



Leading the digital  
inkjet revolution

**Xaar plc**

Interim Report 2019

A close-up photograph of a metal part with 'XAAR 3D' embossed on it. The part is a rectangular block with a textured surface. The embossing is in a bold, sans-serif font. The background is a light, neutral color.

XAAR 3D

ABOUT XAAR

# Xaar's purpose: We unlock innovation, efficiency and creativity

We do this by using our exceptional talent and passion for inkjet technology to design and manufacture products for our customers that help them to: develop innovative solutions, drive supply chain efficiencies and deliver more creativity for their customers.



## Printhead

Our Printhead business unit focuses on the design, manufacture, marketing and sale of printheads, and associated products which are used in a variety of sectors such as for printing Ceramic Tile Decoration, Graphics, Décor, Labels and Packaging as well as 3D Printing and Additive Manufacturing.



## Product Print Systems

Product print involves printing all kinds of industrial and promotional objects such as medical equipment, automotive parts, tools, apparel, appliances, sports equipment and toys. Xaar company, EPS, manufactures and sells a range of highly customised print systems for these applications, including some using Xaar's own inkjet printheads.



## 3D Printing

Our 3D Printing business unit, in which Xaar 3D sits, develops 3D printing solutions based on High Speed Sintering technologies which will have unique capabilities to address new markets especially in manufacturing. With investment from Xaar plc and Stratasys, Xaar 3D can leverage the natural synergies between global leaders in inkjet technology and 3D printing technology.

## HIGHLIGHTS

Xaar is a world leader in the development of digital inkjet technology. Our technology drives the conversion of analogue printing and manufacturing methods to digital inkjet which is more efficient, more economical and more productive than the traditional methods which have been in use for years. We design and manufacture printheads as well as systems for product decoration and 3D Printing which use our inkjet technology.

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	IBC Advisors

**Operational and strategic highlights**

- First half Printhead revenues were stable, up 1% when compared to the same period last year and after adjusting for the one-time royalties and the Xaar 1201 revenue reversal
- Our Product Print Systems revenues grew by 22% driven by growth in inkjet and pad printing equipment 26% as well as consumables 15%
- Significant progress in Xaar 3D Printing sees Stratays increase its investment from 15% to 45% with an option to acquire the remaining 55%, subject to Xaar shareholder approval
- Our strategic review of the Thin Film business has concluded with the decision to cease activities. We are announcing today further restructuring of the Printhead business, subject to employee consultation, which is expected to deliver £8.0 million of annualised savings.

**Financial highlights**

- Revenue in the first half of the year was £22.5 million, a decline of £12.8 million compared to the first half of 2018. However, when adjusted for the Thin Film Xaar 1201 revenue reversal of £4.3 million in 2019 and the one-time royalty payment of £9.7 million from Seiko Instruments Inc. (SII) in 2018, revenue was up £1.3 million or 5%
- Gross loss was £2.6 million, which represents a decline of £21.7 million when compared to the same period of 2018. This decline is largely due to the one-time royalty payment received in the first half of 2018 of £9.7 million and £7.4 million of Xaar 1201 related items. Reduced factory output and an unfavourable product mix resulted in a further £3.9 million decline
- The adjusted operating loss before tax of £15.0 million when adjusted for the £7.4 million related to Xaar 1201 items, results in an underlying loss of £7.6 million
- Impairment charges of £39.0 million have been taken as a result of our decision to cease all Thin Film activities
- Net cash at 30 June 2019 was £21.6 million (31 December 2018: £27.9 million) impacted by the unwinding of payables and continued investment associated with the Thin Film programme.

Revenue £m

**£22.5m**

<b>H1 2019</b>	<b>22.5</b>
H2 2018	28.2
H1 2018	35.3
H2 2017	56.1
H1 2017	44.0

Adjusted (loss)/profit before tax £m<sup>1</sup>**(£15.0m)**

<b>(15.0)</b>	<b>H1 2019</b>
(14.9)	H2 2018
3.2	H1 2018
10.1	H2 2017
7.9	H1 2017

(Loss)/profit before tax £m

**(£52.3m)**

<b>(52.3)</b>	<b>H1 2019</b>
(14.3)	H2 2018
(1.1)	H1 2018
6.6	H2 2017
5.7	H1 2017

Net cash balance £m<sup>2</sup>**£21.6m**

<b>H1 2019</b>	<b>21.6</b>
H2 2018	27.9
H1 2018	36.8
H2 2017	44.7
H1 2017	38.3

1 Adjusted measures exclude items from the IFRS operating (loss)/profit margin and (loss)/profit before tax, such as restructuring and investment expenses, share-based payment charges, exchange differences on intra-group transactions, Thin Film impairment and research and development credit, per the reconciliation of adjusted financial measures on page 16.

2 Net cash includes cash, cash equivalents and treasury deposits.

## CHAIRMAN'S STATEMENT

## Looking at our world differently



Our strategic review of the Thin Film business has concluded with the reluctant decision to cease activities.

**Robin Williams**  
Chairman

Xaar has continued to experience trading losses in the first half of the year, albeit with some stability in the Bulk printhead business and good progress at EPS and 3D. We are not generating sufficient cash to fund a development programme of the scale of our Thin Film activities, which are still not close to commercial levels of revenue, and I regret to report that the Board has consequently decided to cease further investment in our Thin Film programme. The substantial loss we have reported for the half year under IFRS is dominated by balance sheet write-offs of the associated capitalised R&D, plant assets and stock. The underlying trading position is an improvement on this but remains loss-making, so that we continue to be unable to recommend payment of a dividend. We retain substantial cash balances in order to have the flexibility to rebalance the Company's strategic direction and invest behind our areas of strength.

As we reported in our trading statement on 3 July, the Bulk printhead business has been more stable than in previous periods and showed growth in certain segments which demonstrates the resilience and potential in this product portfolio. We continue to have some specific advantages in the types of ink we can jet in Bulk piezo printheads, also in the volume of laydown we can achieve, so we believe the product range will remain in demand and justifies further investment to achieve growth.

At EPS, our Product Print business, revenues improved in 2019 and further progress was made across all product categories.

Xaar 3D continues to make progress towards commercial levels of machine production supported by the partnership with Stratasys. On 12 September, we announced that Stratasys is increasing its shareholding to 45% in this activity subject to shareholder approval, with Xaar receiving \$15.5 million of gross proceeds from the proposed transaction, and over the next three years may acquire the remaining shares. Meanwhile 3D remains an exciting growth area for Xaar. If Stratasys do exercise their option to acquire the remaining shares, we will receive a substantial cash sum, which represents an exceptional return on the investment to date, and a continuing return in the form of an earn-out on Stratasys sales of Xaar 3D products to end users. The transaction remains subject to shareholder approval at a General Meeting of the Company to be convened following a circular to be sent to shareholders in due course.

In our Thin Film business, since March we have engaged in a thorough advisor-led process to identify a partner who will provide the scale and funding that this technology requires, being the final step in our strategic review of the printhead business. Despite interest from a number of parties and recognition that the technology has potential, we have not received a deliverable proposal that either shares or acquires this activity in a way that brings the cost of development down to a level which Xaar can sustain within its cash flows.

In the absence of additional external investment being available, the Board has reluctantly decided to cease Thin Film activities and will consult with employees, customers and suppliers to implement the restructuring and reduce the Xaar headcount accordingly. At the same time, the headcount in the Bulk business and general overheads will be reduced to bring the cost base down to the level appropriate to the sales expected in the short term.

Meanwhile, further to our announcement on 3 September, we have written down the balance sheet carrying value of the capitalised R&D and all other assets involved in Thin Film, by £39.0 million, which is the most significant loss contributor to the half year results.

Xaar's investment in Thin Film printheads has been a lengthy and costly venture which has brought significantly towards commercialisation a product with a remarkable position of technological advantage. The level of investment required for the next few years, combined with the decline in our revenues elsewhere, most notably in printheads for the Ceramics industry, have given us no choice but to cease further investment in this activity.

We will explore options to derive income from licensing the IP we have built up. Our planned restructuring however cannot wait any longer as our priority must be to reduce the cost base to an appropriate level.

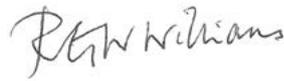
Without our Thin Film activities, Xaar has remaining business units which are good performers in their sectors with a combination of strategic and organic growth opportunities available. With a cost base and balance sheet set at appropriate levels, the Board looks forward to being able to deliver a more encouraging outlook for shareholders in 2020.

### **Board and Governance**

There have been no changes to the Board in the period, but today we announce a succession plan and other Board changes, designed to provide the Board composition and cost which better reflects the activities of the Company going forward.

### **Employees**

Our employees have once again had considerable burden placed upon them and we thank them for their hard work and support as we implement the restructuring.



**Robin Williams**  
**Chairman**

26 September 2019

## CHIEF EXECUTIVE OFFICER'S STATEMENT

# Diversifying revenue streams and getting closer to our end customers



Underlying trading in the Printhead business has stabilised after the decline of 2018.

**Doug Edwards**  
Chief Executive Officer

Our three business unit structure has now been firmly established as we progress to getting closer to end customers by becoming an OEM ourselves in two out of three of our business units and in doing so ultimately improving the sustainability and predictability of our business. Core to our strategy has also been to reduce our dependence upon the sale of a single printhead product into a now largely commoditised ceramics market.

Revenue in the first half of 2019 declined by £12.8 million. Excluding one-time Seiko royalties in H1 2018 and the prior years Xaar 1201 revenue reversal in H1 2019 revenue grew by 5%. Underlying trading in the Printhead business stabilised in the first half (1% revenue growth after adjusting for the one-time royalties and Xaar 1201 revenue reversal) after the decline of 2018. The Industrial and Packaging segments grew £1.0 million (12%) and £0.7 million (8%) respectively whilst Graphics declined by £5.5 million. Graphics revenue and earnings in the first half being impacted by the revenue reversal and increased inventory provision on our Xaar 1201 Thin Film product.

From a regional standpoint the Americas grew by £2.1 million (24%) and EMEA by £1.2 million (11%). Asia however declined significantly by £16.1 million due to a combination of one-time royalty income in 2018 and the Xaar 1201 revenue reversal in 2019.

Our Product Print systems business revenue grew by £1.2 million (22%) in the first half driven by growth in inkjet and pad printing equipment as well as consumables.

Xaar 3D Printing is proceeding to plan with strong customer feedback for our new printer. With the significant progress made Stratasy's expressed an interest to increase its stake in the business. As announced on 12 September Stratasy's, subject to shareholder approval, will increase its shareholding to 45% with an incremental investment of \$15.5 million, of which \$7.3 million is dedicated for Xaar 3D use. In addition Stratasy's will have a call option to acquire the remaining 55% of Xaar 3D for at least \$33 million. We believe this transaction will create good value for Xaar and Stratasy's shareholders and provides the potential for more significant value in due course.

Our strategic review of the Thin Film business has concluded with the decision to cease all further activities and as a consequence we have impaired all associated assets and have embarked upon further restructuring of the Printhead business unit. This decision results in annual recurring cost savings of around £8.0 million with one-time restructuring costs expected to be in the region of £2.5 million.

## Business Unit Performance

### Printheads

#### Segments

Industrials grew by 12% driven by a combination of growth in Ceramics (9%), Décor (45%), and Advanced Manufacturing (5%). Ceramics and Décor growth being driven largely by a 58% growth in the Xaar 2001 printhead.

Graphics declined by £5.5 million largely as a result of the Xaar 1201 revenue reversal. This relates to inventory being returned to the business due to credit and sales channel issues.

Packaging growth of 8% was primarily driven by a 46% growth in Coding & Marking as volumes of the Xaar 501 new product ramped. This Coding & Marking growth being offset by a 50% decline in the Labels market as it transitions away from solvent to water based inks.

#### Bulk Piezo

We have seen the Bulk printhead revenue stabilise in the first half year with modest growth of 1% vs H1 2018.

The growth in the new products of Xaar 2001 (52%) and Xaar 501 (88%) being offset by declines elsewhere mainly in the Xaar 1003 (-15%) and Xaar 128 (-27%) printheads. As we stated at the end of 2018 the replacement ceramics market for which Xaar 1003 was designed continues to experience significant pricing pressure and has not proven as robust as we anticipated as new printer installs have been preferred. This is reflected in the traction we have seen in the first half for Xaar 2001 designed specifically for new printer installs. However we do not anticipate further growth in the second half as OEMs have the inventory they need of Xaar 2001 for their planned new printer installs in the year.

#### Thin Film

We have two Thin Film product offerings, Xaar 1201 and Xaar 5601, both being intimately linked by way of both utilising the same wafer fab for the production of actuators, the core component of the printhead. In fact the anticipated volumes of Xaar 1201 formed an important part of the early purchase commitment necessary to secure supply of actuators for Xaar 5601.

Over the past six months we have explored a number of structural options with third parties supported by advisors for our Thin Film printhead business. This has not produced any viable proposals for us to recommend to shareholders. We recognise we are some years away from reaching meaningful scale in Thin Film and that without a strategic investment partner our own ability to continue to fund this activity at the required level is challenged. It is therefore with some reluctance we have concluded our strategic review with the decision to cease all further activities. We will continue to seek licensing and technology transfer opportunities to enable a smooth transition for our customers and to generate some return for the investments made.

#### Product Print Systems

Revenues grew by 22% to £6.5 million in the first half year with equipment growing 26% and consumables by 15%. We continue to see this business as providing a more stable and predictable revenue stream and aside from its own organic growth offering an opportunity to serve this substantial market through further acquisitions.

#### 3D Printing

We announced our partnership agreement with Stratasys in July 2018 to jointly develop and market High Speed Sintering based 3D printers. Xaar 3D was formed as a result of the initial agreement in which Stratasys holds a 15% stake. Having made significant progress over the past year Stratasys expressed an interest to increase its stake to 45%, with an increased investment of \$15.5 million. In addition Xaar will grant Stratasys a call option to acquire all of the remaining shares of Xaar 3D to be exercised within the next 3 years. The valuation of Xaar 3D Ltd at the time this call option is exercised being the greater of \$60 million or two times revenues of Xaar 3D Ltd in the preceding year. We believe that these terms represent good value for shareholders as they allow:

- Xaar 3D to benefit from increased financial resources with which to accelerate its development;
- Xaar 3D to benefit to a greater extent from Stratasys' unrivalled knowledge of the 3D market and go-to-market expertise; and
- Xaar to crystallise significant value for its shareholders while giving continued exposure to an attractive business with the potential for further value realisation in the future.

#### Outlook

As outlined in our trading statement on 3 September we expect sales in the second half of the year to be similar to those in the first half. Underlying trading in the Printhead business has stabilised after the declines of 2018. We are seeing good growth in our Product Print Systems business with a strong sales pipeline. We believe that the next phase of our partnership with Stratasys delivers significant value for our shareholders. The decision to stop all further investment in Thin Film activities results in the significant impairment of associated assets and a necessary simplification of the Printhead business unit structure. The removal of £7.4 million of one-time Xaar 1201 related items and the expected annual cost savings of around £8.0 million, will result in a substantial improvement in profitability for the coming year. These actions with the additional 3D investment will also enhance the cash position of the Company.



**Doug Edwards**  
Chief Executive Officer  
26 September 2019

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**DIRECTORS' RESPONSIBILITIES STATEMENT**

We confirm that to the best of our knowledge:

- (a) the condensed set of financial statements has been prepared in accordance with IAS 34 'Interim Financial Reporting' as adopted by the EU and gives a true and fair view of the assets, liabilities, financial position and loss of the Group.
- (b) the interim management report includes a fair review of the information required by DTR 4.2.7R:
  - (i) an indication of important events that have occurred during the first six months of the financial year and their impact on the condensed set of financial statements, and
  - (ii) a description of principal risks and uncertainties for the remaining six months of the year.
- (c) the interim management report includes a fair review of the information required by DTR 4.2.8R:
  - (i) related parties transactions that have taken place in the first six months of the current financial year that have materially affected the financial position or performance of the Group in that period, and
  - (ii) any changes in the related parties transactions described in the Annual Report 2018 that could have a material effect on the financial position or performance of the Group in the current period.

By order of the Board



**Doug Edwards**  
Chief Executive Officer



**Shomit Kenkare**  
Chief Financial Officer

**CONDENSED CONSOLIDATED INCOME STATEMENT**  
for the six months ended 30 June 2019

	Notes	Six months ended 30 June 2019 (unaudited) £'000	Six months ended 30 June 2018 (unaudited) £'000	Twelve months ended 31 December 2018 (restated – note 11, audited) £'000
<b>Revenue</b>	3	<b>22,526</b>	35,329	63,534
Cost of sales		<b>(25,119)</b>	(16,251)	(39,085)
<b>Gross (loss)/profit</b>		<b>(2,593)</b>	19,078	24,449
Research and development expenses		<b>(4,315)</b>	(8,454)	(14,682)
Research and development expenditure credit		<b>1,983</b>	649	1,737
Sales and marketing expenses		<b>(4,532)</b>	(4,324)	(9,071)
General and administration expenses		<b>(3,868)</b>	(3,693)	(7,512)
Impairment (losses)/gains on financial assets		<b>(81)</b>	185	(4,681)
Restructuring and investment income/(expenses)	2	<b>108</b>	(4,636)	(5,804)
Thin Film impairment	9	<b>(39,013)</b>	–	–
<b>Operating loss</b>		<b>(52,311)</b>	(1,196)	(15,564)
Investment income		<b>58</b>	98	170
Finance costs		<b>(46)</b>	–	–
<b>Loss before tax</b>		<b>(52,299)</b>	(1,098)	(15,394)
Tax	4	<b>2,426</b>	178	2,589
<b>Loss for the period</b>		<b>(49,873)</b>	(920)	(12,805)
<b>Attributable to:</b>				
Owners of the Company		<b>(49,813)</b>	(920)	(12,673)
Non-controlling interest		<b>(60)</b>	–	(132)
<b>Loss for the period</b>		<b>(49,873)</b>	(920)	(12,805)
<b>Earnings per share</b>				
Basic	5	<b>(64.6p)</b>	(1.2p)	(16.5p)
Diluted	5	<b>(64.6p)</b>	(1.2p)	(16.5p)

No dividends were paid in the period. Dividends paid in the six months to 30 June 2018 amounted to £5,238,000 or 6.8p per share 2017 final dividend (twelve months to 31 December 2018: £6,009,000 or 7.8p per share being 6.8p per share 2017 final dividend and 1.0p per share 2018 interim dividend).

**CONDENSED CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME**  
for the six months ended 30 June 2019

	<b>Six months ended 30 June 2019 (unaudited) £'000</b>	Six months ended 30 June 2018 (unaudited) £'000	Twelve months ended 31 December 2018 (restated – note 11, audited) £'000
<b>Loss for the period attributable to shareholders</b>	<b>(49,873)</b>	(920)	(12,805)
Exchange differences on translation of net investment	<b>(32)</b>	63	202
Tax benefit on share option and restructuring gains	–	–	(41)
<b>Other comprehensive (loss)/income for the period</b>	<b>(32)</b>	63	161
<b>Total comprehensive loss for the period</b>	<b>(49,905)</b>	(857)	(12,644)
<b>Total comprehensive loss attributable to:</b>			
Owners of the Company	<b>(49,820)</b>	(857)	(12,510)
Non-controlling interest	<b>(85)</b>	–	(134)
	<b>(49,905)</b>	(857)	(12,644)

**CONDENSED CONSOLIDATED STATEMENT OF FINANCIAL POSITION**  
as at 30 June 2019

	Notes	As at 30 June 2019 (unaudited) £'000	As at 31 December 2018 (restated – note 11, audited) £'000
<b>Non-current assets</b>			
Goodwill		5,538	5,522
Other intangible assets		4,449	32,796
Property, plant and equipment		24,078	28,044
Deferred tax asset		349	–
		<b>34,414</b>	66,362
<b>Current assets</b>			
Inventories		22,873	32,142
Trade and other receivables		13,985	21,398
Current tax asset		2,815	5,142
Treasury deposits		3,292	3,277
Cash and cash equivalents		18,288	24,669
		<b>61,253</b>	86,628
<b>Total assets</b>		<b>95,667</b>	152,990
<b>Current liabilities</b>			
Trade and other payables		(8,505)	(18,958)
Lease liabilities	1	(902)	–
Other financial liabilities		–	(33)
Provisions		(1,507)	(499)
Derivative financial instruments	8	(957)	(1,260)
		<b>(11,871)</b>	(20,750)
<b>Net current assets</b>		<b>49,382</b>	65,878
<b>Non-current liabilities</b>			
Deferred tax liabilities		(147)	(870)
Lease liabilities	1	(1,909)	–
Other financial liabilities		–	(103)
<b>Total non-current liabilities</b>		<b>(2,056)</b>	(973)
<b>Total liabilities</b>		<b>(13,927)</b>	(21,723)
<b>Net assets</b>		<b>81,740</b>	131,267
<b>Equity</b>			
Share capital		7,833	7,833
Share premium		29,328	29,328
Own shares		(2,902)	(3,113)
Other reserves		15,693	15,144
Translation reserve		810	817
Retained earnings		29,097	79,278
<b>Equity attributable to owners of the Company</b>		<b>79,859</b>	129,287
Non-controlling interest		1,881	1,980
<b>Total equity</b>		<b>81,740</b>	131,267

**CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN EQUITY**  
for the six months ended 30 June 2019

	Share capital £'000	Share premium £'000	Own shares £'000	Other reserves £'000	Translation reserve £'000	Retained earnings £'000	Total £'000	Non-controlling interest £'000	Total equity £'000
Balances at 31 December 2018 as previously reported	7,833	29,328	(3,113)	15,144	817	79,675	129,684	2,200	131,884
Prior period adjustment (note 11)	-	-	-	-	-	(397)	(397)	(220)	(617)
<b>Balances at 31 December 2018 restated</b>	<b>7,833</b>	<b>29,328</b>	<b>(3,113)</b>	<b>15,144</b>	<b>817</b>	<b>79,278</b>	<b>129,287</b>	<b>1,980</b>	<b>131,267</b>
Effect of initial application of IFRS 16 (note 1)	-	-	-	-	-	(157)	(157)	(14)	(171)
<b>Balances at 1 January 2019 restated for IFRS 16</b>	<b>7,833</b>	<b>29,328</b>	<b>(3,113)</b>	<b>15,144</b>	<b>817</b>	<b>79,121</b>	<b>129,130</b>	<b>1,966</b>	<b>131,096</b>
Loss for the period	-	-	-	-	-	(49,813)	(49,813)	(60)	(49,873)
Exchange differences on retranslation of net investment	-	-	-	-	(7)	-	(7)	(25)	(32)
<b>Total comprehensive income for the period</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(7)</b>	<b>(49,813)</b>	<b>(49,820)</b>	<b>(85)</b>	<b>(49,905)</b>
Own shares sold in the period	-	-	211	-	-	(211)	-	-	-
Credit to equity for equity-settled share-based payments	-	-	-	549	-	-	549	-	549
<b>Balance at 30 June 2019</b>	<b>7,833</b>	<b>29,328</b>	<b>(2,902)</b>	<b>15,693</b>	<b>810</b>	<b>29,097</b>	<b>79,859</b>	<b>1,881</b>	<b>81,740</b>
<b>Balances at 1 January 2018</b>	<b>7,833</b>	<b>29,317</b>	<b>(3,642)</b>	<b>14,638</b>	<b>613</b>	<b>98,425</b>	<b>147,184</b>	<b>-</b>	<b>147,184</b>
Loss for the period	-	-	-	-	-	(920)	(920)	-	(920)
Exchange differences on retranslation of net investment	-	-	-	-	63	-	63	-	63
<b>Total comprehensive income for the period</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>63</b>	<b>(920)</b>	<b>(857)</b>	<b>-</b>	<b>(857)</b>
Issue of share capital	-	11	-	-	-	-	11	-	11
Own shares sold in the period	-	-	344	-	-	(238)	106	-	106
Dividends (note 6)	-	-	-	-	-	(5,238)	(5,238)	-	(5,238)
Tax on share options	-	-	-	-	-	(13)	(13)	-	(13)
Credit to equity for equity-settled share-based payments	-	-	-	789	-	-	789	-	789
<b>Balance at 30 June 2018</b>	<b>7,833</b>	<b>29,328</b>	<b>(3,298)</b>	<b>15,427</b>	<b>676</b>	<b>92,016</b>	<b>141,982</b>	<b>-</b>	<b>141,982</b>

**CONDENSED CONSOLIDATED CASH FLOW STATEMENT**  
for the six months ended 30 June 2019

	Notes	Six months ended 30 June 2019 (unaudited) £'000	Six months ended 30 June 2018 (unaudited) £'000	Twelve months ended 31 December 2018 (restated – note 11, audited) £'000
<b>Net cash from operating activities</b>	7	<b>(3,886)</b>	167	(9,862)
<b>Investing activities</b>				
Investment income		57	100	171
Movement in treasury deposits		(15)	(4,031)	(2,524)
Purchases of property, plant and equipment		(817)	(2,340)	(2,790)
Proceeds on disposal of property, plant and equipment		–	–	584
Expenditure on software		(10)	(17)	(160)
Expenditure on licence		–	–	(177)
Expenditure on capitalised product development		(1,118)	(902)	(1,915)
<b>Net cash used in investing activities</b>		<b>(1,903)</b>	(7,190)	(6,811)
<b>Financing activities</b>				
Dividends paid	6	–	(5,238)	(6,009)
Repayments of principal under lease liabilities		(590)	–	–
Proceeds from issue of financial instrument		–	–	902
Income from non-controlling interest		–	–	2,115
Proceeds from the sale of ordinary share capital		–	106	105
Proceeds from issue of ordinary share capital		–	11	11
<b>Net cash used in financing activities</b>		<b>(590)</b>	(5,121)	(2,876)
<b>Net decrease in cash and cash equivalents</b>		<b>(6,379)</b>	(12,144)	(19,549)
Effect of foreign exchange rate changes		(2)	169	274
<b>Cash and cash equivalents at beginning of period</b>		<b>24,669</b>	43,944	43,944
<b>Cash and cash equivalents at end of period</b>		<b>18,288</b>	31,969	24,669

Cash and cash equivalents (which are presented as a single class of asset on the face of the condensed consolidated statement of financial position) comprise cash at bank and other short term highly liquid investments with a maturity of three months or less. The carrying amount of these assets is approximately equal to their fair value.

## NOTES TO THE INTERIM FINANCIAL INFORMATION for the six months ended 30 June 2019

### 1. Basis of preparation and accounting policies

#### Basis of preparation

These interim financial statements have been prepared in accordance with the accounting policies set out in the Group's Annual Report and Financial Statements 2018 on pages 91 to 99 (available at [www.xaar.com](http://www.xaar.com)) and were approved by the Board of Directors on 26 September 2019. The interim financial statements for the six months ended 30 June 2019 have been prepared in accordance with IAS 34 "Interim Financial Reporting" as adopted by the European Union. The interim financial statements do not include all the information and disclosures in the annual financial statements and should be read in conjunction with the Group's annual financial statements as at 31 December 2018.

The financial information in these interim financial statements for the six months ended 30 June 2019, does not constitute statutory financial statements as defined in section 434 of the Companies Act 2006. The Group's Annual Report for the year ended 31 December 2018 has been delivered to the Registrar of Companies and the auditor's report on those financial statements was not qualified and did not contain statements made under section 498(2) or (3) of the Companies Act 2006.

The interim financial statements are unaudited but have been reviewed by the auditor Ernst & Young LLP. The report of the auditor to the Group is set out at the end of this announcement.

#### Significant accounting policies

The accounting policies adopted in the preparation of the interim condensed consolidated financial statements are consistent with those followed in the preparation of the Group's annual financial statements for the year ended 31 December 2018, with the exception of IFRS 16 which was adopted in the 2019 half year period, with the accounting policy included later in this note.

#### Risks and uncertainties

An outline of the key risks and uncertainties faced by the Group is detailed on pages 29 to 33 of the Xaar plc Annual Report and Financial Statements 2018. Risk is an inherent part of doing business and the strong cash position of the Group leads the Directors to believe that the Group is well placed to manage business risks successfully.

#### Brexit and other trade barriers

The Group operates globally and may be affected by Brexit developments, which could provide a number of challenges for Xaar. The Group is continuously monitoring events and putting mitigating actions in place. As previously disclosed, one of the greatest challenges continues to be concerning EU workers and migration. Trading with our EU customers could be more complex. Any actual or perceived barriers to free trade are an obvious area of concern for us. As a result of Brexit, the Group is exposed to potential currency fluctuations, although not significant. Brexit and trade barriers continue to be an integral part of the Group's ongoing risk management and review process, for which solutions to address the risks identified are explored and implemented. Although there is still uncertainty surrounding the outcome of Brexit, we do not expect the direct consequences of Brexit to have a material impact on the Group.

#### Going concern

The Group's forecasts and projections, taking account of the disappointing financial results of the first half of 2019 and reasonably possible changes in trading performance, support the conclusion that there is a reasonable expectation that the Group has adequate resources to continue in operational existence for the foreseeable future, a period not less than 12 months from the date of this report. Accordingly, the going concern basis of preparation has been adopted in preparing the interim financial statements.

#### Changes to reportable segments

Following changes to the structure of the Group's internal organisation and subsequent changes in the way in which financial and management information is presented to both the Board and the Executive Team, the composition of the Group's reportable segments changed in the year ended 31 December 2018.

The changes to the Group's organisational structure has followed the acquisition of EPS and the investment in 3D printing solutions. The activities of the Group are managed in three distinct business units with a more focused approach. As a result of these changes, activities are now reported under three new operating segments, 'Printhead', 'Product Print Systems' and '3D Printing'.

The changes to reported segments can be summarised as follows:

The segment disclosure note for the six months ended 30 June 2018 has been amended as follows:

Six months ended 30 June 2018	As reported £'000	Adjustment £'000	Restated £'000
<b>Revenue</b>			
Printhead	29,983	(33)	29,950
Product Print Systems	5,346	–	5,346
3D Printing	–	33	33
Total revenue	35,329	–	35,329
<b>Result</b>			
Printhead	(541)	17	(524)
Product Print Systems	1	–	1
3D Printing	–	(17)	(17)
<b>Total segment result</b>	<b>(540)</b>	–	<b>(540)</b>

## 1. Basis of preparation and accounting policies *continued*

### Changes in accounting policies – IFRS 16

In the current year, the Group, for the first time, has applied IFRS 16 Leases. The date of initial application of IFRS 16 for the Group is 1 January 2019.

IFRS 16 introduces new or amended requirements with respect to lease accounting. It introduces significant changes to the lessee accounting by removing the distinction between operating and finance lease, requiring the recognition of a right-of-use asset and a lease liability at commencement for all leases, except for short-term leases and leases of low value assets. In contrast to lessee accounting, the requirements for lessor accounting have remained largely unchanged.

The Group is not party to any material leases where it acts as a lessor, but the Group does have a large number of material property and equipment leases.

Details of the Group's accounting policies under IFRS 16 are set out below, followed by a description of the impact of adopting IFRS 16. Significant judgements applied in the adoption of IFRS 16 included determining the lease term for those leases with termination or extension options and determining an incremental borrowing rate where the rate implicit in a lease could not be readily determined.

#### Accounting policies under IFRS 16 Leases

The Group assesses whether a contract is or contains a lease, at inception of the contract. The Group recognises a right-of-use asset and a corresponding lease liability with respect to all lease arrangements in which it is the lessee, except for short-term leases (defined as leases with a lease term of 12 months or less) and leases of low value assets. For these leases, the Group recognizes the lease payments as an operating expense on a straight-line basis over the term of the lease unless another systematic basis is more representative of the time pattern in which economic benefits from the leased assets are consumed.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted by using the rate implicit in the lease. If this rate cannot be readily determined, the Group uses its incremental borrowing rate.

Lease payments included in the measurement of the lease liability comprise:

- fixed lease payments (including in substance fixed payments), less any lease incentives;
- variable lease payments that depend on an index or rate, initially measured using the index or rate at the commencement date;
- the amount expected to be payable by the lessee under residual value guarantees;
- the exercise price of purchase options, if the lessee is reasonably certain to exercise the options;
- payments of penalties for terminating the lease, if the lease term reflects the exercise of an option to terminate the lease.

The lease liability is presented as a separate line in the consolidated statement of financial position.

The lease liability is subsequently measured by increasing the carrying amount to reflect interest on the lease liability (using the effective interest method) and by reducing the carrying amount to reflect the lease payments made.

The Group re-measures the lease liability (and makes a corresponding adjustment to the related right-of-use asset) whenever:

- the lease term has changed or there is a change in the assessment of exercise of a purchase option, in which case the lease liability is re-measured by discounting the revised lease payments using a revised discount rate;
- the lease payments change due to changes in an index or rate or a change in expected payment under a guaranteed residual value, in which cases the lease liability is re-measured by discounting the revised lease payments using the initial discount rate (unless the lease payments change is due to a change in a floating interest rate, in which case a revised discount rate is used);
- a lease contract is modified and the lease modification is not accounted for as a separate lease, in which case the lease liability is re-measured by discounting the revised lease payments using a revised discount rate.

The Group did not make any such adjustments during the periods presented.

The right-of-use assets comprise the initial measurement of the corresponding lease liability, lease payments made at or before the commencement day and any initial direct costs. They are subsequently measured at cost less accumulated depreciation and impairment losses.

Whenever the Group incurs an obligation for costs to dismantle and remove a leased asset, restore the site on which it is located or restore the underlying asset to the condition required by the terms and conditions of the lease, a provision is recognised and measured under IAS 37. The costs are included in the related right-of-use asset, unless those costs are incurred to produce inventories.

Right-of-use assets are depreciated over the shorter period of lease term and useful life of the underlying asset. If a lease transfers ownership of the underlying asset or the cost of the right-of-use asset reflects that the Group expects to exercise a purchase option, the related right-of-use asset is depreciated over the useful life of the underlying asset. The depreciation starts at the commencement date of the lease. The Group does not have any leases that transfer ownership of the underlying asset. The Group does not have any leases with a purchase option where there is a reasonable expectation that the option will be exercised.

**NOTES TO THE INTERIM FINANCIAL INFORMATION** continued  
for the six months ended 30 June 2019

**1. Basis of preparation and accounting policies** continued

**Accounting policies under IFRS 16 Leases** continued

The right-of-use assets are presented within the same line item as that within which the corresponding underlying assets would be presented if they were owned – for the Group this is property, plant and equipment.

Variable rents that do not depend on an index or rate are not included in the measurement of the lease liability and the right-of-use asset. The related payments are recognised as an expense in the period in which the event or condition that triggers those payments occurs and are included in the line income statement.

For short-term leases (lease term of 12 months or less) and leases of low-value assets (such as personal computers and office furniture), the Group has opted to recognise a lease expense on a straight-line basis as permitted by IFRS 16. This expense is presented within the consolidated income statement.

**Approach to transition**

The Group has applied IFRS 16 using the modified retrospective approach, without restatement of the comparative information. In respect of those leases the Group previously treated as operating leases, the Group has elected to measure its right of use assets arising from property leases using the approach set out in IFRS 16.C8(b)(i). Under IFRS 16.C8(b)(i) right of use assets are calculated as if the Standard applied at lease commencement, but discounted using the borrowing rate at the date of initial application.

The Group's weighted average incremental borrowing rate applied to lease liabilities as at 1 January 2019 is 3%.

**Practical expedients adopted on transition**

The Group has made use of the practical expedient available on transition to IFRS 16 not to reassess whether a contract is or contains a lease. Accordingly, the definition of a lease in accordance with IAS 17 and IFRIC 4 will continue to be applied to those leases entered into or modified before 1 January 2019.

As part of the Group's adoption of IFRS 16 and application of the modified retrospective approach to transition, the Group also elected to use the following practical expedients:

- a single discount rate has been applied to portfolios of leases with reasonably similar characteristics;
- right-of-use assets have been adjusted by the carrying amount of onerous lease provisions at 31 December 2018 instead of performing impairment reviews under IAS 36;
- exclusion of initial direct costs from the measurement of the right-of-use asset at the date of initial application;
- non-lease components have not been separated from lease components, and instead both components have been treated as a single component for the purpose of accounting under IFRS 16; and
- hindsight has been used in determining the lease term.

**Impact on lessee accounting**

**Former operating leases**

IFRS 16 changes how the Group accounts for leases previously classified as operating leases under IAS 17, which were off-balance sheet.

Applying IFRS 16, for all leases (except as noted above), the Group now recognises right-of-use assets and lease liabilities in the consolidated balance sheet, initially measured at the present value of the future lease payments as described above.

Lease incentives (e.g. rent free periods) are recognised as part of the measurement of the right-of-use assets and lease liabilities whereas under IAS 17 they resulted in the recognition of a lease incentive liability, amortised as a reduction of rental expenses on a straight line basis.

Under IFRS 16, right-of-use assets will be tested for impairment in accordance with IAS 36 Impairment of Assets. This replaces the previous requirement to recognise a provision for onerous lease contracts.

Under IFRS 16 the Group recognises depreciation of right-of-use assets and interest on lease liabilities in the consolidated income statement, whereas under IAS 17 operating leases previously gave rise to a straight-line expense in other operating expenses.

Under IFRS 16 the Group separates the total amount of cash paid for leases that are on balance sheet into a principal portion (presented within financing activities) and interest (presented within operating activities) in the consolidated cash flow statement. Under IAS 17 operating lease payments were presented as operating cash outflows.

**Former finance leases**

The main differences between IFRS 16 and IAS 17 with respect to assets formerly held under a finance lease is the measurement of the residual value guarantees provided by the lessee to the lessor. IFRS 16 requires that the Group recognises as part of its lease liability only the amount expected to be payable under a residual value guarantee, rather than the maximum amount guaranteed as required by IAS 17. This change did not have a material effect on the Group's consolidated financial statements.

## 1. Basis of preparation and accounting policies continued

### Financial impact

The application of IFRS 16 to leases previously classified as operating leases under IAS 17 resulted in the recognition of right-of-use assets and lease liabilities. Provisions for onerous lease contracts have been derecognised and operating lease incentives previously recognised as liabilities have been de-recognised and factored into the measurement of the right-to-use assets and lease liabilities.

The Group has chosen to use the table below to set out the adjustments recognised at the date of initial application of IFRS 16.

	As previously reported or restated (note 11) as at 31 December 2018 £'000	Impact of IFRS 16 £'000	As restated at 1 January 2019 £'000
<b>Non-current assets</b>			
Property, plant and equipment	28,044	2,866	30,910
<b>Current assets</b>			
Trade and other assets	21,398	(19)	21,379
<b>Total impact on assets</b>		<b>2,847</b>	
<b>Current liabilities</b>			
Trade and other payables	(18,958)	281	(18,677)
Lease liabilities	–	(1,000)	(1,000)
<b>Non-current liabilities</b>			
Lease liabilities	–	(2,383)	(2,383)
Deferred tax liabilities	(870)	85	(785)
<b>Total impact on liabilities</b>		<b>(3,017)</b>	
<b>Equity</b>			
Retained earnings	79,278	(157)	79,121
Non-controlling interest	1,980	(14)	1,966
			<b>(171)</b>

Of the total right-of-use assets of £2.87 million recognised at 1 January 2019, £2.77 million related to leases of property and £0.1 million to leases of machinery.

The table below presents a reconciliation from operating lease commitments disclosed at 31 December 2018 to lease liabilities recognised at 1 January 2019.

	£'000
Operating lease commitments disclosed under IAS 17 at 31 December 2018	3,148
Short-term and low value lease commitments straight-line expensed under IFRS 16	(4)
Effect of discounting	(447)
Payments due in periods covered by extension options that are included in the lease term	599
Other adjustments on transition	87
Lease liabilities recognised at 1 January 2019	3,383

In terms of the income statement impact, the application of IFRS 16 resulted in a decrease in other operating expenses and an increase in depreciation and interest expense compared to IAS 17. During the six months ended 30 June 2019, in relation to leases under IFRS 16 the Group recognised the following amounts in the consolidated income statement:

	£'000
Depreciation	482
Interest expense	46
Short-term lease expense	33

**NOTES TO THE INTERIM FINANCIAL INFORMATION** continued  
for the six months ended 30 June 2019

**2. Reconciliation of adjusted financial measures**

	<b>Six months ended 30 June 2019 (unaudited) £'000</b>	Six months ended 30 June 2018 (unaudited) £'000	Twelve months ended 31 December 2018 (restated – note 11, audited) £'000
Loss before tax	<b>(52,299)</b>	(1,098)	(15,394)
Share-based payment charges	<b>425</b>	656	235
Exchange differences relating to intra-group transactions	<b>(71)</b>	(377)	(629)
Gain on derivative financial instruments	<b>–</b>	(1)	–
Restructuring and investment (income)/expenses	<b>(108)</b>	4,636	5,804
Thin Film impairment	<b>39,013</b>	–	–
Research and development expenditure credit	<b>(1,983)</b>	(649)	(1,737)
Adjusted (loss)/profit before tax	<b>(15,023)</b>	3,167	(11,721)

Share-based payment charges include the IFRS 2 charge for the period of £549,000 (H1 2018: £789,000) and the credit relating to National Insurance on the outstanding potential share option gains of £124,000 (H1 2018: charge of £133,000). These costs were included in the general and administrative expenses in the Consolidated income statement.

Exchange differences relating to the United States, Danish and Swedish operations represent exchange gains or losses recorded in the consolidated income statement as a result of operating in the United States, Denmark and Sweden. These costs were included in general and administrative expenses in the Consolidated income statement.

Gain on derivative financial instruments related to gains and losses made on forward contracts in 2018. These gains were included in the general and administrative expenses in the Consolidated income statement.

Restructuring and investment income of £108,000 in H1 2019 relates to costs incurred and provisions made in relation to a reorganisation, the closure of the manufacturing facility in Sweden in 2016, and investment related expenditure. Restructuring and investment expenses in H1 2018 of £4,636,000 related mainly to the impairment of fixed assets of £3,126,000, to write down assets to their recoverable amount following an impairment review and testing performed as required by IAS 36. The remainder relates to costs incurred and provisions made in relation to a reorganisation, the closure of the manufacturing facility in Sweden in 2016, and investment related expenditure.

The Thin Film impairment charge of £39,013,000 has been recognised following the conclusion of the strategic review of the Thin Film business, with £28,494,000 relating to the intangible asset, £5,416,000 relating to property, plant and equipment, and £5,103,000 relating to working capital balances.

The research and development expenditure credit relates to the corporation tax relief receivable relating to qualifying research and development expenditure that had been recognised in deferred income relating to Thin Film. This has been released to the income statement in H1 2019 at the same time that the intangible asset has been impaired. This item is shown on the face of the Consolidated income statement.

	<b>Six months ended 30 June 2019 (unaudited) Pence per share</b>	Six months ended 30 June 2018 (unaudited) Pence per share	Twelve months ended 31 December 2018 (restated – note 11, audited) Pence per share
Diluted earnings per share	<b>(64.6p)</b>	(1.2p)	(16.5p)
Share-based payment charges	<b>0.5p</b>	0.9p	0.3p
Exchange differences relating to the intra-group transactions	<b>(0.1p)</b>	(0.5p)	(0.8p)
Gain on derivative financial instruments	<b>–</b>	–	–
Restructuring and investment (income)/expenses	<b>(0.2p)</b>	5.9p	7.4p
Thin Film impairment	<b>50.6p</b>	–	–
Tax effect of adjusting items	<b>(2.4p)</b>	(0.5p)	(0.1p)
Adjusted diluted earnings per share	<b>(16.2p)</b>	4.6p	(9.7p)

This reconciliation is provided to enable a better understanding of the Group's results.

### 3. Business segments

For management reporting purposes, the Group's operations are analysed according to the three operating segments of 'printheads', 'product print systems' and '3D'. These three operating segments are the basis on which the Group reports its primary segment information and on which decisions are made by the Group's Chief Executive Officer and Board of Directors, and resources allocated. The Group's chief operating decision maker is the Chief Executive Officer.

Segment information is presented below:

	<b>Six months ended 30 June 2019 (unaudited) £'000</b>	Six months ended 30 June 2018 (restated – note 1, unaudited) £'000	Twelve months ended 31 December 2018 (restated – note 11, audited) £'000
<b>Revenue</b>			
Printhead	<b>15,981</b>	29,950	49,775
Product Print Systems	<b>6,538</b>	5,346	13,658
3D Printing	<b>7</b>	33	101
Total revenue	<b>22,526</b>	35,329	63,534
<b>Result</b>			
Printhead	<b>(51,698)</b>	(524)	(13,853)
Product Print Systems	<b>(69)</b>	1	(576)
3D Printing	<b>(119)</b>	(17)	(900)
Total segment result	<b>(51,886)</b>	(540)	(15,329)
Net unallocated corporate expenses	<b>(425)</b>	(656)	(235)
Operating loss	<b>(52,311)</b>	(1,196)	(15,564)
Investment income	<b>58</b>	98	170
Finance costs	<b>(46)</b>	–	–
Loss before tax	<b>(52,299)</b>	(1,098)	(15,394)
Tax	<b>2,426</b>	178	2,589
Loss for the period	<b>(49,873)</b>	(920)	(12,805)

Unallocated corporate expense relates to administrative activities which cannot be directly attributed to any of the principal product groups, consisting of share-based payment charges.

**NOTES TO THE INTERIM FINANCIAL INFORMATION** continued  
for the six months ended 30 June 2019

#### 4. Income tax

The major components of income tax expense in the income statement are as follows:

	<b>Six months ended 30 June 2019 (unaudited) £'000</b>	Six months ended 30 June 2018 (unaudited) £'000	Twelve months ended 31 December 2018 (audited) £'000
<b>Current income tax</b>			
Income tax (credit)/charge	<b>(1,439)</b>	389	489
<b>Deferred income tax</b>			
Relating to origination and reversal of temporary differences	<b>(987)</b>	(567)	(3,078)
Income tax credit	<b>(2,426)</b>	(178)	(2,589)

The current income tax credit of £1,439,000 for the six months ended 30 June 2019 includes a surrender of qualifying R&D losses, as allowable under the HMRC Small or medium-sized enterprise (SME) R&D tax relief scheme. In 2018, eligible UK Xaar companies claimed the R&D Expenditure Credit (RDEC), where the R&D credit receivable is included in operating loss.

The deferred income tax credit of £987,000 for the six months ended 30 June 2019 includes the de-recognition of deferred tax liabilities relating to the Thin Film impairment and non-recognition of deferred tax assets relating to tax losses within the Printhead business unit. Whilst the Board believes in the long term potential and profitability of the Printhead business unit, the forecast losses over the next couple of years mean that the tax losses will not be utilised in the short term. Therefore the Printhead business unit deferred tax asset brought forward has been derecognised and no deferred tax asset has been recognised relating to losses for 2019.

#### 5. Earnings per ordinary share – basic and diluted

The calculation of basic and diluted earnings per share is based upon the following data:

	<b>Six months ended 30 June 2019 (unaudited) £'000</b>	Six months ended 30 June 2018 (unaudited) £'000	Twelve months ended 31 December 2018 (restated – note 11, audited) £'000
<b>Earnings</b>			
Earnings for the purposes of earnings per share being net loss attributable to equity holders of the parent	<b>(49,813)</b>	(920)	(12,673)
<b>Number of shares</b>			
Weighted average number of ordinary shares for the purposes of basic earnings per share	<b>77,070,748</b>	76,891,906	76,957,142
Effect of dilutive potential ordinary shares:			
Share options	–	–	–
Weighted average number of ordinary shares for the purposes of diluted earnings per share	<b>77,070,748</b>	76,891,906	76,957,142

#### 6. Dividends

	<b>Six months ended 30 June 2019 (unaudited) £'000</b>	Six months ended 30 June 2018 (unaudited) £'000	Twelve months ended 31 December 2018 (audited) £'000
Amounts recognised as distributions to equity holders in the period:			
Final dividend for the year ended 31 December 2017 6.8p per share	–	5,238	5,238
Interim dividend for the year ended 31 December 2018 of 1.0p per share	–	–	771
Total distributions to equity holders in the period	–	5,238	6,009

The Board has not recommended an interim dividend for 2019 (2018: 1.0 pence per share).

## 7. Notes to the cash flow statement

	Six months ended 30 June 2019 (unaudited) £'000	Six months ended 30 June 2018 (unaudited) £'000	Twelve months ended 31 December 2018 (restated – note 11, audited) £'000
Loss before tax	(52,299)	(1,098)	(15,394)
Adjustments for:			
Thin Film impairment	39,013	–	–
Share-based payments	425	656	235
Depreciation of property, plant and equipment	2,487	2,613	4,725
Impairment of fixed assets	–	3,126	3,258
Amortisation of intangible assets	887	1,061	2,139
Research and development expenditure credit	(1,983)	(649)	(1,737)
Investment income	(58)	(98)	(170)
Finance cost	46	–	–
Foreign exchange gains	(65)	(161)	(689)
Other (gains)/losses	(304)	–	357
(Profit)/loss on disposal of property, plant and equipment	(15)	33	(3)
Decrease in provisions	(173)	(884)	(1,383)
Operating cash flows before movements in working capital	(12,039)	4,599	(8,662)
Decrease/(increase) in inventories	6,524	(10,791)	(12,817)
Decrease in receivables	6,254	4,138	9,364
(Decrease)/increase in payables	(8,307)	2,680	2,724
Cash (used in)/generated by operations	(7,568)	626	(9,391)
Income taxes refunded/(paid)	3,728	(459)	(471)
Interest paid	(46)	–	–
<b>Net cash from operating activities</b>	<b>(3,886)</b>	167	(9,862)

## 8. Derivative financial instruments

Fair value of the Group's financial assets and financial liabilities that are measured at fair value on a recurring basis:

Some of the Group's financial assets and financial liabilities are measured at fair value at the end of each reporting period. The following table gives information about how the fair value of these financial assets and financial liabilities are determined (in particular, the valuation technique(s) and inputs used).

Financial asset/financial liabilities	Valuation technique(s) and key input(s)	Significant unobservable input(s)	Relationship and sensitivity of unobservable inputs to fair value
Derivative financial instrument (Level 3)	Black-Scholes model The following variables were taken into consideration: current underlying price of the commodity, options strike price, time until expiration (expressed as a percent of a year), implied volatility of the commodity and LIBOR.	Share price of Xaar 3D Ltd – unobservable as not publicly traded shares.	n/a

There were no transfers between Level 1 and 2 during the current or prior year.

**NOTES TO THE INTERIM FINANCIAL INFORMATION** continued  
for the six months ended 30 June 2019

**8. Derivative financial instruments** continued

**Reconciliation of Level 3 fair value measurements of financial instruments:**

The only financial instrument measured subsequently at fair value on Level 3 fair value measurement represents a derivative financial instrument issued to the non-controlling interest relating to the 3D business.

	£'000
Balance at 1 January 2019 (restated – note 11)	1,260
Total gains or losses:	
– in profit or loss	(303)
<b>Balance at 30 June 2019</b>	<b>957</b>

**9. Thin Film impairment**

Our strategic review of the Thin Film business has concluded with the decision to cease all further activities, and as a consequence we have impaired all associated assets to their net realisable value. An impairment charge of £39,013,000 has been recognised as at 30 June 2019, with £28,494,000 relating to the intangible asset, £5,416,000 relating to property, plant and equipment, and £5,103,000 relating to working capital balances, where the recoverable amounts have been established in accordance with IAS 36.

**10. Events after the balance sheet date**

On 12 September 2019, the Group announced a significant strategic development for Xaar 3D Limited. Xaar has entered into an agreement, subject to shareholder approval, with Stratasys, Ltd. (Stratasys), its partner in Xaar 3D, to sell 20% of Xaar's holding in Xaar 3D to Stratasys for US\$10 million and issue Stratasys a call option to acquire the remaining 55% of Xaar 3D not held by Stratasys for at least US\$33 million, which is exercisable at any time within three years from closing.

Our strategic review of the Thin Film business has now concluded with the decision to cease all further activities. As a consequence we are now embarking upon a restructuring of the Printhead business unit subject to employee consultation. Restructuring costs are expected to be in the region of £2.5 million.

**11. Restatement of prior period**

The financial statements include a prior period restatement in relation to the recognition of the derivative financial instrument issued to the non-controlling interest relating to the 3D business. The adjustment relates to a correction to the fair value of the option granted to the non-controlling interest in Xaar 3D Limited at both the inception date and prior year end. For full details of the terms of the option please refer to the 2018 Annual Report and Accounts.

There is no impact to the six month period ended 30 June 2018. The following tables summarise the impact of the prior period restatement on the financial statements of the Group for the twelve month period ended 31 December 2018:

	Twelve months ended 31 December 2018		
	As reported £'000	Adjustment £'000	Restated £'000
<b>Consolidated income statement</b>			
Restructuring and investment expenses	(5,337)	(467)	(5,804)
Operating loss	(15,097)	(467)	(15,564)
Loss before tax	(14,927)	(467)	(15,394)
Loss for the year	(12,338)	(467)	(12,805)
<b>Attributable to:</b>			
Owners of the Company	(12,276)	(397)	(12,673)
Non-controlling interests	(62)	(70)	(132)
	(12,338)	(467)	(12,805)
<b>Earnings per share</b>			
Basic	(16.0p)	(0.5p)	(16.5p)
Diluted	(16.0p)	(0.5p)	(16.5p)

**11. Restatement of prior period** continued

	Twelve months ended 31 December 2018		
	As reported £'000	Adjustment £'000	Restated £'000
<b>Consolidated statement of comprehensive income</b>			
Loss for the year	(12,338)	(467)	(12,805)
Total comprehensive loss for the year	(12,177)	(467)	(12,644)
<b>Attributable to:</b>			
Owners of the Company	(12,113)	(397)	(12,510)
Non-controlling interests	(64)	(70)	(134)
	(12,177)	(467)	(12,644)

	As at 31 December 2018		
	As reported £'000	Adjustment £'000	Restated £'000
<b>Consolidated statement of financial position</b>			
<b>Current liabilities</b>			
Derivative financial instruments	(643)	(617)	(1,260)
<b>Equity</b>			
Retained earnings	79,675	(397)	79,278
<b>Equity attributable to owners of the company</b>			
Non-controlling interests	2,200	(220)	1,980
<b>Total equity</b>	131,884	(617)	131,267

	Twelve months ended 31 December 2018		
	As reported £'000	Adjustment £'000	Restated £'000
<b>Consolidated cash flow statement</b>			
Proceeds from issue of financial instrument	753	149	902
Income from non-controlling interest	2,264	(149)	2,115

**12. Date of approval of interim financial statements**

The interim financial statements cover the period 1 January 2019 to 30 June 2019 and were approved by the Board on 26 September 2019.

Further copies of the interim financial statements are available from the Company's registered office, 316 Science Park, Cambridge CB4 0XR, and can be accessed on the Xaar plc website, [www.xaar.com](http://www.xaar.com).

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**INDEPENDENT REVIEW REPORT TO XAAR PLC**  
for the six months ended 30 June 2019

We have been engaged by the Company to review the condensed set of financial statements in the half-yearly financial report for the six months ended 30 June 2019 which comprises the condensed consolidated income statement, condensed consolidated statement of comprehensive income, condensed consolidated statement of financial position, condensed consolidated statement of changes in equity, condensed consolidated cash flow statement and related notes 1 to 12. We have read the other information contained in the half-yearly financial report and considered whether it contains any apparent misstatements or material inconsistencies with the information in the condensed set of financial statements.

This report is made solely to the Company in accordance with International Standard on Review Engagements (UK and Ireland) 2410 'Review of Interim Financial Information Performed by the Independent Auditor of the Entity' issued by the Auditing Practices Board. Our work has been undertaken so that we might state to the Company those matters we are required to state to it in an independent review report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company, for our review work, for this report, or for the conclusions we have formed.

**Directors' responsibilities**

The half-yearly financial report is the responsibility of, and has been approved by, the Directors. The Directors are responsible for preparing the half-yearly financial report in accordance with the Disclosure and Transparency Rules of the United Kingdom's Financial Conduct Authority.

As disclosed in note 1, the annual financial statements of the Group are prepared in accordance with IFRSs as adopted by the European Union. The condensed set of financial statements included in this half-yearly financial report has been prepared in accordance with International Accounting Standard 34, 'Interim Financial Reporting', as adopted by the European Union.

**Our responsibility**

Our responsibility is to express to the Company a conclusion on the condensed set of financial statements in the half-yearly financial report based on our review.

**Scope of review**

We conducted our review in accordance with International Standard on Review Engagements (UK and Ireland) 2410 'Review of Interim Financial Information Performed by the Independent Auditor of the Entity' issued by the Auditing Practices Board for use in the United Kingdom. A review of interim financial information consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing (UK) and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

**Conclusion**

Based on our review, nothing has come to our attention that causes us to believe that the condensed set of financial statements in the half-yearly financial report for the six months ended 30 June 2019 is not prepared, in all material respects, in accordance with International Accounting Standard 34 as adopted by the European Union and the Disclosure and Transparency Rules of the United Kingdom's Financial Conduct Authority.

**Ernst & Young LLP****Statutory Auditor**

Cambridge, United Kingdom

26 September 2019

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## ADVISORS

### Registered office

316 Science Park  
Cambridge CB4 0XR

### Registered number

3320972

### Company Secretary

Camila Cottage

### Brokers

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#### N+1 Singer

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### Registered auditor

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### Registrars

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