DEVELOPING THE BEST TECHNOLOGIES FOR THE INDUSTRIES OF THE FUTURE

JANUARY, 2020
**Key Figures and Profile**

WE PROVIDE INDUSTRIAL COMPANIES WORLDWIDE WITH INNOVATIVE SOLUTIONS ENHANCING THE PERFORMANCE OF THEIR PRODUCTS AND SERVICES

<table>
<thead>
<tr>
<th>Key Figure</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sales</strong></td>
<td>€879M</td>
</tr>
<tr>
<td><strong>EBIT Margin</strong></td>
<td>10.4%</td>
</tr>
<tr>
<td><strong>Employees</strong></td>
<td>6,900</td>
</tr>
</tbody>
</table>

2018 figures  
* Before non recurring items
**EXPERTISE WITH LEADERSHIP POSITIONS**

<table>
<thead>
<tr>
<th><strong>ELECTRICAL POWER – 45%</strong></th>
<th><strong>ADVANCED MATERIALS – 55%</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NO. 2 WORLDWIDE</strong></td>
<td><strong>NO. 1-2 WORLDWIDE</strong></td>
</tr>
<tr>
<td>Industrial fuses</td>
<td>Components for power electronics</td>
</tr>
<tr>
<td><strong>SOLUTIONS FOR POWER MANAGEMENT</strong></td>
<td><strong>ANTICORROSION EQUIPMENT</strong></td>
</tr>
<tr>
<td>EATON (US), LITTELFUSE (US)</td>
<td>SGL CARBON (Ger)</td>
</tr>
<tr>
<td><strong>ELECTRICAL PROTECTION &amp; CONTROL</strong></td>
<td><strong>GRAPHITE SPECIALTIES</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>NO. 1 WORLDWIDE</strong></th>
<th><strong>NO. 1-2 WORLDWIDE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Components for power electronics</td>
<td>Graphite anticorrosion equipment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>NO. 1-2 WORLDWIDE</strong></th>
<th><strong>POWER TRANSFER TECHNOLOGIES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>High-temperature applications</td>
<td>Brushes for industrial motors</td>
</tr>
</tbody>
</table>

* 2018 Sales

Competition:

- EATON (US), LITTELFUSE (US), EATON (US), ROGERS (US), METHODE (US), LYTRON (US), CORNELL DUBILIER (US), PANASONIC (JP), SGL CARBON (Ger), TOYO TANSO (JP), TOKAI CARBON (JP), SGL CARBON (Ger), SCHUNK (Ger), MORGAN ADVANCED MATERIALS (UK), SCHUNK (Ger)
HALF OF Mersen solutions are for growing sustainable development markets

2018 SALES

- Process Industries: Energy Efficiency (34%)
- Energy: Renewable Energies (19%)
- Electronics: Semiconductors, Power Conversion (19%)
- Chemicals: Water Treatment (11%)
- Transportation: Rail, Electric Vehicles (17%)

Sustainable development markets ~50%
### For prestigious and exacting customers

<table>
<thead>
<tr>
<th>Category</th>
<th>Sales % as of 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROCESS INDUSTRIES</td>
<td>34%</td>
</tr>
<tr>
<td>CHEMICALS</td>
<td>11%</td>
</tr>
<tr>
<td>TRANSPORTATION</td>
<td>17%</td>
</tr>
<tr>
<td>ELECTRONICS</td>
<td>19%</td>
</tr>
<tr>
<td>ENERGY</td>
<td>19%</td>
</tr>
</tbody>
</table>

- **> 65% customized products**
- **Replacement market**
  - 65% of sales
- **Largest client**
  - ~3% of sales
- **Longstanding ties**

**Examples of Customers:**
- Saint-Gobain
- Arkema
- Alstom
- Siemens
- Wacker
- ABB
- Vestas
- Siemens
- Samsung
- Longi

**Industries:**
- Process Industries: 34%
- Chemicals: 11%
- Transportation: 17%
- Electronics: 19%
- Energy: 19%

**Subindustries:**
- Chemicals: 11%
- Materials: 19%
- Electronics: 19%
GLOBAL FOOTPRINT

- NORTH AMERICA: 33%* Headcount 2,100 Industrial plants 13
- EUROPE: 34%* Headcount 2,360 Industrial plants 22
- SOUTH AMERICA-AFRICA: 4%* Headcount 670 Industrial plants 5
- ASIA-PACIFIC: 29%* Headcount 1,780 Industrial plants 13

50% of the plants are ISO 14001 certified

89% of the employees are proud to be part of the Group (2018)

* % 2018 Sales
Human Capital: The Group’s Foundation

Prevention and Protection
Develop and consolidate a culture of health and safety within the Group

- Improve by 15% the number of safety visits by 2021
- Reach LTIR ≤ 1.4 and SIR ≤ 60 by 2021

A Shared Culture
Excellence, Collaboration, People conscious, Agility & Entrepreneurial Spirit, Partnering with our customers

- 88% human capital success rate in 2021 (85% in 2018)
- 100% of managers trained on the Open Manager program by 2021

A Wealth of Diversity
Teamwork and collaboration for creativity and a better understanding of customer needs worldwide

- 25% to 30% of women managers and professionals by 2022 (20% in 2018)

Excellence, Collaboration, People conscious, Agility & Entrepreneurial Spirit, Partnering with our customers
Teamwork and collaboration for creativity and a better understanding of customer needs worldwide

Develop and consolidate a culture of health and safety within the Group

- Improve by 15% the number of safety visits by 2021
- Reach LTIR ≤ 1.4 and SIR ≤ 60 by 2021

A Shared Culture
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- 88% human capital success rate in 2021 (85% in 2018)
- 100% of managers trained on the Open Manager program by 2021

A Wealth of Diversity
Teamwork and collaboration for creativity and a better understanding of customer needs worldwide

- 25% to 30% of women managers and professionals by 2022 (20% in 2018)
Leadership positions that are source of profitability

**STRENGTHS**
- **Leader:** #1 or #2 in our markets
- **>65% customized products**
- **Expertise:** high barriers to entry

**HIGH GROSS MARGIN**
- Chart showing increasing gross margin from 2013 to 2018

**GLOBAL OPERATIONS**
- **Customer proximity**
- **Access to local markets**

**SUSTAINABLE DEVELOPMENT MARKETS**
- Solar
- Wind
- Semicon
- EV
**Long-term relationships with our shareholders**

**Board of directors**
- 10 members
  - 2 representatives from Ardian
  - 2 representatives from BPI
  - 1 employee director
- Independance: 55%
- Women at the board: 44%
- Compliance with the AFEP-MEDEF corporate governance code
Outlook

Outlook:

Committed to the future:

- Capex program for growing markets
- Strategic acquisitions in 2019

Growth potential for the medium term confirmed
A PROGRAM OF INVESTMENTS IN 2019 TO UNDERPIN MID-TERM GROWTH

€65-75m*

GROWTH CAPEX

LASER SCAN

SIC SEMI-CONDUCTORS

EV

POWER ELECTRONICS

SOLAR

ENVIRONMENT CAPEX

MAINTENANCE CAPEX

DIGITAL CAPEX

* Columbia starting date delayed

THAT WILL CONTINUE IN 2020-2021
Solar: Consistent Growth Ahead

**NUMBER OF PANEL INSTALLATIONS GROWING EACH YEAR**

**2011-2018 CAGR +20%**

**2019-2024 CAGR +8%**

Sources: IHS Markit, Exawatt, Bloomberg NEF, SolarPowerEurope, IEA

**Mersen Offer**

Furnace Internal Parts in Graphite
Graphite Resistance
Crucible Support in C/C Composite
Flexible Felt Insulation Solutions
INVESTMENTS FOR THE FAST-GROWING SiC SEMICONDUCTORS MARKET

MATURE MARKET
- Silicon

MATURING MARKET
- SiC

OTHER TECHNOLOGIES
- GaN/Sapphire
- GaN
- GaAs
- InP

RAW MATERIAL/SUBSTRATE
- Silicon
- SiC
- GaN/Sapphire
- GaN
- GaAs
- InP

COMPONENTS
- Microprocessor
- Memory chip
- Power component (IGBT, MOSFET, JFET)
- LED
- RF component
- Opto electronic

END-MARKET
- Networks and computers
- Speed drives
- EV
- Energy storage
- Renewable energies
- Lighting
- Communications

COMPOUND SEMICONDUCTORS
SiC SEMICONDUCTORS MARKET SET TO ACCELERATE AFTER 2020-2022 IN LINE WITH EV MARKET GROWTH

2016-2021 CAGR +25%

2022-2024 CAGR +40%


MERSEN OFFER

INSULATION
GRAPHITE CRUCIBLE
FURTHER PROGRESS IN EV

FOR HEAVY VEHICLES
- Power conversion
  - Cooling devices
  - Bus bars
- Battery management
  - Fuses
  - Cooling devices
  - Bus bars
- Battery protection
  - Fuses

FOR HIGH-END PASSENGER CARS
- Battery management
  - Fuses
  - Bus bars
- Battery protection
  - DC hybrid Protection
  - Selected by a leading manufacturer

Selected by a leading manufacturer
**STRATEGIC ACQUISITIONS IN 2019**

**COLUMBIA**
USA (Columbia)

**OBJECTIVE**
- Access to complementary isostatic graphite production
- Repatriation within the Group of the production of specialty extruded graphite

**AGM Italy**
Italy (Malonno)
Sales: ~€17m

**OBJECTIVE**
- Capacity of finishing of customized extruded graphite parts
- Synergies with Columbia plant which will eventually supply with blocks

**GAB NEUMANN**
Germany (Maulburg)
Sales: ~10M€

**OBJECTIVE**
- Strengthening presence in specialty chemicals in the DACH countries
- Broader expertise in heat exchanger
COLUMBIA: AN EXCELLENT OPPORTUNITY FOR MERSEN

Isostatic graphite production capacity not utilized

Isostatic graphite production capacity utilized

Columbia: additional production capacity of graphite


12,000 t
COLUMBIA: A NEW INDUSTRIAL BASE FOR THE FUTURE

- **Closing**: Cash-out 7 MUSD
- **CAPEX**: ~€20m
- **Decision for additional capex**
- **Production start**
- **Delivering Malonno**

**Timeline**
- **June 28, 2019**: Closing
- **End of 2019**: Commissioning
- **End of 2020**: Production start
- **End of 2021**: Delivering Malonno
2019 Outlook: FY Guidance Raised in July 2019

Organic* Growth in Sales vs 2018

Operating Margin Before Non-Recurring Items

CAPEX

Initial Guidance
- between 2 and 5%
- between €60m and €70m

Current Guidance
- between 4 and 5%
- between €65m and €75m (o.w. €5m for Columbia)

Guidance (Before Positive Impact of IFRS16)
- between 10.5 and 10.7%

* Excluding foreign change and scope effects
Q3 2019: STRONG PERFORMANCE IN THE CURRENT MACRO-ECONOMIC ENVIRONMENT

9-months sales figures
+10% vs 2018
Incl. +5% like-for-like

Organic growth in all regions:
Europe: +5.7%
Asia-Pacific: +0.4%
North America: +8.4%
Rest of the World: +7.1%

<table>
<thead>
<tr>
<th></th>
<th>Q1 2019</th>
<th>Q2 2019</th>
<th>Q3 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2019 QUARTERLY SALES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total growth</td>
<td>+15.3%</td>
<td>+9.7%</td>
<td>+5.1%</td>
</tr>
<tr>
<td>Like for like</td>
<td>+8.4%</td>
<td>+4.8%</td>
<td>+2.5%</td>
</tr>
<tr>
<td>9-months sales figures</td>
<td>+10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Like for like</td>
<td></td>
<td>+5%</td>
<td></td>
</tr>
</tbody>
</table>
VERY STRONG PERFORMANCE IN H1 2019

Further improvement in sales and operating results

10TH CONSECUTIVE QUARTER OF ORGANIC GROWTH IN SALES

7TH CONSECUTIVE HALF-YEAR OF GROWTH IN OPERATING RESULTS BEFORE NON-RECURRING ITEMS
**A GOOD HALF-YEAR 2019**

### Sales

<table>
<thead>
<tr>
<th>Organic growth</th>
<th>H1 2018</th>
<th>H1 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>+6.5% vs H1 2018</td>
<td>430</td>
<td>484</td>
</tr>
<tr>
<td>+12.4%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Operating Margin Before Non-Recurring Items

<table>
<thead>
<tr>
<th>Operating income before non-recurring items (€m)</th>
<th>H1 2018</th>
<th>H1 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>+30 pts before IFRS16 vs H1 2018</td>
<td>46</td>
<td>54</td>
</tr>
<tr>
<td>+12.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+10% before IFRS16</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Operating Cash-Flow

<table>
<thead>
<tr>
<th>Net cash-flow from operations (€m)</th>
<th>H1 2018</th>
<th>H1 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>+10% before IFRS 16 vs H1 2018</td>
<td>18</td>
<td>20</td>
</tr>
</tbody>
</table>
Rise in Profitability

Higher prices to offset the increase in the cost of raw materials: net positive

Cost inflation offset by productivity plans

As a %

<table>
<thead>
<tr>
<th>Description</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 2018 operating margin before non-recurring items</td>
<td>10.6%</td>
</tr>
<tr>
<td>Volume/mix effects</td>
<td>+0.8%</td>
</tr>
<tr>
<td>Price/raw materials net impact</td>
<td>+0.6%</td>
</tr>
<tr>
<td>Impact of productivity</td>
<td>+1.6%</td>
</tr>
<tr>
<td>Cost inflation</td>
<td>-1.8%</td>
</tr>
<tr>
<td>Impact of exchange rates, change in scope and other</td>
<td>-0.9%</td>
</tr>
<tr>
<td>Comparable H1 2019 operating margin before non-recurring items</td>
<td>10.9%</td>
</tr>
<tr>
<td>IFRS 16 impact</td>
<td>+0.2%</td>
</tr>
<tr>
<td>H1 2019 operating margin before non-recurring items</td>
<td>11.1%</td>
</tr>
</tbody>
</table>
GROWTH IN MARGIN DRIVEN BY ADVANCED MATERIALS
STEADY PERFORMANCE IN ELECTRICAL POWER

- Dilutive effect of acquisitions on margin (-0.3 pt)
- Negative volume/mix effect
- Price increases

- Positive volume effect
- Price increases higher than the rise in raw materials costs

**ELECTRICAL POWER**

<table>
<thead>
<tr>
<th></th>
<th>H1 2018</th>
<th>H1 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>190</td>
<td>206</td>
</tr>
<tr>
<td>Margin</td>
<td>10.2%</td>
<td>10%</td>
</tr>
<tr>
<td>Income</td>
<td>19</td>
<td>20</td>
</tr>
</tbody>
</table>

**ADVANCED MATERIALS**

<table>
<thead>
<tr>
<th></th>
<th>H1 2018</th>
<th>H1 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>240</td>
<td>278</td>
</tr>
<tr>
<td>Margin</td>
<td>14.1%</td>
<td>14.7%</td>
</tr>
<tr>
<td>Income</td>
<td>34</td>
<td>41</td>
</tr>
</tbody>
</table>

- Positive volume effect
- Price increases higher than the rise in raw materials costs
### STRONG GROWTH IN NET INCOME

<table>
<thead>
<tr>
<th>In €m</th>
<th>H1 2018</th>
<th>H1 2019 before IFRS 16</th>
<th>H1 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating income before non-recurring items</td>
<td>45.8</td>
<td>52.6</td>
<td>53.6</td>
</tr>
<tr>
<td>Non-recurring income and expenses</td>
<td>(1.5)</td>
<td>(3.2)</td>
<td>(3.2)</td>
</tr>
<tr>
<td>Net financial income</td>
<td>(4.7)</td>
<td>(4.7)</td>
<td>(6.1)</td>
</tr>
<tr>
<td>Income tax</td>
<td>(10.3)</td>
<td>(10.7)</td>
<td>(10.6)</td>
</tr>
<tr>
<td>Net income</td>
<td>29.3</td>
<td>34.0</td>
<td>33.7</td>
</tr>
<tr>
<td>Attributable to owners of the parent</td>
<td>27.9</td>
<td>33.1</td>
<td>32.8</td>
</tr>
</tbody>
</table>

Non-recurring expenses include restructuring charges, acquisition costs and provision for litigation.

Effective tax rate 24% (vs 26% in H1 2018)
Increased operating cash-flow compared to H1 2018

An improvement despite:

- Increase in raw materials inventories at the end of 2018 (paid in H1 2019)
- Increase in late payment at the end of June
**Strong Financial Structure**

**NET DEBT/EBITDA**
- December 2018: 1.6
- June 2019: 1.5

**NET DEBT/EQUITY**
- December 2018: 39%
- June 2019: 41%

### Operating Cash-Flow in €m
- December 2018: 216
- Operating Cash-Flow: 20
- Investments: 21
- Acquisitions: 7
- Other Including Interests: 4
- June 2019: 228

Includes 19 Capex
## Main Impacts of IFRS16 Standard Application

<table>
<thead>
<tr>
<th>in €m</th>
<th>H1 2019 before IFRS 16</th>
<th>IFRS 16</th>
<th>H1 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating income before non-recurring items</td>
<td>52.6</td>
<td>+1.0</td>
<td>53.6</td>
</tr>
<tr>
<td>Financial income</td>
<td>(4.7)</td>
<td>-1.4</td>
<td>(6.1)</td>
</tr>
<tr>
<td>Net income</td>
<td>34.0</td>
<td>-0.4</td>
<td>33.6</td>
</tr>
<tr>
<td>Depreciation</td>
<td>19.9</td>
<td>+5.5</td>
<td>25.8</td>
</tr>
<tr>
<td>EBITDA</td>
<td>72.5</td>
<td>+6.5</td>
<td>79.0</td>
</tr>
<tr>
<td>Lease liabilities</td>
<td></td>
<td>+45</td>
<td>45</td>
</tr>
<tr>
<td>Rights of use</td>
<td></td>
<td>+45</td>
<td>45</td>
</tr>
</tbody>
</table>

**Depreciation of lease liabilities**

**Interest charge**

**Rental expenses**

**Depreciation expense**