

# **Annual report 2016**

Mensch und Maschine	at a glance																
All amounts in million EUR (unless stated otherwise)	2008	200	19	201	10	201	11	201	2	20	13	20 <sup>-</sup>	14	20 <sup>-</sup>	15	20 <sup>-</sup>	16
Revenue	223.1	163.3	-27%	195.6	+20%	191.7	-2.0%	118.8	-38%	125.8	+5.9%	140.0	+11%	160.38	+14.5%	167.07	+4.2%
Germany	57.3	39.9	24.4%	48.8	24.9%	55.96	29.2%	60.6	51.0%	60.6	48.2%	66.9	47.8%	74.66	46.6%	74.87	44.8%
International	165.8	123.4	75.6%	146.8	75.1%	135.76	70.8%	58.2	49.0%	65.2	51.8%	73.1	52.2%	85.72	53.4%	92.20	55.2%
revenue per share in EUR	16.44	11.20	-32%	13.45	+20%	13.21	-1.8%	7.93	-40%	8.20	+3.4%	9.1	+11%	9.94	+9.6%	10.25	+3.1%
Gross margin	55.9	51.0	-8.7%	66.2	+30%	70.0	+5.8%	63.0	-10%	67.5	+7.1%	74.7	+11%	84.52	+13%	91.43	+8.2%
Distribution	32.2	18.4	36.1%	19.9	30.0%	15.8	22.6%										
M+M Software	22.9	19.2	37.6%	23.0	34.7%	26.4	37.7%	30.6	48.6%	32.5	48.2%	36.6	49.0%	39.58	46.8%	44.73	48.9%
VAR Business	0.8	13.4	26.3%	23.3	35.3%	27.8	39.7%	32.3	51.4%	34.9	51.8%	38.1	51.0%	44.94	53.2%	46.70	51.1%
Operating result EBITDA	13.0	1.4	-89%	6.1	+340%	15.7*	+158%	10.0*	-36%	7.8*	-22%	10.9*	+39%	12.81	+18%	15.76	+23%
EBITDA return from revenue	5.8%	0.8%		3.1%		8.2%		8.4%		6.2%		7.8%		8.0%		9.4%	
Net result	5.8	-4.8		-0.5		6.8		3.6	-47%	2.6	-28%	3.7	+42%	3.87	+4.0%	6.59	+70%
Net return from revenue	2.6%	-2.9%		-0.2%		3.5%		3.0%		2.1%		2.7%		2.4%		3.9%	
Net result per share in EUR	0.42	-0.34		-0.03		0.47		0.24		0.17		0.24		0.24		0.40	
Dividend in EUR	0.20	0.00		0.10		0.20		0.20		0.20		0.20		0.25		0.35	
Total assets	85.0	101.1	+19%	105.1	+4%	104.9	-0%	94.6	-10%	102.7	+9%	104.2	+1%	102.52	-2%	100.52	-2%
Shareholders' equity	26.4	24.2	-8%	27.8	+15%	33.8	+22%	35.9	+6%	36.3	+1%	39.2	+8%	39.62	+1%	40.57	+2%
Equity ratio	31.1%	23.9%		26.4%		32.2%		37.9%		35.4%		37.7%		38.6%		40.4%	
Numbr of shares in million	13.570	13.970	+3%	14.542	+4%	14.514	-0%	14.972	+3%	15.346	+2.5%	15.439	+0.6%	16.127	+4.5%	16.306	+1.1%
Number of employees	388	504	+30%	607	+20%	639	+5%	659	+3%	705	+7%	718	+2%	731	+2%	759	+4%

 $^{\star}$  EBITDA purely operating, excluding contribution from Distribution sale: 2011 EUR 9.1 mln

2012 EUR 0.97 mln 2013 EUR 3.81 mln 2014 EUR 7.87 mln





#### Dear reader,

strong organic growth of proprietary software and services, mainly in the CAM, BIM and PDM areas, and strict cost discipline helped Mensch und Maschine Software SE (M+M) hit new gross margin and operating profit records and achieve stronger than expected operating cash flows in 2016.

The solid +14.2% increase of proprietary M+M gross margin to some degree compensated the fact that gross margin from the resale of Autodesk software fell by 8.2% due to the transition from license sale to a rental model, temporarily diluting group growth.

Nevertheless VAR segment EBITDA climbed by 11% to EUR 5.09 mln. As in the previous years, Software contributed the lion's share EUR 10.66 mln / +30% to the impressive EUR 15.76 mln / +23% group EBITDA. Operating profit EBIT grew even steeper by +47% to EUR 12.49 mln. Net profit jumped by 70% to EUR 6.59 mln or 40 Cents/share together with highly advanced operating cash flows at 90 Cents/share allowing for 35 Cents (PY: 25 / +40%) dividend.

Five years after the sale of the Distribution business it is more and more obvious that the business model transition is bearing fruit. With total EUR 28.5 mln gross margin gain and EUR 14.8 mln purely operating EBITDA gain during this phase, M+M on average achieved 9.8% gross margin growth and EUR 3.7 mln EBITDA surplus per year.

Net profit of one Euro per share thus is no longer a distant utopia but is targeted for as soon as the year 2020, accompanied by continued high 80-90% dividend quotes.

All in all, not really bad prospects for M+M shareholders.

Wessling, March 2017
The Managing Directors

## 2016 at a glance

- Sales: EUR 167.07 mln / +4.2%
  - M+M Software: EUR 46.24 mln / +12%
  - VAR Business: EUR 120.83 mln / +1.6%
- Record gross margin: EUR 91.43 mln / +8.2%
  - M+M Software: EUR 44.73 mln / +13%
  - VAR Business: EUR 46.70 mln / +3.9%
  - D | FDITOA FUD 45 70 | / 000/
- Record EBITDA: EUR 15.76 mln / +23%
  - M+M Software: EUR 10.66 mln / +30%
  - VAR Business: EUR 5.09 mln / +11%
     EBITDA margin 9.4% (PY: 8.0%)
- Record EBIT: EUR 12.49 mln / +47%
- Net profit: EUR 6.59 mln / +70%
  - Per share: 40 Cents (PY: 24)
- Op. cash flows: EUR 14.64 mln (PY: 14.73)
  - Per share: 90 Cents (PY: 91)
  - +25% net of non-recurring PY effect
- Dividend proposal: 35 Cents (PY: 25)
- Group headcount: 759 (PY: 731)

Adi Drotleff CEO



Christoph Aschenbrenner



Markus Pech CFO from March 1, 2016



Peter Schützenberger CFO until February 29, 2016







# **Management report 2016**

# **Enterprise and market position**

Mensch und Maschine Software SE (M+M) is one of the leading European providers of CAD/CAM (Computer Aided Design & Manufacturing) as well as PDM (Product Data Management) and BIM (Building Information Modeling / Management) solutions.

With around 50 locations in Germany, Austria, Switzerland, France, Italy, UK, Poland, Romania and Spain, the M+M group is one of the leading European providers of CAD/CAM/PDM/BIM solutions. Additional sales offices in Japan, Asia-Pacific, the USA and Brazil provide global presence for M+M's self-developed CAD/CAM Software.



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#### **Broad sector coverage**

Two thirds of the M+M business is achieved in the Industrial sector, e.g. Mechanical Engineering, Automotive/Aerospace/Shipbuilding, Tool/Mold/Die Making, Electrical Engineering or Industrial Design.

The remaining third comes from AEC, e.g. Architecture, Building Services, Structural

Architecture, Building Services, Structural and Civil Engineering, Infrastructure or Gardening & Landscaping.

This breakdown is quite similar to the glob.

This breakdown is quite similar to the global CAD/CAM/PDM/BIM market. The broad sector coverage, compared to the competition, allows M+M to offer interdisciplinary solutions such as Simulation, Visualization/Animation, Plant or Factory Design.

#### Large customer and installation base

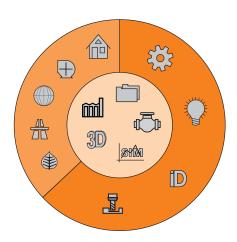
Altogether, Mensch und Maschine's active installed base consists of well over 100,000 CAD/CAM/PDM/BIM seats at about 25,000 end customer sites of all size categories - from small engineer's or architect's offices up to international large-scale enterprises.

#### Wide price/performance range

The M+M product portfolio covers a wide price/performance range from quite simple drawing software for approx. 1,000 Euros through midprice 2D/3D design solutions in the 5,000 Euro range up to high end systems for manufacturing and production control with software investment levels from 10,000 to 100,000 Euros and more per seat. The majority of CAD/PDM/BIM sales are generated in the low to midprice range, while the self-developed CAM solutions are sold in the high end range.

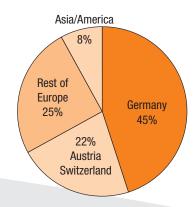
#### Focus on German speaking countries

In 2016 the German speaking countries contributed about 67% (approx. 45% Germany, approx. 22% Austria/Switzerland) to the EUR 167.1 mln group sales, while about 25% came from other European markets. About 8% of sales were achieved in Asia, North and South America, exclusively with M+M's self-developed CAM Software.



Two thirds of the M+M business is achieved in the Industrial sector, e.g. Mechanical Engineering, Automotive/Aerospace/ Shipbuilding, Tool/Mold/Die Making, Electrical Engineering or Industrial Design. The remaining third comes from AEC, e.g. Architecture, Building Services, Structural and Civil Engineering, Infrastructure or Gardening&Landscaping. In addition, there is a number of interdisciplinary solutions such as Simulation, Visualization/Animation, Plant or Factory Design.

Geographically, Germany, Austria, Switzerland and Europe are dominating, but noticeable 8% of sales, approximately EUR 13.5 mln, are achieved with M+M's selfdeveloped CAM Software in Asia and America.





#### M+M business model in transition

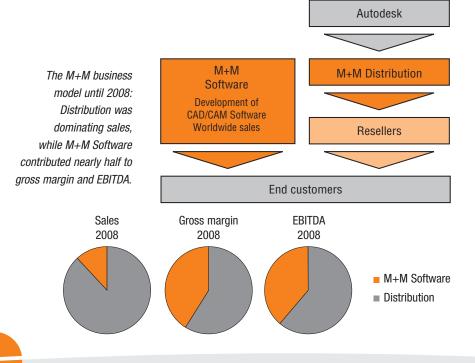
The M+M business model has since 2009 been going through a transition process which strengthened M+M's proprietary part on the one hand and significantly reduced the trading component on the other.

#### **Until 2008: Software and Distribution**

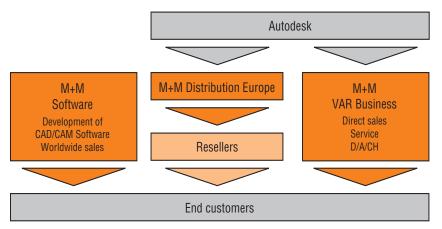
Since 1984, the year of foundation, M+M acted as a Value Added Distributor (VAD) for Autodesk software, while continuously increasing the development of our own CAD/CAM solutions, in order to build up an individual market profile and to be clearly distinguishable from the competition.

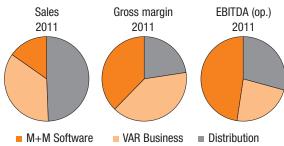
In this two-segment model, the Distribution volume business naturally dominated group sales, while in the year 2008, the high margin Software segment already contributed nearly half of gross margin and EBITDA, with 210 of the 388 group employees.

In 2008 group gross yield was 25%, EBITDA margin had reached 5.8%, and M+M was in a constant head-to-head race with the Tech Data Group for the title of largest Autodesk Distributor in Europe.









The M+M business model from 2009 to 2011: For 2011 group gross margin and EBITDA (operating) the lion's share was already contributed by the value segments Software and VAR Business.

#### 2009: VAD to VAR transition in D/A/CH

In 2009, a third segment 'VAR Business' (Value Added Reselling) was formed. In the course of the 'Market Offensive', the M+M subsidiaries in Germany, Austria and Switzerland were transitioned from indirect business to direct selling to end customers. and more than a dozen former reselling partners were acquired.

In 2011, the third year after the start, the VAR segment contributed nearly 40% to group gross margin and achieved a positive operating result EBITDA.

Thus the stage was set for completing the VAD/VAR transition groupwide. As a first step, the European Distribution business was sold to the Tech Data Group by the end of October 2011, while M+M kept the subsidiaries in France, Italy, UK, Poland and Romania with approx. 70 of the 113 employees.

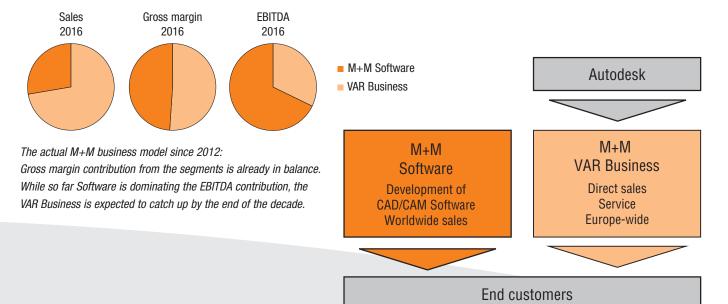
# Since 2012: VAD to VAR transition in Europe On this foundation the European M+M VAR

Business was built up, accompanied by reselling partner acquisitions in I, F and PL ('Market offensive II').

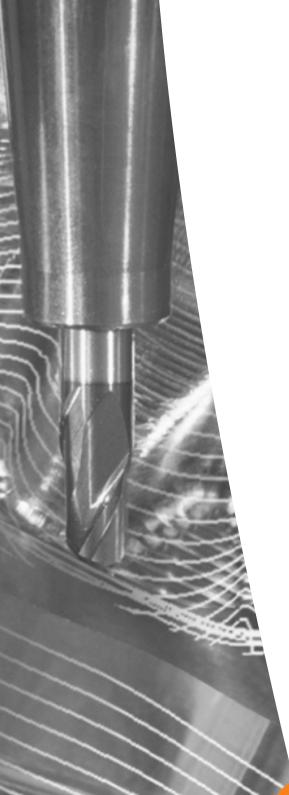
#### More than 14% EBITDA margin achievable

Due to the concentration on the high margin Software and VAR segments, and without wholesale business, the group gross yield since 2012 is well over 50%, representing more than a doubling compared to 2008. The new business model, in the mid term. makes EBITDA margins above 14% achievable.

The main transition target to significantly grow the proprietary part of gross margin has been achieved: While the contribution of M+M Software and service had been less than 50% until 2008, it is now over 75%.







# The M+M segments in detail

The following pages give an overview across the Software and VAR Business segments forming the actual M+M business model.

# Segment M+M Software

Around 85% of M+M Software sales come from CAM Software, while around 15% are contributed by Gardening & Landscaping as well as Electrical Engineering Software.

Economically, the Software segment is a standard software developer with 46.2 Million Euro sales (2016), over 95% gross yield and around 23% EBITDA margin. As a result, the segment pulls a relatively high added value from its less than 28% share in group sales. In fiscal year 2016, about 49% of group gross margin and nearly 68% of operating profit EBITDA were achieved by self developed software technology.

## **High development investment**

M+M in 2016 spent EUR 13.7 mln or 29.7% of segment sales on maintenance and development of the proprietary software.



We push machining to the limit

Software solutions from the wholly owned subsidiary OPEN MIND are used for the process control of milling, drilling and turning in various industries such as mechanical engineering, tool, mold and die making, automotive and aerospace industry, medical technology, toy industry, as well as watch, clock and jewellery manufacturing.

The M+M group belongs to the first tier of vendors in the important niche market of CAM solutions. Around 42% of sales comes from the German speaking area, while approx. 25% is contributed by other European markets (mainly Italy, UK, France, Spain and Eastern Europe). Around one third of the business is achieved through own sales offices in Japan, Singapore, China, Taiwan, India, USA and Brazil.

Innovative
CAM strategies
enable high savings
for the design cycle
and machining time:
Tube milling
using hyperMILL





Particularly in the highly complex 5-axis milling process, the hyperMILL and hyper-CAD S product lines from OPEN MIND hold a technologically leading position and allow the customers quick payback of their high machine tool investments.

A variety of innovative applications for specific products like tyre molds, turbine blades and impellers enable and simplify the programming of complex handling, lower the machining time and improve finished quality.

The milITURN module enables the use of modern combined milling/turning machine tools. The complete handling, including turning and milling on the same machine, reduces manufacturing and machining times. It minimises set-up times by means of reduced clamping, rechuck and unload operations and results in higher machining precision.

Recently the product portfolio was rounded up by the highly innovative hyperMILL MAXX Machining package enabling up to 500% productivity gain by radical reduction of machining time. This is one of the reasons why CAM solutions from OPEN MIND are used for prototype manufacturing by renowned automotive companies, several engine tuners and Formula 1 race teams.



The Open Mind CAD/CAM Software customer base consists of around 6.000 companies (here is a selection) not only located in the German speaking countries and all Europe, but also in Japan, China, India, APAC, North and South America.





# CAM in practice: Shorter milling times due to intelligent machining strategies

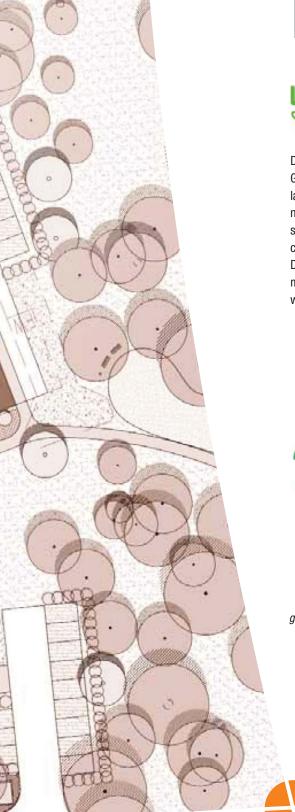
Project: Milled instead of cast impellers in turbo motors

Customer: German automotive manufacturer

Time is money – this rule is particularly applicable for precision machine tools with purchase prices in the six or even seven digit range. The CAM Software *hyper*MILL, developed by the M+M group, reduces milling times by up to 90% through intelligent machining strategies, pushing return on investment for these expensive machine tools to completely new dimensions.

The turbine wheels ('Impellers') for turbo or compressor motors for example can now be milled in a few minutes and thus replace in new generations of motors the cast parts used so far. This not only results in significantly higher fracture strength, but also allows for a much better optimization of consumption and emissions, as the turbine blade design no longer has to take into consideration that the mold kernel has to be turned out after casting the impeller.







DATAflor has a strong position in the German-speaking gardening and landscaping market. The proffered solutions not only contain a graphical planning section but also tools for complete financial calculation and billing of such projects. DATAflor was founded in 1982 and maintains evolved customer relationships which are carefully nurtured.

DATAflor software specializes on the organic forms, the special structures and the core competencies of landscape architects' offices as well as gardening and landscaping enterprises. Any functionality is focussed on the plants and the landscaping.

Recently DATAflor software has been made additionally available for the earthworks and civil engineering market.



A small selection of the DATAflor customer base, which altogether consists of several thousand companies.

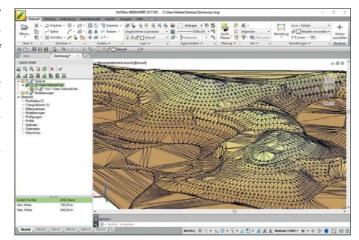








The 'digital terrain model'
enables comfortable three
dimensional design of
garden and park landscapes.
The software e.g. calculates
excavation and filling
material volumes for the
designed landscape,
supporting the designer's
cost calculation.





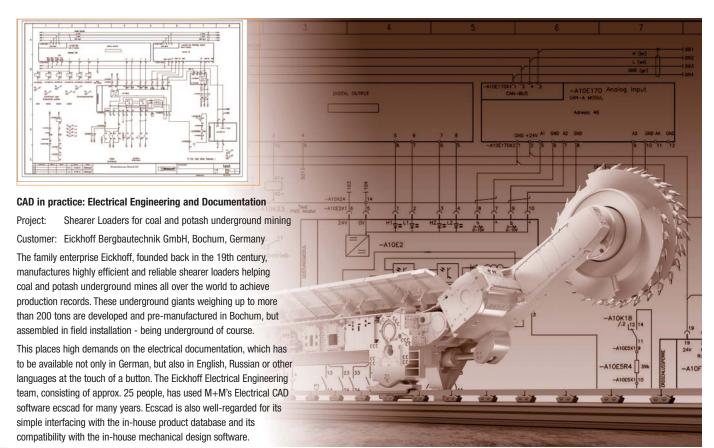


From the beginning of 2014, M+M has licensed back the Electrical Engineering software ecscad, which had been sold to Autodesk 5 years before, re-entering development of the product within the subsidiary MuM Mechatronik GmbH.

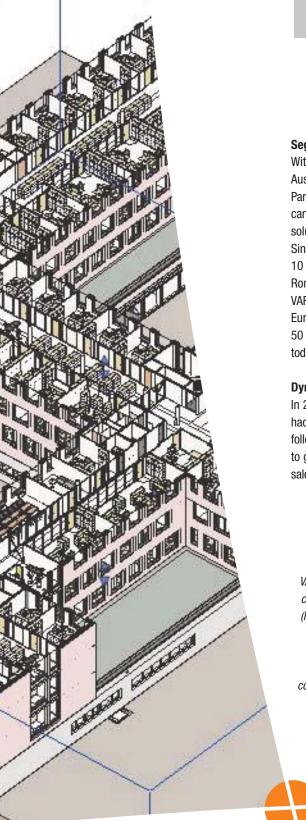
ecscad allows for quick and exact digital design of electrical engineering plans with hundreds or even thousands of individual pages. Specific electrical functions and extensive symbol libraries increase productivity, reduce errors and supply precise production information.



Many of the more than thousand ecscad customers are from the Mechanical and Electrical industry. On the Website mum.de many fascinating references can be found.







### **Segment VAR Business**

With approx. 40 locations in Germany, Austria and Switzerland, Autodesk Platinum Partner M+M provides full area coverage and can serve their customers interdisciplinary solutions with the highest quality.

Since the beginning of 2012, nearly 10 locations in Italy, France, UK, Poland and Romania were added by the transition to VAR (Value Added Reseller) business in Europe. The total M+M VAR segment with 50 locations, employing approx. 450 people today is the largest European Autodesk VAR.

### Dynamic growth

In 2009, more than EUR 35 mln sales had been achieved from scratch. In the following seven years the segment continued to grow very dynamically, more than tripling sales to nearly EUR 121 mln in 2016.

# Distribution sale financed VAR transition in Europe

More than half of the EUR 28 mln total Distribution sale amount closed in October 2011 was used to finance the setup process of the European VAR business. Therefore EUR 9/4/3 mln have been booked to other operating income in the years 2012/13/14. Since 2015 the VAR segment is back to a purely operating profit generation.

#### Steadily growing proprietary business

The gross margin in the VAR business is made up from proprietary M+M business (e.g. customizing, own software, training, hotline) and from reselling Autodesk software. The proprietary M+M contribution to segment gross margin, which had been 49% in 2015, climbed to around 55% in 2016 and is expected to settle around 60% from 2017.

The M+M
VAR segment
customer list
(here a small
selection)
includes all
sectors and
company size
categories
across
Europe





The strong growth in proprietary business is based on highly increasing demand for training in the Industry and - even more - Construction sector, where M+M created a training series called BIMready to make all stakeholders in construction projects - from draftsperson to project manager - familiar with the unprecedented new BIM project development.



With about 14,000 invoiced participant days per year, the training business contributes roughly one third to service gross margin.

The second growth driver is customer specific projects, in which standard software modules are connected to individually tailor-made project solutions, adding functionality where necessary.

In order to avoid re-inventing the wheel in each project, M+M has developed a growing library of application software and content to adopt the Autodesk product portfolio, which is developed for global use, to the specific requirements in Germany, Austria, Switzerland and other European countries, e.g.:

Data management for Industry 4.0



Solution for Architecture/Construction/BIM



· Solution for plant engineering/construction



Solution for GIS/Infrastructure



Variant construction/configurator software



- · Facility management system G-Info
- Extensive M+M symbol libraries for many sectors

M+M's customer specific projects can range from a few man-days to several man-years. Large projects are usually cut into several smaller project segments.

With far over 100 man-years invoiced service per year, project development is contributing about two third to service gross margin in the VAR Business.

#### CAD in practice: BIM - Building Information Management

Project: New headquarter building for AOK West in Dortmund

Customer: Nattler Architekten GmbH, Essen, Germany

All disciplines of a building project working together in three dimensions, collaborating, and sharing information via a common database - that's BIM. Attributing time and cost dimensions to 3D models, known as 5D BIM, is a method that Nattler Architekten have pioneered over their 10 year experience working with BIM and is a method that is only now becoming more broadly established in the construction industry.

In BIM projects, like the 20,000 sqm AOK headquarters building with geothermic air conditioning, there is a consistent digital building model for every design and construction phase, enabling cost calculation and control at any time. In addition, all the information needed for the future facilities management is available at the time of handover to the owner.

At M+M, we support our BIM customers not only by supplying the global leading Revit technology from Autodesk, but have also developed an extensive library for the particular needs of architecture, building technology and calculation in the German speaking markets, known as the M+M Building Suite. In addition, M+M have developed the 'BIM Ready' training concept to get all participants involved in construction projects familiar with this innovative working method.







# Three M+M competence teams: **Industry, AEC and Infrastructure**

To provide optimal professional consulting quality to customers from different sectors, the M+M VAR organisation has competence teams for Industry, Architecture/Engineering/ Construction (AEC) and Infrastructure.

On the Website mum.de there are dozens of interesting reference stories about customers and projects from these teams.

Three examples are displayed here in short. On the previous page an AEC reference, here one from the Industry team and on the next page one from Infrastructure.



#### CAD in practice: CAD and PDM including ERP integration

Design and manufacturing of modular tower cranes Customer: Wilbert TowerCranes GmbH, Waldlaubersheim, Germany

Since 2003, Wilbert GmbH has been designing and manufacturing top slewing tower cranes, which are known for their versatility and efficiency. All elements are designed in a modular system, allowing the realization of tall, free standing hook heights, or cranes growing along with the building. On construction sites with limited space for assembly and disassembly or for power station construction, where heavy assemblies have to be lifted simultaneously by two cranes, Wilbert is very often the chosen provider.

In order to make optimal use of the modular system, the design department was equipped with a fully integrated 3D CAD and PDM (Product Data Management) solution, integrated with the existing ERP software. This system now enables the designers to access standard and repetitive parts, guaranteeing that all 3D models, drawings and bill of material lists are always up to date. Wilbert's design manager Ralf Heise is more than happy with the new software solution: 'M+M helped us to make our processes more effective and significantly safer.'



#### CAD in practice: Tailor-made Infrastructure Software

Projects: Use of geodata for customer service and hazard response

Customers: Municipalities and public services

The German town of Monheim am Rhein maintains a public database showing the number of potential customers including their spending capacity in the urban area to attract more businesses. They also use a 'hazard compass rose' which allows for the coordination of emergency services and a rapid and precise response in the case of fires or leakages in chemical plants. These and other tailor-made software tools making use of geographical data were developed by Mensch und Maschine on the basis of MuM MapEdit.

Another inquiry tool developed by MuM allows public services to provide documentation for civil engineering construction projects quickly in digital form, enabling on-site use by the civil engineers on their Tablet PCs or Smartphones in order to protect electrical and gas pipes from being 'detected' by the excavator.

By the way: The town of Monheim, one of the most creative municipal M+M customers, has attracted more than 260 new businesses in two years, which turned the public finances from red to black.









#### Group headcount moderately increased

The group employed 759 people on average during fiscal year 2016 (PY: 731 / +3.8%), therof 309 / 41% (PY: 290 / 40%) in the Software segment and 450 / 59% (PY: 441 / 60%) in the VAR segment. Headcount does not include the current 10 trainees, nor part time employees working up to 20 hours per week, nor freelancers.

#### **Employees are co-entrepreneurs**

Traditionally, there is a very high focus on good corporate culture at M+M. During the 33 years since the foundation of the company in 1984, the employees were always seen as 'Co-Entrepreneurs' and fully integrated in the decision making process. Whenever acquiring companies in and outside Germany in the course of the intensive expansion since IPO in 1997, M+M always cared for and respected the specific culture of the companies acquired and encouraged them to adopt the M+M corporate culture very gently.

The decision making structures in the M+M group are as decentralised as possible.

The individual entities have a high degree of autonomy in order to be able to optimally meet the customers' requirements and to achieve the best possible results in the individual markets.

#### **Experienced management team**

This corporate culture generates a high degree of continuity. Staff turnover in the M+M group is very low, which even during the hype phases of the IT industry prevented a drain of qualified specialists from which other similar companies in IT suffered. As a result, M+M has an experienced management team down to the second and third management level, with team members mostly looking back on an employment period of more than 15 years.

#### Trading under 'European SE'

In 2006, Mensch und Maschine Software AG was converted to a 'Societas Europaea' SE. In parallel, a pure holding structure was realized, with the parent company Mensch und Maschine Software SE acting as a finance holding.

Central management and service functions for the group are executed by the subsidiary Mensch und Maschine Management AG, while all operating business is performed by German and international subsidiaries.



The step to the SE was combined with a streamlining of the management structure to a 'monistic' board system. The founder and main shareholder Adi Drotleff serves as chairman to the Administrative Board ('Verwaltungsrat'), together with two external members, Thomas Becker (Deputy Chairman) and Heike Lies.

The Administrative Board combines the functions of the Advisory Board of an AG with those of an administrative body ('Organ').

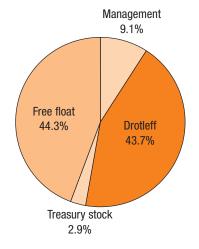
The Board of Managing Directors ('Geschäftsführende Direktoren'), equalling the 'Vorstand' of a German AG without being a legal body ('Organ'), consists of Adi Drotleff (CEO), Christoph Aschenbrenner (COO) and Markus Pech (CFO).

#### **Public and private company**

Though M+M shares have been listed on the stock market for 20 years, a large portion of the shares are still in the hands of the management. Adi Drotleff, the founder, CEO and Chairman of the Board, held nearly 7.3 Million shares or 43.7% of the approx. 16.683 Million shares outstanding on Dec 31, 2016. The founders and Managing Directors of the VAR companies, which were integrated with the M+M group through share swaps in the course of the 'Market Offensive', together are holding more than 1.5 Million M+M shares (approx. 9.1%), which formally belong to free float, as nobody holds a package of 3% or more.

A package of approx. 476,000 shares (~2.9%) was held by MuM SE in treasury stock at Dec 31, 2016. It was bought through the stock repurchase program started by the Administrative Board on Oct 9, 2008. By Dec 31, 2016, nearly 1.5 Million shares have been repurchased, of which approx. one Million shares were re-issued in the course of VAR business acquisitions (and to a small extent for stock option plans).

'Pure' free float at Dec 31, 2016, contained nearly 7.4 Million shares or 44.3%. A certain portion thereof was held in smaller packages by other members of the management. M+M thus can be seen as a public and a private company in one. Including the 9.1% mentioned above, the formal free float would be 53.4%.



#### Listed in scale and m:access

Since March 31, 2010, the M+M share has been listed in the m:access trading segment of Munich stock exchange, since Jan 2, 2012, additionally in the Entry Standard segment of Frankfurt Stock exchange, which since March 1, 2017 has been replaced by a listing in the premium SMB segment scale.

Both segments prescribe, for admission, consequential duties above and beyond legal requirements, guaranteeing a high degree of transparency. In M+M's view, they are ideal market segments for achieving a reasonable cost-benefit ratio of a stock exchange listing in relation to the market capitalisation, protecting the legitimate interests in transparency of the shareholders.

Due to the requirements for disclosure and transparency these market segments represent fully operational markets with protective mechanisms that are very close to that of the regulated market and that guarantee the marketability of the shares including the tradability through Xetra.

In addition, M+M is highly overfulfilling the scale and m:access rules by publishing full quarterly reports and German/English IFRS reporting.



# **Risks and Opportunities**

The operations and activities of the M+M group are subject to various risks.

In our risk management system, sources of uncertainty are systematically identified, documented, evaluated and as far as possible controlled.

In all business units there are so called risk owners, responsible for the description, evaluation and control of risks in their fields. All units' risks are documented in a risk inventory together with the initiated counteractions, and the remaining risk is evaluated. The evaluation takes into account the likelihood of occurence and the impact on the group.

The risk inventory with its documentation of counteractions, together with the monitoring of various early indicators, allows control of the development of a risk. The reduced risk impacts and likelihoods of occurence after successful counteractions, are duly monitored and reported to the Managing Directors.

The remaining risks, particularly, are taken into account in business planning.

The accounting is integrated into the risk management, which allows identification and evaluation of risks which are in conflict with the compliance of the group financial statements. At this stage, we cannot see any such risks.

The whole accounting is subject to efficient control mechanisms. These particularly include extensive monthly reporting and liquidity planning, which are controlled in detail. Additionally, there is a regular review concerning specific items.

In addition, the financial transactions are supervised continuously. Within finance and accounting, there is additional protection by the principle of dual control.

Systematic limit controls (e.g. for open sales orders or for capital expenditure invoices) supplement the control mechanisms.



In detail, the following risk categories exist:

#### **Credit risks:**

Bad debt risks are counteracted with customer credit insurance, individual bad debt provisions, and streamlined receivables management.

Also favourable in this respect, is the fact that sales are divided among many individual customers each of which carries less than

#### Warehouse and transport risks:

1% of the total group revenue.

These risks are generally covered by corresponding insurance contracts.

A risk of loss in value during warehousing can be considered virtually non-existent since the suppliers' software product contracts always include a price, update and stock rotation clause.

#### Sales and market risks:

As with every other supplier of standard software, M+M is subject to software market and product cycles, especially those of the CAD/CAM market. Such risks are generally counteracted, as far as possible, by the vertical and regional division of the M+M Group and by the spread across several product lines, but risk may not always be fully compensated by these actions.

#### Personnel risks:

As an enterprise in the software industry, M+M is, in principle, dependent on individuals with special skills.
M+M's distinctive corporate culture, so far, has been instrumental in keeping employee turnover exceptionally low.
The risk of dependence upon key top management people has been counteracted by appointing several Managing Directors and by strengthening the secondary management level.

#### Supplier risks:

Concentration on the main supplier Autodesk in the VAR segment represents a certain risk through dependency on this supplier's product development, market competence and operational policy.

#### **Losses at subsidiaries and shareholdings:**

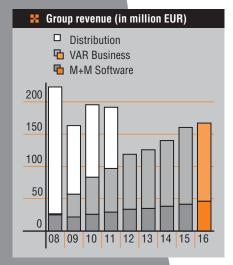
In all shareholding or subsidiary relationships, it is recognised that there is a risk that, contrary to positive expectations, a negative development may occur possibly proceeding to total loss. This would not only cause an appropriate impairment of goodwill or investment value but also lead to a corresponding writedown of deferred tax assets (if capitalized) in case of fully consolidated subsidiaries with loss carryovers.

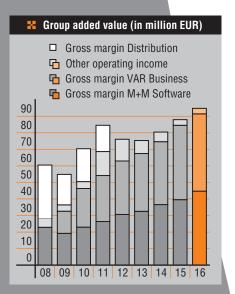
#### Financing and liquidity risk:

As in any business model not exclusively financed by equity, there is a dependency risk for the debt financed part due to the refinancing capabilities of the financial market. This risk is counteracted by distribution of credit lines at several banks inside and outside Germany. It cannot be excluded, however, that the refinancing interest rate payable by M+M may develop negatively or the refinancing by debt may fail in parts or in total. In this respect, internal as well as external influences play a role. Internal influences are mainly the earnings and financial status impacting the M+M market rating, as well as the management's ability in handling relationships with existing and potential creditors. External influences are for example the general interest rate level on the market, the credit policy of banks and other creditors, as well as the legal framework conditions.

Opportunities result from the successful execution of our general strategic concept. These are detailed in the 'Outlook' chapter.







# Course of business 2016 and situation of the group

Strong organic growth of proprietary software and services, mainly in the CAM, BIM and PDM areas, and strict cost discipline helped M+M hit new gross margin and operating profit records and achieve stronger than expected operating cash flows in 2016.

#### With just 4.2% sales growth ...

Sales grew moderately to EUR 167.07 mln (PY: 160.38 / +4.2%). Software contributed solid EUR 46.24 mln (PY: 41.44 / +12%), while the VAR segment at EUR 120.83 mln (PY: 118.94 / +1.6%) just slightly exceeded the previous year's sales.

# ... gross margin increased by 8.2% to a new record level

Gross margin increased at double speed to the new record amount of EUR 91.43 mln (PY: 84.52 / +8.2%), with Software segment contributing EUR 44.73 mln (PY: 39.58 / +13%) and EUR 46.70 mln (PY: 44.94 / +3.9%) from VAR segment, thereof EUR 25.73 mln (PY: 22.10 / +16.4%) from proprietary M+M business.

All in all, gross margin from proprietary software and services grew by 14.2% to EUR 70.46 mln (PY: 61.68), while due to the current transition from license sale to a rental model the gross margin from resale of Autodesk software fell to EUR 20.97 mln (PY: 22.84 / -8.2%).

## Gross yield heading to 60 percent

The increased volume of proprietary gross margin relative to reselling gross margin is also visible in the gross yield rise to 54.7% (PY: 52.7%). The final quarter's gross yield even scratched the 60% level for the first time in the company history.

Total added value, defined as gross margin plus EUR 3.44 mln (PY: 3.41) other operating income, amounted to EUR 94.88 mln (PY: 87.93 / +7.9%).

#### Again only moderate cost development

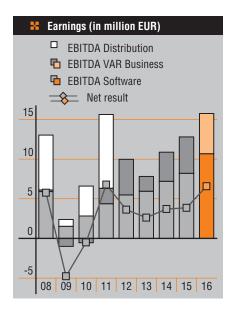
Personnel expenses rose to EUR 58.83 mln (PY: 55.40 / +6.2%), with a stronger increase to EUR 24.42 mln (PY: 22.43 / +8.9%) in the very dynamic Software segment compared to EUR 34.42 mln (PY: 32.97 / +4.4%) in the VAR segment. Similarly, other operating expenses was EUR 10.50 mln (PY: 9.83 / +6.8%) for Software, EUR 9.78 mln (PY: 9.88 / -1.0%) in the VAR segment and EUR 20.29 mln (PY: 19.71 / 19.71 / 19.71 / 19.71 mln (PY: 19.71

Total group operating expenses increased to EUR 79.12 mln (PY: 75.11 / +5.3%).



#### Operating profit EBITDA +23%

Due to the moderate cost increase, operating profit EBITDA before depreciation, amortization, interest and taxes grew disproportionately to new record EUR 15.76 mln (PY: 12.81 / +23%), with EUR 10.66 mln (PY: 8.21 / +30%) coming from Software and EUR 5.09 mln (PY: 4.60 / +11%) from VAR Business.



# Quarterly sales rollercoaster, but normal seasonality for gross margin and EBITDA

Quarterly sales seasonality was significantly impacted by a pull effect in Q1, when in advance of the Autodesk transition to rental there was high demand for software licenses and multi-year maintenance contracts in the VAR Business. Gross margin and EBITDA though showed the pattern typical for M+M, with strong starting and ending quarters and slightly slower mid-year business.

This underlines the steadily growing weight of the high margin proprietary business compared to trading revenue.

### Table of quarterly sales:

Q1: EUR 50.37 mln (PY: 42.79 / +18%) Q2: EUR 37.45 mln (PY: 38.62 / -3.0%) Q3: EUR 39.76 mln (PY: 37.87 / +5.0%) Q4: EUR 39.48 mln (PY: 41.08 / -3.9%)



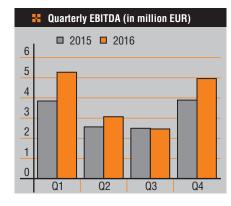
#### Table of quarterly gross margin:

Q1: EUR 24.60 mln (PY: 21.92 / +12%)
Q2: EUR 22.01 mln (PY: 20.37 / +8.1%)
Q3: EUR 21.22 mln (PY: 19.54 / +8.6%)
Q4: EUR 23.60 mln (PY: 22.69 / +4.0%)



#### Table of quarterly EBITDA:

Q1: EUR 5.27 mln (PY: 3.85 / +37%) Q2: EUR 3.06 mln (PY: 2.57 / +19%) Q3: EUR 2.46 mln (PY: 2.50 / -1.6%) Q4: EUR 4.96 mln (PY: 3.89 / +27%)



#### **Amortisation PPA dropped significantly**

Depreciation of fixed assets increased to EUR 2.50 mln (PY: 2.32 / +7.9%), while amortisation on purchase price allocation (PPA) dropped significantly to EUR 0.77 mln (PY: 2.02 / -62%), because the seven year amortization from the 2009 market offensive acquisitions has lapsed.

#### EBIT increased +47% to new record

Operating profit EBIT before interest and taxes therefore increased much stronger than EBITDA to the record amount EUR 12.49 mln (PY: 8.47 / +47%), with EUR 9.42 mln (PY: 7.14 / +32%) contribution from Software and EUR 3.07 mln (PY: 1.33 / +130%) from the VAR Business. The higher percentage growth in the VAR Business was leveraged by the reduction of amortisation.

#### Operating margins clearly higher

EBITDA yield increased to 9.4% (PY: 8.0%) in the group, with a very positive lap to 23.1% (PY: 19.8%) in the Software segment and 4.2% (PY: 3.9%) in the VAR Business. EBIT yield was growing even stronger, to 20.4% (PY: 17.2%) for Software, to 2.5% (PY: 1.1%) in the VAR Business and to 7.5% (PY: 5.3%) in the group.

#### Financial cost with negative currency effect

Financial cost increased to EUR -1.37 mln (PY: -0.95 / +45%).

Adjusted by EUR -0.14 mln (PY: +0.27) currency effects the real financial expenses were on the same level as the previous year.

### Pretax profit nearly 50% higher

Pretax profit amounted to EUR 11.12 mln (PY: 7.53 / +48%), also marking a new company record.







### Tax rate coming down a bit

Income tax rate sank to 36.8% (PY: 43.3%), resulting in a dampened increase of the tax charge to EUR -4.09 mln (PY: -3.26), thereof EUR -3.13 mln (PY: -2.99) real tax charge and EUR -0.96 (PY: -0.26) from deferred taxes.

#### Profit leap in net result

After tax and minority shares amounting to EUR 0.43 mln (PY: 0.40), net profit jumped to EUR 6.59 mln (PY: 3.87 / +70%) or 40 Cents (PY: 24) per share. Thus net result is already slightly relieved from the temporary non cash charges PPA amortisation and deferred taxes still amounting to EUR 1.60 mln (PY: 2.28) or 10 Cents per share (PY: 14).

#### Operating cash flows on high level

Operating cash flows amounted to EUR 14.64 mln (PY: 14.73) or 90 Cents per share (PY: 91), more than twice net profit. Adjusted by a EUR 3 mln non-recurring amount, previous year's strong cash flows have been exceeded by 25%.

#### Dividend proposal 35 Cents (+40%)

Management will propose to the annual shareholders' meeting on May 10, 2017 to pay 35 Cents (PY: 25) dividend per share. The maximum total payout is EUR 4.14 mln, the exact amount depends on the then actual number of shares in treasury stock.

#### Investing activities

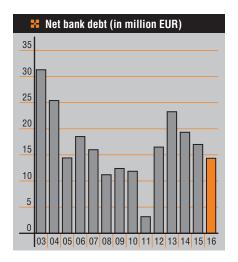
As in the M+M business model the main future investment is in the area of software development, the expenses for which are mostly not capitalized, there is only relatively small capital expenditure necessary to keep the fixed assets on an actual status.

In 2016, EUR 3.41 mln (PY: 5.01) was invested, mainly in IT infrastructure and software.

#### Net bank debt generating leverage effect

M+M had reduced net bank debt by more than EUR 30 Million since its all-time-high in 2002 in the ten years till 2011. In the course of the business model transition and the resulting exchange from accounts receivable to bank debt it rose back to EUR 14.27 mln as of Dec 31, 2016 (PY: 16.95).

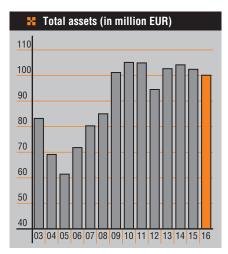
This amount does not include bank loans for financing properties secured by mortgages, amounting to EUR 5.94 mln (PY: 6.90).



M+M uses a mixed equity / credit financing model, profiting from the leverage effect of the favourable credit interest rate level, in order to optimise the earnings per share.

#### **Balance structure further consolidated**

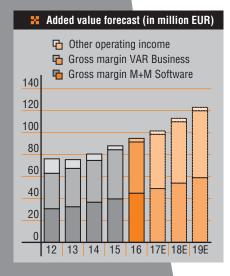
Total assets were further consolidated to EUR 100.52 mln (PY: 102.52 / -2%), in spite of the 8.2% higher gross margin.

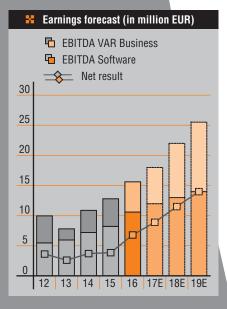


#### Shareholders' equity increased

Shareholders' equity as of Dec 31, 2016 increased to EUR 40.57 mln (PY: 39.62 / +2%), with equity ratio climbing to 40.4% (PY: 38.6%).



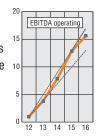




#### **Review and Outlook**

During the five years since the first fiscal year 2012 of the actual business model, gross margin has gained EUR 28.4 mln or 45%, resulting in a purely organic 9.8% p.a. growth, within a bandwidth from 7.1% (2013) to 13% (2015). Hence M+M has delivered quite well on the promise of 10% organic top line growth per year.

Similarly EBITDA on a purely operating base, without the contributions from the Distribution sale booked 2012 to 2014, was increased by total EUR 14.8 mln oder EUR 3.7 mln per year



from 2012 to 2016. Here the bandwidth was between EUR 2.8 mln (2013) and EUR 4.9 mln (2015). The M+M target to gain EUR 3-4 mln EBITDA per year was even slightly exceeded.

The relation between EBITDA and gross margin gain over these four years was approx. 52 percent, meaning that each Euro gross margin surplus created an average EBITDA surplus of 52 Cents. This shows that M+M's cost control, focused on profitable growth, is working. It goes without saying that we will keep using this method in the future.

#### 2017: Transition to rental still retarding

Due to the retarding effect of Autodesk's transition to rental by the end of July, the year 2017 is expected to start slightly slower and like 2016 to come in rather at the lower end of the long-standing growth bandwidth. We target 2017 gross margin growing by 7-8% to EUR 98-99 mln, EBITDA at EUR 17.5 to 18.5 mln (+11% to +17%) and net profit at EUR 8.5 to 9.3 mln (+29% to +41%) or 52-57 Cents per share.



#### 2018: Higher growth estimated

As the rental transition is expected to have then fully delivered its positive impact, we target for 2018 a strong growth rebound in the VAR Business. Group gross margin is estimated to grow by 11-12% to approx. EUR 110 mln, EBITDA to add approx. EUR 4 mln to approx. EUR 22 mln and net profit to grow to around EUR 11.5 mln or 70 Cents/share.

#### From 2019: EPS +13-20 Cents targeted

From 2019 onwards an annual EUR 3-4 mln EBITDA increase is targeted to correspond with an annual EUR 2-3 mln / 13-20 Cents per share net profit improvement, so by 2020 net profit should reach one Euro per share.

#### Annual dividend increase planned

Assuming we achieve these targets we plan to raise the dividend for the year 2017 to 45-50 Cents, for 2018 to approx. 60 Cents, and then annually by approx. 10-15 Cents.

#### All estimates subject to error

All forward looking statements and targets mentioned herein are subject to market conditions occuring in line with estimations in the planning models set up by the management. Therefore no guarantee can be undertaken for meeting the estimates.

#### **Target achievement 2016**

The 'above EUR 90 mln' gross margin target from the previous year's annual report was exceeded. The 'approx. EUR 16 mln' EBITDA target as well as the 'approx. EUR 8 mln or 50 Cents per share' net profit target have not been entirely achieved.

#### Events after the balance sheet date

There were no material events after the balance sheet date.

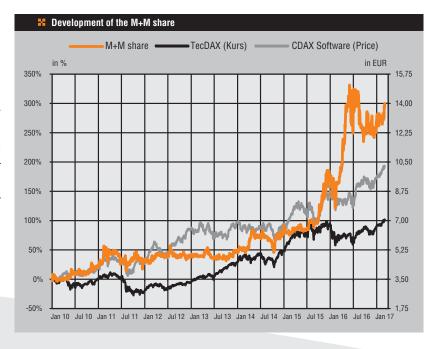
#### **Expression of thanks**

We would like to take the opportunity to thank all employees for their engaged work during the past fiscal year, which helped M+M to achieve new profit records.

In addition, we would like to express our thanks to our customers, suppliers and shareholders for their continued loyalty to M+M. We will do our very best to keep deserving this loyalty in the future.

Wessling, March 2017 Mensch und Maschine Software SE The Managing Directors

The M+M share rose significantly recently, 2015/16 a total 99% share price increase was achieved. In addition, total dividends amounting to 115 Cents have been paid out since 2010, so the total value for the shareholder has roughly quadrupled in 7 years. The share price performance was clearly better than that of the TecDAX over the entire period, and the intermediate underperformance to the CDAX Software has now turned into a solid lead.





# **Statement of income**

₹ Statement of income						
Amounts in KEUR	Note*	2016		Δ%	2015	
Revenues		167,069	100%	+4.2%	160,377	100%
Cost of materials	1	-75,637	-45.3%	-0.3%	-75,861	-47.3%
Gross margin		91,432	54.7%	+8.2%	84,516	52.7%
Personnel expenses	2	-58,831	-35.2%	+6.2%	-55,401	-34.5%
Other operating expenses	3	-20,286	-12.1%	+2.9%	-19,711	-12.3%
Other operating income	5	3,444	2.1%	+1.1%	3,406	2.1%
Operating result EBITDA		15,759	9.4%	+23%	12,810	8.0%
Depreciation	4	-2,501	-1.5%	+7.9%	-2,317	-1.4%
Amortisation	4	-770	-0.5%	-62%	-2,019	-1.3%
Operating result EBIT		12,488	7.5%	+47%	8,474	5.3%
Financial result	6	-1,372	-0.8%	+45%	-948	-0.6%
Result before taxes		11,116	6.7%	+48%	7,526	4.7%
Taxes on income	7	-4,093	-2.4%	+26%	-3,257	-2.0%
Net result after taxes		7,023	4.2%	+65%	4,269	2.7%
therof attributable to M+M shareholders		6,589	3.9%	+70%	3,866	2.4%
therof attributable to minority shareholders		434	0.3%	+7.7%	403	0.3%
Net income per share in EUR (basic)	8	0.4041		+69%	0.2397	
Net income per share in EUR (diluted)	ð	0.4041		+69%	0.2397	
Weighted average shares outstanding in million (basic)	8	16,306		+1.1%	16,127	
Weighted average shares outstanding in million (diluted)	0	16,306		+1.1%	16,129	

<sup>\*</sup> see notes on pages 47 bis 50

Consolidated statement of comprehensive income		
Amounts in KEUR	2016	2015
Ner result after taxes	7,023	4,269
therof attributable to M+M shareholders	6,589	3,866
therof attributable to minority shareholders	434	403
Currency conversion difference	-310	152
Other comprehensive income that may be reclassified subsequently to profit or loss	-310	152
Actuarial gains / Losses on pension obligations	-450	-232
Deferred taxes therof	135	69
Other comprehensive income that will not be reclassified		
subsequently to profit or loss	-315	-163
Total other result	-625	-11
Total comprehensive income	6,398	4,258
therof attributable to M+M shareholders	5,964	3,855
therof attributable to minority shareholders	434	403



# **Balance sheet**

Amounts in KEUR	Note*	Dec 31,	2016	∆%	Dec 31,	2015
Cash and cash equivalents		6,351		-34%	9,579	
Trade accounts receivable	9	23,018		+2%	22,613	
nventories	10	4,571		+42%	3,219	
Prepaid expenses and other current assets	11	4,611		-3%	4,750	
Total current assets		38,551	38.4%	-4%	40,161	39.
Property, plant and equipment		2,615		+12%	2,326	
Real estate		10,610		-2%	10,834	
ntangible assets		9,640		+2%	9,455	
Goodwill	12	33,286		0%	33,286	
Other investments	13	939		-11%	1,050	
Deferred taxes	7	4,881		-10%	5,406	
Total non current assets		61,971	61.6%	-1%	62,357	60.
Total assets		100,522	100%	-2%	102,518	10
Short term debt and current portion of long term debt	14	2,072		+91%	1,085	
Mortgage-secured real estate financing short term		932		-6%	996	
rade accounts payable		12,828		+49%	8,618	
Accrued expenses	15	6,528		+9%	5,994	
Deferred revenues		1,257		+18%	1,067	
ncome tax payable		1,103		-15%	1,305	
Other current liabilities	16	5,809		+2%	5,692	
Total current liabilities		30,529	30.4%	+23%	24,757	24
ong term debt, less current portion	17	18,551		-27%	25,448	
Mortgage-secured real estate financing long term	17	5,010		-15%	5,900	
Shareholders' loan	18	2,074		-43%	3,610	
Deferred taxes	7	1,546		+24%	1,242	
Pension accruals	19	1,902		+35%	1,411	
Other accruals	15	337		-36%	527	
otal non current liabilities		29,420	29.3%	-23%	38,138	37
Share capital	20	16,683		+1%	16,572	
Capital reserve	21	22,810		+7%	21,390	
Other reserves		221		0%	221	
Treasury stock	22	-3,879		+160%	-1,490	
Retained earnings / accumulated deficit		4,630		+119%	2,112	
Other comprehensive income / loss		-1,504		+25%	-1,203	
Equity attributable to non-controlling (minority) interest		1,297		-6%	1,382	
Currency conversion		315		-51%	639	
Total shareholders' equity		40,573	40.4%	+2%	39,623	38

<sup>\*</sup> see notes on pages 48/49, 51 to 58



<b>X</b> Statement of cash flows		
Amounts in KEUR	2016	2015
Net result	7,023	4,269
Interest result	709	934
Depreciation and amortization	3,271	4,336
Other non cash income / expenses	394	309
Increase/decrease in provisions and accruals	835	471
Change in net working capital	2,413	4,411
Net cash provided by (used in) operating activities	14,645	14,730
Purchase of subsidiaries, net of cash	0	-1,567
Purchase of real estate	-7	-107
Purchase of other fixed assets	-3,515	-3,391
Sale of other fixed assets	112	55
Net cash provided by (used in) investing activities	-3,410	-5,010
Proceeds from issuance of share capital	1,531	2,223
Interest proceeds/payments	-615	-857
Purchase/disposal of treasury stock	-2,389	-680
Dividend payment to M+M shareholders	-4,071	-3,181
Dividend payment to minority shareholders	-517	-677
Proceeds from short or long term borrowings	-8,400	-3,443
Net cash provided by (used in) financing activities	-14,461	-6,615
Net effect of currency translation in cash and cash equivalents	-1	12
Net increase / decrease in cash and cash equivalents	-3,228	3,117
Cash and cash equivalents at beginning of period	9,579	6,462
Cash and cash equivalents at end of period	6,351	9,579

see notes on page 58



<b>X</b> Development of shareholders'	equity									
Amounts in KEUR	Subscribed Capital	Capital- Reserve	Other Reserves	Profit/- Loss	Other comprehensive income/loss	Own shares	Currency conversion	attributable to M+M SE shareholders	Minority interest	Total equity
As of Jan 01, 2015	16,186	20,376	221	1,426	-653	-810	100	36,846	2,389	39,235
Capital increase	386	1,837						2,223		2,223
Purchase of own shares						-680		-680		-680
Dividend				-3,181				-3,181	-677	-3,858
Net result				3,867				3,867	403	4,270
Minority interest change		-823						-823	-733	-1,556
Other comprehensive income from pension assessment					-163			-163		-163
Currency conversion					-387		539	152		152
As of Dec, 2015	16,572	21,390	221	2,112	-1,203	-1,490	639	38,241	1,382	39,623
Capital increase	111	1,420						1,531		1,531
Currency conversion						-2,389		-2,389		-2,389
Dividend				-4,071				-4,071	-517	-4,588
Net result				6,589				6,589	432	7,021
Other comprehensive income from pension assessment					-315			-315		-315
Currency conversion					14		-324	-310		-310
As of Dec 31, 2016	16,683	22,810	221	4,630	-1,504	-3,879	315	39,276	1,297	40,573



# **Notes**

#### Segment reporting

According to IFRS 8, reportable operating segments are identified based on the 'management approach'. This approach stipulates external segment reporting based on the Group's internal organizational and management structure and on internal financial reporting to the chief operating decision maker.

The measurement principles for the segment reporting structure are based on the IFRS principles adopted in the consolidated financial statements. M+M evaluates the segments' performance based on their profit/loss from operations (EBIT), among other factors. Revenue generated and goods and services exchanged between segments are calculated on the basis of market prices.

Segment assets and liabilities include all assets and liabilities that are attributable to operations and whose positive or negative results determine profit/loss from operations. Segment assets include, in particular, intangible assets; property, plant and equipment; trade and other receivables; and inventories. Segment liabilities include, in particular, trade and other payables, and significant provisions.

Segment investments include additions to intangible assets and property, plant and equipment. Deferred tax assets and liabilities are not included in the segment assets and segment liabilities.

The M+M business model is based on the segments VAR Business and M+M Software. The VAR Business segment covers direct selling of CAD software to end users and associated services. The M+M Software segment contains the own development of CAD/CAM software.

The sum of the operating results (EBIT), determined on the level of the segments, agrees with the operating result in the statement of income. The financial result and the taxes on income are not controlled on segment level. Therefore the representation of reconciliation to the net result after taxes is not shown.

According to the regulations of IFRS 8 the revenues are also differentiated in Germany, the domicile of Mensch und Maschine Software SE, and business in foreign countries.



<b>Segmentation</b>						
Amounts in KEUR	M+N	1-Softw	are	VAF	Busin	ess
	2016	△%	2015	2016	∆%	2015
Total revenue Internal revenue	47,285 -1,045	+11%	42,426 -986	155,144 -34,315	+3.6%	149,824 -30,887
External revenue share in percent	<b>46,240</b> 100% 27.7%	+12%	<b>41,440</b> 100% 25.8%	<b>120,829</b> 100% 72.3%	+1.6%	118,937 100% 74.2%
Cost of materials	-1,505 -3.3%	-19%	-1,861 -4.5%	-74,132 -61.4%	+0.2%	-74,000 -62.2%
Gross margin share in percent	<b>44,735</b> 96.7% 48,9	+13%	<b>39,579</b> 95.5% 46.8%	<b>46,697</b> 38.6% 51.1%	+3.9%	<b>44,937</b> 37.8% 53.2%
Personnel expenses Other operating expenses Other operating income	-24,415 -52.8% -10,501 -22.7% 846 1.8%	+8.9% +6.8% -5.2%	-22,427 -54.1% -9,829 -23.7% 892 2.2%	-34,416 -28.5% -9,785 -8.1% 2,598 2.1%	+4.4% -1.0% +3.3%	-32,974 -27.7% -9,882 -8.3% 2,514 2.1%
Operating result EBITDA share in percent	<b>10,665</b> 23.1% 67.7%	+30%	<b>8,215</b> 19.8% 64.1%	<b>5,094</b> 4.2% 32.3%	+11%	<b>4,595</b> 3.9% 35.9%
Depreciation Amortisation	-1,242 -2.7% 0 0.0%	+16%	-1,075 -2.6% 0 0.0%	-1,259 -1.0% -770 -0.6%	+1.4%	-1,242 -1.0% -2,019 -1.7%
Operating result EBIT	9,423 20.4%	+32%	<b>7,140</b> 17.2%	3,065 2.5%	+130%	<b>1,334</b> 1.1%
Segment assets Fixed assets Investments Liabilities	25,789 15,277 2,125 9,617	-1.9% +0.1% +4.4% -3.7%	26,286 15,260 2,036 9,989	69,480 41,735 1,560 49,674	-1.9% +0.1% -48% -6.1%	70,826 41,691 3,029 52,906

Seographical segmentation							
Amounts in KEUR	20	)16	2015				
	Germany	International	Germany	International			
Total revenue	109,424	93,005	106,247	86,003			
Internal revenue	-34,557	-803	-31,590	-283			
External revenue share in percent	<b>74,867</b>	92,202	74,657	85,720			
	44.8%	55.2%	46.6%	53.4%			
Fixed assets Investments	36,755	20,257	36,716	20,235			
	1,567	2,118	3,115	1,950			



#### **General remarks**

### Basis of the group financial statements

The consolidated financial statements of Mensch und Maschine Software SE, Wessling, Germany have been drawn up in compliance with International Financial Reporting Standards (IFRS) according to the specifications as defined in the currently valid guidelines of the International Accounting Standards Board (IASB). All IFRS and International Accounting Standards (IAS) as well as the interpretations of the International Financial Reporting Interpretations Committee (IFRIC) or the former Standing Interpretations Committee (SIC) which have been in effect at the closing date, and accepted by the EU, have been considered.

In addition to that, the regulations of Article 315a of the German Commercial Code and §160 of the German Stock Corporation Act have been considered. M+M SE is a global enterprise based in Germany. Its registered office is at Argelsrieder Feld 5, 82234 Wessling. Its business activities are concentrated in the fields of CAD and CAM.

The Managing Directors of M+M SE approved the consolidated financial statements on March 3, 2017 for submission to the company's Administrative Board. The Administrative Board approved the consolidated financial statements at its meeting on March 7, 2017 and approved for publication on March 13, 2017.

The consolidated financial statements have been prepared in Euros. Unless otherwise specified, all amounts are stated in thousand Euros (KEUR).

These consolidated financial statements were prepared for the 2016 fiscal year (January 1 to December 31).



#### Changes in accounting policies

The IASB has approved a number of changes to the existing IFRS and adopted several new IFRS, which became effective as of January 1, 2016. M+M is applying the following IFRSs in the reporting period for the first time:

IFRS 10, IFRS 12 and

IAS 28 Investment Entities: Applying the Consolidation Exception

IFRS 11 Accounting for the acquisition of an interest in a joint operation

IAS 1 Disclosure Initiative

IAS 27 Equity Method in Separate Financial Statements

IAS 16 and IAS 41

Agriculture: Bearer Plants

IAS 16 and IAS 38

Principle for the basis of depreciation and amortisation

IAS 19 Employee Benefits
Improvements to IFRSs 2010-2012
Improvements to IFRSs 2012-2014

The application of these changes had no material impact on the M+M consolidated financial statements.

#### **New accounting policies**

The IASB and IFRIC have adopted further standards and interpretations, which were endorsed by the European Union but not yet effective in the 2016 financial year:

IFRS 9 Financial Assets

IFRS 15 Revenue from Contracts with Customers

The following standards and interpretations have not yet been endorsed by the European Union:

IFRS 2 Classification and Measurement of Share-based Payment Transactions

IFRS 4 Accounting for Insurance Contracts

IFRS 10 and IAS 28

Sale or Contribution of Assets between an Investor and its Associate or Joint venture.

IFRS 16 Leases

IAS 7 Notes to the cash flow statement

IAS 12 Recognition of Deferred Tax Assets for Unrealised Losses

IAS 40 Investment Property under construction

IFRIC 22 Foreign currency transactions and advance consideration

Improvements to IFRSs 2014-2016

These Standards and Interpretations have to be applied for annual periods beginning after January 1, 2017. These regulations have not been early adopted by the M+M group. The application of these standards is not expected to have a material impact on the Group's financial statement 2017.



# Valuation methods and accounting policies applied

Consolidated companies and closing date

In addition to the parent company, the consolidated financial statement comprises all directly and indirectly owned domestic and international subsidiaries, at which M+M SE holds directly or indirectly the majority of the voting rights or the control of the economic power, which are

included in accordance with the principles of full consolidation. They are deconsolidated when the parent ceases to have control.

In addition to the parent company, the following companies were fully consolidated in the group financial statements of December 31, 2016:

M+M group consolidated companies			
Mensch und Maschine Management AG, Wessling, Germany	100%	Mensch und Maschine Mechatronik GmbH, Donzdorf, Germany	60%
Mensch und Maschine Germany GmbH, Wessling, Germany	100%	DATAflor Software AG, Göttingen, Germany	67,2%
Mensch und Maschine At Work GmbH, Osnabrück, Germany	80%	OPEN MIND Technologies AG, Wessling, Germany	100%
Mensch und Maschine benCon 3D GmbH, Neu Wulmstorf, Germany	100%	and 100% shareholdings:	
Mensch und Maschine Haberzettl GmbH, Nürnberg, Germany	90%	OPEN MIND Technologies USA Inc., Needham, MA, USA	
Mensch und Maschine Integra GmbH, Limburg, Germany	75,1%	OPEN MIND Technologies PTE Ltd., Singapore	
customX GmbH, Limburg, Germany	58,1%	OPEN MIND Technologies S.r.l., Rho, Italy	
Mensch und Maschine Scholle GmbH, Velbert, Germany	75%	OPEN MIND CAD-CAM Technologies S.r.l., Rho, Italy	
Mensch und Maschine CAD-praxis GmbH, Düren, Germany	100%	OPEN MIND Technologies France S.a.r.l., Saverne Cedex, France	
Mensch und Maschine acadGraph GmbH, München, Germany	82,75%	OPEN MIND Technologies UK Limited, Bicester, UK	
Mensch und Maschine Tedikon GmbH, Weissenhorn, Germany	50,1%	OPEN MIND Technologies Japan Inc., Tokyo, Japan	
Mensch und Maschine Switzerland AG, Winkel (Zürich), Switzerland	100%	OPEN MIND Technologies China Co.Ltd, Shanghai, China	
Mensch und Maschine Austria GmbH, Großwilfersdorf, Austria	100%	OPEN MIND Technologies Taiwan Inc., Chungli City, Taiwan	
Man and Machine Visiograph S.a.r.I., Paris, France	100%	OPEN MIND Technologies Switzerland GmbH, Bassersdorf, Switzerland	
Man and Machine Software s.r.l., Vimercate (Mailand), Itay	100%	OPEN MIND CAD-CAM Technologies India Private Ltd, Bangalore, India	
Man and Machine Software Sp. z o.o., Lodz, Poland	100%	OPEN MIND Technologies Iberia S.L., Valencia, Spain	
Man and Machine Ltd., Thame, UK	100%	OPEN MIND Technologia Brasil LTDA, Sao Paulo, Brazil	
Man and Machine Benelux NV, Ternat (Brüssel), Belgium	100%		
Man and Machine Romania SRL, Bukarest, Romania	100%		
Mensch und Maschine Medienzentrum AG, Wessling, Germany	99,7%		



The balance sheet closing date for the subsidiaries included in the group consolidated financial statement is December 31.

In the financial year 2016, the subsidiary Yello! Digital production tools AG was renamed to Mensch und Maschine Medienzentrum AG. The financial statements of all group companies were drawn up on the basis of common accounting principles. As far as there is an obligation to examine, they are audited by independent auditors and endorsed by an unqualified audit opinion.

The following domestic subsidiaries made use in 2016 of certain exemptions granted under Sections 264, paragraph 3 of the German Commercial Code regarding the release from the publication of financial statements:

- Mensch und Maschine Management AG, Wessling, Germany
- OPEN MIND Technologies AG, Wessling, Germany

# **Principles of consolidation**

The consolidated financial statements include subsidiaries. Subsidiaries are companies over which M+M is currently able to exercise power by virtue of existing rights. Power means the ability to direct the activities that significantly influence a company's profitability. Control is therefore only deemed to exist if M+M is exposed, or has rights, to variable returns from its involvement with a company and has the ability to use its power over that company to affect the amount of that company's returns. The ability to control another company generally derives from M+M direct or indirect ownership of a majority of the voting rights.

Inclusion of an entity's accounts in the consolidated financial statements begins when the Group is able to exercise control over the entity and ceases when it is no longer able to do so.

Business combinations after January 1, 2010 are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred, measured at acquisition date fair value and the amount of any non-controlling interest in the acquiree. For each business combination, the acquirer measures the non-controlling interest in the acquiree either at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition costs incurred are expensed and included in administrative expenses.

When the Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date. This includes the separation of embedded derivatives in host contracts by the acquiree.

If the business combination is achieved in stages, the acquisition date fair value of the acquirer's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date through profit or loss. Any contingent consideration to be transferred by the acquirer will be recognized at fair value at the acquisition date.

The purchase of shares (participation rate increase) after the initial consolidation is accounted for as an equity transaction.

Subsequent changes to the fair value of the contingent consideration which is deemed to be an asset or liability will be recognized in accordance with IAS 39 either in profit or loss or as a change to other comprehensive income. If the contingent consideration is classified as equity, it should not be remeasured until it is finally settled within equity.



#### **Annual report 2016**

Goodwill is initially measured at cost being the excess of the aggregate of the consideration transferred and the amount recognized for non-controlling interest over the net identifiable assets acquired and liabilities assumed. If this consideration is lower than the fair value of the net assets of the subsidiary acquired, the difference is recognized in profit or loss. After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

Where goodwill forms part of a cash-generating unit and part of the operation within that unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal of the operation.

Goodwill disposed of in this circumstance is measured based on the relative values of the operation disposed of and the portion of the cash-generating unit retained.

For business combinations prior to January 1, 2010 in comparison to the above-mentioned requirements, the following differences applied:

Business combinations were accounted for using the purchase method. Transaction costs directly attributable to the acquisition formed part of the acquisition costs. The non-controlling interest (formerly known as minority interest) was measured at the proportionate share of the acquiree's identifiable net assets.

Business combinations achieved in stages were accounted for as separate steps. Any additional acquired share of interest did not affect previously recognized goodwill.



When the Group acquired a business, embedded derivatives separated from the host contract by the acquiree were not reassessed on acquisition unless the business combination resulted in a change in the terms of the contract that significantly modified the cash flows that otherwise would have been required under the contract.

Contingent consideration was recognized if, and only if, the Group had a present obligation, the economic outflow was more likely than not and a reliable estimate was determinable.

Subsequent adjustments to the contingent consideration were recognized as part of qoodwill.

The differences arising from the consolidation of capital, to the extent that they are assets, are indicated as goodwill under non-current assets.

Non-controlling interests are valued at closing time with their share in shareholders' equity respective earnings of the year of the particular subsidiary. Receivables, reserves, liabilities, accruals and deferrals resulting from intra-group transactions are mutually offset. Differences from the consolidation of debt are treated with effect on earnings. Contingent liabilities were consolidated to the required extent. Interim profits and losses resulting from intra-group supply and service trading were likewise eliminated as were investment returns from companies included in the consolidation. Intra-group sales revenues as well as other intra-group earnings were offset by the appropriate expenditures.

With regard to the consolidation measures affecting results, tax deferrals pursuant to IAS 12 were carried out to the extent that the deviation in tax expenditure would conceivably be balanced in future fiscal years.

# Management judgements in the application of accounting policies

The presentation of the results of operations, financial position or cash flows in the consolidated financial statements is dependent upon and sensitive to the accounting policies, assumptions and estimates. The actual amounts may differ from those estimates. The following critical accounting estimates and related assumptions and uncertainties inherent in accounting policies applied are essential to understand the underlying financial reporting risks and the effects that these accounting estimates, assumptions and uncertainties have on the consolidated financial statements.

Measurement of property, plant and equipment, and intangible assets involves the use of estimates for determining the fair value at the acquisition date, in particular in the case of such assets acquired in a business combination. Furthermore, the expected useful lives of these assets must be estimated. The determination of the fair values of assets and liabilities, as well as of the useful lives of the assets is based on management's judgement.



#### **Annual report 2016**

The determination of impairments of property, plant and equipment as well as intangible assets involves the use of estimates that include, but are not limited to, the cause, timing and amount of the impairment.

Impairment is based on a large number of factors, such as changes in current competitive conditions, expectations of growth, increased cost of capital, changes in the future availability of financing, technological obsolescence, discontinuance of services, current replacement costs, prices paid in comparable transactions and other changes in circumstances that indicate an impairment exists. The recoverable amount and the fair values are typically determined using a discounted cash flow method which incorporates reasonable market participant assumptions. The identification of impairment indicators, as well as the estimation of future cash flows and the determination of fair values for assets require management to make significant judgements concerning the identification and validation of impairment indicators, expected cash flows, applicable discount rates, useful lives and residual values.

If the demand for these products and services does not materialize as expected, this would result in less revenue, less cash flow and potential impairment to write down these investments to their fair values, which could adversely affect future operating results.

The determination of the recoverable amount of a cash-generating unit involves the use of estimates by management. To determine the fair value less costs to sell include discounted cash flow-based methods. Key assumptions on which management has based its determination of fair value less costs to sell include earning development, capital expenditure and market share. These estimates, including the methodologies used, can have a material impact on the fair value and ultimately the amount of any goodwill impairment.



Financial assets include equity investments in companies that are principally engaged in the architecture and construction businesses. As a rule, an investment impairment loss is recorded in accordance with IFRS when an investment's carrying amount exceeds the present value of its estimated future cash flows. The calculation of the present value of estimated future cash flows and the determination of whether impairment is permanent involves judgment and relies heavily on an assessment by management regarding the future development prospects of the investee.

In measuring impairments, quoted market prices are used, if available, or other valuation parameters, based on information available from the investee. To determine whether an impairment is permanent, the Company considers the ability and intent to hold the investment for a reasonable period of time sufficient for a forecasted recovery of fair value up to (or beyond) the carrying amount, including an assessment of factors such as the length of time and magnitude of the excess of carrying value over market value, the forecasted results of the investee, the regional geographic economic environment and state of the industry.

Future adverse changes in market conditions, particularly a downturn in the branch of business or poor operating results of investees, could result in losses or an inability to recover the carrying amount of the investments that may not be reflected in an investment's current carrying amount. This could result in impairment losses, which could adversely affect future operating results.

Management maintains an allowance for doubtful accounts to account for estimated losses resulting from the inability of customers to make required payments. When evaluating the adequacy of an allowance for doubtful accounts, management bases its estimates on the aging of accounts receivable balances and historical write-off experience, customer credit worthiness and changes in customer payment terms.

If the financial condition of customers were to deteriorate, actual write offs might be higher than expected.

Income taxes must be estimated for each of the jurisdictions in which the Group operates, involving a specific calculation of the expected actual income tax exposure for each tax object and an assessment of temporary differences resulting from the different treatment of certain items for IFRS consolidated financial and tax reporting purposes. Any temporary differences will generally result in the recognition of deferred tax assets and liabilities in the consolidated financial statements. Management judgement is required for the calculation of actual and deferred taxes.

Deferred tax assets are recognized to the extent that their utilization is probable. The utilization of deferred tax assets will depend on whether it is possible to generate sufficient taxable income in the respective tax type and jurisdiction, taking into account any legal restrictions on the length of the loss carry-forward period. Various factors are used to assess the probability of the future utilization of deferred tax assets, including past operating results, operational plans, loss carry forward periods, and tax planning strategies.



#### **Annual report 2016**

If actual results differ from these estimates or if these estimates must be adjusted in future periods, the financial position, results of operations and cash flows may be negatively affected. The only tax loss carry forwards capitalized by M+M are those which can presumably be used within the following five years.

In the event that the assessment of future utilization of deferred tax assets changes, the recognized deferred tax assets must be reduced and this reduction be recognized in profit or loss.

Pension obligations for benefits are generally satisfied by plans which are classified and accounted for as defined benefit plans. Pension benefit costs are determined in accordance with actuarial valuation, which rely on assumptions including discount rates, life expectancies and expected return on plan assets. In the event that further changes in assumptions are required with respect to discount rates and expected returns on invested assets, the future amounts of the pension benefit costs may be affected materially.

Within the Group, the cost from the issue of equity instruments to employees is measured at the fair value of the equity instruments on the grant date.

An appropriate measurement method must be determined to estimate the fair value for the issue of equity instruments; this depends on the conditions of issue. It is also necessary to determine suitable data for the selected method, including in particular the expected term of the option, volatility and dividend yield, together with the relevant assumptions.

Provisions for restructuring only cover expenses that arise directly from restructuring measures, are necessary for restructuring and are not related to future business operations. Such expenses include severance payments to employees and rentals for property that is no longer utilized. Restructuring measures may include the sale or termination of business units, site closures, relocations of business activities, changes in management structure or fundamental reorganizations of business units. The respective provisions are established when a detailed restructuring plan has been drawn up, resolved upon by the responsible decisionmaking level of management and communicated to the employees and / or their representatives.



The Management exercises considerable judgment in measuring and recognizing provisions and the exposure to contingent liabilities related to litigation or outstanding claims subject to negotiated settlement, mediation, arbitration or government regulation, as well as other contingent liabilities. Judgment is necessary in assessing the likelihood that a claim will succeed, or a liability will arise, and to quantify the possible range of the final settlement.

Provisions are recorded for liabilities when losses are expected from pending contracts, a loss is considered probable and can be reasonably estimated. Because of the inherent uncertainties in this evaluation process, actual losses may be different from the originally estimated provision. In addition, significant estimates are involved in the determination of provisions related to taxes and litigation risks. These estimates are subject to change as new information becomes available, primarily with the support of internal specialists, if available, or with the support of outside consultants, such as actuaries or legal counsel. Revisions to the estimates of these losses from executory contracts may significantly affect future operating results.

## **Currency conversion**

The annual financial statements of the group's international subsidiaries were converted into Euro in accordance with the principle of functional currency in compliance with IAS 21. This refers to the respective national currency for all companies since these international companies are financially, economically and organizationally independent with respect to their operations. Accordingly, equity was converted at the historical exchange rate, the other balance sheet items were converted at the exchange rate on closing date, and income and expenditures as well as year end results were converted using a mean exchange rate for the year. In compliance with IAS 21, differences arising from currency conversion of both capital consolidation and transfer of the annual earnings to the balance sheet at the mean annual exchange rate were treated as having no effect on earnings and are included within equity. Newly acquired Goodwill is translated as an asset of the economically autonomous foreign entity at the exchange rate in effect on the balance sheet date.

# Structure of statement of income and balance sheet

In keeping with the international practice of consolidated financial statements, the report begins with the statement of income (profit and loss), itemized according to the nature of expense method.

In accordance with IAS 1, the balance sheet is apportioned into current and non-current assets and into current and non-current liabilities. Assets and liabilities are regarded as current if they mature within one year. To improve the clarity in the balance sheet the shareholder loans and mortgage-backed real estate loans are shown separately.

<b>Exchange rates</b>						
	Ave	rage	Year end			
	2016	2015	Dec 31. 2016	Dec 31. 2015		
1 Swiss Franc	0.9173	0.9406	0.9312	0.9240		
1 British Pound	1.2203	1.3808	1.1680	1.3605		
1 Polish Zloty	0.2292	0.2390	0.2267	0.2344		
1 Romania Ron	0.2227	0.2252	0.2203	0.2211		
1 US Dollar	0.9034	0.9194	0.9487	0.9185		
1 Singaporr Dollar	0.6547	0.6527	0.6564	0.6486		
100 Japanese Yen	0.8319	0.7555	0.8104	0.7630		
1 Taiwan Dollar	0.0297	0.0279	0.0293	0.0279		
1 Renminbi Chinese Yuan	0.1360	0.1425	0.1366	0.1416		
1 India Rupie	0.0134	0.0138	0.0140	0.0139		
1 Brazilian Real	0.2593	0.2373	0.2915	0.2319		



# Accounting and valuation methods

#### Cash and cash equivalent

M+M shows credit balances at banks under cash and cash equivalents. Foreign currency credit balances are converted by exchange rate at closing date.

## Property, plant and equipment

Property, plant and equipment is reported at cost of acquisition less regular depreciation. These assets are depreciated over the useful economic life of 3 to 50 years.

#### **Business combinations and goodwill**

Business combinations are accounted for using the purchase method. Goodwill on acquisition is initially measured at cost being the excess of the cost of the business combination over the acquirer's interest in the net fair value of the identifiable assets, liabilities and contingent liabilities. Following initial recognition, goodwill is measured at cost less any accumulated impairment losses.

According to IFRS 3 (business combinations) goodwill is not amortized, instead it is subjected to an impairment test, at least once every year.

In the context of the impairment test, the recoverable amount of the cash generating units is determined by the current value less sales costs or the value in use. The individual subsidiaries of M+M were defined as cash generating units. The current value reflects the best estimation of the amount, for which an independent third party would acquire the cash generating units as of balance-sheet date; Sale costs are taken off. The value in use is determined on the basis of DCF methods. To calculate this, cash flow projections are based on financial budgets approved by the Administrative Board covering a five-year period. This planning is based on experiences from the past as well as on expectations over the future market development.



The discount rate is determined on the basis of market data and considers credit and market risks. For the cash generating units the after-tax basis discount rate amounts between 4.92% and 9.10%.

If this results in the carrying amount of a cashgenerating unit to which goodwill was allocated exceeding the recoverable amount, the allocated goodwill is initially written down by the difference. Impairment losses which must be recognized in addition to this are taken into account by reducing the carrying amount of the other assets of the cash-generating unit on a prorated basis. If the reason for an impairment loss recognized in prior years has ceased to exist, a write-back is performed, whereby the increased carrying amount resulting from the write-back may not exceed the amortized cost. Impairment losses on goodwill are not reversed.

### Other intangible assets

Intangible assets are reported at cost of acquisition less regular depreciation. These assets are depreciated over the useful economic life of 3 to 10 years and are included in the depreciation.

Intangible assets, acquired in the context of a business combination, are capitalized at fair value as at the date of acquisition. Following initial recognition, the cost model is applied to the class of intangible assets. The useful lives of these intangible assets are assessed to be either finite or indefinite. Where amortisation is charged on assets with finite lives, the useful economic life is up to 10 years. The amortization period for an intangible asset with a finite useful life is reviewed regularly. The expense for the amortization is taken to the income statement through the amortizations.

Intangible assets with an indefinite useful life are tested for impairment once a year at the cash-generating unit level.

Intangible assets created within the business are not capitalized and expenditure is charged against profits in the year in which the expenditure is incurred.

Development expenditure on an individual project is capitalized if their future recoverability can reasonably be regarded as assured.

Research costs are expensed as incurred.

## Other investments

Financial assets include shareholdings in other companies. The reported shareholdings are exclusively shareholdings without substantial influence. Consequently, it is not necessary to value them pursuant to IFRS 10 (Accounting for Investment in Associates). Shares in companies that do not fall in the category subsidiaries, joint arrangements and associates are to be valued pursuant to IAS 39 (Financial Instruments). All shareholdings are reported at cost of acquisition the first time they are recorded, corresponding to the fair value of the stated asset. This is the equivalent of cash or cash equivalents. The shareholdings reported within the M+M Group are financial assets availablefor-sale pursuant to IAS 39, as none of the other categories under IAS 39 apply.

As the financial assets do not have a listed market price on an active market and it is therefore impossible to reliably calculate a fair value, the subsequent valuation is also at cost of acquisition, whereby all shareholdings are checked for signs of depreciation (Impairment Test).

In general, the shareholdings are checked for depreciation by means of valuations which are taken as a basis when the shares in shareholdings are transferred. The transactions invoked for the purposes of valuation take place between third parties outside the Group. In addition, DCF methods and industry-specific multipliers are applied for the impairment testing.



#### Inventory

The valuation of the inventory depends on the regulations of IAS 2. This position contains mainly finished goods which are capitalized at cost. If necessary, an inventory valuation adjustment is made due to a reduced usability. All recognizable risks are considered by appropriate adjustments.

## **Financial instruments**

A financial instrument is any contract that leads to a financial asset of one entity and a financial liability or equity instrument of another entity. Financial assets include, in particular, cash and cash equivalents, trade receivables and other originated loans and receivables, held-to-maturity investments, and derivative and non-derivative financial assets held for trading. Financial liabilities generally substantiate claims for repayment in cash or another financial asset. In particular, this includes bonds and other securitized liabilities, trade payables, liabilities to banks and derivative financial liabilities.

Financial instruments are generally recognized as soon as M+M becomes a party to the contractual regulations of the financial instrument. However, in the case of regular way purchase or sale, the settlement date is relevant for the initial recognition and de-recognition. This is the day on which the asset is delivered to or by M+M. In general, financial assets and financial liabilities are offset.

According to IAS 39, financial instruments are categorized as:

- extended loans and receivables
- financial assets at fair value through profit and loss
- available for sale
- held to maturity

Extended loans and receivables are stated at cost less accumulated depreciation and any impairment in value. Impairments, which take the form of allowances, make adequate provision for the expected credit risk; concrete cases of default lead to the write off of the respective receivables.



M+M has not yet made use of the option of designating financial assets upon initial recognition as financial assets at fair value through profit or loss.

Investments classified as available-for-sale, are measured at fair value and accounted in consideration of fluctuations between the trading and the settlement day. The gains and losses arising from fair value measurement are recognized directly in equity.

If the fair value of unquoted equity instruments cannot be measured with sufficient reliability, these instruments are measured at cost (less any impairment losses, if applicable). Investments classified as held-to-maturity, are measured at cost less any impairment in value, and accounted in consideration of fluctuations between the trading and the settlement day.

Financial assets are derecognized when the contractual rights to cash flows from the assets expire or the entity transfers the financial asset. The latter applies when substantially all the risks and rewards of ownership of the asset are transferred, or the entity no longer has control of the asset. The carrying amounts of the financial assets that are not measured at fair value through profit or loss are tested at each reporting date to determine whether there is objective, material evidence of impairment. Any impairment losses caused by the fair value being lower than the carrying amount are recognized in profit or loss.

If, in a subsequent period, the fair value of the financial asset increases and this increase can be related objectively to events occurring after the impairment was recognized, the impairment loss is reversed to income in the appropriate amount. Impairment losses on unquoted equity instruments that are classified as 'available-for-sale' and carried at cost may not be reversed.

Financial liabilities are measured at fair value on initial recognition. For all financial liabilities not subsequently measured at fair value through profit or loss, the transaction costs directly attributable to the acquisition are also recognized.

Trade payables and other non-derivative financial liabilities are generally measured at amortized cost using the effective interest method. The Group has not yet made use of the option to designate financial liabilities upon initial recognition as financial liabilities at fair value through profit or loss.

Derivative financial instruments are not used in the M+M group.

#### Income taxes

Income taxes include current income taxes payable as well as deferred taxes. Tax liabilities mainly comprise liabilities for domestic and foreign income taxes. They include liabilities for the current period as well as for prior periods. The liabilities are measured based on the applicable tax law in the countries where M+M operates and include all facts of which the Company is aware.



Deferred tax assets and liabilities are recognized for temporary differences between the carrying amounts in the consolidated balance sheet and the tax base, as well as for tax loss carry forwards. Deferred tax assets are recognized to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilized. Deferred tax is not recognized if it arises from the initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred tax liabilities are recognized on planned dividend payments by subsidiaries. Where a dividend payment is not planned for the long term, no deferred tax liability is recognized on the difference between the proportionate net assets according to IFRS and the tax base of the investment in the subsidiary.

Currently enacted tax laws and tax laws that have been substantively enacted as of the balance sheet date are used as the basis for measuring deferred taxes.

## **Borrowing costs**

In accordance with IAS 23, borrowing costs are charged to expenditure.

If the construction phase of property, plant or equipment extends over a long period, the interest incurred on borrowed capital up to the date of completion is capitalized as part of the cost of acquisition or construction (Borrowing Costs).

## **Equity costs**

According to IAS 32 the costs for the capital increase are offset with the additional paid in capital.

#### Accruals

Pursuant to IAS 37, accruals are to be reported at the amount resulting from the best estimate of the financial outflow required to meet current obligations as at the balance sheet date. The value stated for other accruals takes into account all identifiable risks based on past experience and where the scope and maturity is uncertain.



#### **Pension accruals**

The pension accruals mainly exist at the parent company and refer to a defined benefit plan for the Managing Directors. The pension commitment contains a retirement pay, a widow's pension as well as a disablement pension. In the case of pension the payments are made monthly in advance. Pursuant to the Projected Unit Credit Method according to IAS 19 the pension accruals are measured at the present value of the defined benefit liability and cover all benefits after termination of employment.

The calculations were based on the following assumptions:

	2016	2015
Discount rate	1.60%	2.40%
Estimated return on plan assets	2.00%	3.00%
Future changes in Remunerations	1.64%-3.00%	1.64%-3.00%

The amount of the pension obligations was determined using actuarial principles using biometric data. The provision is reduced by the amount of the plan assets which consist of pension liability insurances. The service cost is disclosed in staff costs and other comprehensive income.

The actuarial gains and losses arising from two defined benefit plans are recognized in other comprehensive income.

#### Other assets and liabilities

For all identifiable risks of other assets, appropriate allowances are taken.

Liabilities are valued at their repayment value.

#### Foreign currency receivables and liabilities

In the individual financial statements, receivables and liabilities are translated at the rate on the balance sheet date. Profits and losses from the translation of foreign currency receivables and liabilities are reported in the Statement of Income under the financial result. As the income and expenses are not substantial, there are no notes relating to this position.

#### Principles of revenue recognition

In the M+M group, recognition of revenue occurs at that time when the risk passes to the customer. For service revenues the percentage-of-completion method is applied if the prerequisites of IAS 18 in connection with IAS 11 are met. The work in progress is determined on the basis of the already furnished project hours in comparison to the entire project volume.



## Stock option plans

Mensch und Maschine SE offered its Managing Directors and other employees stock options until 2010. Since then, no new stock options have been issued and the outstanding options have been reduced until December 31, 2015 down to a small remainder of 1,914 options.

This remainder has now been used up in the calendar year, so that no options are held as of December 31, 2016.

The options could also be converted by own shares which was used in 2016 with 814 options. The remaining 1,100 options were redeemed by direct bonus payments to the employees, for which KEUR 11 incurred in the personnel expenses.

The weighted average share price at the exercise date of the converted options within the reporting period was EUR 13.60.

As of the balance sheet date a total expense of KEUR 1,692 (PY: 1,692) was recognised by Mensch und Maschine Software SE since 2002 for equity-settled share-based payment transactions. The expense of the current period amounts to KEUR 0 (PY: 0).



## **Related Parties**

M+M's principal, CEO and Chairman of the Board Adi Drotleff and members of his family granted M+M loans amounting to KEUR 1,574 (PY: 3,210) at Dec 31, 2016 and therefore received interest in 2016 of KEUR 56 (PY: 119).

Peter Schuetzenberger, who was M+M's CFO until Feb 29, 2016, granted M+M loans amounting to KEUR 500 (PY: 400) at Dec 31, 2016 and therefore received interest in 2016 of KEUR 10 (PY: 9).

The related party SOFiSTiK AG granted M+M loans amounting to KEUR 1,005 (PY: 1,005) at Dec 31, 2016 and therefore received interest in 2016 of KEUR 20 (PY: 28).

## Notes on the statement of income

## 1. Cost of materials

Amounts in KEUR	2016	2015
Cost of materials from Autodesk products	-59,849	-60,484
Cost of materials from other vendors	-9,723	-9,662
Cost of outstanding services	-2,622	-2,057
Licenses in other production costs for proprietary Software	-3,443	-3,658
	-75.637	-75.861

## 2. Personnel expenses

This position contains mainly wages and salaries, social security, other pension costs and welfare.

## 3. Other operating expenses

Amounts in KEUR	2016	2015
Insurance	-455	-590
Costs of building	-2,977	-3,054
Travel costs	-2,788	-2,419
Car expenses	-3,656	-3,624
Advertising and promotion	-3,591	-3,180
Communication	-907	-846
IT costs	-1,052	-609
Consulting and Laywer fees	-1,195	-1,291
Rest of other operating expenses	-3,665	-4,098
	-20,286	-19,711

The item 'Rest of other operating expenses' consist of various items, all of which are less than KEUR 300.

# 4. Depreciation and Amortization

Amounts in KEUR	2016	2015
Depreciation of property, plant and equipment	-1,316	-1.208
Amortization due to purchase price allocated intangible assets	-770	-2,019
Amortization of other financial assets	-1,185	-1,109
	-3,271	-4,336

## 5. Other operating income

Amounts in KEUR	2016	2015
Return from private use of cars and telephones	1,187	1,067
Rents received	183	190
Marketing funds	1,052	1,038
Other income	1,022	1,111
	3,444	3,406

The item 'Other income' consist of various items, all of which are less than KEUR 300.



## 6. Financial result

Amounts in KEUR	2016	2015
Interest income	85	82
Interest expense	-793	-1,017
Income from investments and participations	164	140
Minority interest in VAR business partners	-486	-334
Other income and expenses	-197	-85
Foreign currency exchange gains / losses	-145	266
Financial result	-1.372	-948

## 7. Taxes on income

This item encompasses actual tax expenses amounting to KEUR 3,129 (PY: 2,994), a surplus amounting to KEUR 660 (PY: 169) from further development and revaluation of deferred tax assets, as well as a surplus of KEUR 304 (PY: 24) from deferred tax liabilities.

In total there are realizable tax loss carry forwards amounting to KEUR 18,711 (PY: 20,729). This creates gross tax credits of KEUR 4,835 (PY: 5,366). The realization of the tax loss carry forward has been proved by planning forecasts and flexible tax models of optimization. The only tax loss carry forwards capitalized are those which can presumably be used within the following five years, resulting in deferred tax assets with an amount of KEUR 4,244 (PY: 4,927) This means 87.80% (PY: 91.80%) of the total gross tax credits are capitalized.



At the moment there are no significant time restrictions for the utilization of the tax assets in the M+M group.

The non permanent differences include deferred tax assets amounting to KEUR 636 (PY: 479) resulting from different valuations of accruals, as well as deferred tax liabilities amounting to KEUR 1,546 (PY: 1,242), mainly resulting from the capitalization of development costs.

The average domestic tax rate contains the corporate income tax ("Körperschaftsteuer") plus solidarity surcharge ("Solidaritätszuschlag") as well as the trade tax ("Gewerbesteuer").

The transition between the expected taxes and the actual tax proceeds are explained by the reconciliation in the following table:

★ Tax reconciliation		
Amounts in KEUR	2016	2015
Result before income tax	11,116	7,526
Legal tax rate	30%	30%
Expected tax charge	-3,335	-2,258
Tax rate variances		
Foreign tax rate differential	-39	70
Deviation of the taxable base from		
Non deductable expenses	-305	-228
Tax free income from investments	49	42
Taxable depreciation of intangible assets	70	70
Valuation of deferred tax assets		
Non-recognition of deferred tax assets	-216	-136
Subsequent recognition of deferred tax assets	0	0
Subsequent recognition of deferred tax liability	-231	-764
Other	-86	-53
Actual tax charge	-4,093	-3,257
Effective tax rate in percent	36.82%	43.28%



# 8. Calculation of shares outstanding and earnings per share

In accordance with IAS 33, a weighted average was calculated for shares outstanding.

The diluted number of shares does not only include the original subscribed capital shares, but also all option rights from the employee option program which were exercisable at the statement closing date, but which had not yet been exercised. The number of shares in treasury stock are included in the calculation of diluted earnings per share.

	2016	2015
Net result KEUR	6,589	3,866
Weighted number of shares	16,305,748	16,127,071
Non diluted earnings per share EUR	0.4041	0.2397
Diluted net results KEL	JR 6,589	3,866
Diluted number of shares	16,305,748	16,128,985
Diluted earnings per share EUR	0.4041	0.2397

For the purpose of calculating diluted earnings per share, the profit and loss attributable to ordinary equity holders and the weighted average number of shares outstanding had to be adjusted in the prior year for the effects of all diluting potential ordinary shares and exercisable options according to IFRS 2.



# Notes on the balance sheet

## **Assets**

## **Current assets**

## 9. Trade accounts receivable

Trade accounts receivable comprised in the group's individual companies include reasonable adjustments and generally have a remaining term of less than one year.

The receivables are reduced by a specific allowance amounting to KEUR 1,073 (PY: 966).

With respect to the trade receivables that are neither impaired nor past due, there are no indications as of the reporting date that the debtors will not meet their payment obligations. The following table shows the development of allowances on trade receivables:

Amounts in KEUR	2016	2015
As of Jan 1	966	985
Translation differences	2	7
Addition	331	110
Disposal	-214	-123
Reversing	-12	-13
As of Dec 31	1,073	966

In the current and the prior year no material expenses for the full write-off of trade receivables as well as income from recoveries on trade receivables written off occurred.

All income and expenses relating to allowances and write-offs of trade receivables are reported under other operating expenses.

₹ Trade receivables									
Amounts in KEUR		of which neither impaired nor past due on the reporting date	of which not impaired on the reporting date and past due in the following periods<						
	Book value		30<60	60<90	90<180	180<360	>360		
As of Dec 31, 2016	23,018	19,531	1,469	816	766	387	49		
As of Dec 31, 2015	22,613	18,506	1,394	532	599	754	828		



₹ Fixed assets register 2015														
			Acquisi	tion costs				Accumulated depreciation					Net book value	
	Jan 01, 15	Consolida- tion effect	- Currency	Addition	Disposal	Dec 31, 15	Jan 01, 15	Consolida- tion effect	Currency	Addition	Disposal	Dec 31, 15	Jan 01, 15	Dec 31, 15
I. Tangible assets	9,457	-1,324	-30	1,373	-895	8,581	6,997	-882	14	972	-846	6,255	2,460	2,326
II. Property	11,352	1,324	0	107	0	12,783	831	882	0	236	0	1,949	10,521	10,834
III. Other intangible assets	25,508	0	-23	2,240	-222	27,503	14,981	0	155	3,128	-216	18,048	10,527	9,455
1. Development costs	5,080	0	0	1,447	0	6,527	445	0	0	416	0	861	4,635	5,666
2. Purchase price allocation	15,647	0	0	0	0	15,647	11,774	0	102	2,019	0	13,895	3,873	1,752
3. Other	4,781	0	-23	793	-222	5,329	2,762	0	53	693	-216	3,292	2,019	2,037
IV. Goodwill	42,307	0	0	0	0	42,307	9,021	0	0	0	0	9,021	33,286	33,286
V. Financial assets	2,945	0	0	0	0	2,945	1,895	0	0	0	0	1,895	1,050	1,050
Financial assets	2,800	0	0	0	0	2,800	1,895	0	0	0	0	1,895	905	905
2. Other	145	0	0	0	0	145	0	0	0	0	0	0	145	145
(all amounts in KEUR)	91,569	0	-53	3,720	-1,117	94,119	33,725	0	169	4,336	-1,062	37,168	57,844	56,951

## 10. Inventories

This position predominantly contains purchased goods amounting to KEUR 4,425 (PY: 2,981), software licenses amounting to KEUR 28 (PY: 41) and work in process amounting to KEUR 118 (PY: 197). As in the previous year specific allowances have not been made.

## 11. Other current assets

This position primarily comprises tax credits, loans and creditor receivables from pending reimbursements.

## Non current assets

The development of the non current assets is indicated in the fixed assets register.



Fixed assets register 2016														
		Acquisition costs			Accumulated depreciation				Net bo	ok value				
		Consolida-	-					Consolida-						
	Jan 01, 16	tion effect	Currency	Addition	Disposal	Dec 31, 16	Jan 01, 16	tion effect	Currency	Addition	Disposal	Dec 31, 16	Jan 01, 16	Dec 31, 16
I. Tangible assets	8,581	0	-160	1,369	-730	9,060	6,255	0	-165	1,085	-730	6,445	2,326	2,615
II. Property	12,783	0	0	7	0	12,790	1,949	0	0	231	0	2,180	10,834	10,610
III. Other intangible assets	27,503	0	3	2,140	-15	29,631	18,048	0	2	1,955	-14	19,991	9,455	9,640
1. Development costs	6,527	0	0	1,611	0	8,138	861	0	0	577	0	1,438	5,666	6,700
2. Purchase price allocation	15,647	0	0	0	0	15,647	13,895	0	0	770	0	14,665	1,752	982
3. Other	5,329	0	3	529	-15	5,846	3,292	0	2	608	-14	3,888	2,037	1,958
IV. Goodwill	42,307	0	0	0	0	42,307	9,021	0	0	0	0	9,021	33,286	33,286
V. Financial assets	2,945	0	0	0	-111	2,834	1,895	0	0	0	0	1,895	1,050	939
1. Financial assets	2,800	0	0	0	0	2,800	1,895	0	0	0	0	1,895	905	905
2. Other	145	0	0	0	-111	34	0	0	0	0	0	0	145	34
(all amounts in KEUR)	94,119	0	-157	3,516	-856	96,622	37,168	0	-163	3,271	-744	39,532	56,951	57,090

# 12. Goodwill

All acquired companies within the 'market offensive' in Germany, Austria and Switzerland are summarized under 'VAR Business D/A/CH'.

Goodwill development							
Amounts in KEUR	D 04 004E	Addition /	0	D 04 0040			
	Dec 31, 2015	Impairment	Currency	Dec 31, 2016			
VAR Business D/A/CH	16,214			16,214			
OPEN MIND	9,341			9,341			
M+M UK	2,982			2,982			
M+M Romania	1,610			1,610			
DATAflor	1,216			1,216			
M+M Italy	1,116			1,116			
M+M Poland	474			474			
M+M France	333			333			
Total	33,286			33,286			



## 13. Other investments

Other investments include one shareholding in SOFiSTiK AG. In 2016 a dividend amounting to KEUR 164 (PY: 140) was recognized.

The maximum loss risk is the amount of the respective net book value.

As of Dec 31, 2016, there are no receivables.

## Liabilities

#### **Current liabilities**

# 14. Short term debt and current portion of long term debt

This position almost exclusively contains bank loans at principal banks in Germany and abroad in the context of credit lines. They are partly secured by assignments of receivables.

In the balance sheet, the bank liabilities classified as current are those which have to be paid back within the next 12 months. Fixed credit lines with indefinite durations are classified as non current, even if they are refinanced on a short term base (low interest rates). This increases the clarity of the financing structure, and avoids the wrong impression that most of the bank debt would be short-term.

A liquidity reserve in the form of credit lines and, where necessary, cash is maintained to guarantee the solvency and financial flexibility of M+M at all times. For this purpose, the Company entered into credit agreements with various international and domestic banks amounting to a total of EUR 52.2 million (PY: 50.2). M+M does not pay commitment fees on unused credit lines.



## 15. Accrued expenses

Accruals are calculated by taking all identifiable risks into account and always represent the expected repayment amount. They mainly include personnel and restructuring accruals.

The development of the accruals in the reporting period is shown in the table of accrual development.

## 16. Other current liabilities

This position includes debts from VAT and tax on wages and salaries, outstanding social security costs and deferred income.

Furthermore this position contains loan liabilities to the related party SOFiSTiK AG amounting to KEUR 1,005 (PY: 1,005).

₹ Table of accrual development						
Amounts in KEUR	Dec 31, 2015	Disposal	Addition	Dec 31, 2016		
Personnel accruals	4,078	-4,078	4,557	4,557		
Outstanding bills	1,343	-1,343	1,386	1,386		
Other	573	-573	585	585		
Total current accruals	5,994	-5,994	6,528	6,528		
Personnel accruals	266	-159	28	135		
Other accruals	261	-75	16	202		
Total non current accruals	527	-234	44	337		
Total accruals	6,521	-6,228	6,572	6,865		



## Non current liabilities

## 17. Long term debt, less current portion

This position contains the fix and unsecured credit lines with indefinite period of redemption, as well as bank loans for financing properties amounting to KEUR 5,942 (PY: 6,896), secured by mortgages of KEUR 11,089.

Bank debt				
Amounts in KEUR	Total	within 1 year	due > 1 year < 5 years	due > 5 years
As of Dec 31, 2016				
Bank debt	20,623	2,072	18,551	0
Real estate financing				
secured by mortgage	5,942	932	3,510	1,500
Financial liability	26,565	3,004	22,061	1,500
As of Dec 31, 2015				
Bank debt	26,533	1,085	25,448	0
Real estate financing				
secured by mortgage	6,896	996	3,650	2,250
Financial liability	33,429	2,081	29,098	2,250

## 18. Shareholders' loan

M+M's principal, CEO and Chairman of the Board Adi Drotleff and members of his family granted M+M loans amounting to KEUR 1,574 (PY: 3,210) at Dec 31, 2016.

Peter Schuetzenberger, who was M+M's CFO until Feb 29, 2016, granted M+M loans amounting to KEUR 500 (PY: 400) at Dec 31, 2016.

## 19. Pension accruals

The pension accruals essentially exist at the parent company and refer to a defined benefit plan for the Managing Directors. The pension commitment contains a retirement pay, a widow's pension as well as a disability pension. The pension accruals are determined according to actuarial principles of the projected unit credit method in accordance with IAS 19.

The pension accruals at the balance sheet date amount to KEUR 1,902 (PY: 1,411), of which an amount of KEUR 1,902 (PY: 1,411) represents the determined cash value of the performance-oriented obligation not financed via funding.

The cash value determined as at the balance sheet date of the performance-oriented obligations financed via funds amounts to KEUR 2,593 (PY: 2,512). This figure also corresponds to the fair value of the plan assets as at the balance sheet date. The Statement of Income includes income from plan assets amounting to KEUR 61 (PY: 54), interest expenses amounting to KEUR 93 (PY: 77) and current time of service expenditure amounting to KEUR 67 (PY: 80). The stated expenses and income are included in the personnel expenses and the financial result.



The recognition of actuarial gains and losses are shown in total in other comprehensive income. (See notes to the pension accruals on page 45)

In the financial year, pension has been paid in the amount of KEUR 59 (PY: 17). The expected contribution to the plan asset for the financial year 2017 amounts to KEUR 80.

Pension benefits payable in the future are estimated as follows:

Amounts in KEUR	2016	2015
Benefit obligation at start of the year	3,923	3,540
Interest cost	93	77
Service cost	67	80
Benefits paid	-59	-17
Net acturial gain	471	243
Benefit obligation at end of year	4,495	3,923
Plan assets at start of year	2,512	2,430
Received contributions	-59	-50
Insurance contributions	59	67
Actual return on plan assets	61	54
Net acturial gain	20	-11
Plan assets at end of year	2,593	2,512
Net recognized liability	1,902	1,411

Pension benefits payable in the future are estimated as follows:

Year	Amounts in KEUR	
2017	73	
2018	76	
2019	163	
2020	166	
2021	166	
2022 - 2027	1,186	

The benefit obligation has an average statistical expected remaining life of 20 years (PY: 21).

The table below shows the sensitivity of pension accruals on changes in the parameters:

Amounts in KEUR	2016	2015
Change in discount rate +0.5%	-328	-281
Change in discount rate -0.5%	364	313
Change in projected future benefit increases +0.5%	40	32
Change in projected future benefit increases -0.5%	-40	-30
Change in life expectancy + 1 year	136	109

When calculating the sensitivity of the DBO to significant assumptions, the same method has been applied as when calculating the pension liability recognised in the statement of financial position. The above sensitivity analysis are based on a change in one assumption while holding all other assumptions constant.

## Shareholders' equity

## 20. Share capital

The subscribed capital of M+M SE as of Dec 31, 2016, comprised 16,683,174 (PY: 16,572,152) shares, with a calculated stake of EUR 1.00 per share.

The subscribed capital increased in the fiscal year due to the share dividend by contribution in kind amounting to KEUR 111 (PY: 275) and in the prior year by conversion of stock options amounting to KEUR 111.

As of Dec 31, 2016 the approved capital amounts to 7,064 (PY: 7,175). It was authorized by the general meeting on May 16, 2013 and expires on May 15, 2018.

## 21. Capital reserve

The development of the capital reserve is shown by the following table:

Amounts in KEUR	2016	2015
Capital reserve as of Jan 1	21,390	20,376
Capital increase by cash	0	317
Share dividend	1,420	1,520
Acquisition of additional shares of already fully consolidated companies	s 0	-823
companies	U	-023
Capital reserve as of Dec 31	22,810	21,390



## 22. Treasury stock

The board of administration of M+M SE resolved to start the share buyback program at October 9, 2008. In 2016 M+M acquired 194,247 (PY: 105,642) M+M shares at a total amount of KEUR 2,389 (PY: 680) or EUR 12.30 (PY: 6.44) per share. As of Dec 31, 2016, M+M held 476,247 (PY: 282,000) shares of treasury stock. This is 2.85% (PY: 1.70%) of the issued capital. Treasury shares are carried at cost amounting to KEUR 3,879 (PY: 1,490) or EUR 8.14 (PY: 5.28) per share.

#### Notes on the cash flow statement

The cash flow statement classifies cash flows according to operating, investing and financing activities. Cash and cash equivalents in the cash flow statement correspond to total cash and cash equivalents on the balance sheet. This position contains cash in form of liquid funds and sight deposit accounts as well as cash equivalents consisting of fixed term deposits and money market papers, which can be transferred into cash at any time and therefore are suspended from substantial interest or currency risks.

The paid and received interest is now shown in the financing activities. The previous year was adjusted accordingly. Flows of funds from the acquisition and sale of consolidated companies are included in cash flows from investing activities. Effects of foreign exchange rate changes are stated separately.

Among other items, cash flows from operating activities include:

- KEUR 3,246 (PY: 2,528) paid for taxes on income (net of income tax refunds)
- cash flows from investments (dividends) amounting to KEUR 164 (PY: 140)

The other non cash expenses / income are mainly the change of the deferred taxes amounting to KEUR 829 (PY: 194), the change of deferred revenues of KEUR 190 (PY: 126) and the change of the other comprehensive income of KEUR 324 (PY: 539).

In the cash flows from financing activities dividends paid out to M+M shareholders amounting to KEUR 4,071 (PY: 3,181) or EUR 0.25 (PY 0.20) per share are included of which KEUR 1,531 (PY: 1,797) was contributed back to equity since the option share dividend was chosen.

There are no restrictions on the disposal of cash and cash equivalents.



## Other supplementary information

# Other financial obligations and contingent liabilities

The other financial obligations are mainly the result of long term rental and operating lease contracts for the group as a whole. The minimum financial obligation for non discounted rental and lease payments is KEUR 6,382 (PY: 6,449).

In the current financial year, rent and leasing payments are contained amounting to KEUR 3,341 (PY: 3,601).

The due dates of payments are as following:

	Amounts in KEUR
2017	2,917
2018	1,569
2019	1,028
2020	444
2021	240
following years	184
Total	6,382

Material leasing contracts mainly apply to office buildings at several locations, software licenses and company cars.

## Risk management

## Principles of risk management

M+M is exposed in particular to risks from movements in exchange and interest rates, as well as liquidity, other price and credit risks that affect its assets, liabilities, and forecast transactions.

Financial risk management aims to limit these risks through ongoing operational and finance activities.

#### **Currency risk**

M+M is exposed to currency risks from its investing and operating activities. Usually foreign currencies are not hedged.

The individual Group entities predominantly execute their operating activities in their respective functional currencies. This is why the assessment of exchange rate risk from ongoing operations is low.

The following table demonstrates the sensitivity to a reasonable possible change in the EURO exchange rate to all other currencies, with all other variables held constant, of the Group's profit before tax (due to changes in the fair value of monetary assets and liabilities).

Amounts in KEUR	2016	2015
Increase of 5%	-167	-228
Decrease of 5%	167	228

#### Interest risk

Interest rate risks are presented by way of sensitivity analyses in accordance with IFRS 7. These show the effects of changes in market interest rates on interest payments, interest income and expense.

Changes in the market interest rates of nonderivative financial instruments with fixed interest rates only affect income if these are measured at their fair value. As such, all financial instruments with fixed interest rates that are carried at amortized cost are not subject to interest rate risk as defined in IFRS 7.

The following table demonstrates the sensitivity to a reasonable possible change in interest rates, with all other variables held constant, of the Group's profit before tax and shareholders equity (through the impact on floating rate borrowings).

Amounts in KEUR	2016	2015
Increase of 25 basis points	-15	-35
Decrease of 25 basis points	15	36



## Liquidity risks

The following tables show contractually agreed (undiscounted) interest payments and maximum possible repayments of the non-derivative financial liabilities:

The variable interest payments arising from the financial instruments were calculated using the last interest rates fixed before the balance sheet date. Financial liabilities that can be repaid at any time are always assigned to the earliest possible time period.

K Liquidity risk 2015							
Amounts in KEUR	Book value	Cash flo	ws 2017	Cash flo	ws 2018	Cash flows	s from 2019
	Dec 31, 2016	Interest rate	Repayment	Interest rate	Repayment	Interest rate	Repayment
Bank debt	26,565	422	4,801	151	17,698	211	4,065
Shareholders' loan	2,074		2,074				
Trade accounts payable	12,828		12,828				
Other current liabilities	2,323		2,323				

Cliquidity risk 2015							
Amounts in KEUR	Book value	Cash flows 2016		Cash flows 2017		Cash flows from 2018	
	Dec 31, 2015	Interest rate	Repayment	Interest rate	Repayment	Interest rate	Repayment
Bank debt	33,429	471	11,000	413	1,120	350	21,308
Shareholders' loan	3,610		3,610				
Trade accounts payable	8,618		8,618				
Other current liabilities	2,296		2,296				

All instruments held at balance sheet date were included. Planning data for future, new liabilities is not included. Amounts in foreign currency were each translated at the closing rate at the reporting date.

The expected future outflow of cash is covered by the operating business, the trade accounts receivables as well as the available credit lines.



The following table shows the carrying amounts and fair values of financial assets and liabilities by category of financial instrument and reconciliation to the corresponding line item in the balance sheet. Since the line items 'Other receivables' and 'Other liabilities' contain both

financial instruments and non-financial assets and liabilities (such as other tax receivables or advance payments for services to be received in the future), the reconciliation is shown in the column headed 'Non-financial assets / liabilities'. As a matter of principal the fair value is determined on the hierarchic level 2 with consideration of prices not noted or indirectly derived from prices noted on active markets.

Fair Values 2016						
Amounts in KEUR Assets	Category in accordance with IAS 39	Book value Dec 31, 2016	Fair Value Dec 31, 2016	Amounts recognized in balance sheet according to IAS39 Amortized cost	non-financial assets / liabilities	Book value on balance sheet Dec 31, 2016
Cash and cash equivalents	LaR	6,351	6,351	6,351		6,351
Trade accounts receivables	LaR	23,018	23,018	23,018		23,018
Other current assets	LaR	1,273	1,273	1,273	3,338	4,611
Liabilities						
Bank debt	FLAC	26,565	27,353	26,565		26,565
Shareholders' loan	FLAC	2,074	2,074	2,074		2,074
Trade accounts payable	FLAC	12,828	12,828	12,828		12,828
Other current liabilities	FLAC	2,323	2,323	2,323	3,486	5,809
Of which aggregated by category in accordance w						
Loans and Receivables (LaR)		30,642	30,642	30,642		
Financial Liabilities Measured at Amortised Cost (FLAC)		43,788	44,576	43,788		

Rair Values 2015						
Amounts in KEUR Assets	Category in accordance with IAS 39	Book value Dec 31, 2015	Fair Value Dec 31, 2015	Amounts recognized in balance sheet according to IAS39 Amortized cost	non-financial assets / liabilities	Book value on balance sheet Dec 31, 2015
Cash and cash equivalents	LaR	9,579	9,579	9,579		9,579
Trade accounts receivables	LaR	22,613	22,613	22,613		22,613
Other current assets	LaR	1,286	1,286	1,286	3,464	4,750
Liabilities						
Bank debt	FLAC	33,429	34,554	33,429		33,429
Shareholders' loan	FLAC	3,610	3,610	3,610		3,610
Trade accounts payable	FLAC	8,618	8,618	8,618		8,618
Other current liabilities	FLAC	2,296	2,296	2,296	3,396	5,692
Of which aggregated by category in accordance with IAS 39						
Loans and Receivables (LaR)		33,478	33,478	33,478		
Financial Liabilities Measured at Amortised Cost (FLAC)		47,953	49,077	47,953		



Cash and cash equivalents, and trade and other receivables mainly have short times to maturity. For this reason, their carrying amounts at the reporting date approximate the fair values.

Trade and other payables, as well as other liabilities, generally have short times to maturity; the values reported approximate to the fair values.

The fair values of unquoted bonds, liabilities to banks, promissory notes, and other financial liabilities are calculated as the present values of the payments associated with the debts, based on the applicable yield curve.

#### Other price risks

As part of the presentation of market risks, IFRS 7 also requires disclosures on how hypothetical changes in risk variables affect the price of financial instruments. Important risk variables are stock exchange prices or indexes. As of December 31, 2016, M+M did not hold any material investments to be classified as 'available-for-sale'.

#### **Credit risk**

M+M trades only with recognized, credit-worthy third parties. It is the Group's policy that all customers who wish to trade on credit terms are subject to credit verification procedures. In addition, receivable balances are monitored on an ongoing basis with the result that the exposure to bad debts is not significant. The maximum exposure is the carrying amount.

There are no significant concentrations of credit risk. With respect to credit risk arising from the other financial assets, which comprise cash and cash equivalents, available-for-sale financial investments, loan notes and certain derivative instruments, the exposure to credit risk arises from default of the counterparty, with a maximum exposure equal to the carrying amount of these instruments.

Credit risks are handled with specific and lump-sum allowances as well as a credit sale insurance. The credit sale insurance covers 90% of the insured receivable in the case of loss of receivables outstanding. Because of the structure of our customers there are no significant concentrations of credit risk.



## **Capital management**

The primary objective of the capital management of M+M was to ensure that it maintains a strong credit rating and healthy capital ratio in order to support its business and maximize shareholder value. M+M 's policy is to keep an equity ratio of at least 30%. Above that the gearing ratio should be below 3 times EBITDA.

The gearing ratio improved from 1.32 to 0.91 and the equity ratio increased from 38.6% to 40.4%.

To maintain or adjust the capital structure, the Group may adjust the dividend payment to shareholders or issue new shares. No changes were made to the objectives, policies and methods as of December 31, 2016.

#### Research and development expenses

The research and development expenses for the financial year amounted to KEUR 13,674 (PY: 13,328) concerning the subsidiaries OPEN MIND, MuM Mechatronik, customX and DATAflor. Thereof KEUR 12,063 was expensed (PY: 11,881) and KEUR 1,611 (PY: 1,447) was capitalized as development cost for individual projects under other intangible assets, because their future recoverability could reasonably be assured.

## **Employees**

The group's average number of employees (excluding temporary workers and trainees) during the fiscal year was 759 (PY: 731). The number of trainees was 9 (PY: 10).

#### **Administrative Board**

According to article 23 and 24 of the SE implementing law in connection with article 10, para 1, of the articles of association of Mensch und Maschine Software SE, the Administrative Board is made up of three members. The general meeting on May 3, 2016 elected the following persons to the Administrative Board for the duration according to the articles of association:

Adi Drotleff, Diplom-Informatiker, Munich (Chairman)

Thomas Becker, Diplom-Kaufmann, Neuss, Tax consultant (Deputy Chairman) Heike Lies, Magister Artium, Munich, Municipal employee

#### **Managing Directors**

The following gentlemen were appointed Managing Directors during fiscal year 2016:

Adi Drotleff, Diplom-Informatiker, Munich (CEO)

Christoph Aschenbrenner, Diplom-Ingenieur (FH) Eresing (COO)

Peter Schützenberger, Kaufmann, Munich (CFO) until February 29, 2016 Markus Pech, Betriebswirt (FH), Schrobenhausen (CFO) since March 1, 2016

The company is legally represented by two Managing Directors or by one Managing Director together with a person authorized to sign. Mr. Adi Drotleff has sole representation authorization.

## Remuneration of Managing Directors and Administrative Board

The remuneration for the Managing Directors amounted to KEUR 731 (PY: 713). It was composed of fixed salaries of KEUR 421 (PY: 416), variable components of KEUR 202 (PY: 183) and non-cash salary components of KEUR 108 (PY: 114).

The pension obligation for the Managing Directors amounted to KEUR 1,915 (PY: 1,708) as of December 31, 2016.

Remuneration for the Administrative Board totaled to KEUR 16 (PY: 16).



## **Audit fees**

The required disclosure of the group auditor's fee volume is as follows:

Amounts in KEUR	2016	2015
Audit	202	197
Tax consulting	56	74
Total	258	271

## **Appropriation of net income**

M+M SE has unappropriated retained earnings amounting to KEUR 10,535 as of December 31, 2016.

The administrative board will propose to the shareholders meeting a dividend of EURO 0.35 per share. With consideration of the 476,247 shares in treasury stock acquired till March 1, 2017, the total dividend payment amounts to KEUR 5,672. The remaining balance of KEUR 4,863 is carried forward. If the number of shares in treasury stock should change before the shareholders' meeting on May 10, 2017, the dividend payment will be adapted accordingly.



## **Independent Auditor's Report**

'We have audited the consolidated financial statements prepared by Mensch und Maschine Software SE, Wessling, comprising the balance sheet, statement of income and statement of comprehensive income, development of shareholders equity, statement of cash flows and the notes to the consolidated financial statements, together with the group management report, for the business year from January 1, 2016 to December 31, 2016. The preparation of the consolidated financial statements and the group management report in accordance with the IFRS, as adopted by the e.u., and the additional requirements of German commercial law pursuant to § (Article) 315a Abs. (paragraph) 1 HGB ('Handelsgesetzbuch': German Commercial Code) are the responsibility of the parent Company's Board of Management. Our responsibility is to express an opinion on the consolidated financial statements and on the group management report based on our audit. We conducted our audit of the consolidated financial statements in accordance with §317 HGB and German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftspruefer (Institute of Public Auditors in Germany) (idw) and additionally observed the International Standards on Auditing (isa).

Those standards require that we plan and perform the audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the consolidated financial statements in accordance with the applicable financial reporting framework and in the group management report are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the Group and expectations as to possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the consolidated financial statements and the group management report are examined primarily on a test basis within the framework of the audit. The audit includes assessing the annual financial statements of those entities included in consolidation, the determination of the entities to be included in consolidation, the accounting and consolidation principles used and significant estimates made by the Company's Board of Management, as well as evaluating the overall presentation of the consolidated financial statements and the group management report. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations. In our opinion based on the findings of our audit the consolidated financial statements comply with the IFRS as adopted by the E.U., the additional requirements of German commercial law pursuant to § 315a Abs. 1 HGB and give a true and fair view of the net assets, financial position and results of operations of the Group in accordance with these requirements. The group management report is consistent with the consolidated financial statements, complies with the legal requirements and as a whole provides a suitable view of the Group's position and suitably presents the opportunities and risks of future development.'

Stuttgart, March 7, 2017

RSM AWT AG WIRTSCHAFTSPRUEFUNGSGESELLSCHAFT

Hahn Wirtschaftspruefer (Auditor)

Huber Wirtschaftspruefer (Auditor)



Report from the Administrative Board of Mensch und Maschine Software SE, Wessling, according to section 47 para 3, SE implementing law (SE-IL) in conjunction with section 171 para 2, AktG (German Companies act)

The Administrative Board (Verwaltungsrat) will report to the shareholders' meeting according to section 47 para 3, SE implementing law (SE-IL) in conjunction with section 171 para 2, AktG (German Companies act) as follows:

The Administrative Board fulfilled all its obligations as incumbent, pursuant to the corresponding statutes and by-laws, and including the ongoing advice and supervision of the company's Managing Directors.

The Administrative Board was involved in all decisions of principal importance for the company. The strategic direction of the M+M group was closely aligned between the Managing Directors and the Administrative Board.

The Managing Directors informed the Administrative Board, orally or in writing, in a regular, timely and extensive manner about all essential matters concerning the short term planning, the actual course of business as well as the financial and earnings situation.

Based on detailed management reports, all business cases significant and essential for the M+M group have been discussed in depth, also concerning the development of the individual subsidiaries. Discrepancies in the course of business from the plan have been discussed intensively.

During fiscal year 2016, five Administrative Board meetings took place on March 3 and 11, May 3, July 12 and October 21.

In particular, the following matters were discussed between the Administrative Board and the Managing Directors:

- Development and maintenance of the group's own software technology
- Impact of the Autodesk transition from software sales to a rental model
- Improvement of the individual subsidiaries' operating profitability
- Use of exisiting tax loss carryovers and tax optimisation
- Dividend policy



## **Administrative Board Report**

The Administrative Board received reports about the development of the risk management system; existing risks and their provision were explained by the Managing Directors.

The Administrative Board was also informed in detail about events of material importance in between the regular meetings.

Due to the size of the Board, there were no additional committees. An efficiency test for the activities of the Administrative Board was not explicitly conducted, because improvement processes are constantly discussed and translated into action.

The annual report of Mensch und Maschine Software SE as of December 31, 2016, as well as the group annual report as of December 31, 2016, including the management report for the group was set up by the Managing Directors and audited by RSM AWT AG Wirtschaftspruefungsgesellschaft (auditing firm), Stuttgart, and endorsed with an unqualified audit opinion.

The Managing Directors' set up and the auditing reports from the auditing firm were available to all members of the Administrative Board.

The auditor took part in the annual fiscal year report meeting on March 7, 2017, and reported upon all significant results of the audit.

The Administrative Board reviewed the annual report and group annual report, the management and group management report and the Managing Directors' suggestion for the use of the net income for the year, and agreed to the annual report and group annual report, raising no objections after its own review.

The Administrative Board has approved the annual report and group annual report, and agreed the Managing Directors' suggestion for the use of the net income for the year.

The Administrative Board would like to thank all employees for their engagement in fiscal year 2016.

Wessling, March 2017
The Administrative Board

Adi Drotleff Chairman



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Mensch und Maschine acadGraph GmbH	Fritz-Hommel-Weg 4 Ludwig-Erhard-Straße 57a Charlottenstraße 65 Oststraße 88 Otto-Brenner-Straße 196 Neuer Zollhof 3 Stockumer Straße 475 Industriestraße 11 Goetheplatz 5	D-80805 München D-04103 Leipzig D-10117 Berlin D-22844 Norderstedt D-33604 Bielefeld D-40221 Düsseldorf D-44227 Dortmund D-46342 Velen D-99423 Weimar	+49 (0) 89 / 3 06 58 96 - 0 +49 (0) 3 41 / 30 85 47 - 0 +49 (0) 30 / 8 91 10 08 +49 (0) 40 / 43 25 79 - 0 +49 (0) 5 21 / 2 81 - 63 +49 (0) 2 11 / 1 57 91 77 +49 (0) 2 31 / 56 03 10 - 40 +49 (0) 28 63 / 92 95 - 0 +49 (0) 36 41 / 6 35 52 - 5	+49 (0) 89 / 3 06 58 96 - 20 +49 (0) 3 41 / 30 85 47 - 20 +49 (0) 30 / 8 93 17 08 +49 (0) 40 / 43 25 79 - 79 +49 (0) 5 21 / 2 81 - 64 +49 (0) 2 11 / 1 59 63 65 +49 (0) 2 31 / 7 75 77 38 +49 (0) 28 63 / 92 95 - 20 +49 (0) 36 41 / 6 35 52 - 4	www.acadgraph.de
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<b>Events</b>	
April 24, 2017	Quarterly report Q1/2017
May 10, 2017	Annual shareholders' meeting
July 24, 2017	Half year report 2017
October 23, 2017	Quarterly report Q3/2017
March 12, 2018	Annual report 2017
March 12, 2018	Analysts' conference

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# CAM in practice: Shorter milling times due to intelligent machining strategies (2)

Project: 5x faster milling of flat surfaces

Customers: All users of precision machine tools worldwide

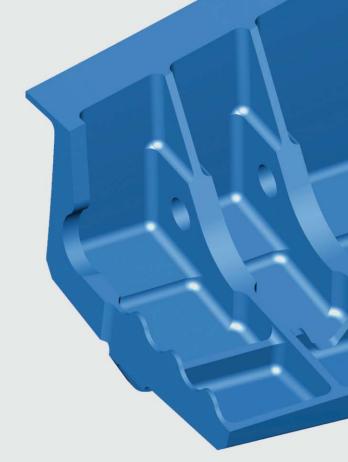
Time is money – this rule is particularly applicable for precision machine tools with purchase prices in the six or even seven digit range. The CAM Software *hyper*MILL, developed by the M+M group, reduces milling times by up to 90% through intelligent machining strategies, pushing return on investment for these expensive machine tools to completely new dimensions.

The machining time needed to mill flat surfaces for example is reduced by around a factor of 5. This is achieved by a new method, using specially developed spherical cutters with slightly convex curvature which avoids the scores at the edges of non-spherical cutters. So the time consuming finishing with a ball cutter is completely superfluous.

As in practice flat surfaces represent about half of all milling processes, the resulting productivity gain in manufacturing is significant. This lightweight aerospace part which conventionally needs more than 10 hours machining time can be finished in just over 2 hours using *hyper*MILL.









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