

Funding the opportunity in medical imaging

On 18 April Kromek announced a major seven-year agreement with a Tier 1 OEM to develop and incorporate its CZT-based detectors in the OEM's advanced medical imaging scanners. A further agreement with Analogic Inc., a Tier 2 supplier, for the application of CZT-based detection technology to next-generation photon counting CT (PCCT) medical imaging scanners, and subsequently, on 2 May, a US\$1.425m CZT-based detector modules order from a new OEM customer have also been announced. In order to fund these opportunities, on 5 May the Group announced a fund raise of £8m (gross).

Focus on CT scanning, a US\$10bn market opportunity

It is our assumption that the Tier 1 OEM segment targeted is the **CT scanner market**. This was worth an estimated US\$6.7bn in 2022 and at a 5.6% CAGR is expected to reach US\$9.92bn by 2029¹. The market is dominated by four players - Canon Medical Systems Corp., GE Healthcare, Philips Medical Systems Inc., and Siemens Healthineers GmbH - and is in the process of transitioning to efficient and accurate processes based on cadmium zinc telluride (CZT) semiconductors. Following the acquisition of Redlen Technologies Inc. in 2021 by Canon, **Kromek remains the only commercial-scale independent source of this key CZT-based technology**. For the Tier 1 agreement we envisage a short development phase followed by full commercialisation. Given the market position of a Tier 1 OEM CT supplier and outlook for the CT market, we calculate that a collaboration in this field could exceed a **cumulative £100m contribution** to Kromek's revenue by 2029.

Equity raise of £8.0m

To fund the Tier 1 development phase Kromek has raised £7.0m (gross) through the placing of 140.0m shares at 5.0p/share, plus an open offer of c.£1.0m (gross) through the issue of up to 20.564m shares at 5.0p/share. We also expect Kromek to finalise, within the next few months, the refinancing of its debt facility, currently with HSBC.

Analogic PCCT agreement, and new SPECT OEM customer

The Tier 2 medical imaging specialist **Analogic Corporation** (<https://www.analogic.com>) PCCT agreement could be compared to Kromek's 2019, US\$58.1m, 7-year agreement with Spectrum Dynamics for SPECT (single photon emission counting) imaging. The 2 May CZT module order adds a new medical imaging OEM customer with a well-established presence in the Asian SPECT market. We expect the commercial phase of the collaborations to make a significant contribution to earnings post-FY25. However, we have revisited the Canon-Redlen acquisition; evaluation of which would indicate a Kromek Group sum-of-parts valuation of between 56p and 84p per share. **Whilst awaiting further details of the Tier 1 and Tier 2 OEM agreements we maintain our Fair Value at 26p/share.**

Summary financial outlook

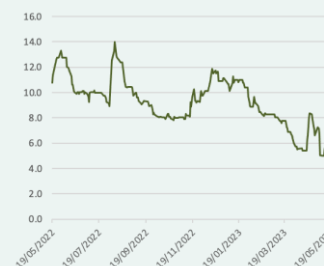
Yr to 30 Apr (£m)	2020	2021	2022	2023E	2024E
Revenue	13.12	10.35	12.06	18.00	21.00
EBITDA (adj)	(1.93)	(1.69)	(1.16)	(2.28)	0.91
Pre-Tax Profit (adj)	(5.80)	(6.28)	(6.03)	(8.06)	(5.41)
EPS (adj, p)	(1.16)	(1.48)	(1.11)	(1.59)	(0.67)
Net debt / (cash)	(3.84)	(7.40)	1.38	8.74	2.98

Source: Company data. Equity Development estimates. ¹ Source: www.fortunebusinessinsights.com.

Company Data

EPIC	KMK.L
Price (last close)	5.1p
52 weeks Hi/Lo	14.4p / 4.8p
Market cap	£22m
ED Fair Value / share	26p

Share Price, p



Source: LSE

Description

Kromek is a detection and advanced imaging specialist operating globally in the fields of advanced imaging and hazard detection (CBRN: chemical, biological, radiation and nuclear). Within the advanced imaging segment, medical imaging, including BMD (bone mineral density), CT (computed tomography) and SPECT (single photon emission computed tomography), is particularly important, utilising Kromek's cadmium zinc telluride (CZT) materials technology.

Other key markets in advanced imaging include security screening and industrial imaging. Principally focused on radiation detection, CBRN also includes development of biohazard threat detection, including the presence of COVID-19.

Mike Jeremy (Analyst)

0207 065 2690
mike.jeremy@equitydevelopment.co.uk

Andy Edmond

0207 065 2691
andy@equitydevelopment.co.uk

Market potential in CZT-based transition

We have previously estimated the annual total addressable market (TAM) for Kromek's products - CZT medical imaging detector assemblies supplied to non-integrated manufacturers - at c. **US\$400m**.

Kromek's medical imaging, total addressable market opportunity

	Segment	Market p.a.
Gamma	Gamma probes	US\$1.6m
BMD	Bone mineral density - osteoporosis detection	US\$30m
SPECT	Single photon emission computed tomography	US\$110m
CT	Computed tomography scanning detector segment	US\$250m

Source: Company data. Equity Development estimates.

SPECT market developments

Market participants in SPECT scanning include: GMI Medical, Spectrum Dynamics, Siemens Healthineers, United Imaging, Canon Medical Systems Corp., GE Healthcare. Some recent developments for Kromek include:

- On 14 October 2022 Spectrum Dynamics Medical, announced the "integration of Kromek CZT detectors in Spectrum digital SPECT/CT products, the VERITON-CT 400 series ... These improvements will significantly shorten the scan times associated with current analog or state-of-the-art digital technology".
- On 19 April 2023 Kromek and Analogic Corp., announced their "agreement to collaborate on the development of next-generation Cadmium Zinc Telluride (CZT) based detector solutions for Photon Counting Computed Tomography (PCCT) applications in the medical imaging and security sectors".

CT scanning market developments

CT scanning market participants include four Tier 1 OEMs - Canon Medical Systems Corp., GE Healthcare, Philips Medical Systems Inc., and Siemens Healthineers GmbH – and Tier 2 OEMs: Analogic Corp., Fuji Film Medical Systems, Mars, Mediso, Samsung-NeuroLogica and United Imaging. The most recent developments focus on CZT-based deployments:

- **November 2022: Canon Medical Systems Corp.** announced a novel photon-counting CT system incorporating technology acquired through the purchase of Redlen Technologies in 2021 (<https://global.medical.canon/News/PressRelease/Detail/123624-834>).
- **March 2022: Samsung Electronics - Neurologica Corp. launched its** OmniTom® Elite PCD photon counting detector. The US FDA noted that this was: "the same system as the predicate device OmniTom Elite energy integrating detector (EID) with the only difference being the detector array system, instead of the current gadolinium oxysulfide EID, it has a cadmium telluride based PCD". (https://www.accessdata.fda.gov/cdrh_docs/pdf21/K211711.pdf)
- **September 2021: Siemens Healthineers'** NAEOTOM Alpha® photon counting CT scanner received US FDA approval, which I called the "first major imaging device advancement" in CT in nearly a decade". Siemens had acquired the Japanese cadmium telluride CdTe developer Acrorad KK in 2011.

CT scanning market opportunity

The global CT scanner market was valued at an estimated US\$6.70bn in 2022 (www.fortunebusinessinsights.com), and is expected to rise to US\$9.92bn by 2029 (CAGR: 5.8%). Whilst noting the importance of accurate CT scanning for a range of chronic diseases, including cardiovascular, neurology and orthopaedic disorders, Fortune Business Insights also noted the impact of COVID-19 and its long-term effects resulting in “higher-than-anticipated demand across all regions”.

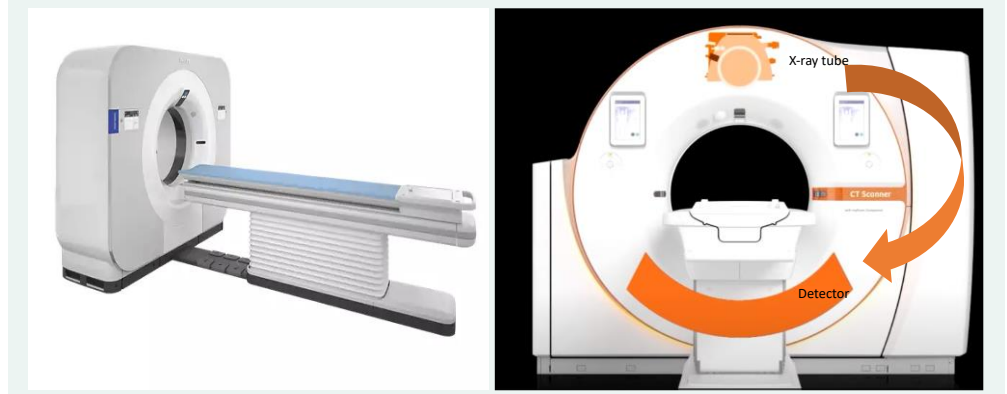
We estimate that the four Tier 1 OEM providers - Canon Medical Systems Corp., GE Healthcare, Philips Medical Systems Inc., and Siemens Healthineers GmbH - dominate c.80% of the global CT scanning systems market, followed by a number of Tier 2 providers including Analogic, Fuii Film Medical Systems, Mars Bioimaging, Mediso, NeuroLogica-Samsung and United Imaging. In our report of 18 January 2022 (*Established leader in detection solutions*) we noted that, for the key CZT components developed and supplied by Kromek, “The replacement cycle for SPECT equipment has commenced which means that major OEMs are securing long-term CZT supplies”. This cycle is now underway in the CT scanning market.

CZT-based photon counting transforms diagnostic imaging

The key components of a CT scanner, illustrated below, are the X-ray emitter and the detection device, which assembles data as the basis for the diagnostic image. These rotate around the subject at c.4x per second, i.e. c.1,000 projections per rotation, equating to c.30,000 photons per projection impacting the detector element.

CT scanning technology is undergoing a generational shift from those based on *scintillation* to those developed around *photon counting*. Scintillation-based scanners capture the impact of X-rays on detector materials which release quantities of photons, which in turn generate electrical signals to build the diagnostic image. This two-stage process introduces imaging limitations. Photon counting eliminates these limitations and relies on the properties of **CZT-based detection**.

CT scanner key components



Source: Philips CT 7500. Siemens Healthineers. <https://www.youtube.com/watch?v=ykOHBVVCwDo>

Conventional scintillation-based scanning

In a scintillation-based device, photons are generated by the impact of X-rays on a (ceramic) material and measured by a photodiode which converts this data into an electrical signal, forming the basis for image-assembly. This approach requires some separation of detector elements - required to limit light cross-contamination - which has the side-effect of reduced image capture, the alternative being unacceptably high X-ray exposure.

The approach also ‘prioritises’ higher-energy X-ray interactions, introducing, for example, the possibility of false positive or exaggerated images.

Photon-counting CT

In place of a photodiode, photon-counting CT uses a crystalline semiconductor to generate an *instant* electric charge, eliminating the need for limiting detector elements, **the basis for which is cadmium zinc telluride (CZT)** or cadmium telluride (CdTe). The CZT/CdTe semiconductor has a high, >1,000 volts valency applied across it. Impacting X-rays generate electron hole pairs as a result of which +ive electrons and -ive electrons are separated; the anode layer measures each electron interaction, resulting in effective conversion of *all* photon impacts into electrical pulses.

The process of conversion takes a few nanoseconds compared to >10,000 nanoseconds for conventional processing, and *each of the 30,000 photons* per projection is measured/counted individually. Image processing follows from filtering of the incoming energy levels to eliminate any 'baseline' electronic interference, and subsequent ASIC-based processing. As Delveinsight describes the process:

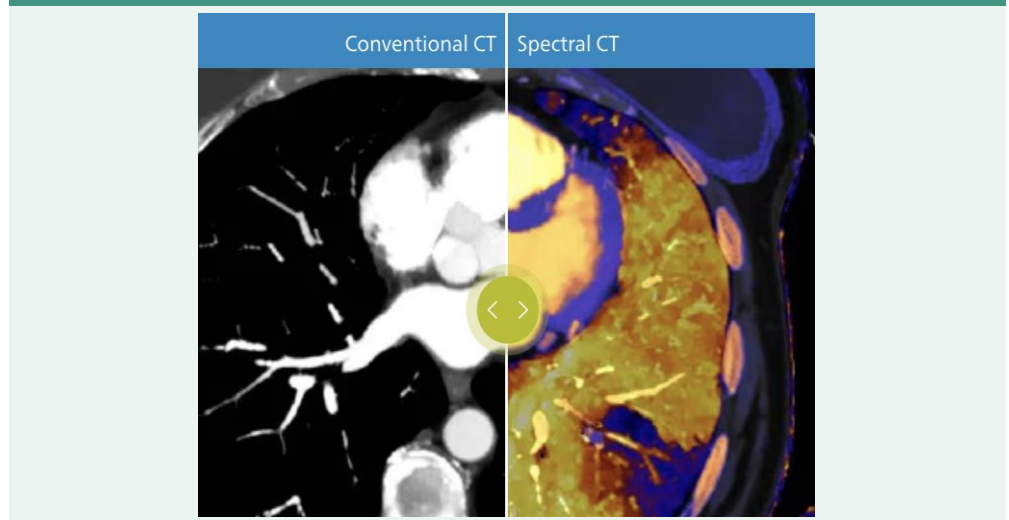
- "Photon counting is a next-generation CT technology that sorts the different energies of X-rays after they have passed through the scan field. A single X-ray source paired with PCD generates multiple sets of CT data acquired at the same time with configurable energy thresholds without any cross-talk between images. PCD allows for more accurate imaging and segmentation of bone, blood clots, plaque, haemorrhage, and brain tumours by capturing CT data in various energy bands. With PCD, the dosage requirements might be reduced." <https://www.delveinsight.com/blog/medtech-news-for-neurologica-cordis-medtronic-novasight>.

The result is the introduction of attributes which contribute to enhanced image quality, under the same X-ray dosage conditions, notably:

- Increased pixilation without the need for increased X-ray dosage.
- Complete elimination of background electronic noise.
- The opportunity for (up to 4) discrete energy thresholds, capturing different target densities.
- Equal treatment of lower energy (photon) quanta, which would be otherwise lost in scanning conditions.

This example from spectral CT scanning provides an illustration of the potential improvement in image quality, and, with this, the amount of diagnostic information made available.

Illustration of the benefits of spectral CT scanning



Source: <https://www.philips.co.uk/healthcare/resources/landing/spectral-detector-ct>

Scale of the CT scanning opportunity for Kromek

We estimate that the opportunity arising from the agreement with the Tier 1 OEM supplier over the initial seven years, including commercialisation, **could exceed a cumulative US\$100m by FY29**. This estimate is based on market share assumptions, allocation of Tier 1 OEM value, and potential for Kromek as follows:

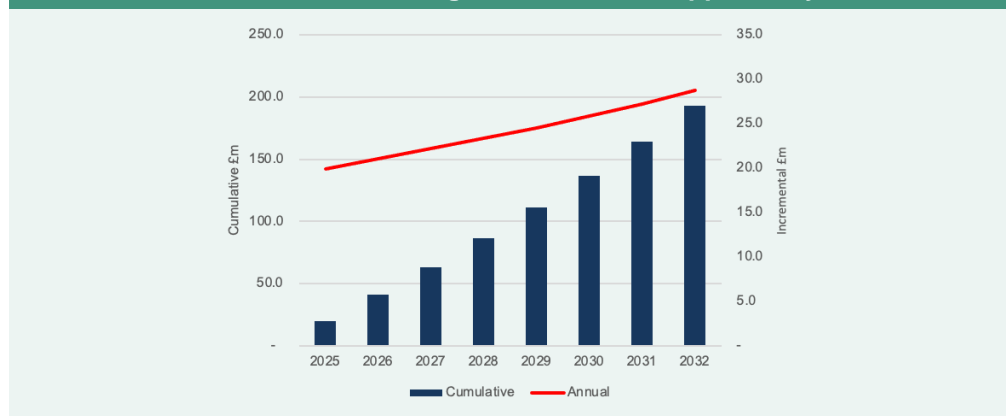
- Estimated CT scanner annual market value 2022, US\$6.70bn, growing, at a 5.8% CAGR to US\$9.92bn by 2029¹.
- Resulting estimated CT scanner annual market value in 2025, US\$8.08bn, at assumed start of Tier 1 OEM-Kromek commercialisation phase.
- Combined Market share of four Tier 1 OEM suppliers: 83%.
- Kromek Tier 1 OEM partner estimated market share: 22% of 83%, 18.3% of market.
- 2025 Tier 1 OEM CT scanner addressable market value c.US\$1.475bn; 2029 US\$1.811bn.
- The value to Kromek includes: assessment of the distribution of units priced at between c.US\$750,000 and c.US\$1.5m; estimates of the annual rate of take-up (e.g. 10.0%); assessment of the per system value accruing to Kromek for core CZT assemblies.

Estimated CZT-based CT scanning Kromek market opportunity

	2025	2029
Total market 2025 (US\$m)	8,080	9,920
Tier 1 (four) mkt share	83.0%	83.0%
Tier 1 TAM	6,706	8,234
Tier 1 estimated share	22.0%	22.0%
Value to Tier 1 (US\$m)	1,475	1,811
Estimated units	246	302
Value to Kromek (US\$m)	24.6	30.2
Value to Kromek (£m)	20.0	24.5

Source: ¹ www.fortunebusinessinsights.com. Equity Development estimates. US\$:GB£ rate 0.8049:1.00

Estimated CZT-based CT scanning Kromek market opportunity



Source: www.fortunebusinessinsights.com. Equity Development estimates.

Redlen valuation read-across

The Tier 1 OEM announcement serves as a reminder that Kromek remains the only independent developer and producer at large-scale, of CZT-based detection systems, with applications in both medical imaging and security scanning. There is a precedent for the value of CZT-based in the recent acquisition of Redlen Technologies Inc., offering a read-across to the value of Kromek's current strategic position. On 29 September 2021 Canon Inc. announced completion of the increase in its holding in Redlen Technologies Inc., from 15.0% to full ownership, which enabled it to "obtain advanced radiation detection and imaging technology used in CZT semiconductor detector modules, which play an important role in the development of Photon Counting CT (PCCT)." (<https://global.canon/en/news/2021/20210929.html>). A year later, Canon announced that it had developed a photon-counting CT system incorporating this technology. The acquisition of 85% of Redlen was completed for an estimated CD\$341m (US\$252m, £203m) (<https://www.bctechnology.com/news/2021/9/10/Saanichton-BC-based-Semiconductor-Firm-Redlen-Technologies-to-be-Acquired-by-Industry-Giant-Canon-in-Reported-341-Million-Deal.cfm>). This indicates a 100% valuation of CD\$401m (US\$297m, £239m). Estimates of Redlen's revenue at the time of acquisition range of between CD\$12.0m (US\$8.9m, £5.3m) and CD\$19.0m (US\$14.1m, £8.4m), which indicates a **multiple-of-revenue range of 21.1x to 33.4x**, and average of 27.3x. The implied sum-of-parts valuation for Kromek is shown below, based on (i) Redlen acquisition multiples for the diagnostic imaging segment, and (ii) a US market-based revenue multiple for the CBRN segment, is **between £242m and £364m**, the majority of which (c.86%) is derived from medical imaging. The same valuation applied to our estimate of the cumulative contribution to medical imaging revenue from the latest Tier 1 OEM CT up to 2029 equates to a revenue multiple of 2.7x.

Redlen Technologies acquisition valuation: read-across for KMK

	High	Low	Av.
Redlen revenue			
CDNm	12.0	19.0	
US\$m	8.9	14.1	
£m	5.3	8.4	
Canon paid for 85%, CDNm	341	341	
Value (100%) CDNm	401	401	
Value (100%) US\$m	297	297	
Value (100%) £m	239	239	
Redlen revenue multiple	33.4x	21.1x	27.3x
US sci insts revenue multiple	4.8x	4.8x	4.8x
Kromek sum-of-parts			
Medical imaging rev FY24E	9.9	9.9	9.9
CBRN rev FY24 E	9.1	9.1	9.1
Implied valuation			
MI	330.6	208.8	269.7
CBRN	43.9	43.9	43.9
Sum-of-parts EV (£m)	374.5	252.7	313.6
Net debt FY24 (£m)	11.0	11.0	11.0
Equity value (£m)	363.5	241.6	302.5
Per share (p)	84.2	56.0	70.1
FY25-29 cumulative MI (£m)	111.1		
Implied multiple	3.3x	2.2x	2.7x
MI contribution to EV value:	88.3%	82.6%	86.0%

Sources: US Scientific & Technical Instruments revenue valuation:

https://csimarket.com/Industry/Industry_Valuation.php?ind=1009. CDN:US\$ 0.740. CDN:£ 0.595.

Appendix I: Cadmium Zinc Telluride

Cadmium Zinc Telluride (CdZnTe: CZT) has two salient properties which distinguish as a key component in radiation detection and radiation-based imaging devices:

- Its high atomic number (48) is associated with high sensitivity to alpha, beta and gamma radiation.
- The impact of radiation, including x-rays, causes the instantaneous release of an electrical charge.

CdZnTe is a compound formed of cadmium, zinc and tellurium, bonded as cadmium telluride and zinc telluride, which operates as a room temperature 'direct bandgap' semiconductor. Its constituent elements are:

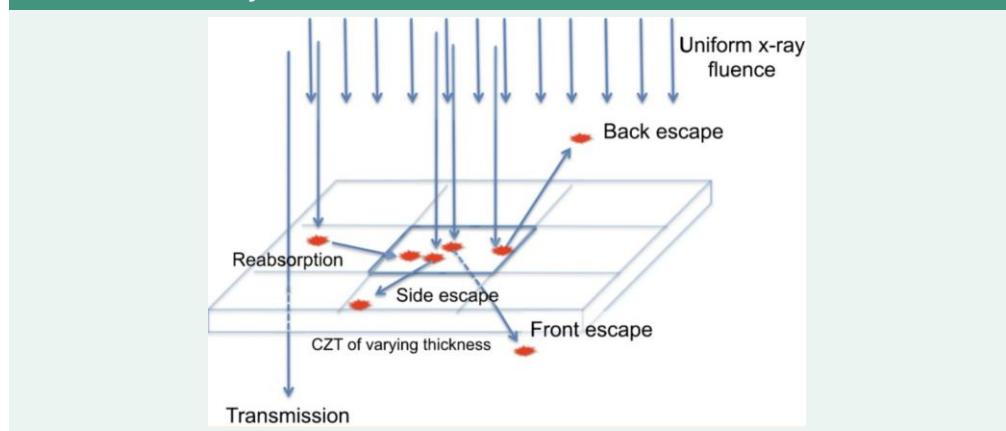
- Cadmium, Cd, atomic number 48.
- Zinc, Zn, atomic number 30.
- Tellurium, Te, atomic number 52, located between Antimony and Iodine in the Periodic Table. It was first identified in 1783 by Franz-Joseph Muller von Reichenstein, believed to be bismuth but occurring as gold telluride or calvarite (AuTe_2), and named 'tellus' meaning 'earth' by Martin Klaproth in 1796. It commonly occurs in sylvanite (AgAuTe_4) and calaverite / krennerite (AuTe_2) ores. Most is produced as a by-product of copper refining.

CZT-based imaging - challenges

As Kromek has noted, the recently announced agreement with a Tier 1 OEM requires an initial "short development phase". Whilst medical Tier 1 OEM imaging suppliers have long experience in such implementation, the key factor in converting the unique properties of CZT-based detection into coherent images remains the same. This is the process of adjusting for and calibrating, at different energy levels, the unwanted scattering of photon impact on the CZT crystal surface.

As noted in the Journal of Applied Physics², there are a number of possible outcomes for photon interaction, "(1) x-ray transmission through the CZT detector, (2) escape of characteristic x-rays into neighbouring detector elements (i.e., side escape), (3) escape of characteristic x-rays out the front (towards readout electronics, referred to as front escape) or back (towards entrance, referred to as back escape), or (4) re-absorption of characteristic x-rays produced nearby and yet recorded in a detector element some distance away from the primary x-ray interaction". To correct for these interactions requires a calibration process.

Illustration of x-ray incident outcomes on the detector surface



Source:² www.ncbi.nlm.nih.gov/pmc/articles/PMC3808444/ from S. J. Glick and C. S. Didier "The effect of characteristic x-rays on the spatial and spectral resolution of a CZT based detector for breast CT," in SPIE Medical Imaging 7961, 796110 (2011). Copyright 2011 SPIE.

FINANCIAL SUMMARY

Profit & Loss FY21 – FY24E						
Year-end Apr 30, £m	FY21	FY22	H1 23	H2 23E	FY23E	FY24E
Advanced Imaging		4.60	3.38	4.52	7.91	9.89
CBRN		5.40	3.16	4.57	7.73	9.14
R&D Projects		2.06	0.25	2.12	2.37	1.97
Revenue	10.35	12.06	6.79	11.22	18.00	21.00
Gross	5.01	5.64	2.74	5.72	8.46	9.93
<i>Margin</i>	<i>48.4%</i>	<i>46.8%</i>	<i>40.4%</i>	<i>51.0%</i>	<i>47.0%</i>	<i>47.3%</i>
COGS	(5.35)	(6.42)	(4.05)	(5.50)	(9.54)	(11.07)
Other income	0.38	1.41	0.00	0.00	0.00	0.00
Distribution	(0.29)	(0.55)	(0.32)	(0.27)	(0.59)	(0.64)
Admin	(10.94)	(12.21)	(7.63)	(7.57)	(15.20)	(13.85)
Sum Op-ex	(10.84)	(11.35)	(7.95)	(7.84)	(15.79)	(14.48)
Exceptional items	0.05	0.13	0.00	0.00	0.00	0.00
EBIT Reported	(5.79)	(5.58)	(5.21)	(2.12)	(7.33)	(4.55)
EBIT Adjusted	(5.73)	(5.48)	(5.09)	(2.00)	(7.09)	(4.31)
Amortisation	(2.36)	(2.57)	(1.47)	(1.43)	(2.89)	(3.20)
Depreciation	(1.69)	(1.75)	(0.96)	(0.95)	(1.92)	(2.03)
EBITDA Reported	(1.74)	(1.26)	(2.79)	0.26	(2.52)	0.67
EBITDA Adjusted	(1.69)	(1.16)	(2.67)	0.38	(2.28)	0.91
Financial income	0.00	0.03	0.00	0.00	0.00	0.00
Financial expense	(0.55)	(0.58)	(0.46)	(0.51)	(0.97)	(1.10)
PBT Reported	(6.33)	(6.13)	(5.67)	(2.63)	(8.30)	(5.65)
PBT Adjusted	(6.28)	(6.03)	(5.55)	(2.51)	(8.06)	(5.41)
Tax	0.98	1.21	0.60	0.60	1.20	1.30
PAT Reported	(5.35)	(4.92)	(5.07)	(2.03)	(7.10)	(4.35)
PAT Adjusted	(5.30)	(4.81)	(4.95)	(1.91)	(6.86)	(4.11)
Basic wtd. av. shares	358.9	431.9	431.9	431.9	431.9	609.2
Diluted wtd. av. shares	359.3	432.2	432.2	457.8	457.8	616.1
EPS Reported Basic (p)	(1.5)	(1.1)	(1.2)	(0.5)	(1.6)	(0.7)
EPS Adjusted Basic (p)	(1.5)	(1.1)	(1.1)	(0.4)	(1.6)	(0.7)

Source: Company data. Equity Development estimates. Diluted basis EPS not reported.

Balance sheet FY21 – FY24E						
Year-end Apr 30, £m	FY21	FY22	H1 23	H2 23E	FY23E	FY24E
Goodwill net	1.28	1.28	1.28	1.28	1.28	1.28
Intangible assets	24.14	28.38	30.54	30.74	30.74	32.81
PPE net	11.20	10.94	10.80	9.76	9.76	8.34
RoU net	4.08	3.87	4.26	3.46	3.46	3.01
Fixed Assets	40.70	44.47	46.87	45.23	45.23	45.43
Inventories	6.20	10.50	10.87	8.88	8.88	8.63
Trade receivables	6.64	6.43	6.69	7.40	7.40	8.05
Tax assets	1.02	0.94	0.35	1.20	1.20	1.30
Cash, Equivalents	15.60	5.08	0.96	1.11	1.11	5.84
Current Assets	29.46	22.96	18.86	18.59	18.59	23.82
Total Assets	70.16	67.42	65.74	63.82	63.82	69.25
Trade payables	(6.17)	(7.86)	(5.99)	(7.87)	(7.87)	(9.21)
Borrowings	(5.39)	(5.72)	(5.69)	(9.13)	(9.13)	(0.29)
Leases	(0.40)	(0.38)	(0.41)	(0.41)	(0.41)	(0.41)
Current Liabilities	(11.96)	(13.95)	(12.09)	(17.41)	(17.41)	(9.91)
Total Assets less Current Liabilities	58.20	53.48	53.64	46.41	46.41	59.34
Deferred income	(1.07)	(1.13)	(1.07)	(0.80)	(0.80)	(0.40)
Leases	(4.26)	(4.16)	(4.51)	(3.46)	(3.46)	(2.76)
Borrowings	(2.82)	(0.75)	(3.57)	(0.73)	(0.73)	(8.53)
Long-term liabilities	(8.14)	(6.04)	(9.14)	(4.99)	(4.99)	(11.69)
Total liabilities	(20.10)	(19.99)	(21.23)	(22.40)	(22.40)	(21.60)
Net Assets	50.06	47.44	44.50	41.42	41.42	47.65
Share Capital	4.32	4.32	4.32	4.32	4.32	6.11
Share Premium	72.94	72.94	72.94	72.94	72.94	81.49
Capital redemption reserve	21.85	21.85	21.85	21.85	21.85	21.85
Translation reserve	0.00	2.06	4.08	3.15	3.15	4.69
Accumulated losses	(49.06)	(53.74)	(58.69)	(60.84)	(60.84)	(66.49)
Equity	50.06	47.44	44.50	41.42	41.42	47.65
Net debt / (cash)	(7.40)	1.38	8.30	8.74	8.74	2.98

Source: Company data. Equity Development estimates.

Cashflow FY21 – FY24E

Year-end Apr 30, £m	FY21	FY22	H1 23	H2 23E	FY23E	FY24E
Net profit/loss	(5.35)	(4.92)	(5.07)	(2.03)	(7.10)	(4.35)
Finance (net)	0.55	0.55	0.46	0.51	0.97	1.10
Tax	(0.98)	(1.21)	(0.60)	(0.60)	(1.20)	(1.30)
Amortisation	2.36	2.57	1.47	1.43	2.89	3.20
Depreciation	1.69	1.75	0.96	0.95	1.92	2.03
Share-based payment	0.14	0.24	0.12	0.12	0.24	0.24
Other non-cash	0.08	(1.44)	0.00	0.00	0.00	0.00
Operating Cash Flow	(1.52)	(2.47)	(2.67)	0.38	(2.28)	0.91
Working capital						
(Increase)/Decrease inventories	0.21	(4.30)	(0.36)	1.99	1.63	0.25
(Increase)/Decrease in receivables	1.57	0.22	(0.26)	(0.71)	(0.97)	(0.66)
Increase/(Decrease) in payables	(2.57)	1.74	(1.93)	1.61	(0.32)	0.94
Change working capital	(0.79)	(2.35)	(2.56)	2.89	0.34	0.53
Cash from operations	(2.31)	(4.81)	(5.22)	3.28	(1.94)	1.44
Tax (paid)/received	1.01	1.28	1.20	0.00	1.20	1.20
Net cash from operations	(1.31)	(3.53)	(4.03)	3.28	(0.75)	2.64
Investing activities						
Investments	0.00	0.00	0.00	0.00	0.00	0.00
Interest	0.00	0.03	0.00	0.00	0.00	0.00
PPE	(0.45)	(0.65)	(0.19)	(0.06)	(0.25)	(0.10)
Other intangibles	0.00	0.00	(0.04)	(0.02)	(0.06)	(0.06)
ROU	(0.16)	(0.18)	(0.04)	(0.02)	(0.06)	(0.06)
Capitalised R&D	(5.46)	(5.62)	(2.58)	(2.62)	(5.20)	(5.20)
Net cash used in investing	(6.07)	(6.42)	(2.85)	(2.72)	(5.57)	(5.42)
Net OpFCF	(7.38)	(9.95)	(6.87)	0.55	(6.32)	(2.78)
Financing activities						
Shares (net)	12.22	0.00	0.00	0.00	0.00	10.34
Borrowings short-term	0.00	0.00	0.50	3.44	3.94	0.00
Borrowings short-term repaid	0.00	0.00	(0.52)	0.00	(0.52)	(8.84)
Borrowings long-term	3.22	0.76	3.34	(2.84)	0.50	7.80
Borrowings long-term repaid	(0.60)	(1.34)	(0.52)	0.00	(0.52)	0.00
Leases	(0.40)	(0.65)	(0.35)	(0.35)	(0.70)	(0.70)
Interest	(0.31)	(0.34)	(0.33)	(0.64)	(0.97)	(1.10)
Net cash from financing	14.13	(1.57)	2.12	(0.40)	1.72	7.50
Net change in cash	6.75	(11.51)	(4.75)	0.16	(4.60)	4.72
Cash at start of year	9.44	15.60	5.08	0.96	5.08	1.11
Forex	(0.59)	0.99	0.63	0.00	0.63	0.00
Cash at period-end	15.60	5.08	0.96	1.11	1.11	5.84
Net debt / (cash)	(7.40)	1.38	8.30	8.74	8.74	2.98

Source: Company data. Equity Development estimates.



Contacts

Andy Edmond

Direct: 020 7065 2691

Tel: 020 7065 2690

andy@equitydevelopment.co.uk

Hannah Crowe

Direct: 0207 065 2692

Tel: 0207 065 2690

hannah@equitydevelopment.co.uk

Equity Development Limited is regulated by the Financial Conduct Authority

Disclaimer

Equity Development Limited ('ED') is retained to act as financial adviser for its corporate clients, some or all of whom may now or in the future have an interest in the contents of this document. ED produces and distributes research for these corporate clients to persons who are not clients of ED. In the preparation of this report ED has taken professional efforts to ensure that the facts stated herein are clear, fair and not misleading, but makes no guarantee as to the accuracy or completeness of the information or opinions contained herein.

This document has not been approved for the purposes of Section 21(2) of the Financial Services & Markets Act 2000 of the United Kingdom ('FSMA'). Any reader of this research should not act or rely on this document or any of its contents. This report is being provided by ED to provide background information about the subject of the research to relevant persons, as defined by the Financial Services and Markets Act 2000 (Financial Promotions) Order 2005. This document does not constitute, nor form part of, and should not be construed as, any offer for sale or purchase of (or solicitation of, or invitation to make any offer to buy or sell) any Securities (which may rise and fall in value). Nor shall it, or any part of it, form the basis of, or be relied on in connection with, any contract or commitment whatsoever.

Research produced and distributed by ED on its client companies is normally commissioned and paid for by those companies themselves ('issuer financed research') and as such is not deemed to be independent as defined by the FCA but is 'objective' in that the authors are stating their own opinions. This document is prepared for clients under UK law. In the UK, companies quoted on AIM are subject to lighter due diligence than shares quoted on the main market and are therefore more likely to carry a higher degree of risk than main market companies.

ED may in the future provide, or may have in the past provided, investment banking services to the subject of this report. ED, its Directors or persons connected may at some time in the future have, or have had in the past, a material investment in the Company. ED, its affiliates, officers, directors and employees, will not be liable for any loss or damage arising from any use of this document to the maximum extent that the law permits.

More information is available on our website www.equitydevelopment.co.uk

Equity Development, 2nd Floor, Park House, 16-18 Finsbury Circus, London, EC2M 7EB

Contact: info@equitydevelopment.co.uk | 020 7065 2690