



Adelphi Manufacturing

Bespoke ATEX filling solution reduces waste of £1,000-per-bottle whisky by over 300%

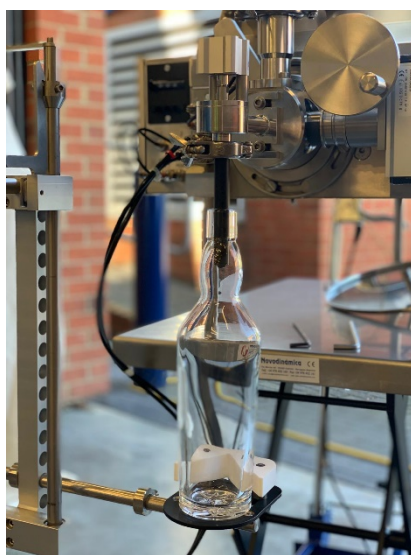
Summary:

Filling this premium product was previously a manual, repetitive and physically demanding process. Automation of the fill removes the possibility of operator-errors, but a particularly expensive product needs a meticulous filling system – waste could cost the company tens of thousands of pounds in a single year.

The Results:

An ATEX Zone 1 Category IIB 2G c T5 (100C) compliant

[Response Benchtop Filler](#), which boasts exceptional filling accuracy of $\pm 0.25\%$ (far superior to the industry average of $\pm 1\%$). In terms of fill accuracy alone, this reduces waste by 7.5L out of every 1,000L filled (10L to 2.5L – a saving of 300%). A cost-effective multi-shot counter enables this single machine to fill both of the company's 75ml, 2L and 3L bottles on the same machine. 316L pharmaceutical grade stainless steel construction guarantees the highest possible levels of hygiene; ensuring that any potentially reputation-ruining contamination is avoided.



Zero waste

Two-speed gentle filling ensures no splash back, and hygienic drip-trays catch any wayward droplets. Whisky is an even lower viscosity liquid than water, but double PTFE seals on the three-way valve guarantee no leakage when feeding the whisky from the hopper. A 6L hopper drains into the main 20L hopper, with a gauze filter between the two to ensure no contaminants – EG: oak from the barrel – can get through. Bottles are twice-checked before filling and twice-checked after filling, so that they only ever reach the customer in spotless condition.



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Quick and easy to strip/clean – less costly production downtime

Full strip-down of the Response for cleaning can be achieved in 3 minutes! Many customers keep a spare set of wetted parts, so that changeover between products can be as quick as possible.

Unsurpassed hygiene

Critically for ingestible products such as beverages, all contact parts are manufactured in 316L pharmaceutical grade stainless steel, PTFE and Viton, and curved and sloping surfaces meet GMP requirements. Clean, lubricant-free pneumatics and sanitary tri-clamp hopper connections prevent unhygienic build-up of residue. The bespoke filling nozzle was also PTFE coated to reduce the (already slim) chance of the nozzle damaging the glass bottle neck – any glass in a drink would be a disaster for the company's reputation.

Improved employee health and happiness

Previously, feeding the whisky into a filling machine meant a tricky angle and height of lift for operating staff, with the potential for serious back injuries through repetitive difficult movement. Their new solution includes a pneumatic trolley which supports the filler, that is lowered to a good working height when the hopper needs filling.

