SURFACE TRANSFORMS

A major quantum production ramp up now secured

Final results were announced on 17 April, together with 1Q'23 sales and an update on the now rectified major production hiccough. In November 2022, SCE announced a second OEM 10 contract, the largest for SCE to date. The forward pipeline has been replenished and remains the same. The OEM 10 order commences in 2025, which is normal visibility. OEM 8 comprises the large majority of 2023 and 2024 revenue and was scheduled for a rapid 2022 start of production, but OEM 8 requested a few months' pause. It has now commenced. SCE's resolution to the production problem comes after half a year's disruption in this major growth story.

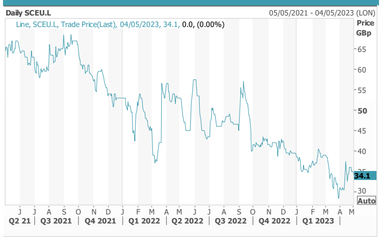
- **2022 results:** Revenue of £5.12m was more than twice 2021 but well below earlier estimates. SCE flagged this disappointment in November 2022 after problems were encountered during October's planned major rise in production volumes. Cash and the funds for the expansion programme are on track.
- **How we got here:** The proof-of-performance has come from a combination of OEM trials, which take many years, and on-road excellence. Commissioning issues have provided evidence of the manufacturing processes' complexities. These two factors provide high and multi-year hurdles to new competition.
- **Where we are going:** There is only one – larger – competitor, BremboSGL. SCE now has fully operational equipment for £20m capacity, taking share in a rapid-growth market. Hard lessons learnt from the high-quantum scale-up assist the next phase to £50m p.a. capacity, for which equipment is now arriving.
- **Risks:** This is a rapidly growing market, readily accommodating growth for both suppliers. A major sales increase leads to a (definable) rise in working capital needs. We reiterate what we wrote a year ago: "The successful commissioning of new capacity is now being achieved, but is always a risk."
- **Investment case:** One, profitable, competitor supplies over 90% of the market, with SCE taking share. Single supply was a most anomalous auto OEM position; now SCE also supplies. The combined OEM 8 then OEM 10 orders, while true "game changers", simply fitted into the broader SCE place in the market expansion. In-house skills were honed by the scale-up disruptions.

Financial summary and valuation

Year-end Dec (£m)	FY'20	FY'21	FY'22	FY'23E	FY'24E	FY'25E
Sales	1.95	2.37	5.12	16.00	33.00	42.00
EBITDA	-2.32	-3.77	-4.90	1.40	9.10	13.90
EBITA	-2.81	-4.45	-5.87	-0.60	5.80	10.30
PBT	-2.92	-4.58	-6.04	-0.80	5.50	10.00
PAT	-2.31	-3.95	-4.78	0.00	6.00	10.00
EPS (adjusted, p)	-1.54	-2.08	-2.34	0.00	2.47	4.10
Shareholders' funds	5.67	20.89	33.55	33.55	39.55	49.55
Gross cash/(debt)	1.06	9.95	14.92	3.40	2.50	3.20
P/E (x)	loss	loss	loss	n/m	13.7	8.3
EV/sales (x)	34.9	28.7	13.2	4.2	2.1	1.6
EV/EBITDA (x)	loss	loss	loss	48.6	7.5	4.9
DPS (p)	nil	nil	nil	nil	nil	nil

Source: Surface Transforms, Hardman & Co Research estimates

Automotive components



Source: Refinitiv

Market data

EPIC/TKR	**SCE**
Price (p)	**34**
12m high (p)	57
12m low (p)	28
Shares (m)	240.6
Mkt cap (£m)	82.0
EV (£m)	68.0
Free float*	72%
Market	AIM

**As defined by AIM Rule 26*

Description

Surface Transforms (SCE) is 100% focused on manufacture and sales of carbon ceramic brake discs. Its capacity rises to £50.0m annual revenues later this year.

Company information

Non-Exec. Chair.	David Bundred
CEO	Dr Kevin Johnson
Finance Dir.	Michael Cunningham

+44 (0)151 356 2141
www.surfacetransforms.com

Key shareholders

Directors	2.3%
Richard Sneller esq.	13.3%
Cannacord	13.3%
Unicorn AM	7.4%
Richard Gledhill esq. (dir.)	6.2%
Janus Henderson	5.0%

Diary

27 Apr	Capital markets day
30 Jun	AGM
7 Jul	Capital markets day
Oct'23	Interim results

Analyst

Mike Foster +44 (0)203 693 7075
mf@hardmanandco.com

Table of contents

A 7.5-fold expansion from here

Current revenue capacity has achieved a £20m p.a. level. Equipment is being delivered now to take capacity to £50m. Equipment is being ordered now to raise this to £75m, which will be onstream later in 2024. There is then a stated ambition to expand capacity to £150m p.a., and plans are well advanced on the constructing of the expanded factory footprint to work towards this goal.

2022 results in line with much reduced expectation

Results in line with previously lowered expectations

2022 results were in line with previously reduced expectations and the continued order book growth in 2022 demonstrates SCE is not demand-constrained, far from it. The commissioning difficulties have dominated too much in 2022 and early 2023. We touch on demand, margins and market competition later, but we concentrate more on the supply side of the equation.

A difficult capacity ramp up, but now secured…

Next rise in capacity begins now

Jump from £20m to £50m capacity begins implementation now

…order book strength underpins the next capacity jump, equipment for which has just arrived

Equipment arrives this month to raise capacity to £50m p.a. from its current £20m. Commissioning this £20m p.a. capacity has clearly demonstrated the difficulty and risks, but two key factors have shown success. The reconfiguring from standalone manufacturing cells to a single process has been fully achieved. The need to re-engineer the heart of the process – the carbon infiltration furnaces – has been done and appears to be holding well.

As of May 2023, capacity is eight times earlier 2022 capacity…

As to the additional £50m p.a. capacity, SCE states that it will be online by end-3Q'23. This is firmly, demonstrably, on track. As the order book (p.6) shows, demand is strong, and growing rapidly in firm orders stretching out many years; however, for capacity:

…underpinning revenue estimates, which take into account customer draw-down scheduling

- prior to the 2022-23 equipment commissioning, the annual run rate was £2m;
- with the new furnaces and other capital equipment now having run smoothly for six weeks, the annual output run rate increases to £16m on £20m capacity;
- the "major quantum" referred to on p.1 is, therefore, ca. eight-fold; and
- deliveries of the next round of new capital equipment should take place later in 2024, to be producing 4Q'24 at a run rate of £75m p.a., 50% ahead of the capacity that has just now been successfully installed and commissioned.

Jump to £75m and then £150m capacity for 2026

Progressively building increasing revenue growth and capex, which is funded by the 2022 equity raise

SCE is on the path to the planned rise to £75m, which is funded by the 2022 equity raise and retained cashflow, and should begin producing in 4Q'24. This is termed Phase 3.1 and set to cost £10m. Phase 3.2, costing £30m, is slated to follow on, planned to take capacity to £150m p.a. and be operational by 2026. £150m is based just on the current prospective and secured orders. To quote from SCE in the 2022 equity raise, which was prior to a rise in orders:

Current and "firm" prospective order book justifies capacity of well over £100m p.a. with prospects for much more growth into expanding market

"Accordingly, the Board are confident that production capacity provided by Phase 3.1 and 3.2 will be required, noting that the combined revenue capability of the existing and new Knowsley factories will be £150 million p.a. Putting this in context, the Company's combined current OEM contracts and prospective contract pipeline total £590 million, and assuming an average contract term of five years, provides an annual equivalent revenue requirement, should all the prospective contract pipeline be formally awarded, to approximately £118 million annual revenue; this significantly exceeds the maximum revenue capacity of £75 million of the existing Knowsley site."

The production ramp up

We see a 7.5-fold expansion from here… "here" being £20m p.a. capacity, which is a 10-fold rise in the past couple of years

Production rise physically secured in February 2023

Production achievements and difficulties of the past 18 months

By the end of the current quarter, production will be back at full capacity. As stated by SCE on 3 April 2023 "changes were successful, and that [furnace] sub process has now run, at target rates, for over a month. This was the last major impediment to meeting ongoing daily customer requirements." More than four weeks later, this still holds true, so we now have over two and a half months' stable raised output, confirming the process is now secured. It is useful, at this point, to consider what has been achieved. To do this, we need to look back 18 months. Prior to then, production was via cells, effectively run in parallel, on a set process to a set formula.

Compared with 18 months ago, we consider:

Capital cost per tonne of capacity was reduced significantly and a whole new manufacturing configuration initiated

- SCE has cut its capital cost per tonne of capacity by 30% to 40p per £1 annual sales capacity.
- At a conservative 60% gross margin, this is a pre-tax gross profits return ambition of 150% p.a.; at a 30% operating margin and, taking into account working capital requirements too, this equates to a pre-tax return of ca.50% p.a.
- Through the implementation of a new manufacturing strategy in September 2021, SCE has broken out of the smaller scale manufacturing process of cell structure and moved fully to the process flow structure.

Difficulties of new furnaces and of other processes are well documented and management has gained credibility to be trusted when it states the problems are now resolved

- It has achieved the raising of output from the whole manufacturing process, but especially the furnaces, which, as of 17 April 2023 update, had run for more than a month at the full planned output with little material degradation and thus without requiring a re-lining. Re-lining should take place every six to 12 months, but the most significant problem had been the need to re-line every month or more.
- Production success has been achieved through re-engineering the furnace linings into more available lining materials and, in part, to raise the yield. This is the furnace process of melt and infiltration of carbon to make the core ceramic part. This is SCE taking the problem into its own hands and coming up with a solution.
- SCE has strengthened its team both in terms of the already strong engineering team and customer liaison. The latter was notably, but not exclusively, demonstrated by SCE winning the largest order in its history. It has also stated its confidence of good progress in the order pipeline in recent months.

May even put off competition and certainly has not dimmed relations with customers

- Once again, SCE has demonstrated to potential competitors not only the complexity of the process but the impossibility of "reverse engineering" a solution and the need to create solutions in-house to complex "running" problems.
- The supportive nature of the SCE and client relationship remains visible.
- SCE has put itself in the position where a 150% rise in capacity (£20m p.a. to £50m p.a.), commencing commissioning in the coming weeks, should benefit from the lessons and solutions learnt from the near 10-fold rise to the current £20m figure.

OEM 8 comprises the large bulk of 2023 and 2024 volume… …there have been timing (only) shortfalls vs. expectations

- The company suffers an estimated £9m shortfall in gross profits for 2022 and 2023E combined, to achieve an estimated figure of £13m.

The outcome is positive, we conclude. Nevertheless, the journey has involved some pain and, effectively, the October 2022 major ramp up threw up significant problems.

Pain, but promises kept

1H'23E will produce a loss

Financial results

1H'23E will produce a loss, which we estimate at £2.1m pre the tax credit. Within this, we estimate a loss of £2.4m for 1Q'23E and a small pre-tax profit 2Q'23; the latter, as guided by SCE management. Recent trading obviously has brought pain, no matter that this is now in the past. Management states SCE "initially adopted a low-risk strategy on individual furnace loading. Therefore, the overall total output for the month of March [2023] did not fully reflect the underlying dramatic improvement in yield and furnace availability achieved across the month."

Statements have been clear and have certainly not been overly optimistic

Keeping stakeholders truthfully informed

SCE's statements have been clear and have certainly not been over-optimistic. Specifically, a 24 November 2022 trading update pointed to production challenges and, in a further update, posted 11 January 2023, SCE stated: "some highly specific, but cumulatively significant, production issues at the Company in late November and December as volumes were ramped up.

As an example, in January, SCE stated wisely: "The problem furnaces are now operational but management wish to see several weeks of consistent output."

The problem furnaces are now operational but management wish to see several weeks of consistent output before being comfortable to confirm that the issue has been permanently resolved."

It is also worth noting that the public communication with customers, investors and other stakeholders has been outstanding, including:

- a promise to provide quarterly updates, kept;
- 11 operational updates since the end of 2021;
- with the late 2021 problems solved, guidance to Hardman & Co, as published by Hardman & Co in April 2022, that one of the business risks remained the physical delivery of the ramp up of output;
- timely and prescient statements, especially towards the end of 2022 and start of 2023 that one month's successful running did not – at that point – fully "prove" the solution;
- two firm statements in April 2023 outlining explicit reasons why the performance now was of a different order and with problems solved; and

Customers appear "unfazed"

- the "proof of the pudding" – the winning of the lifetime-largest order, the £100m OEM 10 order displacing the competitor.

Some markers for 2H'23 and beyond

Order book

3Q'23 is capacity constrained not order-book constrained

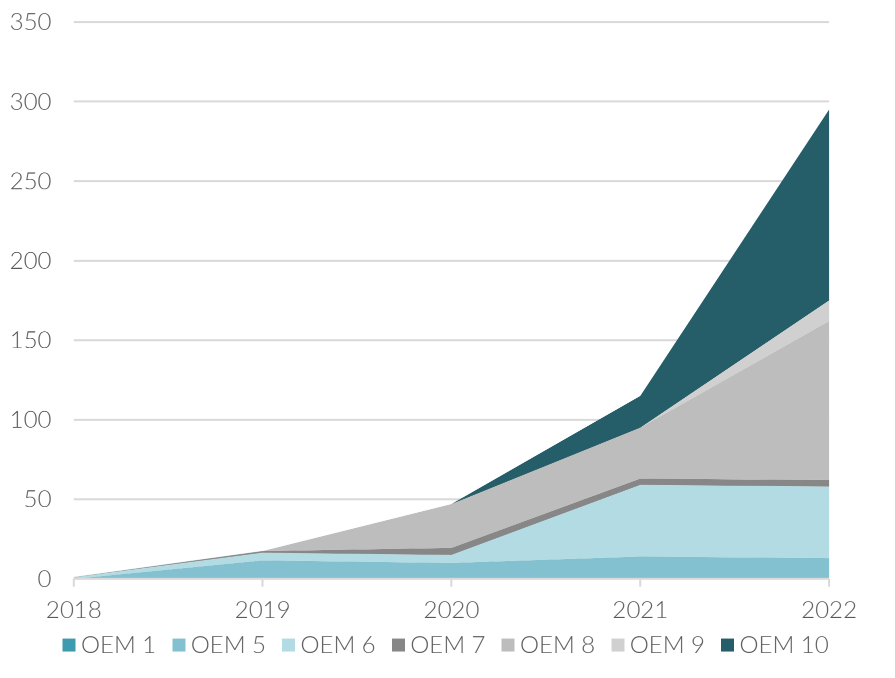
2023 and 2024 rely heavily on US-based EV OEM 8

- The order book increased by 140% in 2021 and 150% in 2022, the latest order being November 2022's £100m six-year lifetime order from the major US OEM, OEM 10. This was the second order for OEM 10 and replaced SCE's main competitor. It is a high-specification, high-margin market of over US$2bn.
- 2H'23 revenue rests heavily on OEM 8, the US-based global EV OEM and start of production was delayed by OEM 8 from 2H'22.
- Existing clients, OEM 5, OEM 6, OEM 8 and OEM 10 added new contracts, termed carry-over contracts. This is a feature that will grow significantly over time and is a robust underpinning for hopes of a 2023 order book expansion.
- Over half the order book is for electric vehicles, 80% from the US. There are well-grounded hopes that European OEM 5 may become a large customer.
- Electric vehicles' attributes are well-suited to carbon ceramic brake characteristics.
- The combined current and prospective contract pipeline is £683m, well up on the £590m stated in September 2022.
- When fully on-stream in 4Q'23, capacity will meet demand; however, as shown below, the firm order book's past rise requires the extra capacity to be delivered.

SCE benefits from 11 contracts with seven OEMs

With OEM 5 anticipated to grow significantly, there soon should be three core major global repeat customers embedded with SCE

Order book at calendar year-end (£m)



Note: OEM 1 has been a relatively small client
Source: Hardman & Co Research, Surface Transforms presentation

Capacity

Equipment now being delivered to raise capacity to £50m p.a., producing by the back end of 2023

Our revenue estimate for 2H'23 is £11m, which is a small fraction above the recently achieved current capacity. Sales do not rise quite up to capacity as there are scheduling peaks and troughs in any manufacturing business. Equipment is now being delivered to raise capacity to £50m p.a. during the remainder of 2023. Current contract sales rates indicate £33m revenue for 2024 and £42m for 2025, with the big recent OEM 10 contract beginning that year. We make no allowance for the possibility of higher revenues as a result of catch-ups from revenue pushed back from 2H'22 and 1H'23. The reason is that the OEMs' supply chains are likely to need time to adjust and rise up beyond planned run rates. There is also SCE's own supply chain. So, upgrades are possible but not safe to rely on. Indeed, ongoing global supply-chain constraints have included capital equipment too; so, for these external reasons, we are aiming at conservative projected sales numbers.

We do not bank on revenue catch-ups from 1H'23 shortfall

This means that, even on just the current order book, the run rate should rise progressively to £50m p.a. sales or higher.

Margins

Clearly, 1H'23 margins have been affected by the production issues. 2H'23 is expected to see full 65% gross margins with the increase in administrative and engineering human resources ongoing through the period and thus rising each year. R&D was particularly high in 2022, at £5.6m (up from £3.4m); these figures even exclude the capitalised R&D, which was high in 2022. Our model sees R&D flatlining or slightly down in 2023, before rising in subsequent years.

Supply chains and costs constrained globally in all industries, including auto

SCE is engineering our costs across the board

Gas and electricity costs set to fall, and the peak was ironed out by fixed contracts

Costs are falling, with falling energy prices. This is especially the case for gas, of which SCE is a big user, not for energy but for the carbon. Much more significantly, efficiency of electricity and gas usage are both continually improving. SCE has halved its total unit costs over past years and aspires to halve them from here. Nonetheless, there is a global trend in inflation. Many costs are hedged or fixed and there is now an element of currency exposure, although the majority of US contracts are still priced in Sterling. Gross margin erosion is far from cast for certain, but we trim gross margins by 1ppt. The main "wild card" was gas, with the SCE fixed price contract ending around now. It can now be fixed at very similar prices.

ESG

ESG in supply chain and in legislative-driven prospective demand

SCE is mindful of ESG and sustainability, which includes workforce training sustainability training; it is expanding its in-house apprenticeships very significantly, for example. Importantly for demand, the carbon ceramic brake disks reduce particulate emission markedly. Such pollution is an issue of increasing concern, especially as petrol emissions start to fall. In 2025, the EU may legislate, which would be an indirect boost to ceramics.

Market potential

Huge market in SCE terms but a fairly niche one in auto terms for the next few years

- The current total global carbon disk market is ca.$350m, on our estimates, maybe slightly more.
- There is a highly visible path to ca.$2.2bn, which represents only 2% of new car sales.
- SCE is continually raising market share.
- SCE is placed strongly to take a high market share. Hardman & Co considers this could possibly be 25%, or more, and we would be disappointed were the share to be only 15%.

Investment case

2022 and 1H'23

Problems really have made SCE stronger but at a £9m cost

The past six months have brought a major order – the largest to date – at the same time as major hitches in a large capacity ramp up. The latter are now resolved but resulted in a ca.£9m shortfall in gross profits. They also confirmed what we knew; namely, SCE has excellent self-help engineering capability and its customers are loyal.

Market position

Demand exciting and, remember, nearly all models sold to have waiting lists

This is a market currently around US$400m, set to grow five-fold in the coming short number of years. SCE's share is small but rising. This is about sharing growth, not taking its competitor's growth away. That said, the most recent order, which was the largest to date, did involve taking the competitor's place with a. global major OEM.

Delivery

SCE back in the driver's seat

SCE has resolved the problems related to delivery having previously reconfigured the process, which cut costs of manufacture and capital costs of equipment significantly. The next capacity ramp up begins now but makes up less of a percentage and is less of an engineering leap than the 2022 one. The well-established continuous cost improvement has not been disrupted.

Some illustrative numbers to 10.5p EPS

With a rapidly growing market demand, we consider it reasonable to look a bit beyond fully contracted orders

The combined current and prospective contract pipeline is £683m, well up on the £590m stated in last year's equity raise.

The average order duration is a little over five years, encouragingly up from 3.8 years a couple of years ago. £683m divided by five years is £136m p.a. sales. Not all this prospective pipeline will be awarded, but, conversely, other contracts not currently in the pipeline will come forward.

Our model has operating margins increasing to 24.5% by 2025E, but there is a rising momentum and operational gearing. We consider a long-term aspiration of 25% to be overly conservative.

Capital is in place to take capacity to £75m p.a., including some retained prospective operating cashflow

Capital is in place to take capacity to £75m p.a. and to achieve £150m p.a., a further £30m for the manufacturing facility and perhaps a total of £45m. including working capital. would be required on top of that. Retained cashflow to 2028E would go a long way towards that and some debt could be accommodated.

10.5p EPS modelled illustration

£136m sales p.a. at 25% pre-tax margins, 20% post-tax margins equate to £27m post-tax profits, or 10.5p EPS. This is some years out beyond our modelling to 2025 but is based on the current prospective order book.

In the context of a fast-growing market confidently looking to exceed US$2.2bn from the luxury and upper-mid range models and with operational gearing and high barriers to competition supporting our categorising of 25% operating margins, and conservatively, we consider 10.5p EPS to be an interesting and valid future target. It relies on the numbers for factory costings, but we consider these to be well-grounded, especially since all the manufacturing has been "proved up".

Risk mitigation

Cashflow and volume manufacturing

SCE currently remains operating cashflow-negative, and has significant capital expenditure programmes on top.

SCE has always been net cash-positive, and remains so, but we consider that, once profits are achieved, a small element of debt-financed capital spend is possible.

2H'22 proved quite a jolt, but SCE emerges strong

The risk of process disruption remains. The greater number of furnaces, CVIs (four of these) and other major equipment spread operational risk.

Contracted volumes have high visibility

Nevertheless, OEM 8 delayed the start of production by a few months in 2022

The risk to contract volumes is minimal. These are flagship, or luxury or upper mid-range models and they will be prioritised for delivery by the OEMs, added to which, many have an end-customer waiting list. While this severely mitigates the risk to overall sales abatements, there is a risk that the start of production could drift until late on. OEMs 9 and 10 have small starts of production in 2024 but much larger in 2025; for example, OEM 10. There is a risk, in 2025, that this could drift, as it did for OEM 8, although we doubt it will and, in any case, our numbers assume a few months' "slack".

Deselection from a model is very unlikely and would be very expensive, to the tune of possibly hundreds £m and a significant engineering risk for the OEM, let alone contractual matters. Deselection is, therefore, near-impossible.

A very high proportion of 2023 and 2024 revenues derive from OEM 8, which already delayed the start of production but are now taking product and have increased the order size.

Competitive position

SCE has only one competitor, BremboSGL, and we note that the Quandt family has a substantial shareholding in the latter. The Quandt family is the owner of BMW. The market and competitive landscape offer a very significant opportunity for SCE. Complex manufacturing scientific process and the mission-critical nature of the component result in multi-year lead times for any new competitors. No other competitors are at all evident. Auto OEM new-product component markets grow with competition.

No new competitors are active, although some Asian companies are potentially interested. SCE knows major global OEMs – and knows them better as each quarter goes by – and no new competition is anticipated for many years. The manufacturing issues in 2022 and 2023 may even make this engineering barrier higher.

The existing competitor may improve its product to more closely emulate SCE's multi-directional weave. Reverse engineering is not possible and such short-term momentum is not there.

Supply chain

SCE's operations had not been affected by the well-documented global bottlenecks in the supply chain across the economy, but they have bitten on the capital equipment servicing and are a factor that the OEMs are aware of. As to labour markets, SCE is an excellent local employer, engaged with a wide local community. Concerning third-party supplies of materials or equipment. SCE is dual-sourced or more. It remains confident it can keep down its engineering costs, so that its sales prices can remain competitive.

Financials

Revenue account						
Year-end Dec (£m)	**FY'22**	**1H'23E**	**2H'23E**	**FY'23E**	**FY'24E**	**FY'25E**
Sales	5.12	*5.50*	*11.00*	16.00	33.00	42.00
Gross profit	3.08	*2.75*	*7.15*	9.60	21.12	26.88
Gross margin	60.10%	*50.00%*	*65.00%*	60.00%	64.00%	64.00%
R&D & overheads*	-7.98	*-4.15*	*-4.35*	-8.20	-12.02	-12.98
R&D capitalised	1.60	*0.90*	*0.10*	1.00	0.20	0.20
EBITDA	-4.90	*-1.40*	*2.80*	1.40	9.10	13.90
EBITDA margin	loss	*loss*	*25.45%*	8.75%	27.58%	33.10%
EBITA	-5.87	*-2.00*	*1.40*	-0.60	5.80	10.30
EBITA margin	loss	*loss*	*12.73%*	loss	17.58%	24.52%
Net finance income**	-0.17	*-0.10*	*-0.10*	-0.20	-0.30	-0.30
PBT (adjusted)	-6.04	*-2.10*	*1.30*	-0.80	5.50	10.00
Exceptional items	0.00	*0.00*	*0.00*	0.00	0.00	0.00
Tax credit	1.26	*0.40*	*0.40*	0.80	0.50	0.00
PAT	-4.78	*-1.70*	*1.70*	0.00	6.00	10.00
EPS (diluted, adjusted, p)	-2.34	*-0.70*	*0.70*	0.00	2.47	4.10
DPS (p)	0.00	*0.00*	*0.00*	0.00	0.00	0.00

** Post Other and Non-recurring income, pre Depreciation. ** A non-cash accounting item*
Source: Surface Transforms accounts, Hardman & Co Research estimates

It may be worth noting that, a year ago, the Hardman & Co estimates for 2025 sales stood at £37m, a number subsequently increased above the current level following a contract win. We reduce our 2025E sales to £42m in order to take a conservative view of both the third-party supply chains, including customers and suppliers, and also to be conservative in our estimate of the Phase 3.1 SCE rollout of its capacity increase to £75m p.a. sales, which is scheduled to take place during 2025.

Balance sheet

Balance sheet					
@ 31 Dec (£m)	**FY'21**	**FY'22**	**FY'23E**	**FY'24E**	**FY'25E**
Shareholders' funds	20.89	33.55	33.55	39.55	49.55
Net cash/(debt)*	11.70	14.03	2.43	1.50	2.23
Avg. shares diluted (m)	190.00	204.20	242.00	243.00	244.00

** Includes current asset investment*
Source: Surface Transforms accounts, Hardman & Co Research estimates

We model net cash positive balance sheets to end 2025, but the front-ended roll out of Phase 3.1 during 2025 may be accelerated or not, and may on that basis be funded in part by debt. Capex cash spending during the current year relates to Phase 2, the rise in capacity to £50m pa revenue where equipment is being delivered 1H23. Note the significantly rising depreciation charge. Page 1 shows gross cash.

Cashflow

Cashflow					
Year-end Dec (£m)	**FY'21**	**FY'22**	**FY'23E**	**FY'24E**	**FY'25E**
Cash from operations*	-3.95	-6.54	-2.60	8.07	11.73
Capex	-3.95	-8.35	-9.00	-9.00	-11.00
Equity issuance	19.10	17.22	0.00	0.00	0.00
Net cashflow	11.20	2.33	-11.60	-0.93	0.73
Depreciation	0.67	0.97	2.00	3.30	3.60

**Post tax, post (de minimis) cash interest*
Source: Surface Transforms accounts, Hardman & Co Research estimates

Disclaimer

Hardman & Co provides professional independent research services and all information used in the publication of this report has been compiled from publicly available sources that are believed to be reliable. However, no guarantee, warranty or representation, express or implied, can be given by Hardman & Co as to the accuracy, adequacy or completeness of the information contained in this research and they are not responsible for any errors or omissions or results obtained from use of such information. Neither Hardman & Co, nor any affiliates, officers, directors or employees accept any liability or responsibility in respect of the information which is subject to change without notice and may only be correct at the stated date of their issue, except in the case of gross negligence, fraud or wilful misconduct. In no event will Hardman & Co, its affiliates or any such parties be liable to you for any direct, special, indirect, consequential, incidental damages or any other damages of any kind even if Hardman & Co has been advised of the possibility thereof.

This research has been prepared purely for information purposes, and nothing in this report should be construed as an offer, or the solicitation of an offer, to buy or sell any security, product, service or investment. The research reflects the objective views of the analyst(s) named on the front page and does not constitute investment advice. However, the companies or legal entities covered in this research may pay us a fixed fee in order for this research to be made available. A full list of companies or legal entities that have paid us for coverage within the past 12 months can be viewed at http://www.hardmanandco.com/legals/research-disclosures. Hardman may provide other investment banking services to the companies or legal entities mentioned in this report.

Hardman & Co has a personal dealing policy which restricts staff and consultants' dealing in shares, bonds or other related instruments of companies or legal entities which pay Hardman & Co for any services, including research. No Hardman & Co staff, consultants or officers are employed or engaged by the companies or legal entities covered by this document in any capacity other than through Hardman & Co.

Hardman & Co does not buy or sell shares, either for their own account or for other parties and neither do they undertake investment business. We may provide investment banking services to corporate clients. Hardman & Co does not make recommendations. Accordingly, they do not publish records of their past recommendations. Where a Fair Value price is given in a research note, such as a DCF or peer comparison, this is the theoretical result of a study of a range of possible outcomes, and not a forecast of a likely share price. Hardman & Co may publish further notes on these securities, companies and legal entities but has no scheduled commitment and may cease to follow these securities, companies and legal entities without notice.

The information provided in this document is not intended for distribution to, or use by, any person or entity in any jurisdiction or country where such distribution or use would be contrary to law or regulation or which would subject Hardman & Co or its affiliates to any registration requirement within such jurisdiction or country.

Some or all alternative investments may not be suitable for certain investors. Investments in small and mid-cap corporations and foreign entities are speculative and involve a high degree of risk. An investor could lose all or a substantial amount of his or her investment. Investments may be leveraged and performance may be volatile; they may have high fees and expenses that reduce returns. Securities or legal entities mentioned in this document may not be suitable or appropriate for all investors. Where this document refers to a particular tax treatment, the tax treatment will depend on each investor's particular circumstances and may be subject to future change. Each investor's particular needs, investment objectives and financial situation were not taken into account in the preparation of this document and the material contained herein. Each investor must make his or her own independent decisions and obtain their own independent advice regarding any information, projects, securities, tax treatment or financial instruments mentioned herein. The fact that Hardman & Co has made available through this document various information constitutes neither a recommendation to enter into a particular transaction nor a representation that any financial instrument is suitable or appropriate for you. Each investor should consider whether an investment strategy of the purchase or sale of any product or security is appropriate for them in the light of their investment needs, objectives and financial circumstances.

This document constitutes a 'financial promotion' for the purposes of section 21 Financial Services and Markets Act 2000 (United Kingdom) ('FSMA') and accordingly has been approved by Capital Markets Strategy Ltd which is authorised and regulated by the Financial Conduct Authority (FCA).

(Disclaimer Version 8 – Effective from August 2018)

Status of Hardman & Co's research under MiFID II

Some professional investors, who are subject to the new MiFID II rules from 3rd January 2018, may be unclear about the status of Hardman & Co research and, specifically, whether it can be accepted without a commercial arrangement. Hardman & Co's research is paid for by the companies, legal entities and issuers about which we write and, as such, falls within the scope of 'minor non-monetary benefits', as defined in the Markets in Financial Instruments Directive II.

In particular, Article 12(3) of the Directive states: 'The following benefits shall qualify as acceptable minor non-monetary benefits only if they are: (b) 'written material from a third party that is commissioned and paid for by a corporate issuer or potential issuer to promote a new issuance by the company, or where the third party firm is contractually engaged and paid by the issuer to produce such material on an ongoing basis, provided that the relationship is clearly disclosed in the material and that the material is made available at the same time to any investment firms wishing to receive it or to the general public…'

The fact that Hardman & Co is commissioned to write the research is disclosed in the disclaimer, and the research is widely available.

The full detail is on page 26 of the full directive, which can be accessed here: https://ec.europa.eu/transparency/regdoc/rep/3/2016/EN/3-2016-2031-EN-F1-1.PDF

In addition, it should be noted that MiFID II's main aim is to ensure transparency in the relationship between fund managers and brokers/suppliers, and eliminate what is termed 'inducement', whereby free research is provided to fund managers to encourage them to deal with the broker. Hardman & Co is not inducing the reader of our research to trade through us, since we do not deal in any security or legal entity.

research@hardmanandco.com

1 Frederick's Place
London
EC2R 8AE
www.hardmanandco.com

+44(0)203 693 7075