AccuVol

SEED ROUND · NOVEMBER 2026

INVESTOR PRESENTATION

Reinventing precision dosing technology.

A precision volumetric pump with **10× accuracy** from the first turn — simpler, longer-lived, lower-cost.

ROUND	STAGE	TARGET RETURN	CONTACT
£0.75M · 10% post-money	Production-ready prototype	**20×** over five years	arthur@accuvol.com

THE ASK

£0.75M takes us from prototype to market.

Patents granted in the UK, EU, US, China and India. MVP built and externally tested. The next milestone is revenue.

RAISE

£0.75M

For 10% post-money equity.

TARGET RETURN

20×

Capital growth over five years.

EBITDA, YEAR 5

£7.5M

On 200% p.a. revenue growth.

CASHFLOW POSITIVE

≤2yr

From close of round.

MARKET

A mature global market.
No dominant player.

Every operator we have spoken to says the same thing: the market is ready for a pump that genuinely beats the 1% CoV benchmark.

ANNUAL TAM

$4–7 Bn

Global positive-displacement pumps.

FORECAST CAGR

5–7 %

Steady, not cyclical.

ACTIVE COMPETITORS

~30

None dominant.

GEOGRAPHY

3

Roughly equal regions: Americas · Europe · Asia.

SOURCE · INDUSTRY ANALYSES, 2024–26

STATUS QUO

The industry has been stuck on the same architecture **for decades**.

SENSING

An optical encoder, sealed inside a dry cavity.

- Needs a precision rotary seal to keep fluid away from the optics.
- That seal is the most expensive — and the most failure-prone — part of the pump.

PERFORMANCE ENVELOPE

Sub-1% CoV, but only above 300 rpm.

01 Industry-quoted band is 300 to 3,500 rpm.

02 Start-up and low-speed accuracy aren't controlled at all.

03 Dosing applications work around it with overruns and dead volumes.

WHAT WE CHANGED

Ultra-precise **from turn one.**

We achieved this with a magnetic sensor outside the cavity, for 10× precision.

SENSING

Digital magnetic sensor, outside the pump body.

- Higher sensitivity than the optoelectronics it replaces.
- The expensive precision seal is no longer needed.

CONTROL PROCESS · PATENTED

10× the current precision benchmark, from turn one.

- Accurate down to 10 rpm — a 30× range extension.
- Fewer, simpler moving parts; longevity by design.

EXTERNALLY REVIEWED · SIMULATED · COSTED

MEASURED PERFORMANCE

DESIGN SPECIFICATION

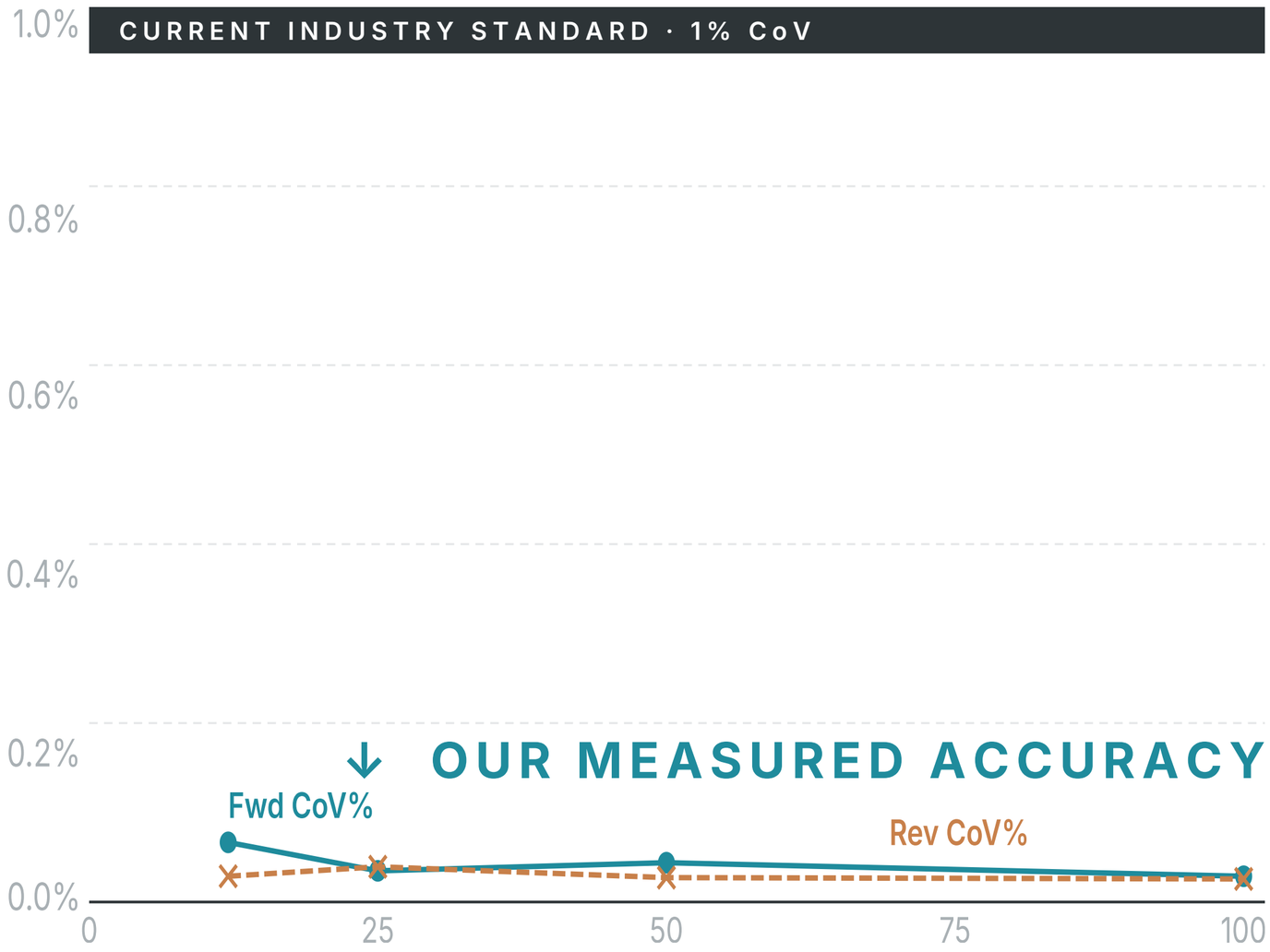
0.10%

CoV from 10 rpm across full operating range.

VS INDUSTRY BENCHMARK

10×

The thick black band is the current industry standard: 1% CoV. The lines beneath it are our measured accuracy.



PATENT ESTATE

Granted in **five jurisdictions**, covering most of global PD demand.

JURISDICTION	NUMBER	FAMILY	STATUS
United Kingdom	**GB 2541031 B**	**1st**	GRANTED
European Union	EP 3332122 B1	1st	GRANTED
United States	US 11624362 B2	1st	GRANTED
China	CN 108138767 B	1st	GRANTED
India	IN 456089	1st	GRANTED
United States · China	US 12584483 B2 · CN 110312869 B	2nd	GRANTED
Third patent	In preparation	3rd	DRAFTING

PROGRAMME STATUS · Q4 2026

MVP built and tested.
Ready for production.

- Design and manufacturing process settled for production.
- External review and advanced simulation completed.
- Assembly process and machinery completed.
- Pre-production batch of MVP pumps built and tested.
- Complete supplier and process-partner network identified.
- Initial manufacturing test run of core parts completed.
- First patent family granted in all five jurisdictions.
- External performance test data in hand.

V1 PRODUCTION UNIT

Better, longer-lived and cheaper — **because it is simpler**.

PRECISION

↑ 10×

Driven by digital sensing and control software, not by mechanical tolerances.

LONGEVITY

↑ 2×+

Fewer, simpler moving parts. No wear-bound precision seal.

PURCHASE COST

↓ BoM

Lower materials cost than competitors in the equivalent class.

TARGET SECTORS

5+

Pharmaceutical, chemical, food, adhesive and paint — and potentially medical device.

IOT & AI ROADMAP

We have a strategy for **IoT and AI**.

IOT · INTERNET OF THINGS

Digital controller and interface.

- Provides a constant stream of feedback data.
- Precision to 2^{12} — 1/4096 of a turn.
- Enhanced local control and management.

AI · ARTIFICIAL INTELLIGENCE

Where clients are willing to share data.

01 Data feedback reveals real duty cycles.

02 We track wear and performance evolution over time.

03 With a sufficient dataset, we pre-emptively forewarn of — and avoid — outages.

MARKET POSITIONING

Same market.
A different specification sheet.

VENDOR	COV	OPERATING RANGE	SENSING	BOM POSTURE
AccuVol	**0.10%**	**10 – 3,500 rpm**	**Digital magnetic**	**Simplified · low**
HNPMicro	±0.5–1.0%	300 – 3,500 rpm	Optical encoder	Reference
JONSN	~1.0%	300 – 3,500 rpm	Optical encoder	Reference
Diener	±0.5–1.0%	300 – 3,500 rpm	Optical encoder	Reference
Suofu	~1.0%	300 – 3,500 rpm	Optical encoder	Reference
Fluid-o-tech	±0.5–1.0%	300 – 3,500 rpm	Optical encoder	Reference
Iwaki	~1.0%	300 – 3,500 rpm	Optical encoder	Reference

SPECIFICATIONS FROM PUBLIC MATERIALS

PRINCIPAL RISK · HONEST ASSESSMENT

Micron-precise manufacturing.

It is not new, but it is hard. This is AccuVol's first time delivering at this tolerance — though every one of our manufacturing partners works to that standard as a matter of routine.

DESIGN TOLERANCE

75 µm

≈ width of a human hair.
Needed to minimise seepage between pump parts so the unit can handle a wide range of pressure differentials.

Every supplier we have selected for the precision parts already ships at this tolerance every day. The novelty is the integration — not the tolerance itself.

WHERE THE £0.75M GOES

Four parallel workstreams over **twenty-four months**.

Structured to reach positive cashflow within two years, with high capital growth by year five.

WS 01

Sales & marketing team

Stand up a small, technical commercial team focused on process engineers and OEM customers, and build the industry-partner pipeline.

Q1 – Q3

WS 02

Manufacturing base

Scale up the in-house assembly cell and lock in the supplier networks already proven during the MVP build.

Q1 – Q4

WS 03

Miniaturisation R&D

Research high-precision injection-moulded plastics for a smaller form factor and a much lower unit cost.

Q2 – Q6

WS 04

Materials qualification

Optimise pump materials for the food, pharmaceutical and chemical industries.

Q2 – Q8

FIVE-YEAR RETURN PROFILE

A targeted 20× on £0.75M, built on three independent levers.

LEVER 01 · PRECISION

10×

Market-precision target — the headline ambition behind the pricing premium.

LEVER 02 · COST

↓ BoM

Lower manufacturing cost — margin expansion at every price point.

LEVER 03 · MOAT

10 yr

Compounding behind a granted-patent moat in the UK, EU, US, China and India.

REVENUE GROWTH

200% p.a.

EBITDA, YEAR 5

£7.5M

CAPITAL GROWTH (DELIVERS 20× TO INVESTORS)

20×

CASHFLOW POSITIVE

≤2 yr

FORWARD MODEL · INDICATIVE

COMPANY & CONTACT

AccuVol™ is a trademark of Magpumps Ltd.

FOUNDERS

Leo Dearden
Arthur Doohan

BOARD

Ian Grigg

Angel investor & non-executive director.

ADVISORS

BASCK

Patent agents.

S. Macdonald, Malvern

Accountant.

CAPITAL STRUCTURE

Wholly privately owned · no net debt.

DIRECT LINE

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ISSUED FOR

Investor diligence · November 2026