## **ProfieSolutions** LEAK DETECTION + AUTOMATION TECHNOLOGY CATALOGUE



Precision Leak Testers for Plastic Containers from 10ml to 1000L

## World leading leak detection Automation Technology

Accurate

Repeatable

**Instant Information** 

Multi-heads

**Fully Adjustable** 

# WORLD'S FASTEST

## Ultra High speed >14,500 per hour

Speed with no sacrifice in accuracy, find holes thou inch (0.18mm) at rated speeds



2LD Entry Level 3600+ per hour



4LD Medium Speedmaster 4500+ per hour



## High Reliability

## **Many Options**

## **Plus More**

Vision Systems Bottle Packing & Palletising Angled Neck





**30LD** Large Container Tester 3500+ per hour



**CONVEYOR SIDE TRANSFER KITS** To suit all configurations

**250LD** manual or fully auto

**WE BUILD CUSTOM TESTERS** 

AND AUTOMATION TO SUIT

**YOUR REQUIREMENTS** 



Am

**MULTI-HEAD** Amazing multi-head machine with up to 7 test heads



**IBC** 

Travelling Heads & Wheel Spacers for speeds > 45,000 per hour





#### CAN YOU AFFORD NOT TO HAVE BOTTLE LEAK DETECTION?

In an increasingly competitive bottle production market, ensuring the quality of your final product is absolutely vital. By rejecting leaking bottles at the point of manufacture, you can ensure that your clients do not become your de facto testers and ex-clients. Our test rates are the fastest in the industry without any compromise to quality to easily find holes as small as 0.18mm.

#### **DEDICATED DESIGN**

Rather than using a generic controller, our proprietary electronic controller is designed specifically for bottle leak detection. Coupled with our ongoing commitment to technical improvement and innovation, this has ensured that our range of leak detectors remains at the forefront of leak detection technology. The color LCD display allows total control of all features and settings with real time feedback of critical process values enables total control and confidence that your product is leak free.



#### ACCURATE

Even at high-speed test rates, our leak detectors will comfortably find holes as small as 0.18mm. Even far smaller holes may be found by using increased test times.

#### FULLY ADJUSTABLE FULLY CUSTOMIZED

Every Profile Solutions leak detector is fully adjustable for a wide range of bottles and production situations. Bottles from 50ml to 6L can be tested on a standard machine. Our modular conveyor design ensures that virtually any conveyor configuration can be easily accommodated. Every machine is built to be integrated into your existing production lines.

#### **EASY TO USE**

Advanced features such as **"Auto Tune"** and **"Self-Test"** are standard on our 6LD flagship leak tester and optional on our other leak testers the take the hard work out of setting up and fine tuning. This minimises the setup time when changing bottle lines. Intuitive controls and simple adjustments dramatically reduce staff training times.

#### **OPTIONS OPTIONS OPTIONS**

Some of our more popular options include:

- Self-Test to ensure your leak tester continues to perform, guaranteeing your production is leak free.
- Test heads diameters from 25mm to 300mm to cater for all bottle neck openings.
- Inclusions heads for checking blocked necks.
- Conveyor lengths made to suit your application.
- Side transfer kits to allow trouble free transfer of bottles to and from our leak tester.
- 90-degree conveyors.
- Fallen bottle detection under head and/or remote location.
- Round drum orientation.
- Handle flash detection.
- Angled neck bottles single and multi-head.
- Upstream gate and downstream jam control.
- Height adjustable conveyors. [See summary page for specific details]
- We can also supply collating tables, CNC bottle palletisers, box diverters and bottle weighing systems.
- Bottle conveyors system using Profileflex modular conveyor system.
- Bung inserter with servo torque control and positioning.
- 4-6-30LD controllers have a background PLC for using spare I/O for other functions.
- RS 485 or Ethernet communication for production and statistical reporting.
- Vacuum conveyors to handle unstable bottles to get the fastest test rate using our leading testing technology.

# Single Head Model Summary

LEAK DETECTION + AUTOMATION TECHNOLOGY

	Profile	2LD+ Now Upgraded	4LD Now Upgraded	6LD	6LD Vacuum Conveyor	30LD
Solutions Inc.		N. A.	-			······································
Test Rates – Bottle per hour	Bottle Size Range	30mL–10L	30mL–6L	30mL-6L	30mL–6L	2L–30L
	Max Bottle/Hr on a single head	Up to 3600+	Up to 4500+	Up to 9500+	Up to > 14500 or 17000 <sup>(4)</sup>	Up to 3500+
	Max speed Up to 150mL*	To 3600+	To 4500+	To 9500	Up to >14500	N/A
	250-300mL	1900–3650	2900–4500	4500–6000	7000–11300+	N/A
	500mL	1500–2400	2700–3800	4000–5800	5000–7500	N/A
	1L	1100–1450	1800–2500	2500–4000	3000–5200	2500–3500
	2L	1100	1350–1500	1700–2050	1900–2200	1500–2000
	4-6L (See note 3)	380–500	450–650	500–750	700–1000	400–750
	10L (See note 3)	300–400	N/A	N/A	N/A	300–500
	15-20L (See note 3)	N/A	N/A	N/A	N/A	150–300
	25-30L (See note 3)	N/A	N/A	N/A	N/A	120–160
Features	Standard Length Conveyor (mm)	1150	1200	1200	1500	1200
	Custom Length Conveyor (mm)	850 (min)	850 (min)	850 (min)	1500 (min)	1200 (min)
	Modular Conveyor	Yes	Yes	Yes	Yes	Yes
	Conveyor height range (mm)	750–1200	550–1200	550–1200	550–1200	
	RS485 Interface	Yes	Yes	Yes	Yes	Yes
	Password Protection	Yes	Yes	Yes	Yes	Yes
	Self Test	Optional	Optional	Standard	Standard	Optional
	Side Transfer	Optional	Optional	Optional	Optional	Optional
	Inclusion Head	Optional	Plug 'n Play	Plug 'n Play	Plug 'n Play	Optional
	Fallen Bottle	Optional	Optional	Optional	Optional	Optional
	Handle Flash Detection	Optional	Optional	Optional	Optional	Optional
	Multi-head	No	No	Optional	Optional	Optional
	Back Ground PLC Sequencer	No	Optional	Optional	Optional	Optional
	Box Diverter	No	Optional	Optional	Optional	Optional
	Other Options	No	Yes	Yes	Yes	Yes

1) All bottle rates are based on finding a 0.17mm-0.18mm (7 thou inch) hole, on a single head. With more time we can find far smaller holes.

2) Maximum bottle speed is influenced by bottle wall thickness, bottle rigidity, volume, shape. Contact us for testing of your sample bottles.

3) Test rates for 4-30L are based on heavier oil and chemical bottles, lightweight water bottles can test up to 50-100% faster than above.

4) Special version of 6LD (can test to beyond 17.00 test per hour on 1 head, new model to shortly be named 7LD).

## **ProfileSolutions**

## Automation and customising – complete solutions.

From the start Profile Solutions has always offered more than just their leading technology leaktesters. We have the creativity to offer flexible customized solutions for your automation and special leak testing needs.



 Side transfers to suit, many variations

- Underwater and pressure decay tester for GM's major Australian car in 2006.
- Included automatic ring locker for fuel pump and gauge, electrical testing for gauge and other assembly.
- Hot plate melting for element mounting on filler tube as well as leak and electrical testing.







• Multi-head 4L round head tester with offset neck orientation. This was for a steel container.



Simple Example

- Test for soap dispenser with cap, with push and hold cylinder with vacuum retention.
- As it was built on a standard 4LD frame, it can be converted into a standard machine by adding a conveyor. Extending the life cycle of the unit.



- Complete very flexible system covering 3 blow moulder making 4 sizes at a time of 15-25L drums.
- Our solution included take-outs rotators, servo bung inserters, 260ft (80m) of conveyors, CNC multi axis dust cap placer, and a Kuka pallesting robot to palletise multiple lines.
- We handled 5 bottle design in 3 height with one EOAT (end of arm tool) on the robot.



• Automatic servo bung inserters, with torque and positioning control.

### LET'S IMAGINE TOGETHER, FOR YOUR SOLUTION.







#### BOTTLE PALLETISING.

Palletising the output of 4 x Nissei ASB50 machines simultaneously with different neck sizes with a large linear robot with 10m stroke. The solution included 4 CNC 2 axis servo takeout on each of the Nissei ASB 50 ISBM machines + leak test. All controlled by the leak tester, with recipe control. This novel approach meant machines you would not normally consider palletising with a good ROI.

### AOKI TAKEOUT AS WELL.

- Flexible test part tester for automotive washer bottles, with quick changeover jigs for 5 parts.
- Result of every test recorded on PC.
- Plus each product was marked with **Red** or **Green**.
- Inkjet marking could



#### UNILOY RETROFIT TESTERS & Trimmer Mount

- Our retrofit testers for Uniloy Milk bottle machines, find holes smaller than any tester that has come with a UNILOY machine.
- Available in 1-4 head.



- Available test time is short in these trimmers and our superior technology fills and tests faster and we find smaller holes. Clients tells us they are more stable.
- Can also be retrofitted to work inside Proco downstream deflashers or other trimmer mount solutions.



Even Multi-head STEEL can testers (6-10L) and at a price far less than the European leader in this area. That's Profile Solutions that rare mix of high technology and reasonable pricing.

## These are some examples, talk to us for more

## **Profile Flex Conveyors** Modular Conveyor Systems

- □ High Quality modular conveyor system.
- □ Chain, profiles and accessories 100% interchangeable with 11 sizes of Flexlink. <u>Mix and match compatible as its dimensionally the same.</u>
- □ 25-35% **+ lower cost**. Ideal for spares, additions to existing systems, or complete systems.
- □ Available as parts or additions.
- □ High quality Dupont acetal resin used in the Chain.
- □ Thousands of Systems in use worldwide since 2002.
- □ Sold in 25 countries.
- Many thousands of systems worldwide, used by major multi-nationals in plastics, food, tissue, automotive and medical.



For more information Contact:



See us on youtube: PROFILE1963 • https://www.youtube.com/user/PROFILE1963/videos



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