



# TC TECH

THERMAL CYCLIC TECHNOLOGIES  
OF SWEDEN

## **TC TECH Sweden AB (publ) Interim Report March 31 2018**

- Net sales amounted to 0 (3 141) TSEK in the first quarter of 2018.
- Net profit/loss totalled -2 648 (-4 472) TSEK in the first quarter of 2018.
- Cash flow from operating activities was -5 045 (-4 095) TSEK in the first quarter of 2018.
- TC TECH Sweden AB (publ) has received a patent approval in Taiwan for the patent application "Device and method for heating a Mould or Tool". The approval in Taiwan follows earlier approvals in Japan and China for the same patent family within electromagnetism, that strengthens and extends the patent protection for the company's general technology platform.
- TC TECH Sweden AB (publ) has completed the specification and initiated the manufacturing of an upgraded version of the company's production system for light guide plates (LGPs) that are used in LCD displays. The company has formally agreed to upgrade two delivered systems in Taiwan to the new version, the first in Q2 2018 and the second in H2 2018.
- TC TECH Sweden AB (publ) announces that Björn Hallare has been appointed as the company's chief operating officer (COO) after having served as interim COO since the autumn of 2017. Björn's 25 years of experience from managing development and industrialization projects at companies such as Ericsson, Huawei and Telia add important knowledge to the company's development of production systems for light guide plates (LGPs) used in LCD displays.

### **Developments after year-end**

- No significant circumstances have occurred since March 31<sup>st</sup>.

## **Comments from Alexander Luiga, C.E.O.**

---

*TC TECH's business strength lies in the company's unique technology for the rapid heating and cooling of substrates, for applications such as replication of nano patterns on Light Guide Plates (LGP's).*

During the first quarter of the year, we took important steps forward with the development of our production system for volume production of a new generation LGPs used in LCD displays, and we also received patent approval for our technology platform in Taiwan.

In early February we announced that we are finalizing a new, upgraded version of the system based on the testing and optimization phase with the previous version. Shortly thereafter, we reached an agreement with Björn Hallare, who has been the driving force behind the development of the upgraded version of the production system, to make his position as chief operating officer (COO) permanent.

With 25 years of experience in leading development and industrialization projects in companies such as Ericsson, Huawei and Telia, Björn brings a valuable skillset to the company that will be used to build the organization and processes needed for optimal product development, sourcing, assembly and delivery.

As previously communicated, our goal is to deliver the first system to a customer in Taiwan during the end of the second quarter, and to be able to verify the system's performance in as realistic conditions as possible, we are now finalizing a cleanroom at our facilities in Spånga. This will make us well equipped to perform initial tests and acceptance tests without the risk of being affected by external factors such as air quality or changes in temperature.

By building a realistic production environment in our own facilities, we have also been able to deepen our discussions with additional, Asia-based companies that are interested in our production system. Several of these potential customers are now planning to evaluate the system at our facilities in Spånga.

In addition to visiting TC TECH to see our system in operation, they will bring their own custom-made matrices to produce test series and verify the quality of the LGPs. The performance improvements that our technology enables is our primary selling point, and we therefore look positively on our chances to receive verified orders from new customers in 2018 based on these visits.

We are working actively to secure the financing of TC TECH's business operations, both in the short and long term. The company has received the necessary short-term financing that the company requires until the long-term financing is secured.

In addition to our customers and potential customers, I am also aware that our shareholders are following TC TECH's progress with great interest. We are therefore planning to showcase our new cleanroom at the Annual General Meeting on May 16, thus providing a deeper insight into how we will work on preparatory tests and acceptance tests.

I hope that as many as possible can attend our AGM, and thereafter we expect to be able to update with news in the coming quarters as we reach our expected milestones. The following months will surely be exciting for the company.

Spånga in February 2018

*Alexander Luiga, C.E.O*

## TC TECH - business concept

---

TC TECH develops, produces and markets systems used for the replication of nanostructures in plastic products. The company has its roots in a patented induction technique, developed in-house, that makes it possible to heat and cool plastic material in record time and with great precision.

TC TECH's technology is well suited for the production of plastic components in a wide range of application areas. To begin with, however, the company has chosen to focus only on systems for the manufacture of so-called Light Guide Plates, LGP. LGP is a plastic sheet or film that diffuses and directs light from the light source behind displays used in products like mobile phones, television sets, computers and tablets. TC TECH's production method paves the way for advanced LGP, which in turn allow for better-performing displays and screens. A more advanced LGP means higher resolution, lower energy consumption and thinner displays.

TC TECH's operations are based on ten years of dedicated R&D. In the past few years, the company has designed production systems that have met with considerable interest in the display industry. TC TECH is well connected among leading producers of screens, displays and components.

TC TECH's customers are partly producers of components for screens and displays; partly companies specialized in the manufacture of LGP. At the end of the production chain we find a limited number of companies producing screens and displays – suppliers to the major actors within consumer electronics such as Apple, Sony, Panasonic etc. TC TECH's potential customers consist of a limited number of companies in Korea, Taiwan, China and Japan. Some fifteen market actors cover an estimated 90 % of the market. The value of the LGP market alone is approximated at some 50 000 MSEK.

## Sales and earnings

---

January - March 2018

Net sales amounted to 0 (3 141) TSEK in the first quarter of 2018. Operating loss totalled -2 639 (-4 449) TSEK, net financial items -10 (-23) TSEK, and net loss -2 648 (-4 472) TSEK.

Financial position

In the first quarter of the year, cash flow from operating activities amounted to -5 045 (-4 095) TSEK, of which 374 (-1 477) TSEK from changes in working capital. Cash flow from investing activities amounted to -3 295 (-1 255) TSEK, of which -798 (-980) TSEK attributable to fixed assets and -2 496 (-275) TSEK to IPR and capitalized expenditure for R&D. Cash flow from financing activities totalled 0 (590) TSEK of which 0 (-40) TSEK attributable to amortization of long-term debt and 0 (630) TSEK to directed equity issue. Total cash flow for the period January to March amounted to -8 340 (-4 760) TSEK.

The company's total liabilities amounted to 11 062 (6 758) TSEK on March 31<sup>st</sup> 2018, of which 4 600 (4 597) TSEK interest bearing. The major creditor was TC TECH's largest shareholder, CIMON Enterprise AB. This liability is to be repaid only when the company's cash flow so allows.

The company's net liquid assets on March 31<sup>st</sup> 2018 amounted to -1 379 TSEK, of which 3 250 TSEK were cash and cash equivalents. On March 31<sup>st</sup> 2017, the company had net liquid assets amounting to 5 444 TSEK of which 10 041 TSEK were cash and cash equivalents.

The company's shareholders' equity amounted to 24 115 (31 789) TSEK on March 31<sup>st</sup> 2018, and its equity ratio was 69% (82%).

## Human resources

---

As of March 31<sup>st</sup> 2018, the company had a total number of 15 staff members, of whom 12 were employees. As of March 31<sup>st</sup> 2017, the company had a total number of 14 staff members, of whom 11 were employees.

## Risks and uncertainties

---

TC TECH's operations are exposed to the following major risks:

- Market risks – TC TECH's potential sales volumes are closely linked to investments made in the display industry, and are thus exposed to the trade cycles of this industry.
- Customers – The number of display and LGP producers is limited, which entails an obvious concentration risk.
- Product quality – Should TC TECH's systems fail to fulfil customer requirements, there is a risk of declining demand for the company's products.
- Competitors – TC TECH operates on a competitive market, where most market actors have financial strengths surpassing those of TC TECH's.
- Other technologies – TC TECH's market potential may be hampered by developments in favour of other types of displays – displays that do not rely on LGP.
- Human resources – TC TECH is a small-scale company, with a limited number of employees. A number of those are key persons, essential for the continued development of TC TECH.
- IPR – Most of TC TECH's IPR are protected by patents or similar rights. Nevertheless, there will always be a risk of competitors trying to copy TC TECH's technology.

## Visions and goals

---

- TC TECH's vision is to establish the company's systems as an international standard for the replication of advanced polymer products.
- Our ambition for the next few years is to establish TC TECH as a high-growth, profitable company, profiled as the leading actor within production systems for advanced LGP.
- Our technology will be gradually implemented in new application areas.

## Prospects

---

Developments on the display market are prompted by producers of consumer electronics, who are demanding displays with higher resolution and lower energy consumption. They also require displays to be as thin as possible, to allow for even slimmer end products. All of these requirements call for optically more advanced LGP. The market is thus ripe for a technological shift involving a new production technology for LGP. The electronic equipment industry, to which TC TECH belongs, is first and foremost prompted by technological development called for by new product models. New models require new production methods. The market size for LGP is a function of the total number of square meters to be produced, rather than the number of screens or displays. The trend goes towards larger and larger displays in smartphones and tablets, which works to TC TECH's advantage.

## Developments after March 31<sup>st</sup> 2018

---

No significant circumstances have occurred since March 31<sup>st</sup>.

## Accounting principles

---

The company applies the accounting principles of BFNAR 2012:1 (K3), which are also the accounting and reporting principles used in the preparation of the company's most recent annual report.

## Review

---

This Interim report have not been reviewed by the company's auditors. TC TECH's ambition is to adhere, to the extent possible, to the regulations of the Swedish Code of Corporate Governance. Thus, the interim report as of September 30th 2018 will be reviewed by the company's auditors.

## Corporate information

---

TC TECH Sweden AB (publ), corporate identity number 556852-1883. The company has its statutory seat in Stockholm, at Domnarvsgatan 4, SE-163 53 SPÅNGA. Where the company also has its operations (mainly R&D).

Tel. +46 (0)8 – 788 08 00

E-mail: [info@tctech.se](mailto:info@tctech.se)

[www.tctech.se](http://www.tctech.se)

TC TECH has appointed Erik Penser Bank as its Certified Adviser.

## Financial calendar

---

Annual General Meeting	May 16 <sup>th</sup> 2018
Interim Report as of June 30 <sup>th</sup> 2018	August 29 <sup>th</sup> 2018
Interim Report as of September 30 <sup>th</sup> 2018	November 7 <sup>th</sup> 2018
Year-end Report as of December 31 <sup>st</sup> 2018	February 21 <sup>st</sup> 2019

This interim report, other interim reports published since TC TECH's listing in November 2015 and the summarized financial statement as of December 31<sup>st</sup> 2015 are available on TC TECH's website [www.tctech.se](http://www.tctech.se). Annual reports are published in Swedish only.

The AGM will be held in Stockholm on May 16<sup>th</sup> 2018, at 15:00 hours, adjacent to the company's own premises at Domnarvsgatan 4 in Spånga, Sweden. No dividend payment will be proposed by the board of directors.

## Affirmation

---

TC TECH's Board of Directors and C.E.O. hereby assure that this interim report gives a true and fair view of the company's operations, financial position and performance, and describes the essential risks and uncertainties that the company may encounter.

Stockholm, April 24<sup>th</sup> 2018

TC TECH Sweden AB (publ)

Peter Mattisson  
*Chairman of the Board*

Sven Löfquist  
*Director of the Board*

Jörgen Brandt  
*Director of the Board*

Cecilia Jinert Johansson  
*Director of the Board*

Per-Anders Johansson  
*Director of the Board*

Anders Lönner  
*Director of the Board*

Alexander Luiga  
*C.E.O.*

For further information, please contact  
Alexander Luiga, C.E.O., TC TECH Sweden AB, tel +46 (0)8 – 788 08 01, [alexander.luiga@tctech.se](mailto:alexander.luiga@tctech.se)

Summarized income statements, TSEK

	3 months Jan - Mar 2018	3 months Jan - Mar 2017	Full Year 2017
Net sales	-	3 141	3 141
Change in inventories of products in progress, finished goods etc.	503	61	-970
Capitalized R&D expenses	2 275	92	3 922
Other operating income	12	-	26
<b>Total operating income</b>	<b>2 790</b>	<b>3 294</b>	<b>6 119</b>
Raw materials and consumables	-503	-1 678	-423
Other external costs	-4 874	-1 728	-11 655
Personnel costs	-2 797	-2 483	-10 150
Depreciation	-2 253	-1 854	-7 542
<b>Total operating costs</b>	<b>-10 427</b>	<b>-7 743</b>	<b>-29 770</b>
<b>Operating profit/loss</b>	<b>-7 637</b>	<b>-4 449</b>	<b>-23 651</b>
<i>Operating margin %</i>	<i>Neg</i>	<i>Neg</i>	<i>Neg</i>
Net financial items	-28	-23	-133
<b>Profit/loss after net financial items</b>	<b>-7 665</b>	<b>-4 472</b>	<b>-23 784</b>
Tax	-	-	-
<b>Net profit/loss for the period</b>	<b>-7 665</b>	<b>-4 472</b>	<b>-23 784</b>

Summarized balance sheets, TSEK

	2018 March 31	2017 March 31	2017 Dec 31
<b>Assets</b>			
Intangible fixed assets	20 969	20 184	20 152
Tangible fixed assets	7 209	5 257	6 977
<b>Total fixed assets</b>	<b>28 178</b>	<b>25 441</b>	<b>27 129</b>
Products in progress/for resale	1 730	2 028	1 227
Current receivables	2 018	1 037	1 881
Cash and bank balances	3 250	10 041	11 590
<b>Total current assets</b>	<b>6 998</b>	<b>13 106</b>	<b>14 698</b>
<b>Total assets</b>	<b>35 176</b>	<b>38 547</b>	<b>41 827</b>
<b>Equity and liabilities</b>			
Shareholders' equity	24 115	31 789	31 780
Interest-bearing liabilities	4 628	4 597	4 600
Non-interest-bearing liabilities	6 433	2 161	5 447
<b>Total equity and liabilities</b>	<b>35 176</b>	<b>38 547</b>	<b>41 827</b>

## Summarized cash flow analyses, TSEK

	3 months Jan - Mar 2018	3 months Jan - Mar 2017	Full Year 2017
Cash flow from operating activities	-5 045	-4 095	-16 182
Cash flow from investing activities	-3 295	-1 255	-7 923
Cash flow from financing activities	-	590	20 894
Cash flow for the period	-8 340	-4 760	-3 211
<i>Cash and cash equivalents, opening balance</i>	<i>11 590</i>	<i>14 801</i>	<i>14 801</i>
<i>Cash and cash equivalents, closing balance</i>	<i>3 250</i>	<i>10 041</i>	<i>11 590</i>

## Data per share

	3 months Jan - Mar 2018	3 months Jan - Mar 2017	Full Year 2017
Earnings per share, SEK <sup>1)</sup>	-0,66	-0,46	-2,12
Earnings per share, SEK, diluted <sup>2)</sup>	-0,66	-0,46	-2,12
Equity per share <sup>1)</sup>	2,07	2,95	2,84
Cash flow from operating activities per share, SEK <sup>1)</sup>	-0,43	-0,38	-1,44
Share price on closing day, SEK	14,45	30,00	16,50
Number of shares on balance sheet day	11 638 283	10 783 250	11 638 283
Number of shares on balance sheet day, diluted <sup>2)</sup>	12 063 508	11 230 175	12 063 508
Number of shares, weighted average	11 638 283	10 753 750	11 208 361
Number of shares, weighted average, diluted <sup>2)</sup>	12 063 508	11 230 175	11 659 399

<sup>1)</sup> Earnings and cash flow per share are based on the weighted average number of shares in the period. Equity per share is based on the total number of issued shares on balance sheet day.

<sup>2)</sup> As of March 31<sup>st</sup> 2018, the company had one warrant commitment in force. In August 2015, TC TECH issued 500 000 share warrants giving the right to subscribe for a maximum of 500 000 shares. The exercise period runs from 2016-01-01 to 2018-12-31, the exercise price corresponding to SEK 14 per share. The warrants have been acquired at market value by persons deemed to be essential for the continued development and success of the company. In 2016, a total of 8 075 of these warrants were exercised, whereby TC TECH's share capital increased by SEK 1 336, and the number of issued shares by 16 700. In 2017, a total of 66 700 of these warrants were exercised. Whereby the share capital increased by 5 336 SEK, and the number of issued shares by 66 700. Thereby, a total of 425 225 warrants now remain to be exercised. In all, should all outstanding warrant commitments be fully exercised, the new shares would correspond to 3.5 % of the total number of issued shares.

Changes in equity, TSEK

	Share capital	Share premium reserve	Retained earnings - P/L for the period	Total equity
<b>Januari 1 2017</b>	<b>3 485</b>	<b>66 578</b>	<b>-34 432</b>	<b>35 631</b>
New share issues	4	626	-	630
Loss for the period	-	-	-4 472	-4 472
<b>March 31 2017</b>	<b>3 489</b>	<b>67 204</b>	<b>-38 904</b>	<b>31 789</b>
New share issues	68	20 236	-	20 304
Transfer to development fund	3 115	-	-3 115	-
Issue expenses	-	-1 000	-	-1 000
Loss for the period	-	-	-19 313	-19 313
<b>December 31 2017</b>	<b>6 672</b>	<b>86 440</b>	<b>-61 332</b>	<b>31 780</b>
Transfer to development fund	1 863	-	-1 863	-
Loss for the period	-	-	-7 665	-7 665
<b>March 31 2018</b>	<b>8 535</b>	<b>86 440</b>	<b>-70 860</b>	<b>24 115</b>

In the period 1 January – 31 December 2017, the company made four new share issues: one directed issue of 833 333 shares, and three issues totalling 66 700 shares prompted by the exercise of 66 700 warrants. During the first quarter of the year 2018, the company has made no new share issues.

Key ratios

	3 months Jan - Mar 2018	3 months Jan - Mar 2017	Full Year 2017
Operating margin, %	Neg	Neg	Neg
Equity/assets ratio, %	69 %	82 %	76 %
Liquid assets, net (TSEK)	-1 379	5 444	6 990
Market cap, at end of period, TSEK	168 173	323 498	192 032