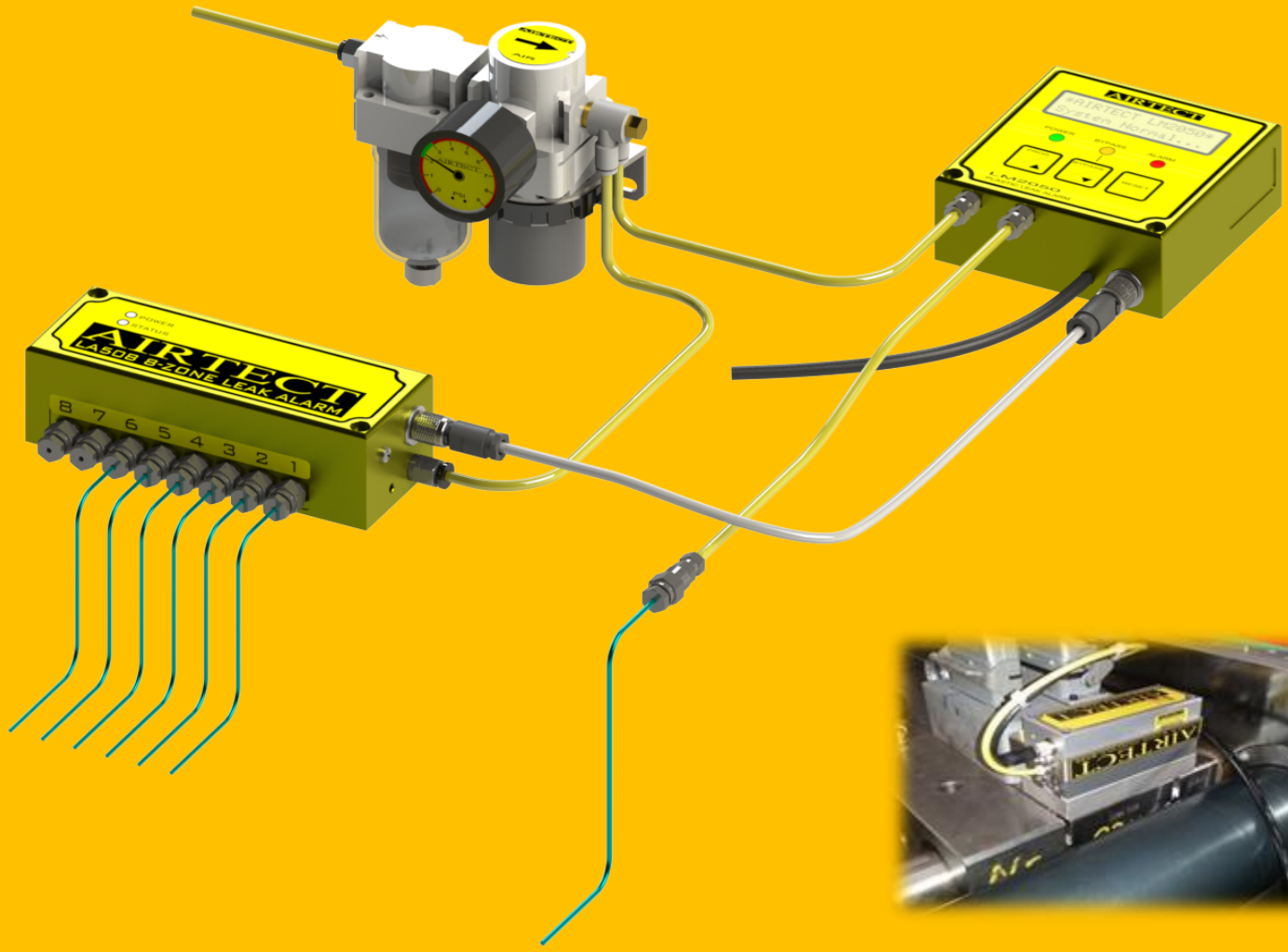
LM2050 INSTALLATION

(single nozzle and 8-zone leak detection)



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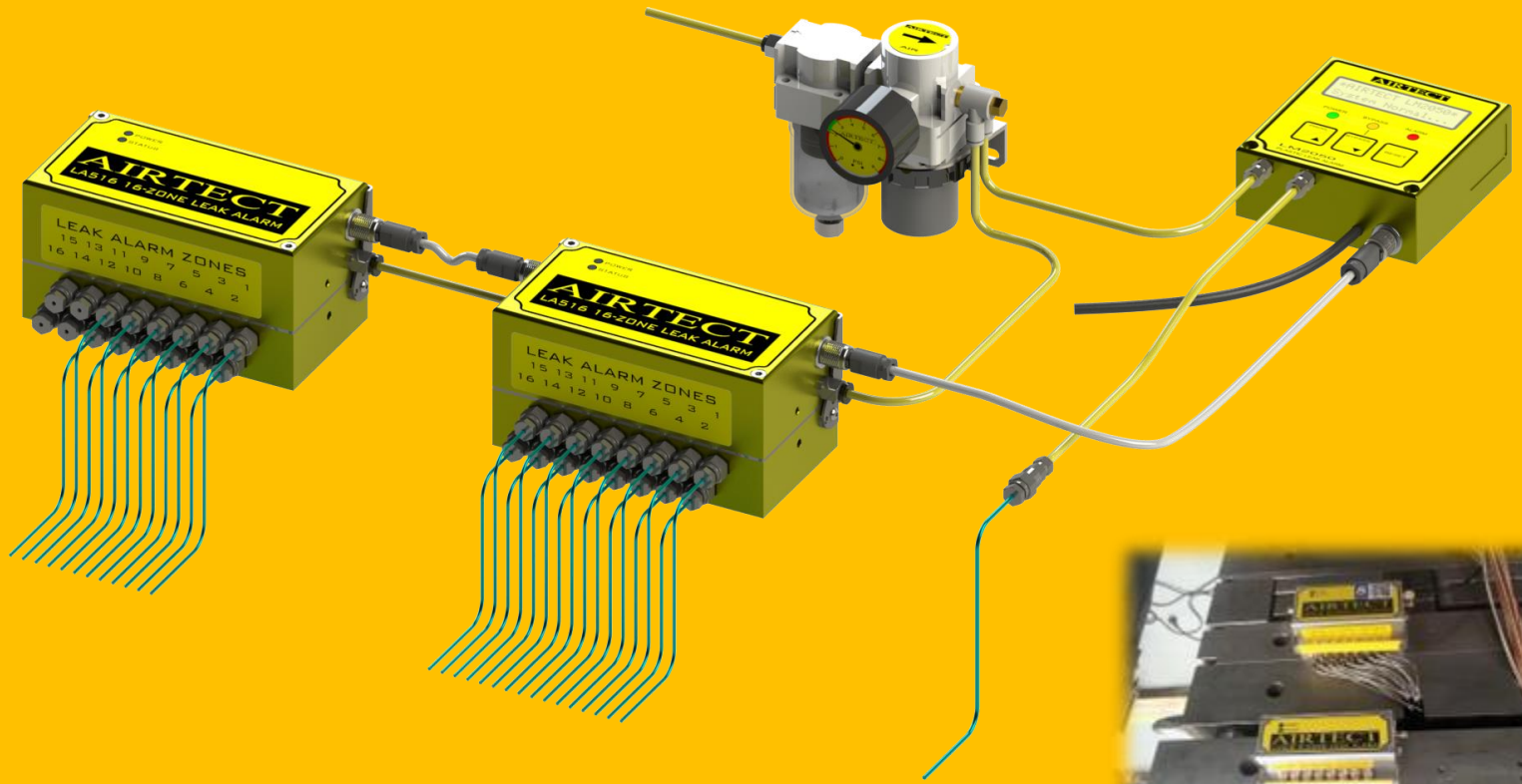
LM2050 INSTALLATION

(single nozzle and 28-zone leak detection)



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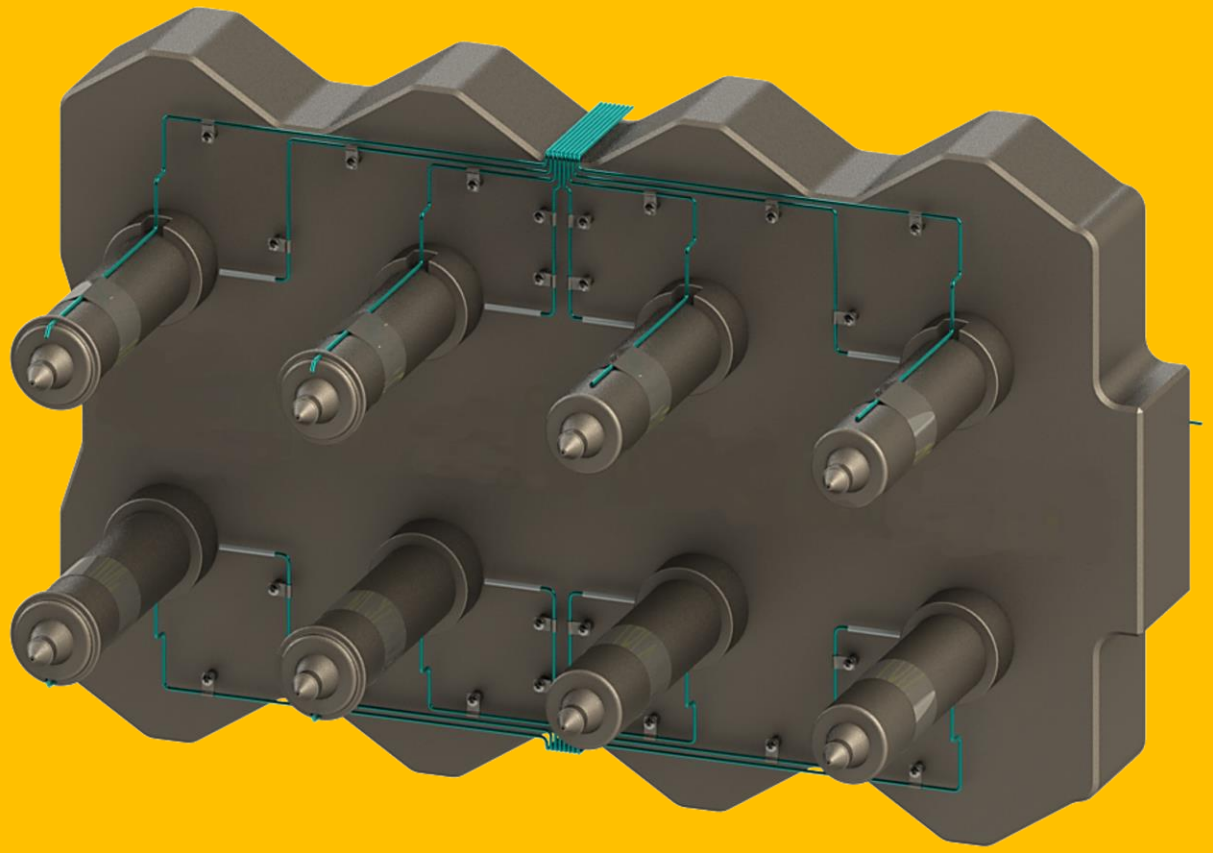
SENSOR TUBE INSTALLATION RECOMMENDATIONS



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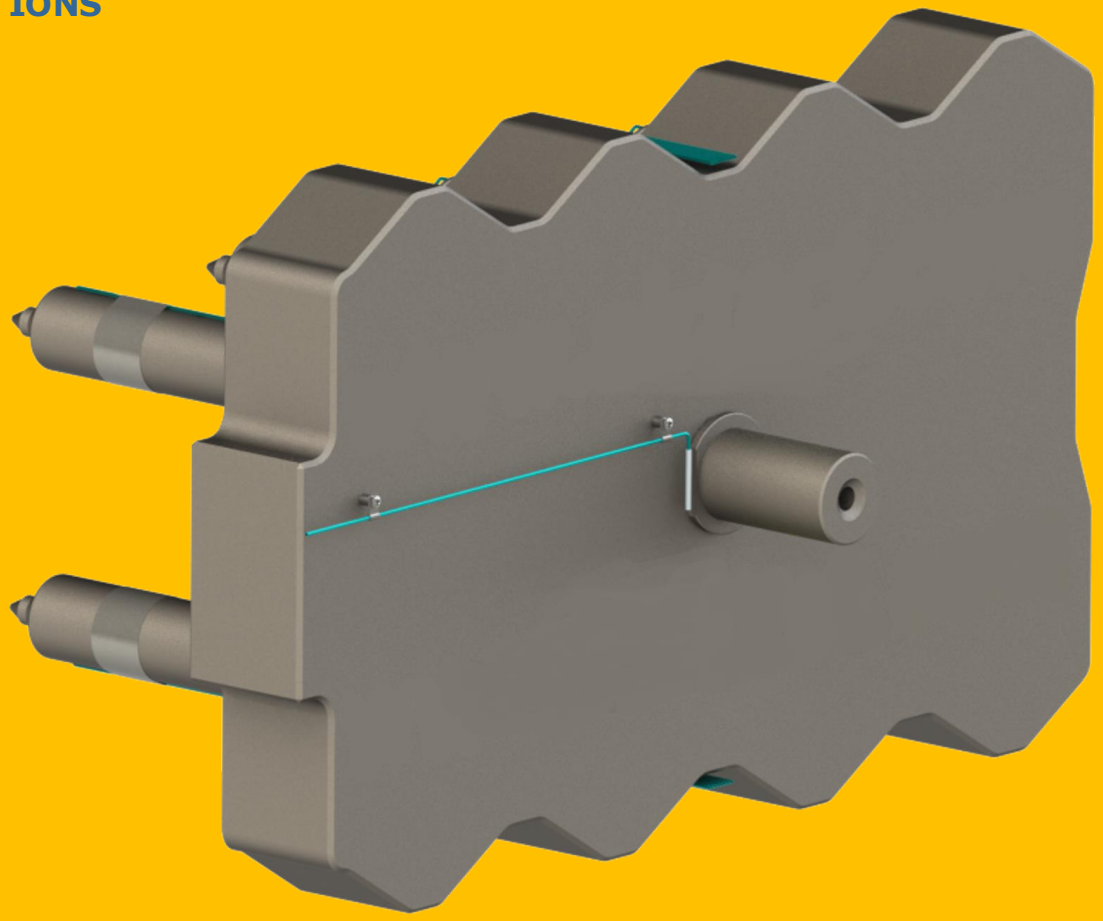

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MULTI-ZONE LEAK DETECTION MANIFOLDS ARE AVAILABLE AS 'STANDARD' OR 'STAND-ALONE' UNUITS

'STANDARD' MANIFOLD ADVANTAGES (CONNECTED TO LA500 or LM2050)

- PROGRAMMABLE FUNCTIONS INCLUDE LEAK REPORTING AND INTERLOCK RELAY DELAY TIMERS, MANIFOLD TEMPERATURE ETC
- MULTIPLE MANIFOLD CONNECTION SYSTEMS (DAISY CHAIN).
- PROVIDE LEAK DETECTION AT MAIN INJECTION NOZZLE

'STAND-ALONE' MANIFOLD ADVANTAGES

- LOW COST ALTERMATIVE WITH INTEGRAL CONTROL UNIT
- LEAK LOCATION DISPLAYED ON MANIFOLD
- FIXED 10 SECOND INTERLOCK RELAY DELAY TIMER
- AVAILABLE IN FIXED OR MODULAR UNITS, SAME AS ABOVE.
- AUTO-RESET OF ALARMS
- SAME ELECTRICAL CONNECTIONS AS LA500/LM2050
- NO PCC CABLES

NOTE: THESE UNITS CANNOT BE EXPANDED (DAISY CHAINED)

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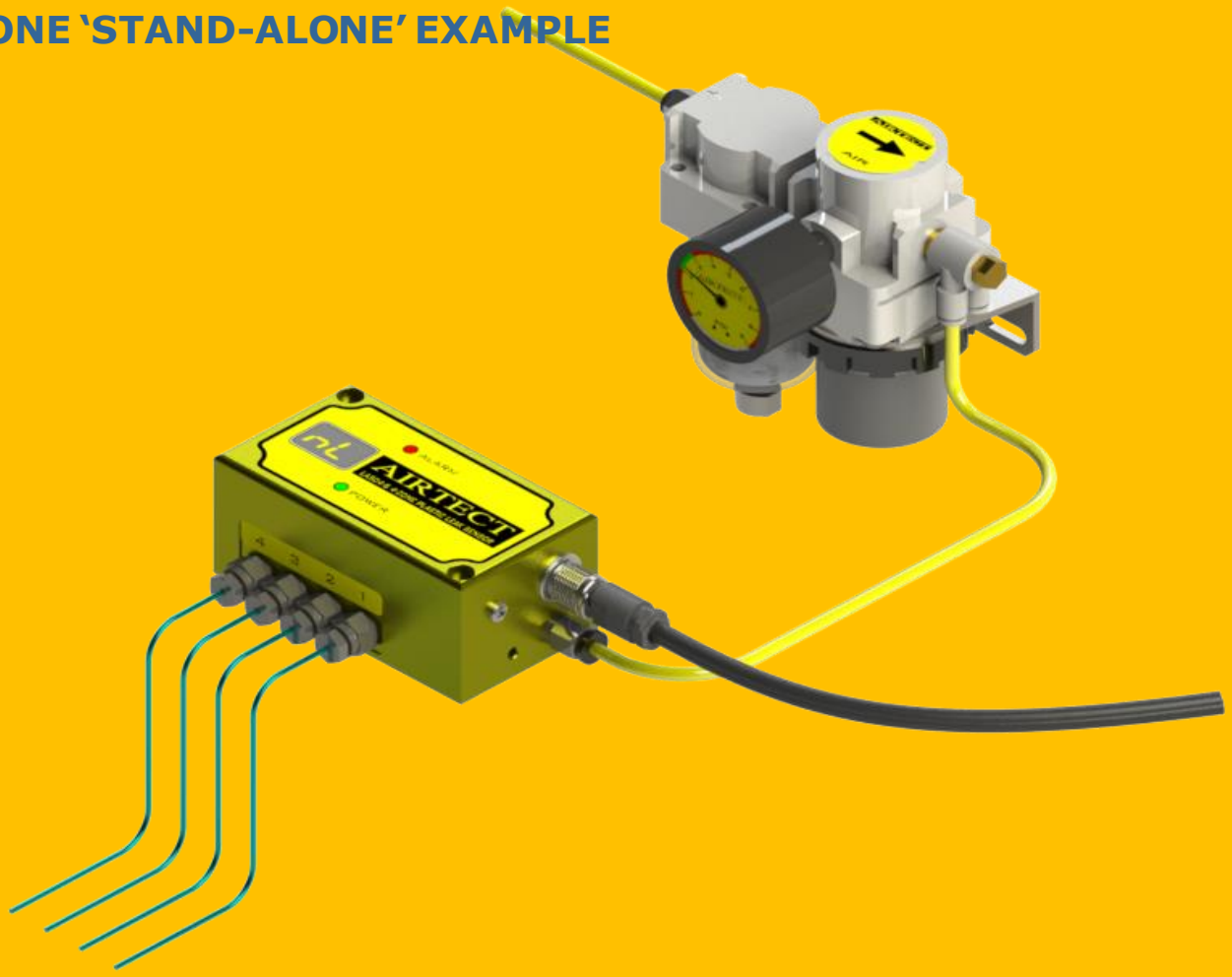
LA504S 4-ZONE 'STAND-ALONE' EXAMPLE



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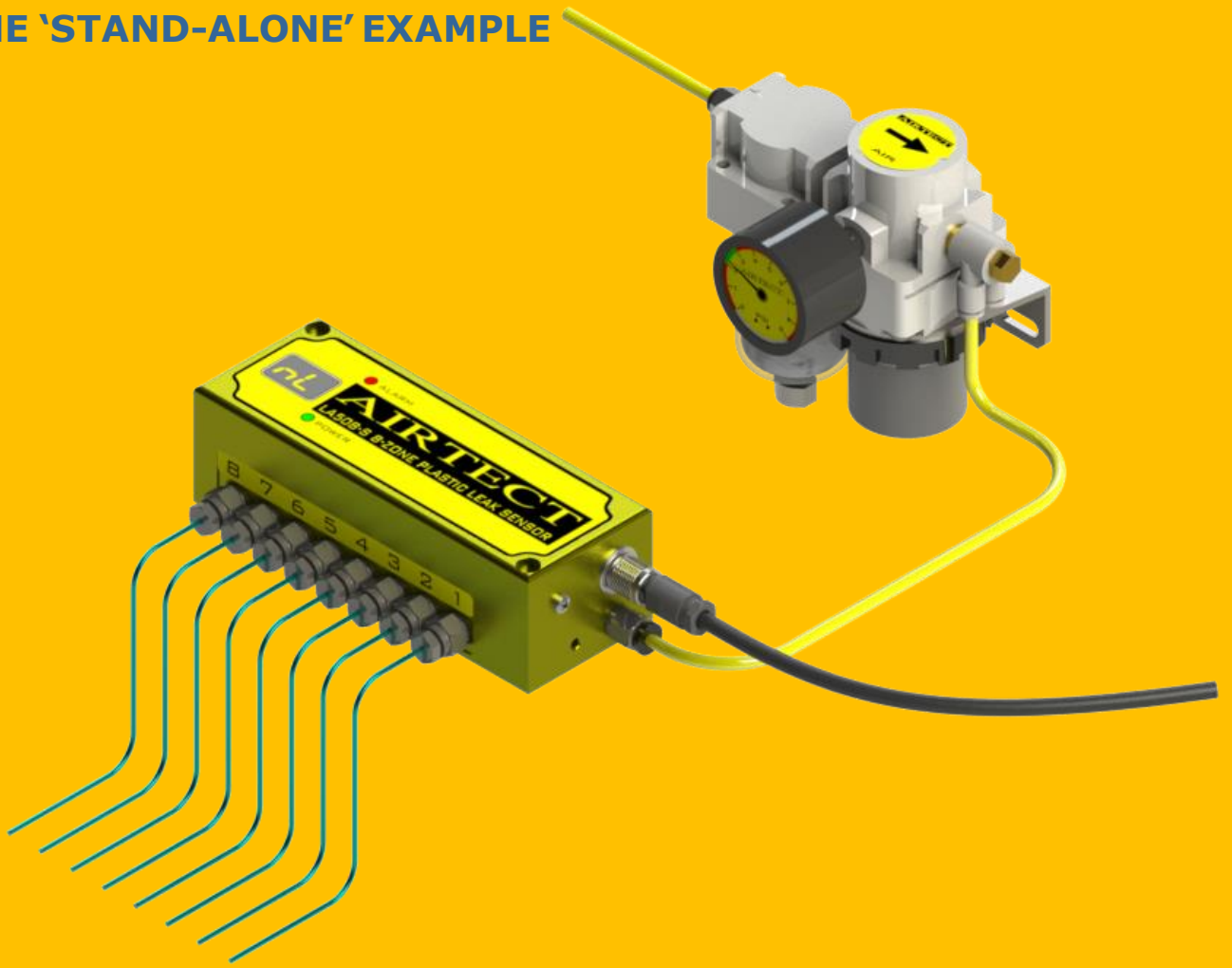
LA508S 8-ZONE 'STAND-ALONE' EXAMPLE



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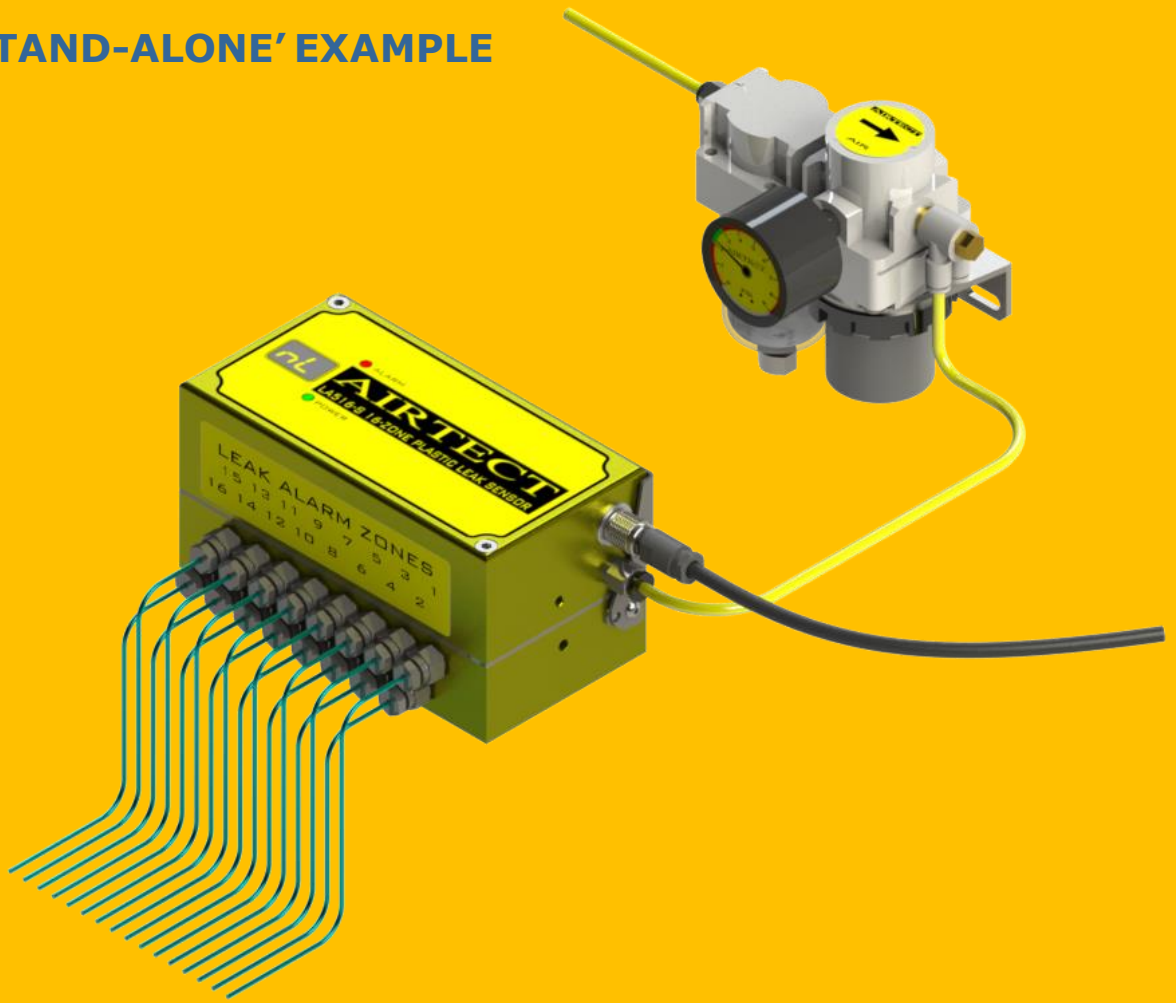
LA516S-M-S 16-ZONE 'STAND-ALONE' EXAMPLE



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NEW! ULTIMATE RANGE OF DETECTION MANIFOLDS

- New ULTIMATE range of Leak Detection Manifolds incorporate POINT Leak Detection Zones + LOOP Leak Detection Zones in the one Manifold ☺.
- POINT Leak Detection Zones are used for detection of leaking plastic at the Nozzle Gates ☺.
- LOOP Leak Detection Zones are used for detection of leaking plastic at numerous locations on the Hot Runner Manifold ☺.
- LOOP Leak Detection is provided when the Silicone Rubber tubes are Compressed OR Broken due to full circuit design ☺.
- Available in 3 Manifold Sizes. See Later.
- Available as Stand-Alone Manifolds ☺.
- Patent Pending ☺.

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ULTIMATE Plastic Leak Alarm System

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LA506-1L-S ULTIMATE LEAK DETECTION MANIFOLD

(6-POINT + 1 LOOP FIXED STAND-ALONE TYPE SHOWN)

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ULTIMATE Plastic Leak Alarm System

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LA512-2L-S ULTIMATE LEAK DETECTION MANIFOLD

(12-POINT+ 2 LOOP STAND-ALONE MODULAR S-TYPE SHOWN)

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LA520-2L-S ULTIMATE LEAK DETECTION MANIFOLD

(20-POINT+ 2 LOOP STAND-ALONE MODULAR S-TYPE SHOWN)

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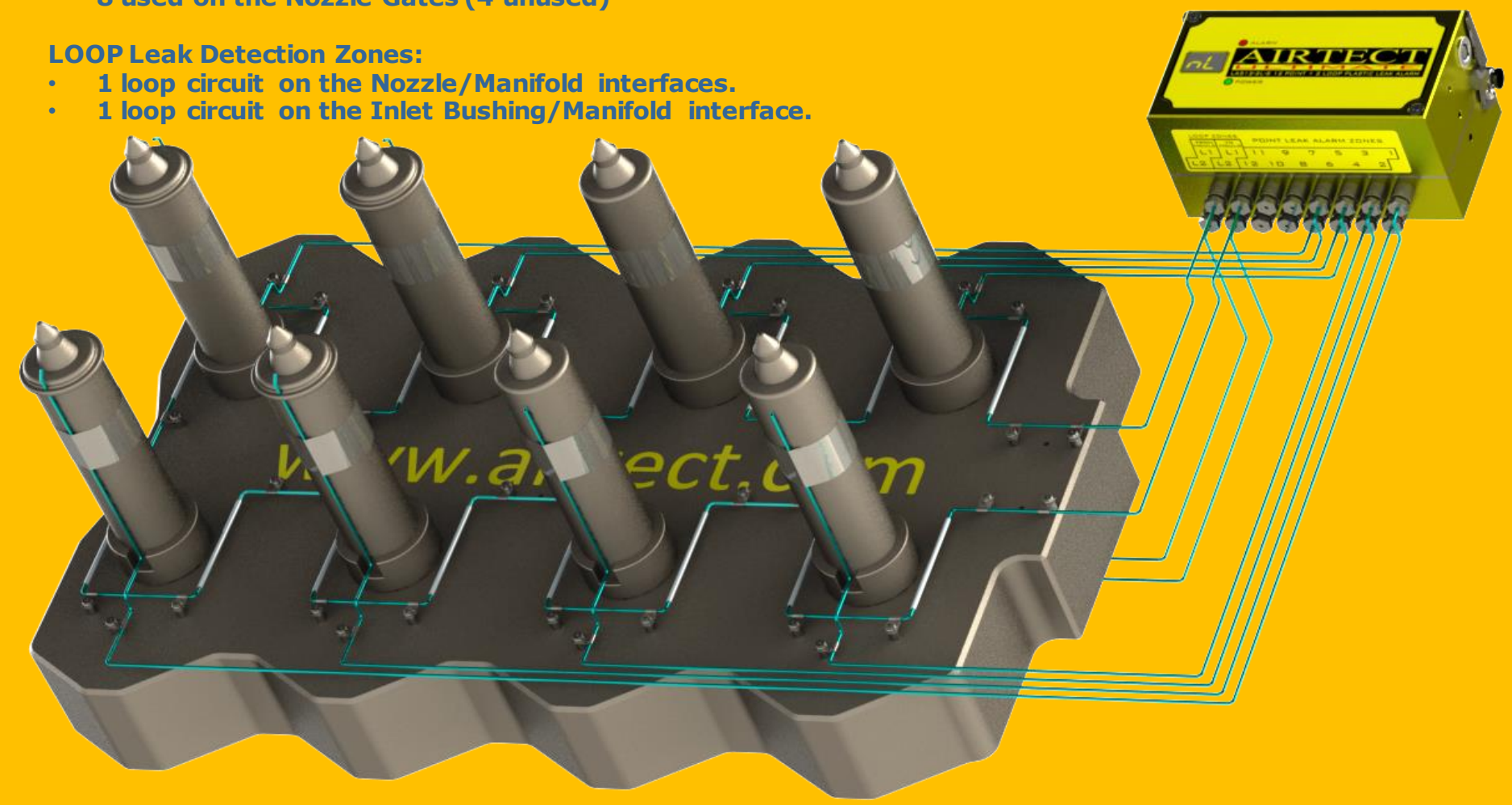
INSTALLATION EXAMPLE USING LA512-2L-S ULTIMATE STAND ALONE MANIFOLD

POINT Leak Detection Zones:

- 8 used on the Nozzle Gates (4 unused)

LOOP Leak Detection Zones:

- 1 loop circuit on the Nozzle/Manifold interfaces.
- 1 loop circuit on the Inlet Bushing/Manifold interface.



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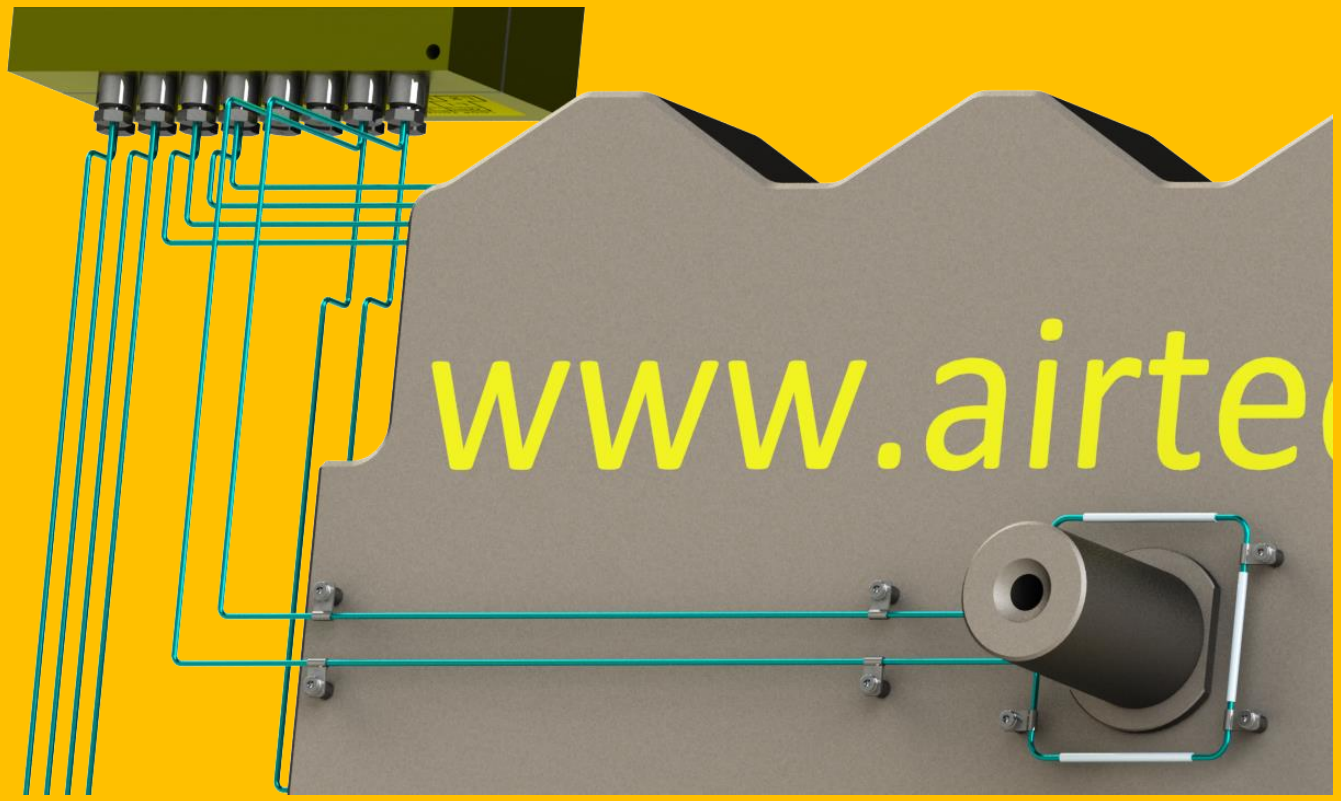

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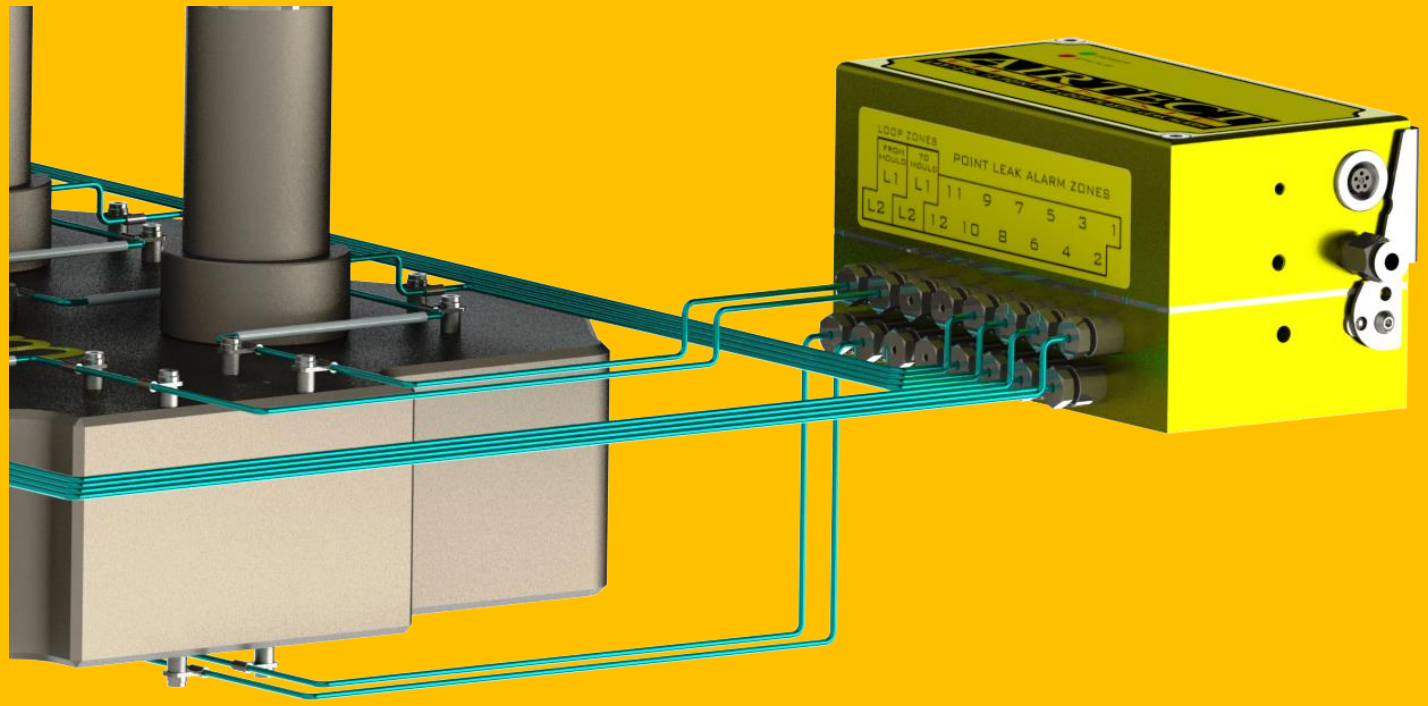

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FREQUENTLY ASKED QUESTIONS

- **Q: How much compressed air is used?**
  A: 0.05 Litres per minute per sensor of compressed air at 2PSI.

- **Q: What is the difference between the LA500 and LM2050.**
  A: There is no functional difference. Only the Clear Text LCD display with multiple language options.

- **Q: How much DC power is required?**
  A: 24Vdc @ 150mA average for LM2050 + LA508. Please note the DC power Source must be free from Electromagnetic Interference (EMI), caused by many devices such a solenoid valves, servo motors etc working on the sale DC power line. Good electrical practice will eliminate all potential problems.

- **Q: How long can the stainless steel sensor tubes be?**
  A: The design is for a maximum of about 5 meters.

- **Q: What is the minimum bend radius for the stainless steel tubes without affecting air flow?**
  A: R1.6mm for the 1.6mm diameter tube and R2 for the 2mm diameter tube.

- **Q: Where is the Silicone Rubber tube used?**
  A: At the end of the stainless steel sensor tube at the main injection nozzle. It is also used within a Hot Runner mould where the temperature is less than 270°C.