

## Application Description

- Drop-in solution to replace the OEM supplied valves on KHS® & Krones® filling machines. This custom 8 station bar manifold solution bolts up to the existing mounting screws.



Previous solution



## Challenges

- Regular replacement of OEM supplied valves.
- Time consuming OEM valve replacement due to the complex mounting of the valves and the high leakage rate.
- Inconsistent response times of the valve.

## MAC Solutions

- **Complete Manifold Assembly:** EBA-BV022 (valves + manifold)
- **Valves:** BV314A-CC1-00-BCCA-CTA Mod. 7965



## Customer Benefits

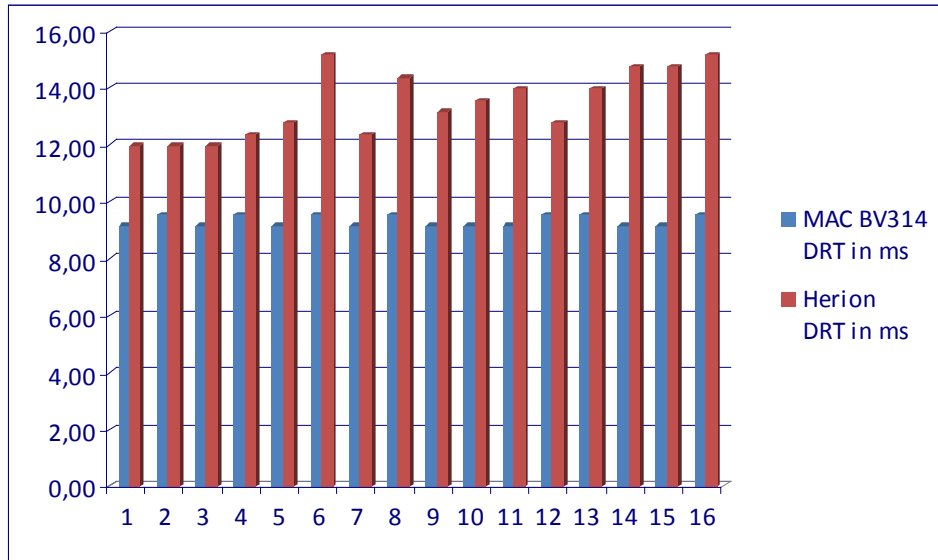
- Reliable alternative to OEM supplied valves that have been a source of much downtime.
- Ability to replace valve individually if failure occurs without manifold disassembly.
- Less downtime and reduced cost per failure.
- Less spare parts in inventory.
- Increased reliability.
- Increased filling accuracy due to the consistent response times of the valves (see chart).

## Cost Savings

- Savings realized in increased production, reduced labour cost and fewer replacement parts.
- Savings realized by reducing overfilling.
- MDN Associates worldwide are skilled to support you in estimating cost savings you can achieve with this upgrade.

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## Response times



Valve number	MAC BV314 DRT in ms	Herion DRT in ms
1	9,20	12,0
2	9,60	12,0
3	9,20	12,0
4	9,60	12,4
5	9,20	12,8
6	9,60	15,2
7	9,20	12,4
8	9,60	14,4
9	9,20	13,2
10	9,20	13,6
11	9,20	14,0
12	9,60	12,8
13	9,60	14,0
14	9,20	14,8
15	9,20	14,8
16	9,60	15,2
<b>Difference between fastest and slowest valve (ms)</b>	0,4	3,2
<b>Average DRT (ms)</b>	9,4	13,5
<b>Standard Deviation (ms)</b>	0,2	1,2