



Automotive components



Source: Refinitiv

Market data

EPIC/TKR	SCE
Price (p)	24
12m High (p)	26
12m Low (p)	12
Shares (m)	136
Mkt Cap (£m)	32.7
EV (£m)	31.1
Free Float*	86%
Market	AIM

*As defined by AIM Rule 26

Description

Surface Transforms (ST) is 100% focused on manufacture and sales of carbon ceramic brake discs. It has recently expanded its manufacturing capacity.

Company information

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

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Key shareholders

Directors	14.0%
Canaccord	14.8%
Unicorn	12.3%
Richard Gledhill esq. (director)	9.9%
Richard Sneller esq.	8.2%
Hargreaves Lansdown	4.5%

Diary

Apr'20	Report for 7 months to Dec'19
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Analyst

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SURFACE TRANSFORMS

The year when it all came together

ST is a specialist designer and manufacturer of carbon ceramic brake discs. This is a highly innovative component for the auto OEMs (original equipment manufacturers). Globally, there are two suppliers to this market. ST's product is proven, having sold to the retrofit market for some years. 2019 has seen the first multi-year orders placed with ST. Potential clients' tests take years. In 2019, ST secured its first three global OEM orders. Our estimates reflect these orders alone. With them, ST is cashflow positive for 2021. It thus has an assured seat, with long and extensive barriers to new competitors, in a market that should evolve to £2bn annual sales or more.

- **Strategy:** ST has executed on its strategy to supply carbon ceramic brake discs to global OEMs. High technical barriers exist to new competition. As of 2019, OEMs – with ST's new contracts – have the dual sourcing that is always required for a market to properly take off. 2019 itself thus opens the door to ST's acceleration.
- **Visibility:** ST has been years in testing and proving both the product and the manufacturing process. The time spent, in itself, creates a significant economic moat. It also underpins appropriate gross margins. The initial market gravitates towards luxury models with a waiting list, and hence visible off-take profiles.
- **Sustainability of growth potential:** Initial contracts are multi-year. We expect significant additional contracts, not reflected in our numbers. ST's three existing major OEM clients will have further models coming. Other OEMs have ongoing ST testing. Furthermore, manufacturing capacity is in place for £17m sales.
- **Evolution of risks:** ST is set to be cashflow positive by 2021. It is the right side of high barriers to new competition in a high growth market with only one competitor. The product requires a delicate marriage of manufacturing and chemical engineering skills. ST's high R&D spend has secured this.
- **Investment summary:** ST's technical competence is demonstrated by years of modest retrofit sales, but the 2019 orders open the door to a market, which we firmly expect will grow to £2bn p.a. ST's 2019 contracts have been a 'game changer' both in the early evolution of this component market and also for ST itself. There are a variety of environmental benefits to this product.

Financial summary and valuation

Year-end May*/ Dec**(£m)	FY18*	FY19*	7-month 19E**	FY20E**	FY21E**	FY22E**
Sales	1.36	1.00	1.50	3.30	4.10	5.80
EBITDA	-2.00	-2.63	-1.00	-0.55	-0.10	1.00
EBITA	-2.30	-2.97	-1.20	-1.25	-0.80	0.30
PBT	-2.30	-2.98	-1.20	-1.25	-0.80	0.30
PAT	-1.83	-2.06	-0.90	-0.70	-0.25	0.85
EPS (adjusted, p)	-1.66	-1.64	-0.66	-0.51	-0.18	0.62
Shareholders' funds	5.55	6.96	6.05	5.35	5.10	5.95
Net (debt)/cash	0.62	1.60	1.60	1.20	1.70	3.00
P/E (x)	loss	loss	N.A.	loss	loss	38.5
EV/sales (x)	14.5	23.4	N.A.	9.7	7.8	5.0
EV/EBITDA (x)	loss	loss	N.A.	loss	loss	28.0
DPS (p)	nil	nil	nil	nil	nil	nil

*May year-end, **the company has announced its change of year-end to December
 Source: Surface Transforms accounts, Hardman & Co Research estimates

Investment case

The first three global OEM contracts secured since summer 2019

Summer 2019 orders are ‘game changers’ as they prove up the whole process of winning such multi-year orders

At a potential £2bn p.a. size, this would still be a modestly sized market by global auto OEM standards

A clearly differentiated, better designed, better performing product than the competition’s

All our numbers are based on contracts in place and, further, with annual off-take profiles, which are readily modelled, with confidence

Current capacity is in place for £17m annual revenue. Above this, new capacity would be required and this comes from a Cell Two, which would be identical to existing Cell One.

A proven product winning its first orders in a new high-growth market

In 2019, three global OEMs completed extensive testing and placed multi-year orders with ST. By the nature of the models being supplied, there is high visibility to each contract. These initial orders are modest in size, but their significance is high. ST is now the right side of significant technical-certification based barriers to entry.

ST has been selling to smaller retrofit clients and thus been used on the road for several years. This is an established product. The market position is unique, but innovative new automotive components follow a ‘well-trodden path’ to growth. OEMs are uncomfortable committing to a single-source mission-critical component. That ‘log-jam’ has been cleared as of ST’s three ‘game changing’ OEM contracts of 2019.

Specific attributes of the market opportunity

We see scope for a ca.£2bn annual market. Its current £150m size is tiny and very ‘early days’ in an automotive context. ST, one of the only two suppliers globally of this technically complex product, has clear opportunities for sustained growth.

This global OEM market, as of ST’s summer 2019 contracts, is now dual supply. We model carbon ceramic discs in due course taking ca.6% volume (by number of discs) of the European OEM market and initially modest volumes elsewhere: the £2bn market. As ST supplies only ca.2% of the 2020 market and now has the credibility of several leading global OEMs’ supply contracts, the volume ramp-up potential – for the market as a whole as well as ST itself – is clear.

SWOT analysis	
Strengths	New order momentum; high barriers to new competition
Weaknesses	Cashflow positive from current contracts: not until 2021E
Opportunities	Only one competitor; order of magnitude market growth
Threats	ST supplies global companies, which set the pipeline timetable

Source: Hardman & Co Research

Risk mitigation

ST’s product is superior to the competitor’s offer. We estimate market growth will lead to sales growth for the competitor, so ST’s mission is to take a share of the growth.

All our forward estimates are based exclusively on existing contracts to supply into specific models where the OEM has a specific imminent launch date. As the majority of these models are at the luxury end of the market, there are waiting lists. This provides ST strong off-take timing clarity. Pricing is agreed and costs are set (e.g. energy costs are on a multi-year price fix). Given this, gross margins are robust (60-70%+ range) and sustainable. As anticipated future contracts would be in greater volume, the anticipated future sales prices would reduce, but so too will production costs. Given the barriers to new competition, gross margins should remain robust.

Current manufacturing capacity is in place for sales of £17m. Physically, future expansion is via simply replicating the existing production cell. We do not expect any circumstances where ST would need to lay down manufacturing Cell Two without being underpinned by multi-year orders. Based on specific OEM models, production schedules do come to an end in due course. Using consistent margin metrics for potential future orders, £17m revenue illustratively would generate ‘standalone’ ca.£11.0m gross profits and in a range of ca.2.5p to 3.0p EPS. These are Hardman illustrations only. We consider this an important support for any future order-driven expansion plan via a new Cell Two.

Highly scalable growth – a ‘game change’ 2019

What Surface Transforms does

Carbon ceramic brake discs... ..chemical engineering manufacturing process for low weight and thus environmental and performance benefits

ST has deep focus on its carbon ceramic brake disc product. ST’s background is one of chemical engineering, and it has chosen to commercialise this transformative technology in the multi-billion-pound auto OEM brake discs market. Carbon ceramic brake discs are particularly difficult to develop. The processes include the transformation of the raw materials, both by chemical processes and highly technical machining. The several elements of seven manufacturing steps are all uniquely designed by ST (and PhD level employees) and then subject to ST and potential client tests lasting a number of years. Environmental (weight) benefits are significant.

OEMs also require a robust dual-sourced supply chain; suppliers who can expand production ‘seamlessly’, in short, suppliers who scale sustainably.

Three recent contracts – among other smaller ones

Three major orders in 2019

28 June 2019: OEM 6 contract award. Two contracts, ca.£8m over the next five years.

16 July 2019: OEM 5 contract award. The lifetime revenue on this specific car model contract is estimated to be approximately €11.8m commencing in October 2021.

Other important 2019 contract awards. Koenigsegg, an existing ST customer, placed an order with ca.£0.3m annual revenues for the Jesko, its new 300mph supercar. Separately, OEM 1 awarded ST a £0.4m sales order, to be satisfied in full this year.

Sustainable and scalable operational and financial model

The move to the new factory two years ago was the culmination of years of product development and has secured a number of positive – and essential – attributes.

The product has undergone many years of road testing

- ▶ The manufacturing process and product testing is on the back of a number of years on the road as retrofitted to high-performance track cars: a niche product. Minimal on-road issues are recorded, and so the confidence gained supports the new OEM-specific tests (themselves lasting for years) which have been a success.

The manufacturing process is precise in terms of the physical product and also in the cost of expansion. It is a cell-structure so Cell Two is exactly the same spec and cost as the now operational Cell One.

- ▶ The factory works on a manufacturing-cell basis. Equipment in place for Cell One can be directly replicated for future cell-based expansion.

- ▶ The cell-manufacture structure means the capital cost of any future expansion is precisely known and commissioning exactly replicates the existing production flow. The cost is ca.18 months of gross profits. Returns on incremental capital are high.

The structure of a dual-sourced market is essential to understand and plays greatly in ST’s favour

- ▶ There is constant scope, as in any manufacturing organisation, to ‘de-bottleneck’ and extend cost-reduced processes. We identify instances where production can be scaled-up through this, which may include modest expenditure but, principally, is efficiency-driven.

Strategy and market position summary

Taking a closer look at ST’s position in the carbon ceramic brake discs market: it has been making an exceptionally technically demanding product for nearly a decade now. This is – and will remain for the foreseeable future – a specialist component market supplied only by two, including ST. As ST supplies only ca.2% of the 2020 market and now has the credibility of several leading global OEMs’ supply contracts, the volume ramp-up potential is clear.

Surface Transforms

There is only one other competitor for the foreseeable future. For OEMs to grow a component market size, a dual-source is invariably required. The fact ST is now that second source will, in itself, enlarge the market. Having only one supplier into the global OEMs was a log-jam to market expansion. That log-jam has now been removed.

Investment case summary

Our profit and cash flow estimates are 100% based on current orders.

All our numbers are firm orders

Moving towards cashflow positive

Robust margins for good reasons

Client model ranges have high visibility of offtake

Every reason to expect 10x growth in the market

- ▶ Current orders take ST to 2021 cashflow positive
- ▶ There is significant scope for new global OEM customers (where extensive product tests are ongoing) as well as follow-on orders from existing OEM clients.
- ▶ The highly technical and safety critical nature of the product and the competitive landscape result in strong profit margins. R&D is significant but relatively fixed.
- ▶ The nature of the auto model ranges being sold into, means the rate of offtake is highly predictable once ST products are specified and designed-in to the model.
- ▶ There is strong evidence supporting the contention that this market's size is set to grow to £2bn from the current ca.£150m. ST has been working for some seven years to achieve its current position and any new entrants (none on the horizon) would face many years of testing and approval from the global OEM client base.

Financials

On 20 March 2019, 12.30m new shares were placed at 15.5p per share (gross £1.9m). No new capital expenditure is required until sales exceed £17m p.a.

Revenue account							
Year-end May*/Dec**(£m)	FY17*	FY18*	FY19*	7-month period FY19E**	FY20E**	FY21E**	FY22E**
Revenue account							
Sales	0.70	1.36	1.00	1.50	3.30	4.10	5.80
Gross profit	0.43	0.92	0.62	0.90	2.45	2.90	4.00
EBITDA	-2.38	-2.01	-2.63	-1.00	-0.55	-0.10	1.00
EBITA	-2.53	-2.30	-2.97	-1.20	-1.25	-0.80	0.30
PBT (adjusted)	-2.53	-2.30	-2.98	-1.20	-1.25	-0.80	0.30
Tax	0.35	0.47	0.92	0.30	0.55	0.55	0.55
PAT	-2.18	-1.83	-2.06	-0.90	-0.70	-0.25	0.85
EPS (diluted, adjusted, p)	-2.42	-1.66	-1.64	-0.66	-0.51	-0.18	0.62
DPS (p)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Balance Sheet							
Net current assets (including cash)	2.53	1.73	2.80	2.60	2.40	2.90	4.20
Shareholders' funds	3.90	5.55	6.96	6.05	5.35	5.10	5.95
Net cash (debt)	1.53	0.62	1.60	1.60	1.20	1.70	3.00
Avg. shares diluted (m)	90.00	110.30	125.20	136.00	136.00	136.00	136.00
Cashflow							
Cash from operations, net tax	-1.21	-2.17	-2.20	0.20	0.20	0.75	1.55
Capex	-2.07	-2.00	-0.10	-0.20	-0.40	-0.25	-0.25
Equity issuance	0.05	3.48	3.30	0.00	0.00	0.00	0.00
Net cashflow	-3.23	-0.69	1.00	0.00	-0.40	0.50	1.30

* May year-end ** December year-end

Source: Surface Transforms accounts, Hardman & Co Research estimates

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