EDISON

SGX research scheme

Sarine Technologies

Navigating through a difficult environment

Sarine's top-line growth continues to be affected by the multiple challenges the midstream diamond business is currently facing, which impair the sector's cash generation (and Sarine's equipment sales). Having said that, scanning activity remains at record-high levels and management expects the number of scanned stones to increase by 20% in 2018. Moreover, corporate overheads and R&D expenses are being kept below last year. In the long term, lab-grown diamonds represent both a risk (which is however difficult to quantify currently) and an opportunity to Sarine's business.

Profitability assisted by reduced operating costs

Sarine reported an EBIT of US\$760k in Q318 (vs a small loss of US\$11k in Q317) on the back of lower R&D, sales and marketing, as well as G&A expenses. Sales grew by 3.7% y-o-y to US\$11.7m despite the downward trend in rough diamond purchases in the market, as recurring revenues (nearly 50% of group sales in 9M18) increased on the back of a growing installed base of Galaxy family systems (390 at end-September 2018 vs 330 at end-September 2017). Retail-related sales were up almost 20% y-o-y in 9M18 and made up more than 2% of group sales.

Midstream players facing multiple headwinds

Sarine's performance is currently shaped by several external factors which affect the midstream industry in India. These include: 1) declining luxury goods sales in China amid the trade war with the US; 2) tightening bank lending as a result of the Gitanjali Gems scandal; and 3) Indian rupee depreciation creating a working capital shortfall. As a result, the cash flow situation of manufacturers has deteriorated visibly. Investor sentiment is also influenced by the uncertainties around the potential long-term impact of lab-growth diamonds (LGD) on the industry.

Valuation: Discount reflects external pressures

Based on Thomson Reuters consensus, Sarine's shares currently trade at FY18e and FY19e P/E ratios of 7.7x and 5.5x, respectively. This represents a 62% and 70% discount to selected peers operating in the laboratory and site-based materials analysis and testing business, respectively. However, this is based on the high EPS growth expectations embedded in the current consensus figures (which are calculated based on two analysts only). We believe the discount reflects the current challenging conditions in Sarine's end-market.

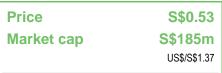
Consensus estimates

| Year end | Revenue (US\$m) | PBT (US\$m) | EPS (c) | DPS (c) | P/E (x) | Yield (%) |
|-------------|--------------------|----------------|------------|------------|------------|--------------|
| 12/16 | 72.5 | 22.0 | 5.14 | 4.50 | 7.5 | 11.6 |
| 12/17 | 58.6 | 9.4 | 1.64 | 3.50 | 23.6 | 9.0 |
| 12/18e | 74.8 | 21.7 | 5.00 | N/A | 7.7 | N/A |
| 12/19e | 85.0 | 28.4 | 7.00 | N/A | 5.5 | N/A |

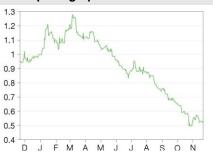
Source: Sarine Technologies, Thomson Reuters consensus as at 20 November 2018.

Industrials

22 November 2018



Share price graph



Share details

| Code | SARINE.SP |
|---|-----------|
| Listing | SGX |
| Shares in issue | 350.6m |
| Last reported net cash at 30 September 2018 | US\$25.3m |

Business description

Sarine is the leading provider of equipment and services for the diamond manufacturing industry. These help to automate planning and maximise yield. It has also developed products that allow it to enter the much larger and more profitable wholesale and retail segments of the industry.

Bull

- Leading market position, strong customer base and proprietary technology.
- Expanding into new and larger addressable downstream market.
- Strong net cash position.

Bear

- Challenging environment for midstream manufacturers.
- Copyright infringement.
- Risk associated with lab-grown diamonds.

Analyst

| Milosz Papst | +44 (0)20 3077 5700 |
|-----------------------------|---------------------|
| industrials@edisongroup.com | |

Sarine Technologies coverage is provided through the SGX research scheme.



Financials: Top line limited by external factors

Sarine reported modest revenue growth of 3.7% y-o-y to US\$11.7m in Q318, despite a low base from Q317. On top of the usual seasonal slowdown in Q3, the company's business was also affected by subdued industry sentiment (discussed later in the note). This is illustrated by the relatively weak sales volume at De Beers sights, which was down 2.2% y-o-y on a cumulative basis in the first seven cycles (with the provisional data for the eighth cycle showing an increase largely due to a low base effect from last year). As prices of rough diamonds continue to rise at a low single-digit pace y-o-y (putting some pressure on midstream margins), this implies a decline in the volume of rough diamonds being purchased. Despite this, Sarine's scanning activity remains solid and the company declared that it should post 20% growth in the number of scanned stones in FY18. Another minor positive factor is that the midstream industry entered Q318 with a more moderate inventory base of rough and polished diamonds (Q218 at US\$41.8bn vs US\$42.6bn at Q217, according to Alrosa estimate).

Top-line growth was mainly assisted by recurring revenues, which stood at just under 50% in 9M18 (vs 46% in 9M17). Galaxy-related recurring sales increased 6% y-o-y in Q318, assisted by the growth in installed base to 390 units at end-September 2018 (vs 330 at end-September 2017). Equipment sales were flat y-o-y, as the company delivered 13 Galaxy family systems in Q318, including 11 Meteorite models, one Meteor and one Galaxy system. In line with prior quarters, sales of equipment for scanning smaller stones is a major contributor, with all these systems delivered to Indian customers. This is a sign that Sarine's efforts to combat illicit competition are showing results, according to the company. Retail-related sales (mainly Sarine Profile) were up nearly 20% in 9M18 (vs 25% y-o-y in H118) and made up more than 2% of group revenue (vs c 2% last year).

Gross profit improved slightly by 1.5% y-o-y to US\$7.5m, as revenue growth was accompanied by a negative sales mix effect and additional costs associated with the newly opened laboratories in Israel and India (Ramat Gan and Mumbai). Consequently, gross margin stood at 64.3% compared with 65.7% in Q317. However, Sarine continued to keep its other expenses below last year, with R&D costs down 9.7% y-o-y to US\$2.2m, or down 22.6% y-o-y taking into account the capitalised costs associated with the development of Sarine Clarity and Sarine Colour systems last year. At the same time, sales and marketing expenses were down 7.4% y-o-y to US\$3.1m (due to lower compensation expenses amid continued staff restructuring) and G&A expenses declined by 10.7% to US\$1.4m (also due to lower salary expenses, including a reversal of some incentive-based compensation expenses). Consequently, Sarine was able to record an EBIT of US\$760k (compared with a minor loss of US\$11k in Q317). This, together with a more normalised tax rate (amid the lack of US\$0.3m write-down of deferred and other tax assets last year), translated into Q318 EPS at 0.08 US cents compared with a negative 0.15 US cents in Q317.

| US\$000s | Q318 | Q317 | у-о-у |
|-------------------------------------|---------|---------|--------|
| Revenues | 11,702 | 11,285 | 3.7% |
| Cost of sales | (4,174) | (3,870) | 7.9% |
| Gross profit | 7,528 | 7,415 | 1.5% |
| Gross margin | 64.3% | 65.7% | -138bp |
| Research and development costs | (2,194) | (2,430) | -9.7% |
| Sales and marketing expenses | (3,142) | (3,393) | -7.4% |
| General and administrative expenses | (1,432) | (1,603) | -10.7% |
| Operating profit | 760 | (11) | N/M |
| EBIT margin | 6.5% | -0.1% | 659bp |
| Net finance income (expense) | 24 | 53 | -54.7% |
| Income taxes | (515) | (572) | -10.0% |
| Post-tax profit | 269 | (530) | N/M |
| Diluted EPS (US\$ cents) | 0.08 | (0.15) | N/M |

Exhibit 1: Financial highlights

Sarine Technologies | 22 November 2018



Trade receivables increased by 18.1% y-o-y to US\$19.3m and, although they were below Q218 (US\$20.2m vs US\$17.6m in Q217), they remained at a relatively high level. This seems to be associated with the tight cash flow situation of selected customers and the overall increase in recurring revenues. Moreover, Sarine has booked US\$91k in doubtful trade receivables in Q318 (US\$100k in 9M18). However, the sequential decline of US\$0.9m had a positive effect on Q318 cash flow, which (together with the US\$269k net income) translated into cash flows from operations at US\$665k (compared with negative US\$1,126k in Q317). The company also recognized positive investing cash flow at US\$3.3m as a result of cash release from bank deposits. This was more than offset by the dividend payment of US\$7.0m and translated into a net decline in cash of US\$3.2m to US\$14.1m. When adding short-term investments representing bank deposits, Sarine's liquid assets stood at a solid US\$25.3m vs US\$29.1m at end-2017. The company continues its buyback programme, with 152,900 shares purchased in Q318, bringing the ytd number to 746,400 (or 0.2% of shares outstanding at end-2017).

Midstream diamond industry remains under pressure

Currently, the midstream industry in India is negatively affected by several factors. Firstly, trade tariffs imposed on China had a negative impact on the Chinese economy, including a c 20–25% decline in luxury goods consumption. Secondly, the recent credit tightening introduced by Indian banks (primarily as a result of the Gitanjali Gems scandal) is translating into cash flow problems for some midstream players. The FX market is causing additional headwinds, with the Indian rupee depreciating by c 10% against the US dollar ytd. As Indian manufacturers' foreign currency export credits are pegged to the Indian rupee and imported rough stones are priced in US dollars, the depreciating local currency has translated into a working capital shortfall. The Gem & Jewellery Export Promotion Council has recently approached the government, suggesting that these credits should be pegged to US dollar instead.

The market also seems to be concerned about the long-term impact of lab-grown diamonds (LGDs) on the diamond industry. De Beers has recently launched its Lightbox line of jewellery based on LGDs, priced as fashion jewellery (ie some 80% below natural diamonds). Moreover, the US Federal Trade Commission has updated its definition of a diamond to include LGD (although it requires that their non-natural origin is clearly labelled). The key competitive edge of lab-grown diamonds is their lower price point vs natural diamonds. However, the actual impact of LGDs on the industry is difficult to assess at the moment. Firstly, it remains to be seen what part of the customer base will consider the attractive pricing a more important factor than the distinct image of natural diamonds (which justifies a certain premium). In addition, a portion of LGDs falls into the fashion jewellery market rather than the higher-quality diamond jewellery market, so would not represent a direct competition to diamond, with special events such as engagement/wedding encouraging customers to prefer natural diamonds. On the other hand, some consumers (especially millennials) may choose LGDs over natural diamonds for environmental, social and governance (ESG) reasons.

According to Paul Zimnisky (an independent industry analyst and consultant), LGD sales should grow from around US\$2.0bn in 2018 to US\$5.0bn in 2023 (ie at a 22% CAGR) and to US\$15.0bn in 2035. This would imply a market share of 3% in 2023 and 5% in 2035 of the overall diamond jewellery market, suggesting that LGD will remain a meaningful, but still limited part of the overall market. It is also important to note that the LGD industry could become a customer for Sarine, especially in the case of diamond producers that use the (currently dominant) high-pressure/high-temperature (HPHT) technology, which requires more inclusion scanning and planning processes compared to the alternative chemical vapour deposition (CVD) technology. With respect to the latter, it still creates a market for Sarine's laser cutting systems. Sarine Profile should remain largely unaffected, as it addresses polished diamonds over 20 points (ie 0.2 of a carat), whereas the



average size of LGD is lower and the maximum size is limited by technological constraints. In fact, LGD constitute a new market opportunity for Sarine's 4Cs grading services.

Valuation

Sarine trades on a trailing 12-month P/E of 14.9x (when adjusted for the US\$1.0m write-down of deferred and other tax assets recognised in Q417). Based on Thomson Reuters consensus figures for 2018 and 2019, the shares are trading on P/E ratios of 7.7x and 5.5x, respectively, with expected y-o-y EPS growth of c 160% (on an adjusted basis) and 40%, respectively. We note that the market consensus includes only two broker estimates.

Sarine's valuation and upside is mainly dependent on its expansion in the downstream segment, which should further support earnings growth and improvements in profitability and returns. Some premium can be expected, given Sarine's industry position and leadership in technology. We believe that ROE has scope to improve at least partially towards 2014 levels (34% vs current LTM ROE of c 12%) in the longer term, as R&D expenditure has already peaked, while revenues from investments should become meaningful. However, the current unfavourable market environment means this is unlikely to happen in the nearest future.

Given the lack of direct listed peers, we have combined a set of companies active in the laboratory and site-based materials analysis and testing business (for a detailed description, please refer to our previous <u>update note</u>). Although we acknowledge that these companies operate in different markets from Sarine, we have identified some similarities to Sarine's activities (see detailed descriptions below). Sarine is trading at a discount to this peer group on P/E ratios of c 60–70%.

Given Sarine's focus on expanding into the downstream market, it is instructive to look at players in this area with strong brands and balance sheets. However, it should be noted that these companies cannot be treated as close peers, given that Sarine's current exposure to the retail business is just c 2% of group sales. Chow Tai Fook (the largest jewellery retailer in China and Hong Kong) and Tiffany & Co both trade at significant premiums to Sarine on P/E ratios. The premiums are likely a reflection of their very strong brands and market positions in jewellery retailing.

| | Market cap | P/E (x) | | EV/EBITDA (x) | | Dividend yield (%) |
|---------------------|------------|---------|-------|---------------|-------|-----------------------|
| | (LCYm) | 2018e | 2019e | 2018e | 2019e | 2018e |
| Bruker Corporation | US\$5,093 | 23.3 | 21.0 | 14.1 | 13.2 | 0.5% |
| Bureau Veritas | €8,604 | 20.2 | 18.6 | 12.2 | 11.5 | 3.0% |
| Spectris | US\$2,455 | 13.8 | 12.5 | 9.1 | 8.4 | 2.9% |
| Intertek | US\$7,321 | 23.1 | 21.3 | 13.5 | 12.5 | 2.1% |
| Peer group average | - | 20.1 | 18.4 | 12.2 | 11.4 | 2.1% |
| Sarine Technologies | S\$186 | 7.7 | 5.5 | N/A | N/A | N/A |
| Premium/(discount) | - | (62%) | (70%) | N/A | N/A | N/A |
| Chow Tai Fook | HK\$70,500 | 14.5 | 12.8 | 11.6 | 9.6 | 5.2% |
| Tiffany & Co | US\$13,036 | 22.0 | 19.5 | 13.1 | 12.2 | 2.1% |

Exhibit 2: Peer comparison

Source: Company accounts, Thomson Reuters. Note: Prices as at 19 November 2018.



General disclaimer and copyright

This report has been commissioned by Sarine Technologies and prepared and issued by Edison, in consideration of a fee payable by Sarine Technologies. Edison Investment Research standard fees are £49,500 pa for the production and broad dissemination of a detailed note (Outlook) following by regular (typically quarterly) update notes. Fees are paid upfront in cash without recourse. Edison may seek additional fees for the provision of roadshows and related IR services for the client but does not get remunerated for any investment banking services. We never take payment in stock, options or warrants for any of our services.

Accuracy of content: All information used in the publication of this report has been compiled from publicly available sources that are believed to be reliable, however we do not guarantee the accuracy or completeness of this report and have not sought for this information to be independently verified. Opinions contained in this report represent those of the Edison analyst at the time of publication. Forward-looking information or statements in this report represent those of the Edison analyst at the time of publication. Forward-looking information or statements in this report contained information that is based on assumptions, forecasts of future results, estimates of amounts not yet determinable, and therefore involve known and unknown risks, uncertainties and other factors which may cause the accular esults, performance or achievements of their subject matter to be materially different from current expectations.

Exclusion of Liability: To the fullest extent allowed by law, Edison shall not be liable for any direct, indirect or consequential losses, loss of profits, damages, costs or expenses incurred or suffered by you arising out or in connection with the access to, use of or reliance on any information contained on this note.

No personalised advice: The information that we provide should not be construed in any manner whatsoever as, personalised advice. Also, the information provided by us should not be construed by any subscriber or prospective subscriber as Edison's solicitation to effect, or attempt to effect, any transaction in a security. The securities described in the report may not be eligible for sale in all jurisdictions or to certain categories of investors.

Investment in securities mentioned: Edison has a restrictive policy relating to personal dealing and conflicts of interest. Edison Group does not conduct any investment business and, accordingly, does not itself hold any positions in the securities mentioned in this report. However, the respective directors, officers, employees and contractors of Edison may have a position in any or related securities mentioned in this report, subject to Edison's policies on personal dealing and conflicts of interest.

Copyright: Copyright 2018 Edison Investment Research Limited (Edison). All rights reserved FTSE International Limited ("FTSE") © FTSE 2018. "FTSE®" is a trade mark of the London Stock Exchange Group companies and is used by FTSE International Limited under license. All rights in the FTSE indices and/or FTSE ratings vest in FTSE and/or its licensors. Neither FTSE nor its licensors accept any liability for any errors or omissions in the FTSE indices and/or FTSE ratings or underlying data. No further distribution of FTSE Data is permitted without FTSE's express written consent.

Australia

Edison Investment Research Pty Ltd (Edison AU) is the Australian subsidiary of Edison. Edison AU is a Corporate Authorised Representative (1252501) of Myonlineadvisers Pty Ltd who holds an Australian Financial Services Licence (Number: 42784). This research is issued in Australia by Edison AU and any access to it, is intended only for "wholesale clients" within the meaning of the Corporations Act 2001 of Australia. Any advice given by Edison AU is general advice only and does not take into account your personal circumstances, needs or objectives, financial stadvice, consider the appropriateness of the advice, having regard to your objectives, financial situation and needs. If our advice relates to the acquisition, or possible acquisition, of a particular financial product you should read any relevant Product Disclosure Statement or like instrument.

New Zealand

The research in this document is intended for New Zealand resident professional financial advisers or brokers (for use in their roles as financial advisers or brokers) and habitual investors who are "wholesale clients" for the purpose of the Financial Advisers Act 2008 (FAA) (as described in sections 5(c) (1)(a), (b) and (c) of the FAA). This is not a solicitation or inducement to buy, sell, subscribe, or underwrite any securities mentioned or in the topic of this document. For the purpose of the FAA, the purpose of the FAA, the purpose of the FAA, the purpose of the FAA (be extended as a source of general information only and is not intended to constitute a recommendation or provino in relation to acquiring or disposing (including refraining from acquiring or disposing) of securities. The distribution of this document is not a "personalised service" and, to the extent that it contains any financial advice, is intended only as a "class service" provided by Edison within the meaning of the FAA (i.e. without taking into account the particular financial situation or goals of any person). As such, it should not be relied upon in making an investment decision.

United Kingdom

Neither this document and associated email (together, the "Communication") constitutes or form part of any offer for sale or subscription of, or solicitation of any offer to buy or subscribe for, any securities, nor shall it or any part of it form the basis of, or be relied on in connection with, any contract or commitment whatsoever. Any decision to purchase shares in the Company in the proposed placing should be made solely on the basis of the information to be contained in the admission document to be published in connection therewith.

This Communication is being distributed in the United Kingdom and is directed only at (i) persons having professional experience in matters relating to investments, i.e. investment professionals within the meaning of Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the "FPO") (ii) high net-worth companies, unincorporated associations or other bodies within the meaning of Article 49 of the FPO and (iii) persons to whom it is otherwise lawful to distribute it. The investment or investment activity to which this document relates is available only to such persons. It is not intended that this document be distributed or passed on, directly or indirectly, no any other class of persons and in any event and under no circumstances should persons of any other description rely on or act upon the contents of this document (nor will such persons be able to purchase shares in the placing).

This Communication is being supplied to you solely for your information and may not be reproduced by, further distributed to or published in whole or in part by, any other person.

United States

Neither this Communication nor any copy (physical or electronic) of it may be (i) taken or transmitted into the United States of America, (ii) distributed, directly or indirectly, in the United States of America or to any US person (within the meaning of regulations Regulation S made under the US Securities Act 1933, as amended), (iii) taken or transmitted into or distributed in Canada, Australia, the Republic of Ireland or the Republic of South Africa or to any resident thereof, except in compliance with applicable securities laws, (iv) taken or transmitted into or distributed in Japan or to any resident thereof for the purpose of solicitation or subscription or offer for sale of any securities or in the context where the distribution thereof may be construed as such solicitation. The distribution of this communication in or into other jurisdictions may constitute a violation of the securities laws of any such jurisdiction. The distribution of this Communication in or into other jurisdictions may be restricted by law and the persons into whose possession this document comes should inform themselves about, and observe, any such restrictions.

Frankfurt +49 (0)69 78 8076 960 Schumannstrasse 34b 60325 Frankfurt Germany London +44 (0)20 3077 5700 280 High Holborn London, WC1V 7EE United Kingdom New York +1 646 653 7026 295 Madison Avenue, 18th Floor 10017, New York US Sydney +61 (0)2 8249 8342 Level 4, Office 1205 95 Pitt Street, Sydney NSW 2000, Australia