6 September 2022

HARDMAN&CO.

Automotive components

Source: Refinitiv

Market data

EPIC/TKR	**SCE**
Price (p)	**47**
12m high (p)	70
12m low (p)	37
Shares (m)	195.4
Mkt cap (£m)	91.9
EV (£m)	85.0
Free float*	67%
Country/CCY of listing	UK/GBP
Market	AIM

**As defined by AIM Rule 26*

Description

Surface Transforms (SCE) is 100% focused on manufacture and sales of carbon ceramic brake discs. It has capacity in place, rising to £50.0m annual revenues by 2023.

Company information

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CEO	Dr Kevin Johnson
Finance Dir.	Michael Cunningham

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Key shareholders

Directors	9.0%
Richard Sneller esq.	12.2%
Cannacord	11.9%
Unicorn AM	9.1%
Richard Gledhill esq. (dir.)	7.7%
Janus Henderson	4.1%

Diary

Dec'22	Trading update
May'23	Final results
Jun'23	AGM
Sep'23	Interim results

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SURFACE TRANSFORMS

Further new order, upgrades, production ramp-up

We are very encouraged by the further significant upgrades following SCE's interim results announcement. This is over and above the upgrades from August's new OEM 9 order. The order book is now £190m (£50m end-2020), with more rises promised before end-2022. The results, announced 5 September, cover a period where production ramp-up was impressive and the resilience of gross margins proven. The major milestone of profitability is achieved this half year. We raise 2024E EPS by 39%, on a 12% sales upgrade. Operational gearing is at play but also the confirmed continuing robustness of gross margins.

- **Order book quadruples in under two years:** The most recent win is a new customer, OEM 9. SCE is winning more than its fair share in this rapid-growth market. Three OEMs generate 2023E revenue, five in 2024E. End-sales of these car models have waiting lists themselves, which adds visibility too.

- **Growth ramp-up:** 2H22E revenue, remarkably, is over eight times 2H21. When many businesses are seeing gross margins fall, SCE has not; indeed, we upgrade 2022. Year-in/year-out cost efficiencies – shared with customers to grow the market – are a given. Importantly, they are ahead of expectations.

- **Direction of travel:** Globally, there is only one – larger – competitor, and SCE is taking share. It is clear and detailed about its extra contract pipeline of new models for existing customers and also of new OEMs. This is because of lengthy interaction with OEMs pre-order. Rapid capacity growth matches this.

- **Risks:** Sales increases lead to a definable rise in working capital needs. New capacity has now been successfully commissioned but is always a risk. Much capex is in $, which is all hedged. Gas is a noticeable input and our numbers assume high prices, which SCE is countering through major efficiency gains.

- **Investment case:** SCE is rapidly growing its 10% market share in this fast-growth market. Single supply was a most anomalous position for an auto OEM market; now SCE is one of only two suppliers. Thus, the OEM 8 orders, while true "game changers", simply fitted into the broader SCE place in the market expansion. Now OEM 9 has arrived too. SCE delivers on a global OEM base.

Financial summary and valuation

Year-end Dec (£m)	FY'20	FY'21	FY'22E	FY'23E	FY'24E	FY'25E
Sales	1.95	2.37	12.50	23.00	33.50	40.00
EBITDA	-2.32	-3.78	1.50	4.90	10.00	12.80
EBITA	-2.81	-4.45	0.20	2.50	7.40	9.80
PBT	-2.92	-4.58	0.00	2.20	7.10	9.50
PAT	-2.31	-3.95	0.70	2.90	7.10	9.50
EPS (adjusted, p)	-1.54	-2.08	0.36	1.48	3.62	4.80
Shareholders' funds	5.67	20.89	20.40	23.30	30.40	39.90
Net cash/(debt)	0.50	11.40	-1.00	-1.00	-1.00	2.00
P/E (x)	loss	loss	n/m	31.7	13.0	9.8
EV/sales (x)	43.6	35.9	6.8	3.7	2.5	2.1
EV/EBITDA (x)	loss	n/a	56.7	17.3	8.5	6.6
DPS (p)	nil	nil	nil	nil	nil	nil

Source: Surface Transforms, Hardman & Co Research estimates

Upgrades to 2023 and 2024

SCE explicitly states a new order – on top of August's OEM 9 – expected in 2022…

Our confidence in SCE's momentum warrants us to initiate 2025E financials. For the reasons below, we believe future years, especially 2024 and 2025 are likely, more than likely, to see significant upgrades. The interim results outlook saw SCE explicitly repeat that it expects at least one more significant new order this year. We would expect this to increase 2024 (and particularly early 2025) sales further, with profits operationally geared. We expect further major orders in 2023 onwards.

…and we expect further major orders in 2023

Interims and current second half

Sales rose 140% in the half year reported; 2H22E eight-fold growth

Interim results were as anticipated; sales increased by 140%, gross margins held broadly firm and administrative expenses rose in anticipation of 2H22. 2H22E annualised revenue is more than eight times the 2021 rate.

2024E PBT upgraded from £5.6m to £7.1m, 2023E rises too

Upgrade to 2023; 27% upgrade to 2024E PBT

Both the new-customer OEM 9 sales and the SCE outlook statement contribute to an upgrade. For 2024E PBT, this is a rise from £5.6m to £7.1m. See table, page 7.

SCE is very granular in its market guidance and it stated: "looking forward to the three years 2023 to 2025, and having concluded volume discussions with OEM 8, the Board is very pleased to increase sales guidance in these years by approximately 10% p.a. …. There are some offsetting costs – approximately £0.8m p.a. reflecting additional production overheads to support sales growth."

Detailed analysis of rapid order growth

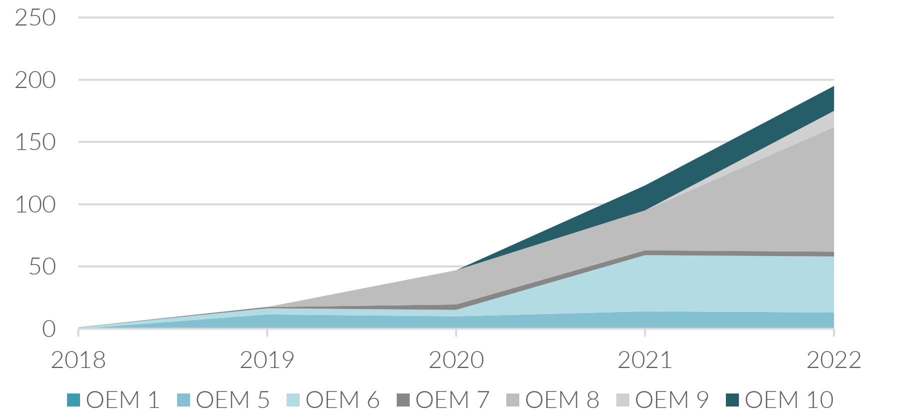
Order book nearly quadruples in under two years; prospective order book twice that, again

The business is now profitable. Importantly, rapid sales increases reflect only the current order book. Given how the order book has risen (see chart below), the momentum to future sales upgrades is clear. SCE states the prospective contract pipeline at £400m. Typically, an order commences production 24 months after the win. This is the case for the £13m contract announced last month, with an entirely new customer, OEM 9. We would strongly expect, therefore, our 2024 sales estimates will be upgraded in due course, with profits operationally geared.

Manufacturing sales capacity of £20m will have risen to £50m by early next year, a timetable recently brought forward from mid-2023. Further expansion will come.

SCE benefits from nine contracts with six OEMs

Order book at calendar year-end (£m)



Notes: the 2022 figure is as of date of this publication. OEM 1 has been a relatively small client.
Source: Hardman & Co Research, Surface Transforms presentation

New order

SCE sells to European-based, US-based, electric and internal combustion OEMs. A strong auto component business covers all bases.

New customer OEM 9 announced 30 August

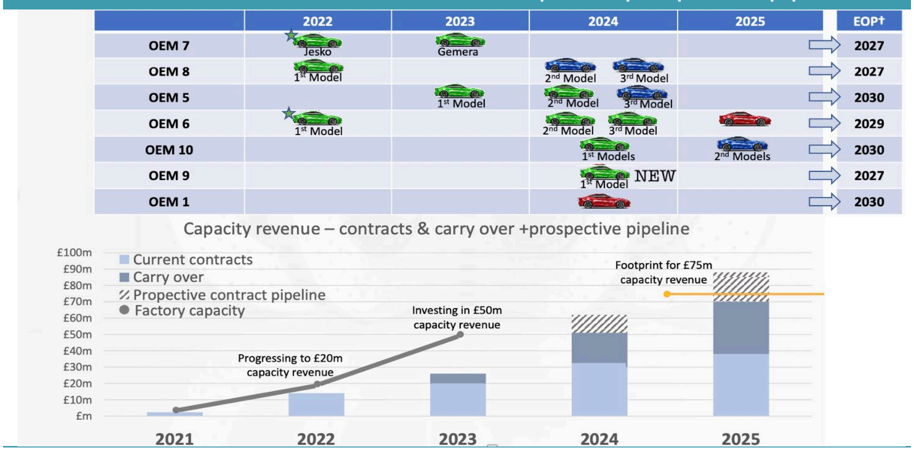
The new order from OEM 9 is a multi-year exclusive supply to both axles. This is not just an end-customer option component. There has been strong visibility to an order for some while. In passing, OEM 10 came 13 months ago; there is a wide range of prospective OEMs testing the product, allotting to new models and so queueing to be delivered, we believe. Almost exactly half of SCE's order book currently is with a leading US-based global EV OEM (OEM 8) and, now, OEM 9 can be said to complement SCE's positioning in this large rapidly growing automotive segment. SCE supplies a higher percentage of the total output of EV market challenger OEM 9, compared with the very important OEM 8 position. We consider this SCE sales profile no longer to be a situation of gaining traction, it is rather covering all bases: electric, internal combustion, US-based global suppliers, European-based global suppliers.

Detailed multiple drivers to ongoing major growth

We expect sales numbers to be upgraded in the future as "carry over" models become live orders and as further, new, OEMs (above and beyond OEM 10) make an appearance. Carry over is defined as the anticipation of a contract win into a new model from an existing customer. This has already happened in British OEM 6 and Continental European OEM 5 and OEM 7.

SCE has explicitly presented its best prospects (blue and red in chart), which are not yet in profit estimates and would upgrade 2024 revenue

Production volumes from current orders and part of prospective pipeline



Key: GREEN active contracts; BLUE carry over; RED prospective contracts; YELLOW factory capacity
SOP: Start of Production; EOP End of Production
Source: Surface Transforms presentation, Hardman & Co Research

Sales estimates are detailed, aggregated bottom-up, model by model, each of which has an annual (monthly) quantified offtake. The overwhelming majority of these models benefit from a large end-customer, pent-up, firm, order demand, facilitating the highly predictable SCE off-take profiles.

Long term now paying off

Many years' building a huge "economic moat" in an explosive growth market

Recent years have tested SCE's supply chain and it's come through with flying colours

This has taken time, as the OEM customers are very careful with this safety-critical component. OEM and SCE spend many years carrying out testing, with each customer having its own particularities. SCE has demonstrated that many of these programmes come to fruition. Many are still in progress. The first bespoke pieces were supplied in 2002. Manufacturing being honed over many years provides excellent hurdles to new competition. OEM trials, on-road retrofit and track cars have brought proof-of-performance for SCE. So too has its supply-chain resilience, tested in recent years.

Operational delivery

This brief update publication can only provide the broad picture on delivery. The main message is that SCE's constant improvements applied to a relatively new manufacturing process and new product are the value creators.

Manufacturing efficiencies grow the market and make the shorter term robust

Consistently delivered efficiencies are key to SCE unlocking growth in global market sales to more than a hundred times its 2023 revenue

Manufacturing costs have halved in recent years, and are on track to halve again in a relatively short number of years. This, at some point, will tip the product into being a mass-market possibility, boosting global market sales to well above a hundred times SCE's sales in 2023 (or 2025 for that matter). How much of this would SCE secure? Time will tell, but there are only two suppliers, none on the horizon and SCE has the superior product. All the while, this enables SCE to maintain its gross margins while customers see large price paring.

So, how exactly does this efficiency drive make the short term more robust? Capital is precious and SCE has made major efficiencies here, in the past year.

Capital cost efficiencies

In 2021, £50m capital cost requirement honed down to £40m, at same time as annual capacity delivered from this rose from £50m to £75m

As of the September 2021 manufacturing strategy update, management stated that an original £50m total factory capital equipment requirement had been reduced to £40m (much of which has been spent to date), a saving of £10m. It also stated that, subject to capital investment, the total factory capacity could be reconfigured upwards to a new figure of £75m p.a. revenue. This is not new information, but it demonstrates the detailed planning behind the delivery of the current major step-change. Customers and potential customers see it, and we consider this to be just as important to winning orders as the product and manufacturing engineering itself.

Manufacturing efficiencies: a quantified, worked example

The programmes are too numerous to list, but one may be chosen to illustrate. Gas provides carbon for the product, via a complex but well-honed chemical "cooking" process. If no efficiencies had been made, the 2022 (to date) change in gas prices would have hit gross margins. SCE indicates that the gas market should not, even with the current outlook, have any net impact on gross margins.

A worked example of how SCE's efficiencies come, and how company is open about risks and mitigations, leading to rewards

SCE guidance is very specific, as it is with the composition of the prospective order book and the capital cost efficiencies. This is really important to us. It is, therefore, worth quoting the SCE update within the 2021 results of 4 April 2022: "Without action, a tripling in energy costs would reduce gross margin percentage by around five percentage points. Fortunately, by 2023, this is likely to be offset by a number of energy efficiency projects that are already under way on the existing furnaces. Additionally, our new furnaces are significantly more efficient than our existing furnaces which, combined, will offset the current range of anticipated commodity increases. Therefore, we are not forecasting gross margin percentage deterioration in 2023 or beyond from this source." SCE is also carefully assessing its extensive, detailed work on the business case for a CHP plant. There are a large number of efficiency-optimising projects on the go and delivering, and there always have been.

Risk mitigations

High R&D, high growth, significant barriers to competition

This is a high-growth, strong-margin, high-barrier-to-competition business, which has now broken through to profitability. It has a multi-year track record and multi-year prospects of significantly raising production efficiencies, and its R&D-led intellectual property (IP), which is unlikely to be easily copied, is a significant factor. Nonetheless, such a rapid growth curve brings risks.

Main investment drivers

Some key points

Bull factors	Risks and challenges
Excellent product, better than competitor's	Supply chain, cost management: achieved
Order book more than doubling every year	SCE has coped with OEM timeline flexing
Only one competitor, and high barriers to entry	Order bunching needs capacity in place
Enables clients to meet environmental issues and better air quality has risen up the agenda	Cash absorbed by growth capex
End-customer waiting lists on models being supplied	Product and manufacturing performance excellence: achieved consistently

SCE pretty open about crucial details

- As mentioned, a major input is natural gas. The fixed price contract – which is with a Russian supplier – expires in May 2023. As investment into capital equipment is undertaken – for example, the carbon vapour infiltration system – significant reduction in gas usage is facilitated. Energy efficiency projects are already under way. Further, new furnaces are more efficient.

Become expert, following many years' raising expertise. Engineering-applied, IP-led.

- Gross margin maintenance relies on ongoing efficiency increases. SCE now has a decade (plus) experience in quantifying, anticipating and delivering this large number of improvements. This is an IP-based business (some at chemistry PhD level), applied to a robust manufacturing delivery.
- Clearly, the product is a globally priced competitive market and, in due course, the mix of all input costs and efficiency gains would tend towards evening out. As a supplier to a global market from a sterling cost base, the weakening pound does no harm.
- Product integrity is crucial. Not only has it been selling its products for over a decade for use in high-performance track and road conditions, without failures, but the current manufacturing plant has been in use for several years also.
- Capacity is being expanded very significantly. Some large-cost items (e.g. furnaces) are priced in $. All this $ exposure is fully hedged. Nearly all contracts are priced in sterling. This might be seen as a modest positive, currently cutting the local-currency cost to the OEM. The point is that all gross margins are as locked in as can be.

Clear manufacturing strategy and outperformance of projections

- SCE has set out its manufacturing strategy in detail. Current capacity expansion goes hand-in-hand with a 2021 efficiency-raising and flexibility-raising refinement of the manufacturing strategy, and a major production ramp up this year. Management has been explicit about the costs (which have been improved on) and timelines, as well as the detailed capital equipment cost and configuration methodology.
- Product obsolescence is important in the automotive market. Carbon ceramic brakes are relatively new, and so on a major upswing. They also tick the regulatory boxes regarding the OEMs' need for fuel efficiency and better air quality. Not only do the discs weigh less, but, more importantly, the whole chassis arrangement can be made lighter than the traditional iron disc brakes.

The carbon ceramic brakes allow for a much lighter chassis and the weight saving saves significant fuel. The minimal particulate generation is ever more important in the environmental agenda, regarding air quality benefits. We believe it is difficult to overstate the benefit of this issue for medium-term major demand growth.

Financials

Upgrades include 39% to 2024E EPS

New OEM 9 affects sales in 2024. 2023 and 2024 OEM 8 sales raised. Gas price rises but gross margin estimates hold firm.

Current financial estimates (£m) revisions

Fiscal period	Previous 2023 estimates	New 2023 estimates	Previous 2024 estimates	New 2024 estimates
Sales	19.50	23.00	30.00	33.50
Gross profit	12.67	14.95	19.50	21.80
Gross profit margin	65.0%	65.0%	65.0%	65.0%
EBITDA	3.40	4.90	8.40	10.00
EBITA	1.00	2.50	5.80	7.40
PBT	0.80	2.20	5.60	7.10
EPS (p)	0.77	1.48	2.61	3.62

Source: Company announcements, Hardman & Co Research

2024E registers a 39% upgrade in EPS vs. 27% upgrade in PBT. SCE has stated that no tax is now expected to be due for 2024 or 2025. Estimates are from current firm contracts only. Active discussions are on top of this.

SCE presentations illustrate possible £50m 2024E sales revenue if active further client discussions are added

We model £33.5m revenue for 2024E from existing contracts alone

Revenue estimates (£m) over past year, and prospects

Fiscal period	Sales estimates as of September 2021	Current sales estimates	Current estimates plus active discussions on model carry-over *
2022E	12.0	12.5**	12.5
2023E	17.0	23.0	25.0
2024E	25.0	33.5	50.0
2025E	n/a	40.0	70.0

**As stated per company presentations*
*** A modest rise, but gross margins raised by "richer" mix*
Source: Company announcements, Hardman & Co Research

Results and current estimates

Revenue

Forward estimates are based solely on firm programme sourcing activities and nominations, that is to say firm orders. SCE states its firm prospects are more than double the current (rising) £190m order book.

Revenue account

Year-end Dec (£m)	FY'20	FY'21	FY'22E	FY'23E	FY'24E	FY'25E
Sales	1.95	2.37	12.50	23.00	33.50	40.00
Gross profit	1.31	1.55	9.13	14.95	21.78	26.00
Gross margin	67.0%	65.0%	73.0%	65.0%	65.0%	65.0%
R&D & overheads	-3.63	-5.58	-7.83	-10.25	-11.98	-13.40
R&D capitalised*	0.00	0.25	0.20	0.20	0.20	0.20
EBITDA	-2.32	-3.78	1.50	4.90	10.00	12.80
EBITA	-2.81	-4.45	0.20	2.50	7.40	9.80
Net finance income**	-0.11	-0.13	-0.20	-0.30	-0.30	-0.30
PBT (adjusted)	-2.92	-4.58	0.00	2.20	7.10	9.50
Exceptional items	0.00	0.00	0.00	0.00	0.00	0.00
Tax credit***	0.61	0.63	0.70	0.70	0.00	0.00
PAT	-2.31	-3.95	0.70	2.90	7.10	9.50
EPS (diluted, adjusted, p)	-1.54	-2.08	0.36	1.48	3.62	4.80
DPS (p)	0.00	0.00	0.00	0.00	0.00	0.00

** Included within line above. ** Non cash, accounting item. *** This may continue beyond 2023, but we aim to estimate conservatively.*
Source: Surface Transforms accounts, Hardman & Co Research estimates

The strategic report to the 2021 full-year report stated that ongoing investment at the operating cost expenditure as well as capex means that return on sales (EBIT level) will be limited to “single-digit percentage….for the next few years, but we believe that we could reach 20% by 2024 and 2025.” This was subsequently, recently, revised upwards with the upgrades at the time of the 1H’22 results.

Balance sheet

Balance sheet						
@ 31 Dec (£m)	**FY’20**	**FY’21**	**FY’22E**	**FY’23E**	**FY’24E**	**FY’25E**
Shareholders’ funds	5.67	20.89	20.40	23.30	30.40	39.90
Net cash/(debt)	0.50	11.40	-1.00	-1.00	-1.00	2.00
Avg. shares diluted (m)	149.80	190.00	195.10	196.00	197.00	198.00

Source: Surface Transforms accounts, Hardman & Co Research estimates

Gross cash held at end-1H’22 was £6.7m. This is reducing in part through measured WIP rises and with an estimated £10m-£12m capital expenditure in the full year 2022. Net cash is reckoned, excluding lease liabilities. It includes long-term elements classed as debt, which do not bear interest and, in some regards, are grant-related.

Cashflow

Cashflow						
Year-end Dec (£m)	**FY’20**	**FY’21**	**FY’22E**	**FY’23E**	**FY’24E**	**FY’25E**
Cash from operations, pre-tax	-1.34	-4.10	-0.35	3.90	4.00	7.80
Equity issuance	2.26	18.90	0.00	0.00	0.00	0.00
Net cashflow	0.28	10.90	-12.35	-0.10	0.00	2.80
Depreciation*	0.49	0.67	1.30	2.40	2.60	3.00

**Includes small amounts of IFRS2 share-based payments*
Source: Surface Transforms accounts, Hardman & Co Research estimates

Cashflow has flexibility to undertake capex and fund working capital, with the former front-loaded over the years covered and the latter growing with the top line. The element on the revenue statement classed as “interest” is a non-cash item.

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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

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