

December 17th, 2018  
Research update

**SMC** Research  
Small and Mid Cap Research



# Mensch und Maschine SE

## A convincing acquisition

Rating: Buy (unchanged) | Price: 25.40 Euro | Price target: 33.70 Euro

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## Recent business development



### Basic data

|                                  |                    |
|----------------------------------|--------------------|
| <b>Based in:</b>                 | Wessling           |
| <b>Sector:</b>                   | CAD/CAM software   |
| <b>Headcount:</b>                | approx. 900        |
| <b>Accounting:</b>               | IFRS               |
| <b>ISIN:</b>                     | DE0006580806       |
| <b>Price:</b>                    | 25.40 Euro         |
| <b>Market segment:</b>           | Scale / m:access   |
| <b>Number of shares:</b>         | 16.7 m             |
| <b>Market-Cap:</b>               | 423.8 m Euro       |
| <b>Enterprise Value:</b>         | 446.9 m Euro       |
| <b>Free Float:</b>               | 46.6 %             |
| <b>Price high/low (12M):</b>     | 30.90 / 19.00 Euro |
| <b>Ø turnover (Xetra, 12 M):</b> | 161,100 Euro / day |

After a long break, Mensch und Maschine have completed an inorganic expansion step and have taken over the majority of SOFiSTiK AG. To this end, the minority interest of 13.3 percent, which M+M has held since 1999, will now be increased to 51 percent against the issue of approximately 500,000 shares. This corresponds with the new M+M subsidiary's total valuation of almost EUR 34 m or 2.8 times its sales (from 2017). The transaction that is part of a succession plan for the SOFiSTiK founders serves to strengthen M+M's software segment with a highly profitable specialist for construction software who is one of the leading suppliers in the areas of structural analysis and reinforcement planning as well as in the very promising BIM area. The reference structures calculated with SOFiSTiK software include some of the world's most spectacular projects of recent years, such as the new bridge over the Bosphorus. We see the acquisition as very promising and clearly value-enhancing. After a rough integration into our valuation model, we now see the fair value at EUR 33.70 per share and on this basis confirm our "Buy" rating.

| FY ends: 31.12.    | 2015  | 2016  | 2017  | 2018e | 2019e | 2020e |
|--------------------|-------|-------|-------|-------|-------|-------|
| Sales (m Euro)     | 160.4 | 167.1 | 160.9 | 177.0 | 208.1 | 229.9 |
| EBIT (m Euro)      | 8.5   | 12.5  | 15.2  | 20.3  | 25.9  | 30.3  |
| Net profit         | 3.9   | 6.6   | 9.4   | 12.1  | 15.1  | 18.1  |
| EpS                | 0.24  | 0.39  | 0.56  | 0.72  | 0.90  | 1.08  |
| Dividend per share | 0.25  | 0.35  | 0.50  | 0.67  | 0.85  | 1.00  |
| Sales growth       | 14.5% | 4.2%  | -3.7% | 10.0% | 17.6% | 10.5% |
| Profit growth      | 4.0%  | 70.4% | 42.9% | 28.1% | 25.1% | 20.2% |
| PSR                | 2.67  | 2.56  | 2.66  | 2.42  | 2.06  | 1.86  |
| PER                | 110.7 | 65.0  | 45.5  | 35.5  | 28.3  | 23.6  |
| PCR                | 29.1  | 29.2  | 28.1  | 25.4  | 20.1  | 17.6  |
| EV / EBIT          | 53.2  | 36.1  | 29.7  | 22.2  | 17.4  | 14.9  |
| Dividend yield     | 1.0%  | 1.4%  | 2.0%  | 2.6%  | 3.3%  | 3.9%  |

## Stake increased to more than 50%

After a break of several years, Mensch und Maschine has become active again in acquisitions and have announced the majority takeover of SOFiSTiK AG from Oberschleissheim near Munich. This is a long-term minority participation of Mensch und Maschine (most recently 13.3 percent) that will now be increased to 51 percent.

## Strengthening of BIM competence

SOFiSTiK AG has been active in the market since 1987 and has specialized in the development of construction software. The company now claims to be Europe's leading software producer for the calculation, design and construction of building projects, with a particular focus on bridge and tunnel construction. The SOFiSTiK software is based on the Autodesk products AutoCAD and Revit Structure and has its strengths above all in the planning and calculation of structural analysis and reinforcement. One strength of SOFiSTiK's software products are their BIM functionalities, which enable frictionless and complete mapping of the entire design and construction process in consistent data models, making the company one of the leading BIM providers.

## Excellent references

The software's strength can play out in particular where special demands are made on the statics of the object, which is why the reference list includes several world-famous and spectacular buildings. These include numerous bridges, such as the new Bosphorus Bridge in Turkey, several stadiums and the BMW World in Munich. However, the software is also suitable for "normal" use in building construction and civil engineering. In total, M+M speaks of thousands of construction projects that were calculated and constructed with SOFiSTiK products.

## Double-digit margins

SOFiSTiK AG currently employs around 70 of staff at its two locations in Oberschleissheim and Nuremberg, who generate annual sales in the low double-digit millions. In the 2017 financial year, sales in the

individual financial statements (the Group also includes two smaller investments - BiMOTiON GmbH and SOFiSTiK Southern Africa (Pty.) Ltd.) amounted to EUR 12.1 m, 12.4 percent more than in 2016. With a gross margin of around 79 percent, the net profit for the year increased disproportionately by 22.5 percent to EUR 2.1 m, leading to a net margin improvement from 15.3 to 16.7 percent.

## Strong balance sheet

The high profitability is also reflected in the balance sheet, where two thirds of the liabilities side consisted of equity at the end of 2017 despite high profit distributions. The high accruals (almost 20 percent of the balance sheet total) also point to generous risk provisioning, while bank loans are completely absent. On the assets side, liquidity was by far the largest item at the end of 2017 with EUR 4.3 m or 59 percent of the balance sheet total, while real estate assets accounted for a further EUR 1 m.

## Acquisition through share swap

For the increase of its participation from 13.3 to 51.0 percent, Mensch und Maschine will issue around 500,000 own shares, resulting in a purchase price of around EUR 12.8 m based on the current share price and a total valuation of SOFiSTiK of EUR 33.9 million. This corresponds to a multiple of 2.8 based on SOFiSTiK AG's 2017 revenue and 11.3 based on its EBITDA. Due to the high net liquidity, the final price should even be somewhat dampened, although – because of dividends for the financial years 2017 and 2018 as well as the investments in 2018 – the effect will be noticeably lower than the balance sheet figures for 2017 would suggest.

## Integration into valuation model

On the basis of the available data, we have incorporated the majority takeover of SOFiSTiK AG into our model and made changes at several points in the process. The most obvious adjustment is certainly the increase in the sales projection, which we raised conservatively by EUR 12.5 m from 2019 onwards. At the same time, we have slightly increased the gross margin

of the Group to take account of the now higher share of the software segment. For 2019, we therefore expect sales of EUR 208.1 m and a gross margin of 59.7 percent (previously: sales of EUR 195.6 m and gross margin of 59.2 percent). This results in an increase in EBITDA from EUR 26.7 m to EUR 29.4 m, assuming that the expense ratios remain unchanged. The increase in EBIT, on the other hand, will be slightly impacted by the higher depreciation on the property, plant and equipment acquired (especially buildings) and by the purchase price allocation. As the distribution of the purchase price is not yet known, we have initially worked with flat-rate assumptions and based our calculations on the M+M management's statement to strive for the lowest possible PPA share. With regard to intangible purchase price components, we have therefore made a 75-25 split for goodwill/PPA. Despite slightly higher depreciation and amortization, our EBIT estimate increased by EUR 2.3 m to EUR 25.6 m. After taxes and the likewise increased minority interests, we now expect net income for 2019 to be EUR 15.1 m (previously: EUR 14.3 m). The model business performance for the next eight years, which

we assume for determining the fair value, is summarized in the table below; further details can also be found in the Annex.

### Framework data unchanged

The changes have had a corresponding effect on the estimates for subsequent years, so that at the end of the detailed forecast period we are now calculating with sales of EUR 378.8 m and an EBIT margin of 15.8 percent. In order to reduce risk, we continue to work with a 25 percent safety discount on the target margin of the detailed forecast period and, on this basis, are targeting "perpetual" cash flows growth of 1.0 percent. We have also left the basic data of the model unchanged. We continue to discount the cash flows resulting from our estimates at a WACC rate of 6.1 percent, based on a cost of equity of 9.0 percent (consisting of: beta factor: 1.2, risk-free interest rate: 2.5 percent, risk premium 5.4 percent), borrowing costs of 4.0 percent and a target debt ratio of 45 percent.

| m Euro                            | 12 2018     | 12 2019     | 12 2020     | 12 2021     | 12 2022     | 12 2023     | 12 2024     | 12 2025     |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Sales                             | 177.0       | 208.1       | 229.9       | 254.1       | 280.8       | 310.2       | 342.8       | 378.8       |
| Sales growth                      |             | 17.6%       | 10.5%       | 10.5%       | 10.5%       | 10.5%       | 10.5%       | 10.5%       |
| EBIT margin                       | 11.5%       | 12.4%       | 13.2%       | 13.9%       | 14.5%       | 15.1%       | 15.5%       | 15.8%       |
| <b>EBIT</b>                       | <b>20.3</b> | <b>25.9</b> | <b>30.3</b> | <b>35.3</b> | <b>40.8</b> | <b>46.9</b> | <b>53.2</b> | <b>60.0</b> |
| Tax rate                          | 34.0%       | 33.5%       | 33.0%       | 32.5%       | 32.0%       | 31.5%       | 31.0%       | 30.5%       |
| Adjusted tax payments             | 6.9         | 8.7         | 10.0        | 11.5        | 13.0        | 14.8        | 16.5        | 18.3        |
| <b>NOPAT</b>                      | <b>13.4</b> | <b>17.2</b> | <b>20.3</b> | <b>23.8</b> | <b>27.7</b> | <b>32.1</b> | <b>36.7</b> | <b>41.7</b> |
| + Depreciation & Amortisation     | 3.2         | 3.6         | 3.2         | 3.1         | 3.0         | 2.9         | 2.9         | 2.9         |
| + Increase long-term accruals     | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| + Others                          | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| <b>Gross operating Cash Flows</b> | <b>16.6</b> | <b>20.8</b> | <b>23.5</b> | <b>26.9</b> | <b>30.7</b> | <b>35.1</b> | <b>39.6</b> | <b>44.6</b> |
| - Increase Net Working Capital    | 1.1         | 1.3         | 1.4         | 1.5         | 1.5         | 1.6         | 1.7         | 1.8         |
| - Investments in fixed assets     | -1.8        | -2.0        | -2.1        | -2.2        | -2.3        | -2.4        | -2.5        | -2.6        |
| <b>Free Cash Flows</b>            | <b>15.9</b> | <b>20.1</b> | <b>22.8</b> | <b>26.2</b> | <b>30.0</b> | <b>34.3</b> | <b>38.8</b> | <b>43.7</b> |

*SMC estimation model*

## Target price: EUR 33.70 per share

The model leads to a market value of equity of EUR 568.0 m or EUR 33.71 per share, from which we derive our new price target of EUR 33.70 (previously: 31.30). We calculate here with a number of shares of 16.85 m. This includes the assumed issue of 0.5 million new shares, while we have deducted treasury shares (most recently 2.0 percent) as before. However, as a small portion of the purchase price could also be paid in cash (at the accounting par value of EUR 24.00 per M+M share), the number of shares is very likely to change somewhat. The assessment of the forecast risk of our estimations remains unchanged at three out of six possible points.

## Sensitivity analysis

When the input parameters are varied for our sensitivity analysis (WACC between 5.1 and 7.1 percent and perpetual cash flows growth between 0 and 2 percent), the fair value of the share lies between EUR 25.61 and EUR 51.84.

| Sensitivity analysis<br>WACC | Perpetual cash flows growth |       |       |       |       |
|------------------------------|-----------------------------|-------|-------|-------|-------|
|                              | 2.0%                        | 1.5%  | 1.0%  | 0.5%  | 0.0%  |
| 5.1%                         | 51.84                       | 46.17 | 41.87 | 38.49 | 35.77 |
| 5.6%                         | 44.78                       | 40.62 | 37.35 | 34.72 | 32.56 |
| 6.1%                         | 39.42                       | 36.26 | 33.71 | 31.62 | 29.86 |
| 6.6%                         | 35.20                       | 32.74 | 30.71 | 29.02 | 27.58 |
| 7.1%                         | 31.80                       | 29.84 | 28.20 | 26.81 | 25.61 |

## Conclusion

After M+M had already been able to convince with its last quarterly reports, the company has now delighted its shareholders with a convincing acquisition. The majority takeover of SOFiSTiK AG, in which M+M has held a minority interest for many years, decisively strengthened the company's own software portfolio, especially in the highly promising BIM area.

The takeover, which is part of a succession plan, strengthens the Group through a fast-growing, highly profitable and healthy company with a strong balance sheet and a leading market position in the addressed market. With a valuation of around EUR 34 million and thus 2.8 times last year's sales, the takeover was not a bargain, but in view of the high profitability and

the very good prospects, we nevertheless consider the conditions to be attractive – especially if M+M should succeed in using the potentials of SOFiSTiK even only roughly as well as it has succeeded with its subsidiary OpenMind in the CAM area so far.

We have generally included the takeover in our model, but have refrained from considering any dynamic growth and margin effects and limited ourselves to static integration. Nevertheless, we see the transaction as clearly value-increasing and are raising our price target to EUR 33.70. Our vote remains "Buy".

# Annex I: Balance sheet and P&L estimation

## Balance sheet estimation

| m Euro                   | 12 2017      | 12 2018      | 12 2019      | 12 2020      | 12 2021      | 12 2022      | 12 2023      | 12 2024      | 12 2025      |
|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>ASSETS</b>            |              |              |              |              |              |              |              |              |              |
| I. Total non-current     | 63.0         | 61.6         | 71.5         | 70.4         | 69.4         | 68.7         | 68.2         | 67.8         | 67.5         |
| 1. Intangible assets     | 43.8         | 42.7         | 51.5         | 50.5         | 49.7         | 48.9         | 48.1         | 47.5         | 46.9         |
| 2. Tangible assets       | 13.2         | 12.9         | 14.0         | 13.8         | 13.8         | 13.9         | 14.1         | 14.3         | 14.7         |
| II. Total current assets | 38.8         | 41.7         | 47.5         | 50.6         | 53.5         | 62.3         | 73.3         | 84.8         | 97.3         |
| <b>LIABILITIES</b>       |              |              |              |              |              |              |              |              |              |
| I. Equity                | 43.9         | 48.1         | 65.7         | 70.2         | 75.2         | 81.2         | 87.7         | 94.6         | 102.2        |
| II. Accruals             | 9.4          | 10.3         | 11.1         | 12.0         | 12.9         | 13.7         | 14.6         | 15.5         | 16.4         |
| III. Liabilities         |              |              |              |              |              |              |              |              |              |
| 1. Long-term liabili-    | 23.2         | 18.6         | 14.3         | 9.3          | 3.6          | 2.3          | 2.3          | 2.3          | 2.3          |
| 2. Short-term liabili-   | 25.2         | 26.3         | 27.8         | 29.4         | 31.2         | 33.8         | 36.8         | 40.2         | 43.9         |
| <b>TOTAL</b>             | <b>101.8</b> | <b>103.3</b> | <b>119.0</b> | <b>121.0</b> | <b>122.9</b> | <b>131.1</b> | <b>141.4</b> | <b>152.6</b> | <b>164.8</b> |

## P&L estimation

| m Euro              | 12 2017 | 12 2018 | 12 2019 | 12 2020 | 12 2021 | 12 2022 | 12 2023 | 12 2024 | 12 2025 |
|---------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Sales               | 160.9   | 177.0   | 208.1   | 229.9   | 254.1   | 280.8   | 310.2   | 342.8   | 378.8   |
| Gross profit        | 94.8    | 105.4   | 124.2   | 136.6   | 150.1   | 165.0   | 181.4   | 199.4   | 219.1   |
| EBITDA              | 18.0    | 23.5    | 29.4    | 33.5    | 38.4    | 43.8    | 49.9    | 56.1    | 62.9    |
| EBIT                | 15.2    | 20.3    | 25.9    | 30.3    | 35.3    | 40.8    | 46.9    | 53.2    | 60.0    |
| EBT                 | 13.6    | 19.0    | 24.7    | 29.4    | 34.6    | 40.8    | 47.1    | 53.5    | 60.3    |
| EAT (before minori- | 9.0     | 12.6    | 16.4    | 19.7    | 23.4    | 27.7    | 32.2    | 36.9    | 41.9    |
| EAT                 | 9.4     | 12.1    | 15.1    | 18.1    | 21.5    | 25.5    | 29.7    | 33.9    | 38.6    |
| EPS                 | 0.56    | 0.72    | 0.90    | 1.08    | 1.28    | 1.51    | 1.76    | 2.01    | 2.29    |

## Annex II: Cash flows estimation and key figures

### Cash flows estimation

| m Euro                 | 12 2017 | 12 2018 | 12 2019 | 12 2020 | 12 2021 | 12 2022 | 12 2023 | 12 2024 | 12 2025 |
|------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| CF operating           | 15.2    | 16.9    | 21.3    | 24.3    | 27.9    | 32.3    | 36.8    | 41.5    | 46.6    |
| CF from investments    | -3.8    | -1.8    | -2.0    | -2.1    | -2.2    | -2.3    | -2.4    | -2.5    | -2.6    |
| CF financing           | -10.1   | -13.6   | -16.4   | -20.8   | -24.8   | -23.2   | -25.8   | -30.0   | -34.3   |
| Liquidity beginning of | 6.4     | 7.7     | 9.2     | 12.1    | 13.6    | 14.5    | 21.2    | 29.9    | 38.8    |
| Liquidity end of year  | 7.7     | 9.2     | 12.1    | 13.6    | 14.5    | 21.2    | 29.9    | 38.8    | 48.5    |

### Key figures

| m Euro                        | 12 2017 | 12 2018 | 12 2019 | 12 2020 | 12 2021 | 12 2022 | 12 2023 | 12 2024 | 12 2025 |
|-------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Sales growth                  | -3.7%   | 10.0%   | 17.6%   | 10.5%   | 10.5%   | 10.5%   | 10.5%   | 10.5%   | 10.5%   |
| Gross profit growth           | 3.7%    | 11.2%   | 17.8%   | 9.9%    | 9.9%    | 9.9%    | 9.9%    | 9.9%    | 9.9%    |
| Gross margin                  | 59.0%   | 59.6%   | 59.7%   | 59.4%   | 59.1%   | 58.8%   | 58.5%   | 58.2%   | 57.9%   |
| EBITDA margin                 | 11.2%   | 13.3%   | 14.2%   | 14.6%   | 15.1%   | 15.6%   | 16.1%   | 16.4%   | 16.6%   |
| EBIT margin                   | 9.5%    | 11.5%   | 12.4%   | 13.2%   | 13.9%   | 14.5%   | 15.1%   | 15.5%   | 15.8%   |
| EBT margin                    | 8.5%    | 10.8%   | 11.9%   | 12.8%   | 13.6%   | 14.5%   | 15.2%   | 15.6%   | 15.9%   |
| Net margin (after mi-<br>...) | 5.9%    | 6.8%    | 7.3%    | 7.9%    | 8.5%    | 9.1%    | 9.6%    | 9.9%    | 10.2%   |

# Disclaimer

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## *Charts*

The charts were made with Tai-Pan ([www.lp-software.de](http://www.lp-software.de)).

## Disclaimer

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## *II) Preparation and updating*

The present financial analysis was prepared by: Dipl. Volkswirt Dr. Adam Jakubowski

Participants in the preparation of the present financial analysis: -

The present analysis was finished on 17.12.2018 at 10:00 and published on 17.12.2018 at 10:20.

For the preparation of its financial analyses, the sc-consult GmbH uses a five-tier rating scheme with regard to price expectation in the next twelve months. Additionally, estimation risk is quantified on a scale from 1 (low) to 6 (high). The ratings are as follows:

|                 |  |
|-----------------|--|
| Strong Buy      | We expect an increase in price for the analyzed financial instrument by at least 10 percent. We assess the estimation risk as below average (1 to 2 points). |
| Buy             | We expect an increase in price for the analyzed financial instrument by at least 10 percent. We assess the estimation risk as average (3 to 4 points).       |
| Speculative Buy | We expect an increase in price for the analyzed financial instrument by at least 10 percent. We assess the estimation risk as above average (5 to 6 points). |

|      |  |
|------|--|
| Hold | We expect that the price of the analyzed financial instrument will remain stable (between -10 and +10 percent). The forecast risk (1 to 6 points) has no further impact on the rating. |
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The expected change in price refers to the current share price of the analyzed company. This price and any other share prices used in this analysis are XETRA closing prices as of the last trading day before publication. If the share is not traded on XETRA, the closing price of another public stock exchange is used with a separate note to that effect.

The price targets published within the assessment are calculated with common methods of financial mathematics, especially with the DCF (discounted cash flow) method, the sum of the parts valuation and a peer group analysis. The valuation methods are affected by economic framework conditions, especially by the development of the interest rates.

The rating resulting from these methods reflects current expectations and can change anytime subject to company-specific or economic changes.

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| Date       | Rating | Target price | Conflict of interests |
|------------|--------|--------------|-----------------------|
| 23.10.2018 | Buy    | 31.30 Euro   | 1), 3)                |
| 30.07.2018 | Buy    | 30.80 Euro   | 1), 3), 4)            |
| 24.04.2018 | Buy    | 26.70 Euro   | 1), 3)                |
| 19.02.2018 | Buy    | 25.90 Euro   | 1), 3), 4)            |
| 26.10.2017 | Hold   | 21.80 Euro   | 1), 3), 4)            |
| 17.08.2017 | Hold   | 19.80 Euro   | 1), 3), 4)            |
| 25.04.2017 | Buy    | 17.80 Euro   | 1), 3), 4)            |
| 16.02.2017 | Buy    | 16.20 Euro   | 1), 3)                |
| 27.10.2016 | Buy    | 14.80 Euro   | 1), 3), 4)            |

In the course of the next twelve months, sc-consult GmbH will presumably prepare the following financial analyses for the company: one report, three updates

The publishing dates for the financial analyses are not yet fixed at the present moment.

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