# Notes to the consolidated financial statements
## for the year ended 31 December 2020

## 1. General information

Xaar plc ('the Group') is incorporated in England and Wales under the Companies Act 2006. The address of the registered office is given on the inside back cover. The nature of the Group's operations and its principal activity is set out in the Strategic Report starting on pages 8 to 31.

The Strategic Report can be found **on pages 8 to 31.**

## 2. Key sources of estimation uncertainty and critical accounting judgements

The key assumptions concerning the future and other sources of estimation uncertainty at the date of the statement of financial position that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are as follows:

**Accounting judgements** – The Group applies judgement in how it applies its accounting policies, which do not involve estimation, which could materially affect the numbers disclosed in these financial statements. The key judgements, without estimation, that could have the most significant effect on the amounts recognised in these financial statements are as follows:

**Capitalisation of development costs (accounting judgement) – note 16**
As described in note 3, the Group capitalises development expenditure as an intangible asset where the criteria under IAS 38 'Intangible Assets' is met. This requires management to make judgement on when all of the criteria for capitalisation are met and when to cease capitalisation and start amortising the asset. In 2020, total capitalised development additions amounted to £nil (2019: £2,255,000) given capitalisation ceased on Xaar 3D in the prior year and no projects have met the capitalisation criteria in the current year.

**Consolidation of Xaar 3D (accounting judgement) – notes 22, 34 and 37**
The Group considered the application of IFRS 10 Consolidated Financial Statements. Following this review the Group concluded that it has retained power over the investee, it is both exposed, and has the right, to variable returns, and it has the ability to use its power to affect these returns. This conclusion was drawn on the basis of the current share ownership (55% Xaar), the make-up of the Board (Xaar has a majority position), the terms of the call option that Stratasys holds over the Xaar 3D shares, and the process used to make key strategic and operational decisions including who the key decision makers are.

Based on the option valuation, the Board has concluded that the currently exercisable call option that Stratasys holds over the remaining 45% of Xaar 3D is not substantive as at the reporting date. While certain matters require the consent of Stratasys, management have assessed that these only give protective rights over the relevant activities, which are judged at this time to be the development and commercialisation of the 3D product for it to be produced by a contract manufacturer, an area in which Xaar plc has the expertise.

The proposed amendment of the call option (see note 37 – Non-adjusting post balance sheet event) is subject to shareholder approval, and does not alter the contractual terms in place as at the year end, Xaar plc retains and is exposed to the rights and obligations associated with its shareholding as at that date. As such, the Group has concluded it continues to retain control and should therefore continue to consolidate Xaar 3D at the year end.

**Discontinued operations (accounting judgement) – note 11**
Following the Board decision in December 2020 to amend the terms of the call option in relation to Xaar 3D the Group considered the application of IFRS 5 'Non-current Assets Held for Sale and Discontinued Operations'.

The 3D business meets the criteria of a discontinued operation per IFRS 5 given it has been previously been reported as a major line of business and the disposal is highly probable in the next 12 months. The Group has a commitment to a plan to sell the asset with an active programme in place to complete the sale, which is expected to achieve a reasonable sale price in relation to its current fair value.

**Significant estimates** – The preparation of financial statements in conformity with adopted IFRSs requires the use of estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting year. Although these estimates are based on management's best knowledge of the amount, events or actions, actual results ultimately may differ from those estimates. The estimates and underlying assumptions are reviewed on an ongoing basis. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

The Directors consider the following to be the key estimates applicable to the financial statements, which have a significant risk of resulting in a material adjustment to the carrying amounts of assets and liabilities within the next financial year or in the longer term:

**Xaar 3D option – (estimation uncertainty) – note 22**
In December 2019 Xaar 3D Holdings granted Stratasys Solutions Limited an option to acquire the remaining shares in Xaar 3D Limited. This financial liability is measured at fair value. In order to calculate the fair value the Group uses the Black Scholes model. The Black Scholes model uses a number of inputs that require estimation. Whilst the Group uses third party experts to provide these inputs the estimates remain uncertain.

**Inventory provision (estimation uncertainty) – note 20**
The Group's inventory provision at 31 December 2020 of £24,621,000 (2019: £20,935,000) includes £21,256,000 relating to discontinued operations (2019: £17,815,000) and £3,365,000 from continuing operations (2019: £3,120,000). All assets, including inventory, that relate to the discontinued operations have been valued at the lower of the carrying amount and fair value less cost to sell. Provisions in relation to continued operations have been made based on management's assessment of customer sell through, market conditions, current and potential competitors, and the ageing profile and quantity of the inventory on hand. Furthermore, management has assessed the likely

# Notes to the consolidated financial statements (cont.)
for the year ended 31 December 2020

time period to sell the inventory and the ability to decrease prices to drive sales.

## 2. Key sources of estimation uncertainty and critical accounting judgements (cont.)

**Credit provision for the allowance of doubtful debts (estimation uncertainty) – note 21**
The Group's provision for doubtful debts of £622,000 (2019: £7,959,000) relates to management's assessment of the ageing profile of receivables and the risk of collecting unpaid overdue balances. In making the estimate, management has taken steps to assess the ongoing viability of the customers, the probability and timing of repayment, external factors which may affect the customers' ability to pay and historical data relating to settlement of aged debts.

**Impairment of capitalised development costs (estimation uncertainty) – note 16**
The Group determines whether capitalised development costs, and all other non-current assets, are impaired at least on an annual basis. This requires an estimation of the 'value-in-use' of the cash-generating units to which the capitalised development costs are allocated. Estimating a value-in-use amount requires management to make an estimate of the expected future cash flows from the cash-generating unit and also to choose a suitable discount rate in order to calculate the present value of those cash flows. The carrying amount of capitalised development costs at 31 December 2020 was £76,000 (2019: £5,166,000).

The value of capitalised development costs in relation to Xaar 3D has been transferred into Assets held for sale.

**Impairment of goodwill – Engineered Print Solutions (EPS) (estimation uncertainty) – note 15**
The Group tests goodwill annually for impairment or more frequently if there are indications that goodwill might be impaired. Having performed impairment testing, no impairment has been identified and therefore no impairment loss has been recognised in 2020 (2019: £nil). Management has performed sensitivity analysis on its reasonable worst case scenario for the EPS business and it been completed on each key assumption in isolation. This analysis indicates that reasonable changes in the key assumptions on which we have based our determination of the recoverable amount would not cause the carrying amount of goodwill to exceed its recoverable amount.

**Revenue recognition – Engineered Print Solutions (EPS) (estimation uncertainty) – note 5**
Engineered Print Solutions recognises revenue on the stage of completion of the customer contract and performance obligations in the manufacture of bespoke machinery and equipment for delivery to the customer.
Each month an assessment is undertaken of the work in progress and stage of completion in both supply of individual components and labour hours allocated to the project against the expected project manufacture costs. The revenue determined is recognised upon the proportion and stage of completion of the performance obligations.
This assessment enables an estimate to be undertaken for the expected profitability of the customer contract, costs incurred to date, and costs to complete, but are subject to a level of uncertainty until the work in progress is finalised and the completed machinery is available for final delivery and acceptance by the customer.
The transaction price allocated to partially satisfied and unsatisfied obligations at 31 December 2020 are set out in note 5.

## 3. Significant accounting policies

**Basis of accounting**
The Group financial statements have been prepared in accordance with International Accounting Standards (IAS) in conformity with the requirements of the Companies Act 2006 and in accordance with International Financial Reporting Standards (IFRS) adopted pursuant to Regulation (EC) No 1606/2002 as it applies in the European Union. The financial information has been prepared on the basis of all applicable IFRS, including all International Accounting Standards (IAS), Standing Interpretations Committee (SIC) interpretations and International Financial Reporting Interpretations Committee (IFRIC) interpretations issued by the International Accounting Standards Board (IASB) that are applicable to the financial period.

The financial statements have been prepared on the historical cost basis, except for the revaluation of financial instruments. The Group financial statements are presented in Sterling and all values are rounded to the nearest thousand pounds (£'000) except when otherwise indicated. The principal accounting policies adopted are set out below.

**Basis of consolidation**
The consolidated financial statements incorporate the financial statements of the Company and entities controlled by the Company ('its subsidiaries') made up to 31 December each year. Control is achieved where the Company has the power to govern the financial and operating policies of an investee entity so as to obtain benefits from its activities. An investor controls another entity, an investee, if and only if the investor has all of the following: it has power over the investee, exposure or rights to variable returns from its involvement with the investee, and the ability to use its power over the investee to affect the amount of the investor's returns. To have power, an investor must have existing substantive rights that give it the current ability to direct the relevant activities. The investor reassesses whether it controls an entity if facts and circumstances indicate changes to one or more of the elements of control.

The results of subsidiaries acquired or disposed of during the year are included in the consolidated income statement from the date of acquisition or up to the date of disposal, as appropriate. Where necessary, adjustments are made to the financial statements of subsidiaries to bring the accounting policies used in line with those used by the Group.

All intra-group transactions, balances, income and expenses are eliminated on consolidation. Foreign exchange gains and losses arising on the retranslation of trading balances with subsidiaries with different functional currencies are reported in the income statement.

## 3. Significant accounting policies (cont.)

**Basis of consolidation (cont.)**

Non-controlling interests in subsidiaries are identified separately from the Group's equity therein. Those interests of non-controlling shareholders that are present ownership interests entitling their holders to a proportionate share of net assets upon liquidation may initially be measured at fair value or at the non-controlling interests' proportionate share of the fair value of the acquiree's identifiable net assets. The choice of measurement is made on an acquisition-by-acquisition basis.

Profit or loss and each component of other comprehensive income are attributed to the owners of the Company and to the non-controlling interests. Total comprehensive income of subsidiaries is attributed to the owners of the Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

Changes in the Group's interests in subsidiaries that do not result in a loss of control are accounted for as equity transactions. The carrying amount of the Group's interests and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiaries. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognised directly in equity and attributed to the owners of the Company.

**Going concern**

The Group's business activities, together with the factors likely to affect its future development, performance and position, are set out in the Strategic Report on pages 6 to 19. The Group reported a loss after tax for the year ended 31 December 2020 of £14.7 million, of which £10.3 million related to discontinued operations, being the final costs relating to Thin Film and the Xaar 3D business which is expected to be sold. Notes 21 and 22 include a description of the Group's objectives, policies and processes for managing its capital; its financial risk management objectives; details of its financial instruments and hedging activities; and its exposure to credit risk and liquidity risk. The Group's day to day working capital requirements are expected to be met through the current cash and cash equivalent resources (including Treasury deposits) at the balance sheet date of 31 December 2020 of £18.1 million. The Group was debt free as at 31 December 2020 and across each of the going concern scenarios described below.

Whilst the impact of COVID-19 on the performance of the business over the last year has been not been significant the long-term implications of the spread of the virus remain uncertain making it difficult to determine the impact on the 2021 financial performance. The Board has therefore considered the performance of the different businesses across the Group and each of their funding requirements before performing a number of stress tests. The base going concern case assumes that the disposal of Xaar 3D completes as described in note 37 and the Strategic update on page 11, however excludes the anticipated consideration. Conservatively, a second case which excludes the disposal of Xaar 3D has been applied. In both cases the downturn in revenue across the entire Group required to prevent the business continuing as a going concern would have to be severe and is not plausible given the nature and size of the order book and the trading experience of the Printhead and EPS segments during COVID-19 conditions to date. Notwithstanding this, the Group has further options to mitigate a cash shortfall which have not been factored into the above forecasts, such as staffing reductions, further delaying/ stopping capital and research and development expenditure and aligning performance related pay to actual results.

The Group continues to enjoy a strong cash position and is well positioned to cope with the current situation. The Board remains confident in the long-term future prospects for the Group and its ability to continue as a going concern for the foreseeable future.

The Directors have a reasonable expectation that the Group has adequate resources to continue in operational existence for the foreseeable future, based on the Group's forecasts and projections for the period to 30 April 2022, taking account of reasonably possible changes in trading performance. For this reason, we continue to adopt the going concern basis in preparing the financial statements.

**Adjusted financial measures**

Adjusted financial measures relate to continuing operations and comprise adjusted profit / (loss) before tax, and adjusted diluted earnings per share. These measures are alternative performance measures ('APMs') which are not defined or specified under the requirements of IFRS. These APMs adjust for recurring and non-recurring items which management consider to have a distorting effect on the underlying results of the Group. These APMs are used in evaluating management's performance and in determining management and executive remuneration. Items adjusted for include share-based payment charges, exchange differences on intra-group transactions, gains and losses on derivative financial instruments, restructuring and investment expenses, other income and the research and development expenditure credit.

Recurring items are adjusted each year irrespective of materiality to ensure consistent treatment, and allow for variation that can occur e.g. due to volatility in share prices in respect of share-based payment charges, or the significant impact of restructuring costs. Net cash includes cash, cash equivalents and treasury deposits. Gross R&D investment represents the cost of research and development on continuing operations in the year. No amounts have been capitalised in the current year, as the criteria have not been achieved.

**Business combinations**

The acquisition of subsidiaries is accounted for using the acquisition method.

Goodwill arising on acquisition is recognised as an asset and initially measured at cost, being the excess of the sum of consideration transferred, the amount of any non-controlling interests in the acquiree over the net of the acquisition-date fair values of the identifiable assets, liabilities and contingent liabilities recognised. If after reassessment, the Group's interest in the net fair value of the acquiree's identifiable assets, liabilities and contingent liabilities exceeds the cost of the business combination, the excess is recognised immediately in the income statement.

# Notes to the consolidated financial statements (cont.)
for the year ended 31 December 2020

## 3. Significant accounting policies (cont.)

**Goodwill**

Goodwill arising on consolidation is initially recognised as an asset at cost and is subsequently measured at cost less any accumulated impairment losses. Goodwill which is recognised as an asset is reviewed for impairment at least annually. Any impairment is recognised immediately in the income statement and is not subsequently reversed.

For the purposes of impairment testing, goodwill is allocated to each of the Group's cash-generating units expected to benefit from the synergies of the combination. Cash-generating units to which goodwill has been allocated are tested for impairment annually, or more frequently when there is an indication that the unit may be impaired. If the recoverable amount of the cash-generating unit is less than the carrying amount of the unit, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit pro rata on the basis of the carrying amount of each asset in the unit.

On disposal of the cash-generating unit, the attributable amount of goodwill is included in the determination of the profit or loss on disposal.

Goodwill arising on acquisitions before the date of transition to IFRS has been retained at the previous UK GAAP amounts subject to being tested for impairment at that date. Goodwill written off to reserves under UK GAAP prior to 1998 has not been reinstated and is not included in determining any subsequent profit or loss on disposal.

**Revenue recognition**

Revenue is measured based on the consideration to which the Group expects to be entitled in a contract with a customer and excludes amounts collected on behalf of third parties. The Group determines whether to recognise revenue, following a five-step process:

1. Identifying the contract with a customer;
2. Identifying the performance obligations;
3. Determining the transaction price;
4. Allocating the transaction price to the performance obligations; and
5. Recognising revenue when/as performance obligation(s) are satisfied.

Revenue arises from a number of sources but mainly the manufacture and sale of printheads and engineered printing solutions. The Group also licenses intellectual property to third parties as part of royalty based revenue. Revenue is shown net of value-added tax, returns, rebates and discounts and after eliminating sales within the Group.

Revenue from goods and services is recognised in accordance with IFRS 15 when control has been transferred to the customer. For sale of goods and services revenue is recognised at a point in time, unless specific conditions have been satisfied allowing revenue to be recognised over a period of time as identified in the five-step process (above), e.g. where the asset produced doesn't have an alternative use and the Group has an enforceable right to payment for performance completed to date. An input methodology (based on estimated costs) is used when recognising revenue over time. Use has been made of the practical expedient not to recognise a significant financing component where the period between transfer of the good or service and payment is one year or less.

Royalties are recognised on an accruals basis, based on quarterly statements received from each licensee. The royalties arise from the licensee's use of their printheads and our related intellectual property installed in equipment developed by original equipment manufacturers ('OEMs').

A receivable is recognised when the performance obligations are satisfied (e.g. upon shipment, upon delivery as services are rendered or upon completion of service) as this is the point in time that the consideration is unconditional because only the passage of time is required before the payment is due, there will be a reservation of title until payment has been received, but control has been transferred.

**Investment income**

Investment income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount.

**Interest expense**

Interest expense on lease liabilities is a component of finance costs which requires to be presented separately in the income statement.

**Foreign currencies**

The individual financial statements of each Group company are presented in the currency of the primary economic environment in which it operates (its functional currency). For the purpose of the consolidated financial statements, the results and financial position of each Group company are expressed in Sterling, which is the functional currency of the Company and the presentation currency for the consolidated financial statements.

## 3. Significant accounting policies (cont.)

**Foreign currencies (cont.)**
Exchange differences arising on the settlement of monetary assets and liabilities, and on the retranslation of monetary assets and liabilities, are included in the income statement for the period.

In order to hedge its exposure to certain foreign exchange risks, the Group may enter into forward contracts (see page 143 for details of the Group's accounting policies in respect of such derivative financial instruments).

Further information can be found **on page 143**.

For the purposes of presenting consolidated financial statements, the assets and liabilities of the Group's foreign operations are translated at the exchange rates prevailing on the date of the statement of financial position. Income and expense items are translated at the average exchange rates for the period.

Exchange differences arising are recognised in other comprehensive income and taken to the translation reserve. Exchange differences on the translation of net investments are taken to the translation reserve.

When the Group's foreign operations are liquidated or disposed, exchange differences previously recognised through other comprehensive income and the translation reserve will be recycled and recognised through the income statement.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing rate.

**Government and EU grants**
Government and EU grants are not recognised until there is reasonable assurance that the Group will comply with the conditions attached to them and that the grant will be received. Government and EU grants relating to research and development are treated as income over the periods necessary to match them with the related costs, or in the case of the Payment Protection Program (PPP) for COVID-19 support provided by the US Government, that it meets the criteria for the loan to be waived and recognised as grant income.

**Operating profit/(loss)**
Operating profit/(loss) is stated after charging restructuring costs but before investment income and finance costs.

**Restructuring costs**
Restructuring cost refers to the one-time expenses or infrequent expenses which are incurred by the Company in the process of reorganising its business operations with the motive of the overall improvement of the long-term profitability and working efficiency of the Company.

**Retirement benefit costs**
Payments to defined contribution retirement benefit schemes are charged as an expense as they fall due. Payments made to state managed retirement benefit schemes are dealt with as payments to defined contribution schemes where the Group's obligations under the schemes are equivalent to those arising in a defined contribution retirement benefit scheme.

**Taxation**
The tax expense represents the sum of the tax currently payable and deferred tax, including UK corporation tax and foreign tax.

The tax currently payable is based on taxable profit for the year. Taxable profit differs from net profit as reported in the income statement because it excludes items of income or expense that are taxable or deductible in other years and it further excludes items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the date of the statement of financial position.

Deferred tax is the tax expected to be payable or recoverable on differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit and is accounted for using the statement of financial position liability method. Deferred tax liabilities are generally recognised for all taxable temporary differences and deferred tax assets are recognised to the extent that it is probable that taxable profits will be available against which deductible temporary differences can be utilised. Such assets and liabilities are not recognised if the temporary difference arises from the initial recognition of goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the tax profit nor the accounting profit.

Deferred tax liabilities are recognised for taxable temporary differences arising on investments in subsidiaries, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the date of each statement of financial position and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax is calculated at the enacted or substantively enacted tax rates that are expected to apply in the period when the liability is settled or the asset is realised. Deferred tax is charged or credited in the income statement, except when it relates to items charged or credited directly to equity, in which case the deferred tax is also dealt with in equity.

# Notes to the consolidated financial statements (cont.)
for the year ended 31 December 2020

## 3. Significant accounting policies (cont.)

**Taxation (cont.)**
To the extent that the Group receives a tax deduction relating to share-based payment transactions, a deferred tax asset is recognised at the appropriate tax rate on the difference in value between the market price of the underlying equity as at the date of the financial statements and the exercise price of the outstanding share options multiplied by the expired portion of the vesting period. As a result, the deferred tax impact of share options will not be derived directly from the expense reported in the consolidated income statement. Where the deductible difference exceeds the cumulative charge to the consolidated income statement the excess of the associated tax benefit is recorded directly to equity rather than in profit or loss.

Deferred tax assets and liabilities are measured on an undiscounted basis and are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis.

**Property, plant and equipment**
All property, plant and equipment is shown at original historical cost less accumulated depreciation and any recognised impairment loss.

Assets in the course of construction for production or administrative purposes are carried at cost, less any recognised impairment loss. Depreciation of these assets, on the same basis as other assets in the same class, commences when the assets are ready for their intended use.

Freehold land is not depreciated.

Depreciation is charged so as to write off the cost or valuation of assets, less their residual values, other than assets in the course of construction, over their estimated useful lives, using the straight-line method, on the following bases:

| | |
|---|---|
| Leasehold property improvements | Shorter of the lease term and 20 years |
| Plant and machinery | Three to 20 years |
| Furniture, fittings and equipment | Three to 20 years |
| Buildings | Up to 40 years |

Assets held under finance leases are depreciated over their expected useful lives on the same basis as owned assets or, where shorter, over the term of the relevant lease.

The gain or loss arising on the disposal of an asset is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in income.

**Internally generated intangible assets – research and development expenditure**
Expenditure on research activities is recognised as an expense in the period in which it is incurred.

In accordance with IAS 38, an internally generated intangible asset arising from the Group's development is recognised only if all of the following conditions are met:

- an asset is created that can be identified (such as software and new processes);
- it is probable that the asset created will generate future economic benefits;
- the development cost of the asset can be measured reliably;
- the project is technically and commercially feasible;
- the Group intends to and has sufficient resources to complete the project; and
- the Group has the ability to use or sell the services and product developed.

Internally generated intangible assets are amortised on a straight-line basis over three to 20 years. Where no internally generated intangible asset can be recognised, development expenditure is recognised as an expense in the period in which it is incurred.

**Other intangible assets**
Costs incurred in maintaining the patent and trademark portfolio are written off to the income statement as incurred.

Payments in respect of software, and licence rights acquired are capitalised at cost and amortised on a straight-line basis over their estimated useful lives.

| | |
|---|---|
| Licence | Shorter of the licence term and 20 years |
| Software | Three to 15 years |

## 3. Significant accounting policies (cont.)

**Impairment of tangible and intangible assets excluding goodwill**

At the date of each statement of financial position, the Group reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Where the asset does not generate cash flows that are independent from other assets, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs.

Recoverable amount is the higher of fair value less costs of disposal and value-in-use. In assessing value-in-use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognised as an expense immediately.

Where an impairment loss is subsequently reversed, the carrying amount of the asset (or cash-generating unit) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (or cash-generating unit) in prior years. A reversal of an impairment loss is recognised as income immediately.

**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 recognises 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. Generally an incremental borrowing rate approach is applied.

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 an incremental borrowing rate at the effective date of the modification.

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.

# Notes to the consolidated financial statements (cont.)
for the year ended 31 December 2020

## 3. Significant accounting policies (cont.)

**Leases (cont.)**
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.

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.

**Inventories**

Inventories are stated at the lower of cost and net realisable value. Cost is calculated using the first in, first out ('FIFO') cost formula, by applying the standard cost methodology, with costs including direct materials, direct labour costs and an attributable proportion of manufacturing overheads based on normal levels of activity that have been incurred in bringing the inventories to their present location and condition. Net realisable value represents the estimated selling price less all estimated costs of completion and costs to be incurred in marketing, selling and distribution. Provision is made for obsolete, slow-moving or defective items where applicable.

**Financial instruments**
Financial assets and financial liabilities are recognised in the Group's statement of financial position when the Group becomes a party to the contractual provisions of the instrument.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognised immediately in profit or loss.

**Financial assets**
All regular way purchases or sales of financial assets are recognised and derecognised on a trade date basis. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the marketplace.

All recognised financial assets are measured subsequently in their entirety at either amortised cost or fair value, depending on the classification of the financial assets.

In order for a financial asset to be classified and measured at amortised cost or fair value through OCI, it needs to give rise to cash flows that are 'solely payments of principal and interest ('SPPI')' on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level. Financial assets with cash flows that are not SPPI are classified and measured at fair value through profit or loss, irrespective of the business model.

**Effective interest method**
The effective interest method is a method of calculating the amortised cost of a debt instrument and of allocating interest income over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts through the life of the debt instrument, or, where appropriate, a shorter period, to the net carrying amount on initial recognition.

**Impairment of financial assets**
The Group recognises an allowance for expected credit losses ('ECLs') for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

ECLs are recognised in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition. ECLs are provided for credit losses that result from default events that are possible within the next 12 months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL). Trade receivables are recognised using a lifetime ECL approach.

For financial assets carried at amortised cost, the amount of the impairment is the differences between the asset's carrying amount and the present value of the estimated future cash flows, discounted at the financial asset's original effective interest rate.

**Derecognition of financial assets**
The Group derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognises its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

## 3. Significant accounting policies (cont.)

**Derecognition of financial assets (cont.)**
On derecognition of a financial asset, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss that had been recognised in other comprehensive income and accumulated in equity is recognised in profit or loss.

**Financial liabilities and equity**
Debt and equity instruments are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangement.

**Financial liabilities**
All financial liabilities are measured subsequently at amortised cost using the effective interest method or at fair value through profit or loss (FVTPL).

However, financial liabilities that arise when a transfer of a financial asset does not qualify for derecognition or when the continuing involvement approach applies, and financial guarantee contracts issued by the Group, are measured in accordance with the specific accounting policies set out below:

Financial liabilities are classified at FVTPL when the financial liability is (i) contingent consideration of an acquirer in a business combination, (ii) held for trading or (iii) it is designated as at FVTPL.

Financial liabilities at FVTPL are measured at fair value, with any gains or losses arising on changes in fair value recognised in profit or loss to the extent that they are not part of a designated hedging relationship. The net gain or loss recognised in profit or loss incorporates any interest paid on the financial liability and is included within 'other gains and losses' in profit or loss.

The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial liability, or (where appropriate) a shorter period, to the amortised cost of a financial liability.

**Derecognition of financial liabilities**
The Group derecognises financial liabilities when, and only when, the Group's obligations are discharged, cancelled or have expired. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable is recognised in profit and loss.

**Derivative financial instruments**
The Group's activities expose it primarily to the financial risks of changes in foreign currency exchange rates and interest rates and liquidity risk.

The Group uses derivative financial instruments (primarily foreign currency forward contracts) to hedge its risks associated with foreign currency fluctuations relating to certain firm commitments and forecast transactions.

Derivatives are recognised initially at fair value at the date a derivative contract is entered into and are subsequently remeasured to their fair value at each reporting date. The resulting gain or loss is recognised in profit or loss immediately unless the derivative is designated and effective as a hedging instrument, in which event the timing of the recognition in profit or loss depends on the nature of the hedge relationship.

The written call option that Xaar 3D Holdings granted Stratasys to acquire its remaining 55% shareholding in Xaar 3D in 2019 is a financial liability measured subsequently at fair value at Level 3 fair value measurement. The valuation technique used is the Black-Scholes model. Further detail is included in note 22 - Financial instruments.

A derivative with a positive fair value is recognised as a financial asset whereas a derivative with a negative fair value is recognised as a financial liability. Derivatives are not offset in the financial statements unless the Group has both legal right and intention to offset.

A derivative is presented as a non-current asset or a non-current liability if the remaining maturity of the instrument is more than 12 months and it is not expected to be realised or settled within 12 months. Other derivatives are presented as current assets or current liabilities.

**Embedded derivatives**
An embedded derivative is a component of a hybrid contract that also includes a non-derivative host with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative.

Derivatives embedded in hybrid contracts with a financial asset host within the scope of IFRS 9 are not separated. The entire hybrid contract is classified and subsequently measured as either amortised cost or fair value as appropriate.

Derivatives embedded in hybrid contracts with hosts that are not financial assets within the scope of IFRS 9 (e.g. financial liabilities) are treated as separate derivatives when they meet the definition of a derivative, their risks and characteristics are not closely related to those of the host contracts and the host contracts are not measured at FVTPL.

If the hybrid contract is a quoted financial liability, instead of separating the embedded derivative, the Group generally designates the whole hybrid contract at FVTPL.

# Notes to the consolidated financial statements (cont.)
for the year ended 31 December 2020

## 3. Significant accounting policies (cont.)

**Embedded derivatives (cont.)**
An embedded derivative is presented as a non-current asset or non-current liability if the remaining maturity of the hybrid instrument to which the embedded derivative relates is more than 12 months and is not expected to be realised or settled within 12 months.

**Cash and cash equivalents**
Cash and cash equivalents comprise cash on hand and demand deposits and other short-term highly liquid investments that are readily convertible to a known amount of cash with a maturity of three months or less and are subject to an insignificant risk of changes in value.

**Treasury deposits**
Treasury deposits comprise demand deposits that are convertible to a known amount of cash with an original maturity of between three months and 12 months and are subject to an insignificant risk of changes in value.

**Interest-bearing loans and borrowings**
Interest-bearing loans and bank overdrafts are measured initially at fair value, net of direct issue costs. Finance charges, including premiums payable on settlement or redemption and direct issue costs, are accounted for on an accrual basis in the income statement using the effective interest rate method and are added to the carrying amount of the instrument to the extent that they are not settled in the period in which they arise.

**Equity instruments**
Equity instruments issued by the Company are recorded as the proceeds received, net of direct issue costs.

**Provisions**
Provisions are recognised when the Group has a present obligation as a result of a past event and it is probable that the Group will be required to settle that obligation. Provisions are measured at the Directors' best estimate of the expenditure required to settle the obligation at the date of the statement of financial position and are discounted where the effect of the time value of money is material.

A restructuring provision is recognised when the Group has developed a detailed formal plan for the restructuring and has raised a valid expectation in those affected that it will carry out the restructuring by starting to implement the plan or announcing its main features to those affected by it, and the plan has reached a stage where the decision is unlikely to be reversed. The measurement of a restructuring provision includes only the direct expenditures arising from the restructuring, which are those amounts that are both necessarily entailed by the restructuring and not associated with the ongoing activities of the entity.

Provisions for the expected cost of warranty obligations under contracts with customers and local sale of goods legislation are recognised in the month of sale of the relevant products, at the Directors' best estimate of the expenditure required to settle the Group's obligation.

**Share-based payments**
The Group has applied the requirements of IFRS 2 'Share-based Payment'. The Group issues equity-settled share-based payments to certain employees. These payments are measured at fair value (excluding the effect of non-market based vesting conditions) at the date of grant. The fair value determined at the grant date of the equity-settled share-based payments is expensed on a straight-line basis over the vesting period, based on the Group's estimate of the shares that will eventually vest based on the satisfaction of non-market based vesting and service conditions.

The fair value of options issued under the Group's Long-Term Incentive Plan is measured using a stochastic (Monte Carlo binomial) model for grants made with market based vesting conditions since 2007. The fair value of all other equity-settled share-based payments is measured using the Black-Scholes pricing model. The expected life used in these models has been adjusted, based on management's best estimate, for the effects of non-transferability, exercise restrictions and behavioural considerations.

SAYE share options granted to employees are treated as cancelled when employees cease to contribute to the scheme. This results in accelerated recognition of the expenses that would have arisen over the remainder of the original vesting period.

## 3. Significant accounting policies (cont.)

**Own shares**
Own shares are deducted from equity. No gain or loss is recognised in the income statement on the purchase, sale, issue or cancellation of the Group's own shares.

**Non-controlling interests**
The transactions with non-controlling interests are accounted for as equity transactions. For purchases of non-controlling interests, the difference between any consideration paid and the relevant share acquired of the carrying value of the net assets of the subsidiary is deducted from equity. Gains or losses on disposals to non-controlling interests are also recorded in equity.

**Non-current assets (or disposal groups) held for sale**
Non-current assets (or disposal groups) are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use and a sale is considered highly probable. They are measured at the lower of their carrying amount and fair value less costs to sell, except for assets such as deferred tax assets, assets arising from employee benefits, financial assets and investment property that are carried at fair value and contractual rights under insurance contracts, which are specifically exempt from this requirement.

An impairment loss is recognised for any initial or subsequent write-down of the asset (or disposal group) to fair value less costs to sell. A gain is recognised for any subsequent increases in fair value less costs to sell of an asset (or disposal group), but not in excess of any cumulative impairment loss previously recognised. A gain or loss not previously recognised by the date of the sale of the non-current asset (or disposal group) is recognised at the date of derecognition.

Non-current assets (including those that are part of a disposal group) are not depreciated or amortised while they are classified as held for sale. Interest and other expenses attributable to the liabilities of a disposal group classified as held for sale continue to be recognised.

Non-current assets classified as held for sale and the assets of a disposal group classified as held for sale are presented separately from the other assets in the balance sheet. The liabilities of a disposal group classified as held for sale are presented separately from other liabilities in the balance sheet.

**Discontinued operations**
A discontinued operation is a component of the Group that has been disposed of and that represents a separate major line of business and is part of a single co-ordinated plan to dispose of such a line of business. The results of discontinued operations are presented separately in the income statement and are shown net of tax.

Where an operation is classified as discontinued, the post-tax results of that operation will be presented as a single line item on the face of the income statement and the cash flows from the discontinued operations will be split between continuing and discontinued operations on the face of the cash flow statement. Comparatives are restated to distinguish between continuing and discontinued operations.

**New standards and interpretations not yet adopted**
Certain new accounting standards and interpretations have been published that are not mandatory for 31 December 2020 reporting periods and have not been early adopted by the Group. These standards do not have a material impact on the entity in the current or future reporting periods and on foreseeable future transactions.

**Other standards**
The following new standards, amended standards and interpretations became effective as at 1 January 2020 but did not have a significant impact on the Group's financial statements.

Amendments to IAS 1 and IAS 8 – Definition of material

Amendments to IFRS 3 – Definition of a Business

Amendments to IFRS 7, IFRS 9 and IAS 39 – Interest Rate Benchmark Reform

Revised Conceptual Framework for Financial Reporting

# Notes to the consolidated financial statements (cont.)
## for the year ended 31 December 2020

## 4. Reconciliation of adjusted financial measures

| | Note | 2020 £'000 | Restated 2019 £'000 |
|---|---|---|---|
| Loss before tax from continuing operations | | **(4,322)** | (10,937) |
| Share-based payment charges | 9 | **348** | 910 |
| Exchange differences on intra-group transactions | | **347** | 499 |
| (Gain) / Loss on derivative financial liabilities | 22, 36 | **(77)** | 87 |
| Restructuring costs | | **754** | 1,519 |
| Other operating income | 7 | **(819)** | – |
| Research and development expenditure credit | | **(142)** | (29) |
| Adjusted loss before tax from continuing operations | | **(3,911)** | (7,952) |
| Interest income | 10 | **(47)** | (65) |
| Interest charge arising from IFRS 16 | 18 | **82** | 97 |
| Depreciation of property, plant and equipment | 17, 18 | **3,856** | 2,970 |
| Amortisation of intangible assets | 16 | **82** | 93 |
| Adjusted EBITDA from continuing operations | | **62** | (4,857) |

EBITDA is calculated as statutory operating profit before depreciation, amortisation and impairment of property, plant and equipment, intangible assets and goodwill. Adjusted EBITDA is calculated as EBITDA excluding other adjusting items as defined.

Adjusted financial measures are alternative performance measures, which adjust for recurring and non-recurring items that management consider to have a distorting effect on the underlying results of the Group.

Share-based payment charges include the IFRS 2 charge for the period of £242,000 (2019: £1,109,000) and the debit relating to National Insurance on the outstanding potential share option gains of £106,000 (2019: credit £199,000). These costs were included in the general and administrative expenses in the consolidated income statement and exclude the Xaar 3D charge of £5,000 )2019: 2,000).

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 intragroup transactions in the United States, Denmark and Sweden. These costs were included in general and administrative expenses in the Consolidated income statement.

Gain/loss on derivative financial instruments relate to gains and losses made on call option contracts. These amounts are included on the consolidated income statement under (Gain)/loss on derivative financial liabilities.

Restructuring costs of £754,000 (2019: £1,519,000) relate to costs incurred and provisions made in relation to reorganisation. In the prior year, it relates mainly to the 2019 redundancy programme. The calculated impact of the restructuring at corporation tax rate of 19% would be £143,000 (2019: £289,000). The cash related to restructuring is £518,000 (2019: £896,000).

Other operating income of £819,000 (2019: £nil) relates to a forgivable $1 million loan between Engineered Print Solutions (EPS) and TD bank and is backed by the US Federal Government (Small Business Administration); further details are provided under note 7. The loan was taken out as part of the government backed scheme. The Company considers that it has met the requirements of the waiver, and therefore expects it to be waived the loan has therefore been treated as a government grant under IAS 20. A cash receipt of the same amount was received.

The research and development expenditure credit relates to the corporation tax relief receivable relating to qualifying research and development expenditure.

This item is shown on the face of the consolidated income statement. Cash receipts of £1,460,000 (2019: £1,587,334) were received in relation to 2018 and 2019 RDEC claims submitted.

| | Note | 2020 Pence per share | 2019 Restated Pence per share |
|---|---|---|---|
| Basis and Diluted earnings (loss) per share from continuing operations | 14 | **(5.7p)** | (18.7p) |
| Share-based payment charges | | **0.5p** | 1.2p |
| Exchange differences on intra-group transactions | | **0.5p** | 0.6p |
| (Gain) / Loss on derivative financial asset | | **(0.1p)** | 0.1p |
| Restructuring costs | | **1.0p** | 2.0p |
| Other operating income | | **(1.1p)** | – |
| Tax effect of adjusting items | | **(0.3p)** | (0.3p) |
| Basic and Adjusted diluted earnings (loss) per share from continuing operations | 14 | **(5.2p)** | (15.1p) |

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

## 5. Revenue

The Group derives its revenue from contracts with customers for the transfer of goods and services over time and at a point in time in the following major segments. This is consistent with the revenue information that is disclosed for each reportable segment under IFRS 8 Operating Segments in note 6.

| Continuing operations | 2020 £'000 | 2019 £'000 |
|---|---|---|
| Printhead | **35,283** | 33,681 |
| Product Print Systems | **12,701** | 15,698 |
| | **47,984** | 49,379 |

Product Print Systems has contracts with customers where the performance obligations are partially unsatisfied at 31 December 2020. The transaction price allocated to partially satisfied and unsatisfied performance obligations at 31 December 2020 are as set out below. The transaction price allocated to partially satisfied performance obligations have been recognised in the year while the transaction price allocated to partially unsatisfied performance obligations has not been recognised.

| Continuing operations | 2020 £'000 | 2019 £'000 |
|---|---|---|
| Transaction price allocated to partially satisfied performance obligations | **950** | 647 |
| Transaction price allocated to partially unsatisfied performance obligations | **956** | 754 |
| **Total transaction price for partially completed contracts** | **1,906** | 1,401 |

Management expects that 100% of the transaction price allocated to the unsatisfied contracts as at 31 December 2020 totalling £956,000 will be recognised during the 2021 financial year (2019: £754,000 recognised in 2020).

## 6. Business and geographical segments

For management reporting purposes, the Group's operations are analysed according to the three operating segments of 'Printhead', 'Product Print Systems', and '3D Printing'. 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. Each business unit is run independently of the others and headed by a general manager. The Group's chief operating decision maker is the Chief Executive Officer. There is no aggregation of segments for disclosure purposes.

The Xaar 3D business which we expect to divest in the first half of 2021 has been reclassified as held for sale and discontinued operations, hence the 3D Printing is presented separately in note 11 and the 2019 comparatives has been restated accordingly.

Segment information for continuing operations is presented below:

| Year ended 31 December 2020 | Printhead £'000 | Product Print Systems £'000 | Unallocated £'000 | Consolidated £'000 |
|---|---|---|---|---|
| **Revenue** | | | | |
| Total segment revenue | **35,283** | **12,701** | **–** | **47,984** |
| **Result** | | | | |
| Adjusted loss from continuing operations before tax | **(3,431)** | **(480)** | **–** | **(3,911)** |
| Share-based payment charges | **–** | **–** | **(348)** | **(348)** |
| Exchange differences relating to intra-group transactions | **(347)** | **–** | **–** | **(347)** |
| Restructuring | **(754)** | **–** | **–** | **(754)** |
| Gain on financial instrument | **77** | **–** | **–** | **77** |
| Research and development expenditure credit | **142** | **–** | **–** | **142** |
| Other operating income | **–** | **819** | **–** | **819** |
| **Profit / (loss) before tax from continuing operations** | **(4,313)** | **339** | **(348)** | **(4,322)** |

Share-based payment charges include the IFRS 2 charge for the period and the charge or credit relating to National Insurance on the outstanding potential share options, excluding the charge attributable to Xaar 3D as discontinued operations £5,000 (2019: £2,000).

# Notes to the consolidated financial statements (cont.)
## for the year ended 31 December 2020

## 6. Business and geographical segments (cont.)

| Year ended 31 December 2019 | Printhead £'000 | Product Print Systems £'000 | Unallocated £'000 | Restated Consolidated £'000 |
|---|---|---|---|---|
| **Revenue** | | | | |
| Total segment revenue | 33,681 | 15,698 | – | 49,379 |
| **Result** | | | | |
| Adjusted loss from continuing operations before tax | (8,019) | 67 | – | (7,952) |
| Share-based payment charges | – | – | (910) | (910) |
| Exchange differences relating to intra-group transactions | (499) | – | – | (499) |
| Restructuring | (1,574) | 55 | – | (1,519) |
| Loss on financial instrument | (87) | – | – | (87) |
| Research and development expenditure credit | 29 | – | – | 29 |
| **Profit / (Loss) before tax from continuing operations** | (10,150) | 122 | (910) | (10,938) |

**Segment assets – Continuing operations**

| | 2020 £'000 | 2019 £'000 |
|---|---|---|
| Printhead | **48,816** | 58,118 |
| Product Print Systems | **14,487** | 14,776 |
| **Total assets** | **63,303** | 72,894 |

Assets are allocated to the segment which has responsibility for their control.

No information is provided for segment liabilities as this measure is not provided to the chief operating decision maker.

**Other segment information – Continuing operations**

| Year ended 31 December 2020 | Notes | Printhead £'000 | Product Print Systems £'000 | Unallocated £'000 | Consolidated £'000 |
|---|---|---|---|---|---|
| Depreciation and amortisation | 16, 17, 18 | **4,302** | **367** | **–** | **4,669** |
| Impairment of PPE | | **158** | **115** | **–** | **273** |
| Share-based payment charges | 9 | **–** | **–** | **348** | **348** |
| Capital expenditure | 16, 17, 18 | **957** | **574** | **–** | **1,531** |

| Year ended 31 December 2019 | Notes | Printhead £'000 | Product Print Systems £'000 | Unallocated £'000 | Consolidated £'000 |
|---|---|---|---|---|---|
| Depreciation and amortisation | 16, 17, 18 | 3,701 | 386 | – | 4,087 |
| Impairment of PPE | | – | – | – | – |
| Share-based payment charges | 9 | – | – | 910 | 910 |
| Capital expenditure | 16, 17, 18 | 2,091 | 198 | – | 2,289 |

## 6. Business and geographical segments (cont.)

**Revenues from major products and services – Continuing operations**

| | 2020 £'000 | Restated 2019 £'000 |
|---|---|---|
| Printhead | **35,283** | 33,681 |
| Product Print Systems | **12,701** | 15,698 |
| Consolidated revenue (excluding investment income) | **47,984** | 49,379 |

**Geographical information**

The Group operates in three principal geographical areas: EMEA, the Americas and Asia. The Group's revenue from external customers and information about its segments (non-current assets excluding deferred tax assets and other financial assets) by geographical location is detailed below:

| | Revenue from external customers Continuing operations | |
|---|---|---|
| | 2020 £'000 | 2019 £'000 |
| EMEA | **18,113** | 18,473 |
| Asia | | |
| – China | **7,936** | 5,101 |
| – Japan | **1,235** | 1,338 |
| – Other | **420** | 530 |
| The Americas (including USA) | **20,280** | 23,937 |
| | **47,984** | 49,379 |

Revenues are attributed to geographical areas on the basis of the customer's operating location.

| | Non-current assets | |
|---|---|---|
| | 2020 £'000 | 2019 £'000 |
| EMEA | **16,755** | 27,266 |
| Asia | **38** | 6 |
| The Americas (including USA) | **7,791** | 8,073 |
| | **24,584** | 35,345 |

Non-current assets, being Goodwill, Other intangible assets, Property, plant and equipment and Right of use assets are attributed to the location where they are situated.

**Information about major customers**

There are no customers whose revenue exceeds 10% of total revenues from continuing operations during the current and preceding year. No other single customer contributed 10% or more to the Group's revenue in either 2020 or 2019.

Revenue from the top five customers represents 26% of revenues (2019: 23%).

# Notes to the consolidated financial statements (cont.)
for the year ended 31 December 2020

## 7. Government grants

The accounting policy in relation to the adopted and applicable treatment of government grants is disclosed in note 3, in accordance with IAS 20 Accounting for Government Grants and Disclosure of Government Assistance.

Xaar plc and its UK based subsidiaries have decided not to take part in any of the Government support schemes arising from the COVID-19 crisis.

- No employees have been placed on furlough and no claims made via the Coronavirus Job Retention Scheme (CJRS)
- No submissions have been made for financial support via either the Coronavirus Business Interruption Loan Scheme (CBILS) or Bounce Back Loan Scheme (BBLS)
- The UK entities operate primarily under a VAT repayment position due to the significant level of export sales, so do not utilise the government scheme in deferring VAT payments
- Xaar 3D Aps based in Denmark has also not taken part in any government support measures in response to COVID-19
- No submission has been made for salary compensation, which could arise due to employees that could otherwise have been fired. No employees have left the business
- Xaar 3D Aps operates in a repayment position for Danish VAT, and like the UK has not utilised the extension available for repayments.

A Xaar group company based in the USA, Engineered Print Solutions (EPS), has taken part in the US Government Loan scheme which has provided a $1 million Loan (£819k), which under certain provisions linked to maintaining employment and avoiding redundancy can be waived. The company considers that it has met the requirements of the waiver, and therefore expects it to be waived, the Loan has therefore been treated as a government grant. The Group has presented this amount as exceptional income in the consolidated income statement. Government support grants are recognised in the consolidated income statement on a systematic basis over the periods in which the related revenue or expense for which the grants are intended to compensate. Further details are provided under note 4.

## 8. Loss for the year

Loss for continuing operations in the year has been arrived at after charging/(crediting):

| | 2020 £'000 | Restated 2019 £'000 |
|---|---|---|
| Research and development expenses (net of capitalised development costs)* | **4,535** | 3,081 |
| Grants towards research and development including the research and development expenditure credit | **(142)** | (29) |
| Depreciation of property, plant and equipment | **3,400** | 2,946 |
| Depreciation of right of use asset | **1,107** | 962 |
| Amortisation of capitalised development costs (included in research and development expenses) | **82** | 94 |
| Amortisation of software (included in general and administrative expenses) | **81** | 85 |
| Amortisation of licence (included in general and administrative expenses) | **–** | – |
| Loss/(profit) on disposal of property, plant and equipment | **99** | (18) |
| Cost of inventories recognised as expense | **31,467** | 34,392 |
| Impairment of other financial assets | **946** | 2,715 |
| Total fees payable to the Company's auditor and its associates | **402** | 213 |

* Total spend on research and development in 2020, before capitalised and amortised development costs included in note 16, was £4,535,000 (2019: £3,081,000).

Grant income includes £142,000 (2019: £29,000) in respect of the research and development expenditure credit.

### Auditor's remuneration

| | 2020 £'000 | 2019 £'000 |
|---|---|---|
| Fees payable to the Company's auditor for the audit of the Company's annual accounts | **20** | 20 |
| Fees payable to the Company's auditor and its associates for other services to the Group | | |
| – The audit of the Company's subsidiaries | **272** | 163 |
| – Prior year overrun | **70** | – |
| Total audit fees | **362** | 183 |
| – Interim review | **40** | 30 |
| Total non-audit fees | **40** | 30 |
| Total fees payable for the continuing operations | **402** | 213 |
| Total fees payable for the discontinued operations | **38** | 12 |
| Total fees payable to the Company's auditors and its associates | **440** | 225 |

## 8. Loss for the year (cont.)

The Audit Committee has considered the independence of the auditor in relation to non-audit services throughout the year. A description of the work of the Audit Committee is set out in the Corporate Governance statement on pages 72 to 75 and includes an explanation of how auditor's objectivity and independence is safeguarded when non-audit services are provided by the auditor.

## 9. Staff costs

The average monthly number of persons employed by the Group including Executive Directors was as follows:

| | **2020 Number** | 2019 Number |
|---|---|---|
| Research and development | **78** | 77 |
| Sales and marketing | **47** | 53 |
| Manufacturing and engineering | **193** | 247 |
| Administration | **47** | 60 |
| | **365** | 437 |

Their aggregate remuneration comprised:

| | Notes | **2020 £'000** | 2019 £'000 |
|---|---|---|---|
| Wages and salaries | | **18,784** | 21,518 |
| Social security costs | | **1,752** | 2,035 |
| Pension costs | 33 | **740** | 951 |
| Share-based payments | | **353** | 912 |
| | | **21,629** | 25,416 |

Share-based payment charges comprise the IFRS 2 charge for the period £246,000 (2019: £1,111,000) and a charge relating to National Insurance on the outstanding potential share option gains £107,000 (2019: £199,000 credit), of which a charge of £5,000 (2019:£2,000) relates to discontinued operations in Xaar 3D.

## 10. Investment income

| | **Group £'000** | **3D £'000** | **2020 Total £'000** | Group £'000 | 3D £'000 | Restated 2019 Total £'000 |
|---|---|---|---|---|---|---|
| Interest receivable on cash and bank balances, and treasury deposits | **47** | **24** | **72** | 65 | 38 | 103 |

Group interest accrued receivable of £8,000 at year end (2019: £nil), Cash interest received at year end was £64,000 (2019: £103,000).

## 11. Discontinued operations

On 26 September 2019, Xaar announced the cessation of all Thin Film activities. This resulted in an impairment charge of £39,000,000 in the interim 2019 financial statements which is made up of £28,500,000 of intangible assets, £5,400,000 of property, plant and equipment and £5,100,000 of working capital.

The Thin Film business which was discontinued in 2019 incurred costs in 2020 which mainly related to supplier liabilities and inventory for last time buy sales. All liabilities have now been settled and we maintain a small level of inventory which we expect to sell in the first half of 2021. Of the total Group net assets, £271,000 is related to Thin Film which is not included in net assets held for sale.

As detailed in the strategic and financial update the Xaar 3D business which we plan to divest in the first half of 2021 has been reclassified as held for sale and a discontinued operation given the disposal has been assessed as highly probable.

The results of Thin Film and 3D related activities for the year are shown below:

| | **Thin Film 2020 £'000** | **3D 2020 £'000** | **Total 2020 £'000** | Thin Film 2019 £'000 | 3D 2019 £'000 | Restated Total 2019 £'000 |
|---|---|---|---|---|---|---|
| Revenue | **258** | **734** | **992** | 1,586 | 18 | 1,604 |
| Expenses | **(3,922)** | **(7,175)** | **(11,097)** | (61,587) | (1,228) | (62,815) |
| Loss before income tax | **(3,664)** | **(6,441)** | **(10,105)** | (60,001) | (1,210) | (61,211) |
| Income tax credit | **–** | **(190)** | **(190)** | 3,918 | (4) | 3,914 |
| Loss after income tax from discontinued operation | **(3,664)** | **(6,631)** | **(10,295)** | (56,083) | (1,214) | (57,297) |

# Notes to the consolidated financial statements (cont.)
## for the year ended 31 December 2020

### 11. Discontinued operations (cont.)

| | Thin Film 2020 £'000 | 3D 2020 £'000 | Total 2020 £'000 | Thin Film 2019 £'000 | 3D 2019 £'000 | Restated Total 2019 £'000 |
|---|---|---|---|---|---|---|
| Attributable to: | | | | | | |
| Owners of the Company | **(3,664)** | **(3,647)** | **(7,311)** | (56,083) | (791) | (56,874) |
| Non-controlling interest | **–** | **(2,984)** | **(2,984)** | – | (423) | (423) |
| | **(3,664)** | **(6,631)** | **(10,295)** | (56,083) | (1,214) | (57,297) |

The major classes of assets and liabilities of 3D classified as held for sale as at 31 December 2020 are as follows:

| | 2020 £'000 |
|---|---|
| **Assets** | |
| Property, plant and equipment | **1,041** |
| Intangible assets | **4,649** |
| Deferred tax asset | **68** |
| Right of use asset | **440** |
| Inventory | **919** |
| Debtors | **737** |
| Cash and cash equivalents | **2,120** |
| **Assets held for sale** | **9,974** |
| **Liabilities** | |
| Creditors | **(1,115)** |
| Corporate income tax | **(6)** |
| Provisions (Warranty & Restructuring) | **(11)** |
| IFRS 16 lease liability | **(463)** |
| **Liabilities associated with the assets held for sale** | **(1,595)** |
| **Net assets associated with disposal group** | **8,379** |

The net cash flows incurred by Thin Film and 3D are as follows.

| | Thin Film 2020 £'000 | 3D 2020 £'000 | Total 2020 £'000 | Thin Film 2019 £'000 | 3D 2019 £'000 | Restated Total 2019 £'000 |
|---|---|---|---|---|---|---|
| Net cash outflow from operating activities | **(5,058)** | **(6,213)** | **(11,271)** | (17,647) | (2,434) | (20,081) |
| Net cash outflow from investing activities | **(25)** | **(645)** | **(670)** | (321) | (2,299) | (2,620) |
| Net cash inflow/(outflow) from financing activities | **–** | **(160)** | **(160)** | – | 5,511 | 5,511 |
| Net decrease in cash generated from discontinued operations | **(5,083)** | **(7,018)** | **(12,101)** | (17,968) | 778 | (17,190) |

| | 2020 Pence per share | 2019 Restated Pence per share |
|---|---|---|
| **Earnings (loss) per share** | | |
| Basic, loss for the year from discontinued operations | **(9.5p)** | (73.8p) |
| Diluted, loss for the year from discontinued operations | **(9.5p)** | (73.8p) |

## 12. Tax

**Total tax calculation:**

| | Notes | 2020 £'000 | 2019 Restated £'000 |
|---|---|---|---|
| Current tax – UK | | **159** | 153 |
| Current tax – overseas | | **125** | 113 |
| | | **284** | 266 |
| Amounts under provided in previous years | | **41** | 281 |
| Total current income tax charge | | **325** | 547 |
| Deferred tax – origination and reversal | | **(18)** | (1,054) |
| Adjustment in respect of prior years | | **(64)** | 90 |
| Total deferred tax credit | 23 | **(82)** | (964) |
| Total tax expense / (credit) for the year | | **242** | (417) |

The rate of tax for the year, based on the UK standard rate of corporation tax, is 19% (2019: 19%). Taxation for other jurisdictions is calculated at the rates prevailing in the respective jurisdictions.

The Finance Act 2020, which was substantively enacted on 22 July 2020, did not amend the main rate of UK corporation tax, and this remains at 19%. As deferred tax assets and liabilities are measured at the rates that are expected to apply in the periods of the reversal, deferred tax balances at 31 December 2020 have been calculated at the rate at which the relevant balance is expected to be recovered or settled.

Following the UK Budget on 2 March 2021, the government has announced that the main rate of corporation tax will remain unchanged until 2023. The impacts of this budget have not been reflected in these financial statements, as they were not substantively enacted at the year end.

The note to the cash flow statement (note 31) shows repayments of tax for £1,466,000 during the year (2019: £3,392,000).

The closing deferred tax liability at 31 December 2019 has been calculated at 19% reflecting the tax rate at which the deferred tax liability is expected to be reversed in future periods. Details on deferred tax assets are disclosed in note 23.

In addition to the amount charged to the income statement and other comprehensive income, the following amounts relating to tax have been recognised directly in equity:

| | Notes | 2020 £'000 | 2019 £'000 |
|---|---|---|---|
| **Current tax** | | | |
| Foreign exchange movement | | **–** | 13 |
| | | **–** | 13 |
| **Deferred tax** | | | |
| Arising on transactions with equity participants: | | | |
| Foreign exchange movement | | **4** | 4 |
| | | **4** | 4 |
| Total income tax recognised directly in equity | | **4** | 17 |

# Notes to the consolidated financial statements (cont.)
## for the year ended 31 December 2020

## 12. Tax (cont.)

The charge for the year can be reconciled to the profit per the income statement as follows:

| | Notes | 2020 £'000 | Restated 2019 £'000 |
|---|---|---|---|
| **(Loss) / profit before tax from continuing activities** | | **(4,322)** | (10,937) |
| **Loss before tax from discontinuing activities** | | **(10,105)** | (61,211) |
| Loss before income tax | | **(14,427)** | (72,148) |
| Tax on ordinary activities at standard UK rate of 19% (2019: 19.00%) | | **(2,741)** | (13,708) |
| Effect of: | | | |
| Expenses not deductible for tax purposes | | **883** | 606 |
| (Non-taxable) income | | **(171)** | – |
| Effect of different tax rates of subsidiaries operating overseas | | **(15)** | 43 |
| Effect of change in UK corporation tax rate on deferred tax | | **7** | 65 |
| Current year losses not recognised | | **2,303** | 8,364 |
| Derecognition of previously recognised deferred tax balances | | **–** | 3,842 |
| Prior year adjustments | | **(24)** | 371 |
| **Total tax expense / (credit) for the year** | | **242** | (417) |
| **Income tax expense / (credit) reported in the statement of profit and loss** | 36 | **52** | 3,497 |
| **Income tax expense / (credit) attributable to discontinued operations** | | **190** | (3,914) |
| | | **242** | (417) |

The expenses not deductible for tax purposes include depreciation on non-qualifying assets, share-based payments, the cessation of operations in Sweden, certain RDEC adjustments and restructuring costs.

The effective tax rate for the year is -1.7% (2019: 0.6%).

## 13. Dividends

No interim or final dividend was proposed or paid for the year ended 31 December 2020 (31 December 2019: Nil).

## 14. Earnings per share – basic and diluted

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

| | 2020 £'000 | 2019 Restated £'000 |
|---|---|---|
| **Earnings** | | |
| Earnings for the purposes of basic earnings per share being net (Loss) attributable to equity holders of the parent | **(11,685)** | (71,308) |
| from continuing operations | **(4,374)** | (14,434) |
| from discontinued operations | **(7,311)** | (56,874) |
| **Number of shares** | | |
| Weighted average number of ordinary shares for the purposes of basic earnings per share | **77,103,593** | 77,116,331 |
| Effect of dilutive potential ordinary shares: | | |
| Share options | **–** | – |
| Weighted average number of ordinary shares for the purposes of diluted earnings per share | **77,103,593** | 77,116,331 |

| | 2020 Pence per share | 2019 Restated Pence per share |
|---|---|---|
| Basic | **(15.2p)** | (92.5p) |
| Diluted | **(15.2p)** | (92.5p) |
| Continuing operations: | | |
| Basic | **(5.7p)** | (18.7p) |
| Diluted | **(5.7p)** | (18.7p) |
| Discontinued operations: | | |
| Basic | **(9.5p)** | (73.8p) |
| Diluted | **(9.5p)** | (73.8p) |

Potential ordinary shares are treated as dilutive if their conversion to ordinary shares would decrease earnings per share or increase loss per share. Therefore in 2020 and 2019, the diluted earnings per share is not impacted by the effect of dilutive potential ordinary shares.

The weighted average number of ordinary shares for the purposes of basic earnings per share is calculated after the exclusion of ordinary shares in Xaar plc held by Xaar Trustee Ltd, the Xaar plc ESOP Trust and the matching shares held in trust for the Share Incentive Plan.

For 2020, there were share options granted over 310,100 shares that would not have been included in the diluted earnings per share calculation because they were anti-dilutive at the period end (2019: 978,915 shares that would not have been included).

The performance conditions for LTIP awards over 510,482 shares (2019: 1,733,172 shares) have not been met in the current financial period or are not expected to be met in future financial periods, and therefore the dilutive effect of those shares has not been included in the diluted earnings per share calculation.

# Notes to the consolidated financial statements (cont.)
for the year ended 31 December 2020

## 14. Earnings per share – basic and diluted (cont.)

**Adjusted earnings per share**

This adjusted earnings per share information is considered to provide a fairer representation of the Group's trading performance year on year, as it removes items which, in the Board's opinion, do not reflect the underlying performance of the Group and is a measure used in establishing remuneration.

The calculation of adjusted EPS excluding share-based payment charges, exchange differences relating to intra-group transactions, other operating income and restructuring expenses, is based on the loss on continuing operations of:

| | 2020 £'000 | 2019 Restated £'000 |
|---|---|---|
| Earnings / (loss) on continuing operations for the purposes of basic earnings per share being Net profit / (loss) attributable to equity holders of the parent | **(4,374)** | (14,434) |
| Share-based payment charges | **348** | 910 |
| Exchange differences relating to intra-group transactions | **347** | 499 |
| (Gain) / loss on derivative financial assets | **(77)** | 87 |
| Restructuring costs | **754** | 1,519 |
| Other operating income | **(819)** | – |
| Tax effect of adjusting items | **(217)** | (214) |
| Adjusted (loss) / profit after tax – continuing operations | **(4,038)** | (11,633) |

Tax effect of adjusting items is calculated at current corporation tax rate (19%) less any disallowed tax items.

The denominators used are the same as those detailed above for both basic and diluted earnings per share.

Adjusted earnings per share on continuing operations is earnings per share excluding the items adjusted for as detailed above:

| | 2020 Pence per share | 2019 Restated Pence per share |
|---|---|---|
| Adjusted basic | **(5.2p)** | (15.1p) |
| Adjusted diluted | **(5.2p)** | (15.1p) |

Adjusted EPS on continuing operations is considered to provide a fairer representation of the Group's trading performance year on year.

## 15. Goodwill

The carrying amount of goodwill at 31 December 2020 was £5,152,000 (2019: £5,333,000).

Goodwill acquired in a business combination is allocated, at acquisition, to the cash-generating units (CGUs) that are expected to benefit from that business combination. Goodwill arose from the acquisition of Engineered Print Solutions (EPS) in July 2016.

| | **2020 £'000** | 2019 £'000 |
|---|---|---|
| **Product Print Systems (a single CGU)** | | |
| Balance at the beginning of the year | **5,333** | 5,522 |
| Foreign currency translation | **(181)** | (189) |
| Balance at the end of the year | **5,152** | 5,333 |

Goodwill relates to the acquisition of Engineered Print Solutions in July 2016 (a company incorporated in the USA). As part of the changes to the reportable segments in the prior year, the goodwill stated above is now wholly attributed to Product Print Systems (a single CGU).

The Group tests goodwill annually for impairment or more frequently if there are indications that goodwill might be impaired. Having performed impairment testing, no impairment has been identified and therefore no impairment loss has been recognised in 2020 (2019: £nil).

The recoverable amount of the CGU is determined from a value-in-use calculation. The key assumptions to which the value-in-use calculation is most sensitive are those regarding the expected change in sales, the discount rate used, and the growth rate used as part of the terminal value.

A cash flow forecast was prepared for a period of five years based upon the strategic plan for the business and a terminal value determined using a 2% growth rate in Engineered Print Solutions, based on OECD growth rates.

To evaluate the risk of impairment, the Group risk adjusted its cash flows over the five-year period to reflect the risk that the market recovery may be slower than expected and/or that the Group does not achieve the growth objectives set out in its strategic plan. These risk adjusted cash flows have then been used in the value-in-use calculation. The discount rate applied to the cash flow projections is 10.25% (2019: 12.1%) and reflects external third party advice on the discount rate associated with Engineered Print Solutions. This discount rate is higher than the Group discount rate of 7.70%. The discount rate reflects the risk free rate, equity beta and local market premium as calculated at the year-end. This has reduced year on year, based upon reductions in the risk free rate and to reflect the risk that has already been incorporated in the cash flows. A terminal value was determined using a 2% growth rate in Engineered Print Solutions, based on OECD growth rates.

The recoverable amount calculated on the basis set out above exceeds the carrying value of the EPS CGU by £1.5 million. Sensitivity analysis has been completed on each key assumption (Revenue, Discount Rate and Terminal Value) for the EPS business.

The carrying amount of goodwill would exceed its recoverable amount, when compared to the risk adjusted cash flows, if:

- revenue were to decline by a further $2 million meaning revenues would not recover to pre-COVID levels until later in 2024/25; or
- the discount rate would need to increase by 0.77%; or
- the terminal value growth rate would need to fall to 0.81% (a reduction of 60%).

# Notes to the consolidated financial statements (cont.)
for the year ended 31 December 2020

## 16. Other intangible assets

| | Capitalised development costs £'000 | Licences acquired £'000 | Software £'000 | Total £'000 |
|---|---|---|---|---|
| **Cost** | | | | |
| At 1 January 2019 | 41,465 | 716 | 3,383 | 45,564 |
| Additions | 2,255 | - | 90 | 2,345 |
| Transfer | 17 | (3) | (2) | 12 |
| Exchange movements | – | (4) | – | (4) |
| Disposals | – | – | (18) | (18) |
| **At 1 January 2020** | **43,737** | **709** | **3,453** | **47,899** |
| Exchange movements | - | - | (6) | (6) |
| Assets held for sale | (5,050) | (177) | (10) | (5,237) |
| **At 31 December 2020** | **38,687** | **532** | **3,437** | **42,656** |
| **Amortisation** | | | | |
| At 1 January 2019 | 9,128 | 540 | 3,099 | 12,767 |
| Charge for the year | 923 | 14 | 87 | 1,024 |
| Transfers | 26 | – | 62 | 88 |
| Disposals | – | – | (17) | (17) |
| Impairment | 28,494 | – | – | 28,494 |
| **At 1 January 2020** | **38,571** | **554** | **3,231** | **42,356** |
| Charge for the year | 587 | 13 | 85 | 685 |
| Exchange movements | – | – | (4) | (4) |
| Assets held for sale | (547) | (35) | (6) | (588) |
| **At 31 December 2020** | **38,611** | **532** | **3,306** | **42,449** |
| **Carrying amount:** | | | | |
| **At 31 December 2020** | **76** | **–** | **131** | **207** |
| At 31 December 2019 | 5,166 | 155 | 222 | 5,543 |

Internally generated product development costs relate to the Platform 2, Platform 3 and Platform 4 ranges of printheads and technology. They also include the capitalisation of the product development costs that relate to the High Speed Sintering 3D printer developed by Xaar 3D. Platform 2 and Platform 3 are fully amortised.

Amortisation of Platform 4 commenced in August 2017 and was being amortised over a period of 20 years prior to the decision to cease all Thin Film activities. Following the decision in 2019 to discontinue the Thin Film operation the Platform 4 range has been fully impaired (an impairment of £28,494,000) based on its fair value less costs to sell.

The development of the High Speed Sintering 3D printer was completed in December 2019 at total cost of £5,050,000 and amortisation commenced over a ten-year period. Following the decision to sell the 3D business the cost, and accumulated amortisation of £547,000, have been reclassified as part of an asset group held for sale.

Licences acquired are amortised over their estimated useful lives which is the shorter of the licence term and 20 years.. The majority of the remaining licences belong to the 3D business and have been reclassified as part of the asset group held for sale.

The amortisation period for software is three to 15 years and for other product development costs incurred on the Group's product development is three to 20 years.

As at 31 December 2020 the Group had not entered into any contractual commitments for the acquisition of intangible assets.

## 17. Property, plant and equipment

| | Land and buildings £'000 | Leasehold property £'000 | Plant and machinery £'000 | Furniture, fittings and equipment £'000 | Assets in the course of construction £'000 | Total £'000 |
|---|---|---|---|---|---|---|
| **Cost** | | | | | | |
| At 1 January 2019 | 1,192 | 13,421 | 70,734 | 3,765 | 2,122 | 91,234 |
| Additions | – | 50 | 1,421 | 83 | 96 | 1,650 |
| Transfers | 532 | 628 | 1,111 | (182) | (2,102) | (13) |
| Exchange movements | (41) | (29) | (46) | (16) | (5) | (137) |
| Disposals | 1 | (25) | (5,059) | (16) | (3) | (5,102) |
| **At 1 January 2020** | 1,684 | 14,045 | 68,161 | 3,634 | 108 | 87,632 |
| Additions | – | 199 | 1,654 | 382 | 16 | 2,251 |
| Transfer | 184 | (171) | (737) | – | (69) | (793) |
| Exchange movements | (57) | (2) | 12 | (18) | (4) | (69) |
| Disposals | – | – | (492) | – | – | (492) |
| Assets held for sale | – | (551) | (1,766) | (6) | (2) | (2,325) |
| **At 31 December 2020** | 1,811 | 13,520 | 66,832 | 3,992 | 49 | 86,204 |
| **Depreciation** | | | | | | |
| At 1 January 2019 | 64 | 8,222 | 52,016 | 2,888 | – | 63,190 |
| Charge for the year | 17 | 576 | 3,089 | 94 | – | 3,776 |
| Transfer | 242 | (480) | (293) | 444 | – | (87) |
| Exchange movements | (3) | (1) | (47) | (2) | – | (53) |
| Disposals | – | (18) | (5,122) | (16) | – | (5,156) |
| Impairment | – | 5 | 5,049 | – | – | 5,054 |
| **At 1 January 2020** | 320 | 8,304 | 54,692 | 3,408 | – | 66,724 |
| Charge for the year | 48 | 569 | 3,506 | 101 | – | 4,224 |
| Transfer | 34 | (21) | (702) | – | – | (689) |
| Exchange movements | (14) | (2) | (1) | (17) | – | (34) |
| Disposals | – | – | (275) | – | – | (275) |
| Impairment | – | – | 391 | – | – | 391 |
| Assets held for sale | – | (65) | (1,216) | (3) | – | (1,284) |
| **At 31 December 2020** | 388 | 8,785 | 56,395 | 3,489 | – | 69,057 |
| **Carrying amount** | | | | | | |
| **At 31 December 2020** | **1,423** | **4,735** | **10,437** | **503** | **49** | **17,147** |
| At 31 December 2019 | 1,364 | 5,741 | 13,469 | 226 | 108 | 20,908 |

Impairments in 2019 of £5,054,000 are almost all in relation to the Thin Film discontinued operation; these assets have been valued at fair value, less costs of disposal of nil. In 2020 the impairments of £391,000 related to the Printhead and EPS businesses with associated assets written down to nil.

The transfer of assets out of property, plant and equipment includes assets belonging to the Printhead business that were reclassified as held for sale. These assets had a net book value (NBV) of £104,000. As at 31 December 2020 machinery with a NBV of £43,000 remained unsold.

Assets with a NBV of £1,041,000 (a cost value of £2,325,000 and depreciation of £1,284,000) belonging to the 3D business have been reclassified as part of the asset group held for sale.

As at 31 December 2020 the Group had entered into contractual commitments for the acquisition of property, plant and equipment amounting to £218,000 (2019: £71,000).

## 18. Leases

The Group has lease contracts for various items of buildings, equipment and vehicles used in its operations. The Group's obligations under its leases are secured by the lessor's title to the leased assets. Generally, the Group is restricted from assigning and subleasing the leased assets and some contracts require the Group to maintain certain financial ratios.

The Group also has certain leases of machinery with lease terms of 12 months or less and leases of office equipment with low value. The Group applies the 'short-term lease' and 'lease of low-value assets' recognition exemptions for these leases.

# Notes to the consolidated financial statements (cont.)
## for the year ended 31 December 2020

## 18. Leases (cont.)
Set out below are the carrying amounts of right-of-use assets recognised and the movements during the period:

| | Buildings £'000 | Equipment £'000 | Vehicles £'000 | Total £'000 |
|---|---|---|---|---|
| **Cost** | | | | |
| At 1 January 2019 | 12,204 | 99 | 16 | 12,319 |
| Additions | 1,494 | 20 | – | 1,514 |
| Disposals | (1,692) | – | – | (1,692) |
| Exchange movements | (28) | – | – | (28) |
| At 31 December 2019 | 11,978 | 119 | 16 | 12,113 |
| Additions | 183 | – | – | 183 |
| Disposals | (172) | (36) | (16) | (224) |
| Assets held for sale | (885) | – | – | (885) |
| Exchange movements | 18 | 1 | – | 19 |
| **At 31 December 2020** | **11,122** | **84** | **–** | **11,206** |
| **Depreciation** | | | | |
| At 1 January 2019 | 9,159 | 25 | 8 | 9,192 |
| Charge for the year | 1,025 | 31 | 5 | 1,061 |
| Disposals | (1,686) | – | – | (1,686) |
| Exchange movements | (15) | – | – | (15) |
| At 31 December 2019 | 8,483 | 56 | 13 | 8,552 |
| Charge for the year | 1,204 | 29 | 3 | 1,236 |
| Disposals | (167) | (35) | (16) | (218) |
| Assets held for sale | (445) | – | – | (445) |
| Exchange movements | 3 | – | – | 3 |
| **At 31 December 2020** | **9,078** | **50** | **–** | **9,128** |
| **Carrying amount** | | | | |
| **At 31 December 2020** | **2,044** | **34** | **–** | **2,078** |
| At 31 December 2019 | 3,495 | 63 | 3 | 3,561 |

Set out below are the carrying amounts of lease liabilities (included under current and non-current liabilities on the statement of financial position) and the movements during the period:

| | 2020 £'000 | 2019 £'000 |
|---|---|---|
| At 1 January | 3,971 | 3,639 |
| Additions | 183 | 1,507 |
| Accretion of interest | 98 | 110 |
| Payments | (1,224) | (1,274) |
| Exchange movement | 14 | (11) |
| Lease liabilities associated with assets held for sale | (463) | – |
| **At 31 December** | **2,579** | **3,971** |
| Current | 1,064 | 1,450 |
| Non-current | 1,515 | 2,521 |
| | 2,579 | 3,971 |

## 18. Leases (cont.)

The table below summarises the maturity profile of the Group's lease liabilities based upon the contractual undiscounted payments as at 31 December 2020.

| | 2020 £'000 | 2019 £'000 |
|---|---|---|
| On demand | – | – |
| Less than three months | 222 | 292 |
| Four to twelve months | 645 | 1,250 |
| One to five years | 1,945 | 2,530 |
| More than five years | – | 97 |
| | 2,812 | 4,169 |

The following are the amounts recognised in profit or loss:

| | 2020 £'000 | 2019 £'000 |
|---|---|---|
| Depreciation expense of right-of-use assets | 1,235 | 1,061 |
| Interest expense on lease liabilities | 98 | 110 |
| Expense relating to short-term leases (included in administrative expenses) | 152 | 53 |
| Total amount recognised in profit or loss | 1,485 | 1,224 |

Interest expense on lease liabilities consists of £82,000 (2019: £97,000) reported under continuing operations and £16,000 (2019: £13,000) relating to Xaar 3D business reported under discontinued operations.

## 19. Subsidiaries

A list of the investments in subsidiaries, including the name, country of incorporation and proportion of ownership interest, is given in note 11 to the Company's separate financial statements.

## 20. Inventories

| | 2020 £'000 | Restated 2019 £'000 |
|---|---|---|
| Raw materials and consumables | 6,356 | 8,938 |
| Work in progress | 1,687 | 3,258 |
| Finished goods | 2,312 | 4,334 |
| | 10,355 | 16,530 |

The cost of inventories recognised as an expense includes £3,895,000 (2019: £18,801,000) in respect of inventory write-downs.

Gross stock was £34,976,000 (2019: £37,465,000) with inventory provisions of £24,621,000 (2019: £20,935,000). The provision of £24,621,000 included £21,256,000 in relation to discontinued operations. Inventory for discontinued operations has been recorded at the lower of carrying amount and fair value.

## 21. Other financial assets

The fair value of all financial assets and financial liabilities approximates their carrying value.

**Trade and other receivables**

| | 2020 £'000 | 2019 £'000 |
|---|---|---|
| Amount receivable for the sale of goods | 6,791 | 14,407 |
| Allowance for doubtful debts | (622) | (7,959) |
| | 6,169 | 6,448 |
| Other debtors | 2,760 | 1,634 |
| Prepayments | 822 | 1,027 |
| | 9,751 | 9,109 |
| Current tax asset | 425 | 1,788 |

No amounts are expected to be settled in more than 12 months.

# Notes to the consolidated financial statements (cont.)
for the year ended 31 December 2020

## 21. Other financial assets (cont.)

**Trade receivables**

The average credit period taken on sales of goods is 47 days (2019: 48 days). No interest is charged on the receivables for the period agreed in the Requirements Contract or, if not specified or applicable, the first 30 days from the date of the invoice. Thereafter, the Group reserves the right to charge interest at a daily rate of the greater of either 3% per annum above the base rate of the Bank of England from time to time, or the maximum rate of interest allowable under the Late Payment of Commercial Debts (Interest) Act 1998, on all sums outstanding until payment in full is received. Trade receivables over 120 days are provided for based on estimated irrecoverable amounts from the sale of goods, determined by reference to past default experience.

The maximum exposure to credit risk is the carrying amount of the financial assets as disclosed on page 129. Before accepting any new customer, the Group uses an external credit scoring system to assess the potential customer's credit quality and defines credit limits by customer. Credit limits are reviewed at least once per year. Of the trade receivables balance at the end of the year, four customers each represented greater than 5% of the total receivables balance, totalling £1.1 million (2019: £7.5 million). The total due from these customers represents 2% (2019: 15%) of the Group's revenue.

Included in the Group's trade receivables balance are debtors with a carrying amount of £1.8 million (2019: £2.1 million) at the reporting date for which the Group has not provided:

| | 2020 £'000 | 2019 £'000 |
|---|---|---|
| 1–30 days overdue | 1,168 | 801 |
| 30–60 days overdue | 233 | 434 |
| 60–90 days overdue | 85 | 228 |
| 90–120 days overdue | 266 | 61 |
| Over 120 days overdue | 91 | 570 |
| Total receivables | 1,843 | 2,094 |

Movement in the allowance for doubtful debts:

| | 2020 £'000 | 2019 £'000 |
|---|---|---|
| Balance at the beginning of the year | 7,959 | 5,178 |
| Impairment (reversal) / losses increased | (929) | 2,781 |
| Amounts written off as uncollectible | (6,408) | - |
| Balance at the end of the year | 622 | 7,959 |

The Group always measures the loss allowance for trade receivables at an amount equal to lifetime ECL. The expected credit losses on trade receivables are estimated using a provision matrix by reference to past default experience of the debtor and an analysis of the debtor's current financial position, adjusted for factors that are specific to the debtors, general economic conditions of the industry in which the debtors operate and an assessment of both the current as well as the forecast direction of conditions at the reporting date. The Group has recognised a loss allowance of 1.0% against all receivables, excluding those with a specific provision against them. Most of the debt over 120 days has been provided in full and relates to a small number of customers where none of the debt is expected to be recovered through normal trading. A provision is made against trade receivables until such time as the Group believes the amount to be irrecoverable (such as the bankruptcy of a customer or emerging market risks, which would render the receivable irrecoverable), after which the trade receivable balance is written off. Amounts written off in the year relate to distributor balances. There is no current enforcement activity on the remaining balance.

Ageing of impaired trade receivables:

| | 2020 £'000 | 2019 £'000 |
|---|---|---|
| Current | 19 | 132 |
| 1–30 days overdue | 3 | 45 |
| 30–60 days overdue | – | 25 |
| 60–90 days overdue | – | 15 |
| 90–120 days overdue | – | 361 |
| Over 120 days overdue | 600 | 7,381 |
| Total | 622 | 7,959 |

The Directors have considered the sensitivity of doubtful debts and a 1% increase on the ECL percentage would equate to an additional £59,000 allowance. The Directors consider that the carrying amount of trade and other receivables approximates their fair value.

## 21. Other financial assets (cont.)

### Treasury deposits

Treasury deposits comprise bank deposits with an original maturity of between three months and 12 months. The carrying amount of these assets approximates their fair value.

| | 2020 £'000 | 2019 £'000 |
|---|---|---|
| Treasury deposits | **161** | 522 |

### Cash and cash equivalents

Cash and cash equivalents comprise cash held by the Group and short-term bank deposits with an original maturity of three months or less. The carrying amount of these assets approximates their fair value.

The analysis of cash and short-term bank deposits is as follows:

| | 2020 £'000 | 2019 £'000 |
|---|---|---|
| Cash | **17,956** | 24,800 |

The credit risk on liquid funds and derivative financial instruments is limited because the counterparties are banks with high credit ratings assigned by international credit-rating agencies.

## 22. Financial instruments

### Fair value measurements

The following table combines information about:

- classes of financial instruments based on their nature and characteristics;
- the carrying amounts of financial instruments;
- fair values of financial instruments (except financial instruments when carrying amount approximates their fair value); and
- fair value hierarchy levels of financial assets and financial liabilities for which fair value was disclosed.

Fair value hierarchy Levels 1 to 3 are based on the degree to which the fair value is observable:

- Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2 fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

| | Financial assets | | | Financial liabilities | | |
|---|---|---|---|---|---|---|
| 2020 | FVTPL – designated £'000 | FVTPL – mandatorily measured £'000 | Amortised cost £'000 | FVTPL – mandatorily measured £'000 | Amortised cost £'000 | Total £'000 |
| Trade and other receivables | – | – | 8,928 | – | – | 8,928 |
| Treasury deposits | – | – | 161 | – | – | 161 |
| Cash and bank balances | – | – | 17,956 | – | – | 17,956 |
| Trade and other payables | – | – | – | – | (9,940) | (9,940) |
| Derivative financial instrument | 160 | – | – | (2,919) | – | (2,759) |

Additional disclosure for lease liabilities is reported in note 18.

# Notes to the consolidated financial statements (cont.)
## for the year ended 31 December 2020

## 22. Financial instruments (cont.)

| 2019 | Financial assets: FVTPL – designated £'000 | Financial assets: FVTPL – mandatorily measured £'000 | Financial assets: Amortised cost £'000 | Financial liabilities: FVTPL – mandatorily measured £'000 | Financial liabilities: Amortised cost £'000 | Total £'000 |
|---|---|---|---|---|---|---|
| Trade and other receivables | – | – | 8,082 | – | – | 8,082 |
| Treasury deposits | – | – | 522 | – | – | 522 |
| Cash and bank balances | – | – | 24,800 | – | – | 24,800 |
| Trade and other payables | – | – | – | – | (7,973) | (7,973) |
| Derivative financial instrument | – | – | – | (2,996) | – | (2,996) |

**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 underlying share, options strikeprice, time until expiration (expressed as a percent of a year), implied volatility of the underlying share and LIBOR. | Underlying price of the share.<br>Volatility of the underlying share. | 8% increase / (decrease) would result in a £549,000 increase in the fair value and a £509,000 decrease. 10% increase / (decrease) would result in £301,000 increase in the fair value and £286,000 decrease. |

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

The only financial liabilities measured subsequently at fair value on Level 3 fair value measurement represent written call options relating to a business combination. In July 2018 Xaar signed an investment agreement with Stratasys Solutions Limited ('Stratasys') which granted Stratasys a 15% share of Xaar 3D Limited ('Xaar 3D') and two written call options to acquire a further 10% and 5%. These options gave Stratasys the right, but not the obligation, to acquire GBP denominated shares in Xaar 3D for a fixed price which was denominated, and to be settled, in USD. At 1 January 2019 the fair value of these options was £936,000. On 4 December 2019 Stratasys exercised the first of the two options granting them a further 10% share in Xaar 3D. At the same time Xaar 3D and Stratasys agreed to extinguish the second option, thereby settling both options in the year. On 4 December 2019 Xaar 3D Holdings sold to Stratasys a 20% share in Xaar 3D. As a consequence Stratasys now owns 45% of Xaar 3D with the remaining 55% owned by Xaar 3D Holdings. As part of the agreement between Xaar 3D Holdings and Stratasys, Xaar 3D Holdings granted Stratasys a written call option to acquire its remaining 55% shareholding in Xaar 3D. As with the original option agreement between Xaar 3D and Stratasys the new options are USD denominated giving rise to a new derivative financial liability. This liability was valued at a fair value of £2,996,000 at 31 December 2019. During 2020 no further issues or settlements took place. The only movement in the year represents the revaluation of the existing option at 31 December 2020. Additional disclosure information is provided in note 35 Non-controlling interest and note 34 Related party transactions.

| | 2020 £'000 | 2019 £'000 |
|---|---|---|
| Balance at 1 January 2020 | **(2,996)** | (936) |
| Issues | **–** | (2,908) |
| Settlements | **–** | 742 |
| Total gains or losses – in profit or loss | **77** | 106 |
| **Balance at 31 December 2020** | **(2,919)** | (2,996) |

## 22. Financial instruments (cont.)

**Fair value of the Group's financial assets and financial liabilities that are measured at fair value on a recurring basis (continued)**
The use of financial derivatives is governed by the Group's policies approved by the Board of Directors, which provides written principles on the use of financial derivatives consistent with the Group's risk management strategy. The Group does not use derivative financial instruments for speculative purposes.

**Financial risk management objectives**
The Group's policy is to manage the Group's financial risk, secure cost effective funding for the Group's operations and to minimise the adverse effects of fluctuations in the financial markets on the value of the Group's financial assets and liabilities, on reported profitability and on the cash flows of the Group.

The Group finances its activities with a combination of cash and treasury deposits. Other financial assets and liabilities, such as trade debtors and trade creditors, arise directly from the Group's operating activities.

Financial instruments give rise to foreign currency, interest rate, credit and liquidity risk. The Group's management of its exposure to credit risk is discussed in note 21.

The Group's exposure has been calculated with reference to these balances as at the year-end.

**Interest rate risk**
As the Group currently has no borrowings, its exposure to interest rate risk relates to the interest rate on its cash, cash equivalent and treasury deposit balances. The Group's interest rate risk arises mainly from its funds invested in short-term bank deposits. To mitigate these risks, limits have been set by the Board in relation to maturity period and maximum deposits with any one institution.

If interest rates had been 2% higher/reduced to 0% and all other variables were held constant, the Group's profit for the year ended 31 December 2020 would increase by £0.1 million or decrease by £0.1 million (2019: increase by £0.2 million or decrease by £0.1 million). There would be no effect on equity reserves.

**Foreign currency risk**
The Group receives approximately 40% of its revenues in US Dollars and 10% of its revenue in Euros, which are partially naturally hedged by supplies in these currencies, but the remainder requires conversion into Sterling in order to fund the remaining costs of the UK operations. The Group has R&D operations in Sweden, and therefore incurs costs and holds cash balances in Swedish Krona. In 2017, the Group had a manufacturing facility in Sweden which was closed in 2016 and legacy working capital balances denominated in Swedish Krona remain in the Group's Swedish companies prior to the dissolution of these entities.

The Group is mainly exposed to foreign currency risk resulting from transactions in US Dollars, Euros and Swedish Krona. The following table demonstrates the Group's sensitivity to a 10% increase and decrease in the Sterling exchange rate against the relevant foreign currencies on the Group's profit before tax and equity (due to changes in the fair value of monetary assets, liabilities and forward currency contracts). 10% represents management's assessment of the reasonably possible movement in exchange rates. The sensitivity analysis includes only outstanding foreign currency denominated monetary items and adjusts their translation at the period end for a 10% change in foreign currency rates. The sensitivity analysis includes inter-company balances within the Group where the denomination of the balance is in a currency other than the functional currency of the debtor or the creditor. A positive number below indicates an increase in profit or equity.

| | Euro currency impact | | US Dollar currency impact | | Swedish Krona currency impact | |
|---|---|---|---|---|---|---|
| | **2020 £'000** | 2019 £'000 | **2020 £'000** | 2019 £'000 | **2020 £'000** | 2019 £'000 |
| Effect of a 10% increase in relevant exchange rate on: | | | | | | |
| Profit or loss | **(139)** | (90) | **(420)** | (342) | **(107)** | (12) |
| Other equity | **–** | – | **(582)** | (227) | **–** | 57 |
| Effect of a 10% decrease in relevant exchange rate on: | | | | | | |
| Profit or loss | **170** | 110 | **514** | 418 | **131** | 15 |
| Other equity | **–** | – | **711** | 276 | **–** | (48) |

**Capital risk management**
The primary objective of the Group's capital management is to ensure that it maintains a strong credit rating and healthy capital ratios in order to support its business, maximise shareholder value and provide flexibility for value enhancing investments. The Group manages its capital structure and makes adjustments to it in light of changes in economic conditions or as a result of corporate strategy. To maintain or adjust the capital structure, the Group may adjust the dividend payment to shareholders, return capital to shareholders or issue new shares. In addition, any potential value enhancing investments may be funded through additional debt instruments. No changes were made in the objectives, policies or processes during the current or prior year. No dividend is proposed for 2020.

Further information can be found **on page 134 (note 13).**

The Group monitors capital using a gearing ratio, which is determined as the proportion of debt to equity. Debt is defined as long- and short-term borrowings. Equity includes all capital and reserves of the Group attributable to the equity holders of the parent. The Group's policy for its existing business is to use debt where appropriate, whilst maintaining the gearing ratio at a level under 10%.

# Notes to the consolidated financial statements (cont.)
for the year ended 31 December 2020

## 22. Financial instruments (cont.)

### Capital risk management (cont.)
The gearing ratio (excluding IFRS 16 leases) at the year-end is as follows:

| | 2020 £'000 | 2019 £'000 |
|---|---|---|
| Net debt | – | – |
| Total equity | **56,158** | 70,337 |
| Gearing ratio | **0%** | 0% |

The Group is not subject to externally imposed capital requirements.

### Credit risk management
Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Group. The Group has adopted a policy of only dealing with creditworthy counterparties, as a means of mitigating the risk of financial loss from defaults.

Trade receivables consist of a large number of customers, spread across different industries and geographical areas. Ongoing credit evaluation is performed on the financial condition of accounts receivable.

The credit risk on liquid funds is limited because the counterparties are banks with high credit ratings assigned by international credit rating agencies. Additional credit insurance coverage is maintained where appropriate against agreed credit terms with customers.

### Liquidity risk
The Group aims to mitigate liquidity risk by managing cash generation by its operations and applying cash collection targets throughout the Group. Investment is carefully controlled, with authorisation limits operating up to Group Board level and cash payback periods applied as part of the investment appraisal process. In this way the Group aims to maintain a good credit rating to facilitate fund raising.

In order to mitigate the Group's liquidity risks, the Group can choose to fund significant fixed asset purchases by finance leases repayable over a period of three to five years dependent on the individual asset being financed and interest-bearing loans.

In its funding strategy, the Group's objective is to maintain a balance between continuity of funding and flexibility through the use of overdrafts, bank loans, finance leases and hire purchase contracts. The Group manages liquidity risk by maintaining adequate reserves and banking facilities by continuously monitoring cash flows and matching the maturity profiles of financial assets and liabilities. Given the current level of cash availability there are currently no overdraft or bank loan facilities arranged with banks either drawn or undrawn.

Non-derivative financial liabilities of £9,940,000 (2019: £7,973,000) comprise trade creditors of £9,940,000. The trade creditors are within current liabilities. The inherent liquidity risk of these financial liabilities is managed within the overall liquidity risk of the Group as described above. The maturity profile of lease liabilities is set out in note 18.

The Group's policy is to invest any excess cash used in managing liquidity in financial instruments exposed to insignificant risk of changes in market value, being placed on interest-bearing deposit with maturities no more than 12 months.

## 23. Deferred tax
The following are the major deferred tax liabilities and assets recognised by the Group and movements thereon during the current and prior reporting periods:

| | Accelerated tax depreciation £'000 | Share-based payment £'000 | Untaxed reserves £'000 | Tax losses £'000 | Other temporary difference £'000 | Total £'000 |
|---|---|---|---|---|---|---|
| At 1 January 2019 | 5,017 | (150) | 148 | (3,411) | (774) | 830 |
| (Credit)/charge to income | (56) | 110 | (148) | 2,829 | 220 | 2,955 |
| (Credit)/charge for discontinued operations | (4,256) | – | – | – | 337 | (3,919) |
| Foreign exchange movement | – | – | – | – | 4 | 4 |
| At 31 December 2019 | **705** | **(40)** | **–** | **(582)** | **(213)** | **(130)** |
| (Credit)/charge to income | 55 | 39 | – | (139) | 31 | (14) |
| (Credit)/charge for discontinued operations | (68) | – | – | – | – | (68) |
| Foreign exchange movement | – | – | – | – | 4 | 4 |
| **At 31 December 2020** | **692** | **(1)** | **–** | **(721)** | **(178)** | **(208)** |

Certain deferred tax assets and liabilities have been offset. The following is the analysis of the deferred tax balances (after offset) for financial reporting purposes:

## 23. Deferred tax (cont.)

| | 2020 £'000 | 2019 £'000 |
|---|---|---|
| Deferred tax assets | **208** | 130 |
| Being: Deferred tax assets from continuing operations | **139** | 130 |
| Being: Deferred tax assets from discontinued operations | **68** | – |

As at 31 December 2020, the Group had unused tax losses of £75.9 million (2019: £65.8 million) available to offset against future profits. As at 31 December 2020 the Group has an unrecognised deferred tax assets in respect of these losses totalling £14.5 million (2019: £11.2 million). These losses may be carried forward indefinitely. As at 31 December 2020, the Group has unused capital losses of £1.1 million (2019: £1.1 million) available for offset against future gains.

No deferred tax asset has been recognised in respect of these capital losses as it is not considered probable that there will be future chargeable gains available. These losses may be carried forward indefinitely.

## 24. Trade and other payables

| | 2020 £'000 | Restated 2019 £'000 |
|---|---|---|
| Trade payables and accruals | **9,940** | 7,973 |

Trade payable and accruals principally comprise amounts outstanding for trade purchases and ongoing costs. The average credit taken for trade purchases is 18 days (2019: 27 days).

The Directors consider that the carrying amount of trade payables approximates to their fair value.

## 25. Provisions

| | Warranty and commercial agreements £'000 | Restructuring £'000 | Total £'000 |
|---|---|---|---|
| At 1 January 2019 | 207 | 292 | 499 |
| Additional provision in the year | 206 | 2,641 | 2,847 |
| Utilisation of provision | (166) | (233) | (399) |
| **At 1 January 2020** | **247** | **2,700** | **2,947** |
| Additional / (release) provision in the year | 71 | 685 | 756 |
| Utilisation of provision | (121) | (3,105) | (3,226) |
| Release of provision | (120) | – | (120) |
| **At 31 December 2020** | **77** | **280** | **357** |

The warranty and commercial agreements provision represents management's best estimate of the Group's liability related to claims against product warranties or commercial sales agreements. The timing of the utilisation of this provision is uncertain.

Additional restructuring provisions of £685,000 have been added primarily in relation to the strategic review of the business and redundancy programme and have been released within the year; utilisation of £3,105,000 relates to the conclusion of the 2019 and 2020 redundancy programmes. The remaining restructuring provision of £280,000 will be utilised in 2021 and relates to dilapidations.

# Notes to the consolidated financial statements (cont.)
## for the year ended 31 December 2020

## 26. Share capital

| | 2020 £'000 | 2019 £'000 |
|---|---|---|
| Issued and fully paid: | | |
| 78,334,296 (2019: 78,334,296) ordinary shares of 10.0p each | **7,833** | 7,833 |

The Companies Act 2006 abolished the legal requirement for a Company to have an authorised share capital. The Articles of Association were amended to remove the authorised share capital article following approval via special resolution at the AGM on 19 May 2010.

The movement during the year on the Company's issued and fully paid shares was as follows:

| | 2020 Number | 2019 Number | 2020 £'000 | 2019 £'000 |
|---|---|---|---|---|
| Balance at 1 January and 31 December | **78,334,296** | 78,334,296 | **7,833** | 7,833 |

The Company has one class of ordinary shares which carry no right to fixed income.

| Scheme | Date of grant | Number of shares under option as at 31 December 2020 | Number of shares under option as at 31 December 2019 | Subscription price per share |
|---|---|---|---|---|
| **Xaar plc 2004 Share Option Plan** | 22 November 10 | **–** | 10,000 | 211.0p |
| | 1 June 11 | **40,000** | 40,000 | 250.0p |
| | 1 May 12 | **90,000** | 90,000 | 226.5p |
| | | **130,000** | 140,000 | |
| **Xaar plc Share Save Scheme** | 1 November 16 | **–** | 22,676 | 407.0p |
| **Xaar plc 2017 Share Save Scheme** | 1 November 17 | **7,010** | 19,351 | 344.0p |
| | 1 November 18 | **116,596** | 182,295 | 142.0p |
| | 1 December 19 | **937,505** | 1,196,152 | 34.0p |
| | 2 November 20 | **702,032** | – | 102.0p |
| | | **1,763,143** | 1,397,798 | |
| **Xaar plc 2013 Share Incentive Plan** | 17 April 13 | **6,309** | 8,105 | 0.0p |
| | 16 April 14 | **8,866** | 11,079 | 0.0p |
| | 14 April 16 | **11,717** | 16,206 | 0.0p |
| | 13 April 17 | **5,280** | 8,000 | 0.0p |
| | | **32,172** | 43,390 | |
| **Total share options outstanding at 31 December** | | **1,925,315** | 1,603,864 | |

## 26. Share capital (cont.)

Options granted under the Xaar plc 2004 Share Option Plan are ordinarily exercisable within three to ten years after the date of grant. The maximum value of approved options, under the Xaar plc 2004 Share Option Plan, which may be granted to individual employees is £30,000.

Options under the Xaar plc Share Save Scheme are ordinarily exercisable between 36 and 42 months after the date of grant.

Awards under the Xaar plc Share Incentive Plan are ordinarily exercisable between three and five years after the date of grant.

**Long-Term Incentive Plan**

Performance Share Awards outstanding under the Xaar plc 2007 Long-Term Incentive Plan are as follows:

| Date of grant | Number of shares under option as at 31 December 2020 | Number of shares under option as at 31 December 2019 |
|---|---|---|
| 3 May 11 | **4,533** | 4,533 |
| 2 April 12 | **–** | 60,417 |
| 1 May 12 | **7,297** | 66,872 |
| 2 April 15 | **35,933** | 111,077 |
| 28 September 15 | **3,069** | 3,695 |
| 7 December 15 | **9,354** | 9,354 |
| 1 April 16 | **34,645** | 58,579 |
| 11 May 16 | **4,977** | 14,019 |
| 27 June 16 | **3,733** | 8,400 |
| 6 September 16 | **700** | 700 |
| 1 December 16 | **15,093** | 15,093 |
| | **119,334** | 352,739 |

All awards under this scheme are exercisable within three to ten years after the date of grant.

Performance Share Awards have been made under the Xaar plc 2017 Long-Term Incentive Plan as follows:

| Date of grant | 2020 Number of shares | 2019 Number of shares |
|---|---|---|
| 16 May 17 | **30,472** | 194,079 |
| 3 April 18 | **126,735** | 199,396 |
| 1 June 18 | **–** | – |
| 2 April 2019 | **110.792** | 127,821 |
| 30 April 2019 | **59,789** | 80,648 |
| 4 October 2019 | **180,328** | 180,328 |
| 29 April 2020 | **404,000** | – |
| 4 June 2020 | **535,000** | – |
| 1 October 2020 | **21,000** | – |
| | **1,468,116** | 782,272 |

All awards under this scheme are exercisable within three to ten years after the date of grant.

## 27. Share premium account

| | 2020 £'000 | 2019 £'000 |
|---|---|---|
| Balance at 1 January | **29,328** | 29,328 |
| Premium arising on issue of equity shares | **–** | – |
| **Balance at 31 December** | **29,328** | 29,328 |

# Notes to the consolidated financial statements (cont.)
for the year ended 31 December 2020

## 28. Own shares

| | 2020 £'000 | 2019 £'000 |
|---|---|---|
| Balance as at 1 January | **(2,676)** | (3,113) |
| Sold in the year | **719** | 437 |
| Balance at 31 December | **(1,957)** | (2,676) |

Of this balance, £20,000 (2019: £20,000) represents 91,250 ordinary shares in Xaar plc held in trust by Xaar Trustee Ltd. Xaar Trustee Ltd was formed in 1995 to act as trustee to the Employee Benefit Trust established in 1995 to hold shares for the benefit of the employees of the Company and the Group. There has been no movement in the number of shares held in trust by Xaar Trustee Ltd during the year.

The remaining balance of £1,937,000 (2019: £2,656,000) represents the cost of 705,083 (2019: 966,410) shares in Xaar plc purchased in the market at market value and held by the Xaar plc ESOP trust to satisfy options granted under the Company's share option schemes.

The market value of own shares at 31 December 2020 was £1,421,000 (2019: £585,000).

## 29. Translation reserves

| | 2020 £'000 | 2019 £'000 |
|---|---|---|
| Balance at 1 January | **594** | 817 |
| Exchange differences on retranslation of net investment | **224** | (157) |
| Prior year correction (see note 36) | **–** | (66) |
| Balance at 31 December | **818** | 594 |

Exchange differences relating to the translation of the net assets of the Group's foreign operations, which relate to subsidiaries only, from their functional currency into the parent's functional currency, being Sterling, are recognised directly in the translation reserve.

## 30. Retained earnings and other reserves

| | Notes | Merger reserve £'000 | Share-based payments £'000 | Other reserves £'000 | Total other reserves £'000 | Retained earnings £'000 | Total £'000 |
|---|---|---|---|---|---|---|---|
| **Balance at 1 January 2019** | | 1,105 | 13,554 | 485 | 15,144 | 79,343 | 94,487 |
| Net loss for the year | | – | – | – | – | (71,051) | (71,051) |
| Own shares sold in the period | | – | – | – | – | (437) | (437) |
| Charge to equity for equity-settled share-based payments | | – | 1,111 | – | 1,111 | – | 1,111 |
| Adjustment arising from change in non-controlling interest | | – | – | 4,666 | 4,666 | – | 4,666 |
| Balance at 31 December 2019 as reported | | 1,105 | 14,665 | 5,151 | 20,921 | 7,855 | 28,776 |
| Correction of error | 36 | – | – | – | – | (257) | (257) |
| Restated total equity at the beginning of the financial year | | 1,105 | 14,665 | 5,151 | 20,921 | 7,598 | 28,519 |
| Net loss for the year | | – | – | – | – | (11,685) | (11,685) |
| Tax on items taken directly to equity | | – | – | – | – | (5) | (5) |
| Own shares sold in the period | | – | – | – | – | (710) | (710) |
| Charge to equity for equity-settled share-based payments | | – | – | 246 | 246 | – | 246 |
| **Balance at 31 December 2020** | | **1,105** | **14,665** | **5,397** | **21,167** | **(4,802)** | **16,365** |

The merger reserve and other reserves are not distributable. The merger reserve represents the share premium account in Xaar Technology Limited.

The share-based payment reserve represents the cumulative charge made under IFRS 2 in relation to share options and LTIP awards. Other reserves represent the non-distributable portion of the dividend received in Xaar plc from Xaar Digital Limited and includes the change in parent equity arising from the transactions with non-controlling interest of Xaar 3D during 2019.

## 31. Notes to the cash flow statement

| | 2020 £'000 | Restated 2019 £'000 |
|---|---|---|
| Loss before tax from continuing operations | **(4,322)** | (10,937) |
| Loss before tax from discontinued operations | **(10,105)** | (61,211) |
| Total loss before tax | **(14,427)** | (72,148) |
| Adjustments for: | | |
| Share-based payments | **353** | 912 |
| Depreciation of property, plant and equipment | **4,223** | 3,776 |
| Depreciation of right of use assets | **1,236** | 1,061 |
| Amortisation of intangible assets | **685** | 1,024 |
| Impairment of assets | **391** | 39,013 |
| Research and development expenditure credit | **(454)** | (2,610) |
| Investment income | **(72)** | (103) |
| Interest expense – finance cost for leases | **94** | 110 |
| Foreign exchange losses | **523** | 447 |
| Gain on re-measurement of derivative liability | **(77)** | (106) |
| Profit/(loss) on disposal of property, plant and equipment | **99** | (18) |
| Other gains and losses | **202** | 623 |
| (Increase) / decrease in provisions | **(2,572)** | 1,267 |
| Operating cash flows before movements in working capital | **(9,796)** | (26,752) |
| Decrease in inventories | **4,849** | 11,805 |
| (Increase) / decrease in receivables | **(1,337)** | 11,059 |
| Increase / (decrease) in payables | **2,011** | (9,332) |
| Cash used in operations | **(4,273)** | (13,220) |
| Income taxes received | **1,466** | 3,392 |
| Net cash used in operating activities | **(2,807)** | (9,828) |

During the year non-cash investing activity pertains to purchase of property, plant and equipment by the Company on credit amounting to £1,152,000 (2019: £114,000).

From the consolidated cash flow statement net cash (including treasury deposits) generated from continuing operations (excluding proceeds from transactions with non-controlling interest) amounted to £7,073,000 (2019: £8,405,000).

Further information of cash flows from discontinued operations can be found in note 11.

# Notes to the consolidated financial statements (cont.)
## for the year ended 31 December 2020

## 32. Share-based payments

**Equity-settled share option scheme**

The Company's share option schemes are open to all employees of the Group. Options are exercisable at a price equal to the average quoted market price of the Company's shares on the date of grant. The standard vesting period is three years.

An option granted under the Xaar plc 2004 Share Option Plan from 2011 onwards will be exercisable over shares with a market value at the date of grant not exceeding a person's annual salary, if at the third anniversary of grant, Xaar plc has achieved positive adjusted profit before tax as shown in the consolidated income statement in the Company's Annual Report and Accounts for any of the three years ending during the vesting period. One third of the shares subject to the option granted rounded to the nearest whole share will vest based on the performance condition being met per year for each of the three years ending in the vesting period. If the adjusted profit before tax as shown in the consolidated income statement in Xaar plc's Annual Report and Accounts for any relevant year is restated before the option becomes exercisable, the restated figure shall, unless the Remuneration Committee determines otherwise, be applied in determining whether the above targets are met. In addition, options shall only become exercisable in respect of any shares if the Committee in its absolute discretion determines that the overall financial performance of Xaar plc over the performance period is satisfactory.

The Xaar 2007 and 2017 Share Save Schemes provides an opportunity to all UK employees to save a set monthly amount (up to £500) over three years towards the exercise of a discounted share option, which is granted at the start of the three years.

The Xaar Share Incentive Plan provides an opportunity for all UK employees to buy shares from their pre-tax remuneration up to the limit permitted by the relevant tax legislation (£1,500 per year for the awards made in 2013 and 2014, £1,800 per year for awards made from 2015) and are awarded additional shares for free on a matching basis; the Company currently operates the plan on the basis of a 1:1 match but may award matching shares up to the maximum ratio permitted by the relevant tax legislation (currently a 2:1 ratio).

Options and awards under the Xaar 2007 and 2017 Share Save Schemes and Xaar Share Incentive Plan are not subject to performance conditions.

If the options remain unexercised after a period of ten years from the date of grant, or 42 months in the case of the Share Save Scheme, or five years in the case of the Share Incentive Plan (being the contractual lives), the options expire. Save as permitted in the share option scheme rules, options ordinarily lapse on an employee leaving the Group.

Details of the share options outstanding during the year are as follows:

| | **2020** | | 2019 | |
|---|---|---|---|---|
| | **Number of share options** | **Weighted average exercise price (£)** | Number of share options | Weighted average exercise price (£) |
| Outstanding at beginning of year | **1,603,864** | **0.72** | 1,367,107 | 1.87 |
| Granted during the year | **702,032** | **1.02** | 1,196,152 | 0.34 |
| Lapsed during the year | **(349,323)** | **0.94** | (951,559) | 1.91 |
| Exercised during the year | **(31,258)** | **0.22** | (7,836) | – |
| Outstanding at the end of the year | **1,925,315** | **0.79** | 1,603,864 | 0.72 |
| Exercisable at the end of the year | **162,172** | **1.87** | 159,184 | 2.04 |

The weighted average share price at the date of exercise for share options exercised during the period was £1.10 (2019: £0.86). The options outstanding at 31 December 2020 had a weighted average remaining contractual life of three and a half years (2019: three years). In 2020, options were granted on 2 November. The aggregate of the estimated fair values of the options granted on those dates is £0.525 million. In 2019, options were granted on 1 December. The aggregate of the estimated fair values of the options granted on those dates is £0.25 million.

## 32. Share-based payments (cont.)

**Equity-settled share option scheme (cont.)**

The inputs into the Black-Scholes model are as follows:

| | 2020 | 2019 |
|---|---|---|
| Weighted average share price | **£1.28** | £0.43 |
| Weighted average exercise price | **£1.02** | £0.34 |
| Weighted average expected volatility | **74%** | 61% |
| Expected life | **3.5 years** | 3 years |
| Risk-free rate | **(0.05)%** | 0.60% |
| Weighted average expected dividends | **0.00%** | 0.00% |

Expected volatility was determined by calculating the historical volatility of the Group's share price over periods ranging from the previous one to three years. The expected life used in the model has been adjusted, based on management's best estimate, for the effects of non-transferability, exercise restrictions and behavioural considerations.

**Long-Term Incentive Plan**

The Company's Long-Term Incentive Plan is open to all employees of the Group.

All LTIP share awards granted before 2015 are subject to the achievement of EPS performance conditions and the number of shares that vest will depend on the EPS growth of the Company for the three financial years of the Company commencing on 1 January of the year of grant, as follows:

(1) None of the awards will vest if the Company's EPS growth does not exceed growth in the Retail Prices Index ('RPI') by at least 4% compound p.a.

(2) 35% of the awards will vest if the Company's EPS growth exceeds growth in the RPI by at least 4% compound p.a.

(3) All of the awards will vest if the Company's EPS growth exceeds growth in the RPI by at least 10% compound p.a.

(4) Awards will vest on a straight-line basis for EPS growth in excess of growth in the RPI of between 4% and 10% compound p.a.

LTIP share awards granted in 2015 onwards are subject to the achievement of different performance conditions depending on the level of the employee. The number of shares that vest will depend on for the three financial years of the Company commencing on 1 January of the year of grant, and are subject to one, two, three, four or five of the conditions as set out below:

(1) Absolute cumulative EPS performance over the period, whereby 25% of the awards will vest if the threshold target is achieved, below threshold 0% will vest and up to a maximum of 100% if the maximum EPS target or higher is achieved.

(2) For 2015 and 2016 grants, TSR relative to FTSE TechMARK All Share Index, whereby 25% of the awards will vest if the median rank in the comparator group is achieved, below median 0% will vest and up to a maximum of 100% if the upper quartile or higher is achieved. For 2017 and 2018 grants, TSR outperformance multiplier determined by comparison to the FTSE Small Cap Index, whereby a performance multiplier of between 116.7% (for upper quartile performance) and 150% or 200% (for upper decile performance) is applied to the base award relating to awards granted with EPS and revenue performance conditions.

(3) For 2015 and 2016 grants, achievement of positive adjusted profit before tax as shown in the consolidated income statement in the Company's Annual Report and Accounts for any of the three years ending during the vesting period. One third of the shares subject to the option granted, rounded to the nearest whole share, will vest based on the performance condition being met per year for each of the three years ending in the vesting period. If the adjusted profit before tax as shown in the consolidated income statement in Xaar plc's Annual Report and Accounts for any relevant year is restated before the option becomes exercisable, the restated figure shall, unless the Remuneration Committee determines otherwise, be applied in determining whether the above targets are met. In addition, options shall only become exercisable in respect of any shares if the Committee in its absolute discretion determines that the overall financial performance of Xaar plc over the performance period is satisfactory.

(4) From 2017, revenue growth over the period, whereby 25% of the awards will vest if the threshold target is achieved, below threshold 0% will vest and up to a maximum of 100% if the maximum revenue growth target or higher is achieved.

(5) From 2018, revenue from new products in the third year in the vesting period, whereby 25% of the awards will vest if the threshold target is achieved, below threshold 0% will vest and up to a maximum of 100% if the maximum revenue target or higher is achieved.

(6) From 2019, Adjusted Basic EPS over the performance period, whereby 25% of the awards will vest if the threshold target is achieved, below threshold 0% will vest and up to a maximum of 100% if the maximum EPS target or higher is achieved. TSR element over the performance period, whereby 25% of the awards will vest if the median target v comparator group is achieved, below threshold 0% will vest and up to a maximum of 100% if the TSR ranking of the company is ranked in the upper quartile of the comparator group.

(7) From 2020, Adjusted Profit before tax ('aPBT') over the performance period 100% of the awards will vest if the threshold target is achieved, below threshold target 0% will vest. The threshold target is achieving an adjusted profit before tax measured over the three-year performance period to 31 December 2022.

There are also a number of LTIP share awards granted that are subject to the achievement of different performance conditions for specific individuals, dependent on revenue or profit performance over a set performance period.

In addition, options shall only become exercisable in respect of any shares if the Committee in its absolute discretion determines that the overall financial performance of Xaar plc over the performance period is satisfactory. All awards that will vest will be calculated on a straight-line basis. All awards made under this scheme are exercisable within three to ten years after the date of grant. Save as permitted in the Long-Term Incentive Plan rules, awards lapse on an employee leaving the Group.

# Notes to the consolidated financial statements (cont.)
for the year ended 31 December 2020

## 32. Share-based payments (cont.)

**Long-Term Incentive Plan (cont.)**

Key individuals have previously been invited to participate in a bonus matching scheme where matching LTIP share awards are granted when the employee invests their bonus in Xaar shares and retains ownership of these shares for the duration of the LTIP share award vesting period. The matching share award is a 1 for 1 match on the pre-tax value of the bonus used to acquire bonus investment shares. Matching LTIP share awards are subject to the same performance criteria as all other LTIP awards.

Details of Performance Share Awards outstanding during the year are as follows:

| | 2020 | 2019 |
|---|---|---|
| Awards outstanding at start of year | **1,135,011** | 2,080,009 |
| Granted during the year | **963,000** | 829,149 |
| Lapsed during the year | **(275,618)** | (1,615,254) |
| Exercised during the year | **(234,943)** | (158,893) |
| Awards outstanding at end of year | **1,587,450** | 1,135,011 |
| Exercisable at the end of the year | **149,806** | 255,948 |

The weighted average share price at the date of exercise for awards exercised during the period was £0.58 (2019: £0.72). The options outstanding at 31 December 2020 had a weighted average remaining contractual life of nine and a half years (2019: seven years). In 2020, Performance Share Awards were made in April, June and October. The aggregate of the estimated fair values of grants made on those dates is £0.44 million. In 2019, Performance Share Awards were made in April and October. The aggregate of the estimated fair values of grants made on those dates is £0.5 million.

The estimated fair values for grants with non-market based performance conditions were calculated using the Black-Scholes model. The inputs into the Black-Scholes model were as follows:

| | 2020 | 2019 |
|---|---|---|
| Weighted average share price | **£0.48** | £0.96 |
| Weighted average exercise price | **nil** | £nil |
| Weighted average expected volatility | **74%** | 44% |
| Weighted average expected life | **3 years** | 3 years |
| Weighted average risk free rate | **(0.05)%** | 0.76% |
| Weighted average expected dividends | **0.00%** | 0.00% |

The estimated fair values for grants with market based performance conditions were calculated using the Monte Carlo model. The inputs into the Monte Carlo model were as follows:

| | 2020 | 2019 |
|---|---|---|
| Weighted average share price | **£0.44** | £0.79 |
| Weighted average exercise price | **nil** | £nil |
| Weighted average expected volatility | **72%** | 56% |
| Weighted average expected life | **3 years** | 4 years |
| Weighted average risk free rate | **0.04%** | 0.83% |
| Weighted average expected dividends | **0.00%** | 0.00% |

The Group recognised total expenses of £246,000 and £1,111,000 related to all equity-settled share-based payment transactions in 2020 and 2019, respectively.

## 33. Retirement benefit schemes

**Defined contribution schemes**

The UK based employees of the Group's UK companies have the option to be members of a defined contribution pension scheme managed by a third party pension provider. For each employee who is a member of the scheme the Company will contribute a fixed percentage of each employee's salary to the scheme. The only obligation of the Group with respect to this scheme is to make the specified contributions.

The total cost charged to the income statement in respect of these schemes during 2020 was £740,000 (2019: £951,000). As at 31 December 2020 contributions of £89,000 (2019: £94,000) due in respect of the current reporting period had not been paid over to the schemes.

## 34. Related party transactions

Transactions between the Company and its subsidiaries, which are related parties, have been eliminated on consolidation and are not disclosed in this note.

Following the transaction in December 2019 which increased the shareholding owned by Stratasys Solutions Limited ('SSYS') in Xaar 3D Limited to 45%, the shareholding determines that they are a related party to Xaar plc.

- SSYS part exercised its existing option, which was granted to SSYS under the terms of the Initial Transaction in 2018, to acquire additional Xaar 3D Shares in return for a $4 million investment in Xaar 3D, increasing its shareholding in Xaar 3D to 25%
- Xaar sold to SSYS, 20% of the enlarged share capital of Xaar 3D for $10 million
- Subsequently, Xaar and SSYS together invested $3.25 million in Xaar 3D on a fully-preemptive basis as follows:
  - Xaar re-invested $1.79 million into Xaar 3D by way of an additional share subscription; and
  - SSYS invested $1.46 million into Xaar 3D by way of an additional share subscription.

Following such share subscriptions, Xaar holds 55% of the enlarged issued share capital of Xaar 3D, and SSYS holds 45% of the enlarged issued share capital of Xaar 3D.

In addition, in 2019 Xaar granted SSYS a call option to acquire its remaining 55% shareholding in Xaar 3D for at least $33 million (being the greater of $33 million and 2 x revenue for previous 12 months; the option is exercisable during the three-year period following completion of the Additional Investment Agreement ('Call Option'). Exercising such Call Option will entitle Xaar to receive royalties on products and services sales for up to 15 years, subject to a $10 million cap. This Call Option is subject to a negotiation for amendment to exercise.

Additional disclosure on the transaction is included in note 22 – Financial instruments, and note 35 – Non-controlling Interest.

During 2020 there were both product sales between Xaar and SSYS, and related party transactions associated with the "go-to-market" functions where SSYS employees have been seconded to Xaar 3D Limited and the costs recharged:

- Sales between Xaar and SSYS in 2020 £636,078 (o/s at year end £237,783)

- Purchases between SSYS and Xaar £2,620 (o/s at year end £nil)

- Employees seconded to Xaar from SSYS £219,201 (accrued at year end)

There were no other transactions during the year with related parties who are not members of the Group.

**Remuneration of key management personnel**

The actual remuneration of the Directors, who are the key management personnel of the Group, is disclosed in the Directors' Remuneration report. The contractual employee benefits are set out below in aggregate for each of the categories specified in IAS 24 'Related Party Disclosures'.

Further information about the remuneration of individual Directors is provided in the audited part of the Directors' Remuneration report **on pages 87 to 89**.

| | **2020 £'000** | 2019 £'000 |
|---|---|---|
| Short-term employee benefits | **1,040** | 947 |
| Post-employment benefits | **29** | 53 |
| Share-based payments | **183** | 90 |
| | **1,252** | 1,090 |

# Notes to the consolidated financial statements (cont.)
for the year ended 31 December 2020

## 35. Non-controlling interest

Summarised financial information in respect of each of the Group's subsidiaries that has a material non-controlling interest is set out below. The summarised financial information below represents amounts before intra-group eliminations.

The terms of the 2019 call option allow for Stratasys to purchase the remaining 55% of Xaar 3D Ltd for at least $33 million, which is exercisable at any time within three years of closing. The fair value of the option is a £2.9 million derivative liability and is disclosed further in note 22.

The management judgement is that the shareholding and option call held by Stratasys are assessed as having significant influence but does not exercise control over Xaar 3D Ltd and which is therefore subject to consolidation as a subsidiary of Xaar plc. This judgement will be reassessed at each reporting period end.

Stratasys have not consolidated Xaar 3D Limited into their financial statements, presenting their investment under other non-current assets in their consolidated balance sheet.

**Xaar 3D Limited**

| Statement of financial position | 2020 £'000 | 2019 £'000 |
|---|---|---|
| Current assets | 3,770 | 10,057 |
| Non-current assets | 6,198 | 6,909 |
| Current liabilities | (1,233) | (1,432) |
| Non-current liabilities | (356) | (558) |
| Equity attributable to owners of the Company | 8,379 | 14,976 |
| Non-controlling interests (2020: 45% / 2019: 45%) | 3,771 | 6,739 |

| Income statement and other comprehensive income | 2020 £'000 | 2019 £'000 |
|---|---|---|
| Revenue | 734 | 18 |
| Expenses | (7,366) | (1,219) |
| Loss for the year | (6,632) | (1,201) |
| Loss attributable to owners of the Company | (3,648) | (778) |
| Loss attributable to the non-controlling interests | (2,984) | (423) |
| Loss for the year | (6,632) | (1,201) |
| Total comprehensive loss attributable to owners of the Company | (3,648) | (778) |
| Total comprehensive loss attributable to the non-controlling interest | (2,968) | (458) |
| Total comprehensive loss for the year | (6,616) | (1,236) |

| Cash flow statement | 2020 £'000 | 2019 £'000 |
|---|---|---|
| Net cash outflow from operating activities | (6,213) | (2,434) |
| Net cash outflow from investing activities | (645) | (2,299) |
| Net cash (outflow) / inflow from financing activities | (160) | 5,511 |
| Net cash (outflow) / inflow | (7,018) | 778 |

| Non-controlling interest equity | 2020 £'000 | 2019 £'000 |
|---|---|---|
| Balance at 1 January | 6,739 | 2,028 |
| Effect of initial application of IFRS 16 | – | (2) |
| Adjustment arising from change in non-controlling interest | – | 5,171 |
| Share of total comprehensive expense for year | (2,968) | (458) |
| Balance at 31 December | 3,771 | 6,739 |

## 36. Prior period restatement

The financial statements include a prior year restatement in relation to the release of untaxed reserves of £623,000 in XaarJet AB in 2019. This reserve is a Swedish-IFRS GAAP difference and both balance sheet and income statement impacts should have been eliminated on consolidation. The accounting for these untaxed reserves should have no impact on the consolidated Group financial statements as the untaxed reserves are not carried on the Group balance sheet, in accordance with IFRS. However, in 2019 an entry was incorrectly recorded which resulted in a credit of £623,000 to the income statement, with a corresponding reduction to other payables and accruals. A correcting entry has been recorded in these financial statements, as a prior year adjustment to eliminate these entries from the 2019 balance sheet and income statement with a corresponding increase in exceptional costs in 2019 of £623,000 and associated translation reserve impact of £66,000.

Furthermore there was the reversal of an adjustment on intercompany sales which had been made in 2019 in error. The goods had been sold externally by the year end. The adjustment impacts cost of sales (£278,000), general and administrative expenses (£88,000) and inventory (£366,000).

In addition, as required under IFRS the financial statements have been restated to present the assets, liabilities and net income from discontinued operations associated with the planned and ongoing sale of 3D business unit as single lines in the comparative period, which is consistent with the current year presentation (further information and other required disclosures can be found in note 11).

The following tables summarise the impact of the prior year restatement on the financial statements of the Group for year ended 31 December 2019:

| Consolidated income statement | Note | As reported 2019 £'000 | Untaxed reserve £'000 | Inventory £'000 | 3D £'000 | Restated 2019 £'000 |
|---|---|---|---|---|---|---|
| Revenue | | 49,397 | – | – | (18) | 49,379 |
| Cost of sales | | (37,435) | – | 277 | 69 | (37,089) |
| Gross profit | | 11,962 | – | 277 | 51 | 12,290 |
| Research and development expenses | | (3,502) | – | – | 421 | (3,081) |
| Research and development expenditure credit | | 260 | – | – | (231) | 29 |
| Sales and marketing expenses | | (8,410) | – | – | 306 | (8,104) |
| General and administrative expenses | | (8,689) | – | 89 | 882 | (7,718) |
| Impairment losses on financial assets | | (2,715) | – | – | – | (2,715) |
| Restructuring costs | | (896) | (623) | – | – | (1,519) |
| Gain on derivative liabilities | 22 | 106 | – | – | (193) | (87) |
| Operating loss | | (11,884) | (623) | 366 | 1,236 | (10,905) |
| Investment income | 10 | 103 | – | – | (38) | 65 |
| Finance costs for leases | 18 | (110) | – | – | 13 | (97) |
| (Loss) / profit before tax | | (11,891) | (623) | 366 | 1,211 | (10,937) |
| Income tax (expense) / credit | 12 | (3,501) | – | – | 4 | (3,497) |
| (Loss) / profit for the year from continuing operations | | (15,392) | (623) | 366 | 1,215 | (14,434) |
| Loss for the year from discontinued operations | | (56,082) | – | – | (1,215) | (57,297) |
| (Loss) / profit for the year | | (71,474) | (623) | 366 | – | (71,731) |
| **Attributable to (Restated):** | | | | | | |
| Owners of the Company | | (71,051) | (623) | 366 | – | (71,308) |
| Non-controlling interests | | (423) | – | – | – | (423) |
| | | (71,474) | (623) | 366 | – | (71,731) |
| **Earnings per share from continuing operations (Restated)** | | | | | | |
| Basic | | (19.4p) | (0.8p) | 0.5p | 1.0p | (18.7p) |
| Diluted | | (19.4p) | (0.8p) | 0.5p | 1.0p | (18.7p) |

# Notes to the consolidated financial statements (cont.)
## for the year ended 31 December 2020

## 36. Prior period restatement (cont.)

| Consolidated statement of comprehensive income | 31-Dec-19 as previously reported £'000 | Untaxed reserve £'000 | Inventory £'000 | 31-Dec-19 restated £'000 |
|---|---|---|---|---|
| **Loss for the year** | (71,474) | (623) | 366 | (71,731) |
| Exchange differences on retranslation of net investment | (192) | (66) | – | (258) |
| **Other comprehensive (loss) / income for the year** | (192) | (66) | – | (258) |
| **Total comprehensive income for the year** | **(71,666)** | **(689)** | **366** | **(71,989)** |
| **Attributable to (Restated):** | | | | |
| Owners of the Company | (71,208) | (689) | 366 | (71,531) |
| Non-controlling interests | (458) | – | – | (458) |
| | (71,666) | (689) | 366 | (71,989) |

| Consolidated statement of financial position | 31-Dec-19 as previously reported £'000 | Untaxed reserve £'000 | Inventory £'000 | 31-Dec-19 restated £'000 |
|---|---|---|---|---|
| **Current assets** | | | | |
| Inventories | 16,164 | – | 366 | 16,530 |
| **Total assets** | **87,858** | **–** | **366** | **88,224** |
| **Current liabilities** | | | | |
| Trade and other payables | (7,284) | (689) | – | (7,973) |
| **Total liabilities** | **(17,198)** | **(689)** | **–** | **(17,887)** |
| **Net assets** | **70,660** | **(689)** | **366** | **70,337** |
| **Equity** | | | | |
| Translation reserve | 660 | (66) | – | 594 |
| Retained earnings | 7,855 | (623) | 366 | 7,598 |
| **Total equity** | **70,660** | **(689)** | **366** | **70,337** |

## 37. Non-adjusting post balance sheet event – 3D Call Option

In the year ended 31 December 2020, the Company invested approximately £7.0 million cash in Xaar 3D. Due to delays caused by the impact of the COVID-19 pandemic on the development of Xaar 3D products, the Directors believe there was a risk that the Xaar 3D programme may take longer than anticipated when it entered into the original Call Option with Stratasys, and subsequently the Company would be required to commit additional funds to Xaar 3D. With further investment anticipated, the Xaar Board has considered all options for the future financing and ownership structure of Xaar 3D, and accordingly has held detailed discussions to sell the remaining stake in Xaar 3D. Terms are still to be finalised and may potentially differ to those of the Call Option originally agreed in 2019.

The terms of any final agreement will be subject to Xaar shareholder approval.

Such an arrangement would provide Xaar 3D with the best opportunity to complete the commercialisation of the HSS product range in the shortest time, would lead to an immediate injection of cash and will enable Xaar to focus on its core business (see Strategy update on page 11).

## 38. Subsidiary audit exemption

The following companies are exempt from the requirements relating to the audit of individual accounts for the year ended 31 December 2020 by virtue of section 479A of the companies act 2006: XaarJet Limited (03320972), XaarJet (Overseas) Limited (03375961), Xaar Technology Limited (02469592), Xaar Digital Limited (03588121), Xaar Trustee Limited (03025096), Xaar 3D Holdings Limited (11425540), Xaar 3D Limited (11389105).