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#### How can you recognize a real technology leader?

A look at the current economic context provides an answer: a real technology leader is a **company capable of sustainably growing its business over time**. It's also a company capable of resisting less favorable environments while continuing to advance, innovate and support the constant shifts and changes in customer technologies.

While 2013 was an uneven year for Mersen, it also offered us an opportunity to reaffirm our positioning in all of our markets. We successfully preserved a base of robust business operations and initiated an in-depth transformation that will enable us to improve our competitiveness and meet our ambitious growth objective.

Behind this success, the most important factor has been our pragmatism. We know our business inside out and are aware that we have everything we need to meet the expectations of the world's leading manufacturers, and thereby gain significant market share. In driving this process, we can leverage three major competitive advantages.

The first is our approach to the business – a subtle combination of **technological expertise and continuous innovation**, backed by a robust R&D commitment that enables us to sustain our technological lead and serve emerging customer needs with truly innovative products. The second is our commitment to local **customer relationships**, based on the broad global footprint formed by our local teams and our seamless understanding of each country's regulatory environment and unique cultural characteristics, along with the expectations of its manufacturers. Lastly, our third advantage is of course our manufacturing organization built around **two segments and five promising markets**, reinforced by our solid positions in high potential markets like solar energy and power electronics. We're not just a supplier of industrial equipment. From enabling the emergence of alternative energies and new forms of mobility for people and goods to supporting the constant search for energy efficiency, Mersen is helping to drive deep-rooted changes in the way we live.

We are proud of our core expertise in technology.

Luc Themelin
Chairman of the Management Board

## **2013 HIGHLIGHTS**

## **January**

Key position in rail transportation confirmed: Mersen selected by the Alstom/Bombardier consortium to provide equipment for the new Montréal metro.

## **February**

Wind energy product range highlighted: Mersen attends Europe's premier wind energy event EWEA 2013 in Vienna and its equivalent in Asia, held in Tokyo.

#### March

Results in line with expectations and stable compared with 2011: Mersen announces its 2012 full-year results.

## **April**

Electrical power and Energy product range highlighted: Mersen attends Hannover Fair Energy, the world's biggest industrial fair.

Change at the supervisory board: Mrs Carolle Foissaud and Ulrike Steinhorst joined the board

## May

Shareholder relations: Mersen holds its Annual General Meeting of shareholders in Paris.

Financial policy: Buy-back of 200,000 shares.

A key player in chemical industry: Mersen attends Achemasia, the world forum for the chemical process industries in Beijing.

#### June

Technology success in space optical instruments: European Space Agency to use Mersen's technology.

Aeronautics product range highlighted: Mersen attends Paris international airshow, the world's leading and largest aerospace trade show.

## July

Withdrawal from non-strategic businesses: Sale of Grésy industrial plant.

A key player in solar market: Mersen attends Intersolar Europe, the world's leading exhibition series for the solar industry.

Power electronics capabilities recognized: Mersen receives Siemens "Top Supplier" award in the category "Best Technology".

## August

Effectiveness of adaptation plans in an unfavorable economic environment: Mersen discloses its 2013 half-year results.

## September

Strengthened financial position: Mersen successfully refinances its credit facilities in China.

R&D capabilities recognized: Mersen receives a grant from the National Science Foundation.

#### November

Position strengthened in power electronics: Mersen wins a contract with Siemens to equip its latest generation of wind turbine.

Solutions for the specific requirements of space instruments: Mersen at the heart of EUMETSAT's next generation of satellites.

#### December

Withdrawal from non-strategic businesses: Sale of Brignais industrial facility.

## **CORPORATE DATA**

#### Note:

Data for 2012 are restated to take into account the application of IAS19

Data for 2012 and 2011 are presented in accordance with IFRS5, in light of the plan to divest or discontinue certain non-strategic businesses that are part of the Materials segment, as disclosed on February 14, 2013.

Data for 2009, 2008 and 2007 are restated for the disposal of the Automotive and Household Electrical Appliance Brush division (effective May 1, 2009).

Financial highlights			EBITDA argin		High level of cash-flow				
(in millions of euros except ratio)	2013	2012	2011	2010	2009	CA GR 09-13			
Consolidated sales	739	811	816	741	587	+6%			
Operating income before non- recurring items	59.8	77.6	106.5	77.6	50.9	+4%			
operating margin	8.1%	9.6%	13.0%	10.5%	8.7%				
EBITDA	100	117.3	143.5	114.2	82.3	+5%			
EBITDA margin	13.5%	14.5%	17.6%	15.4%	14.0%				
Net income (Group share)	(29.2)	6.5	56.9	38.4	14.6				
			\	/					
Cash-Flow from operating activities (1)	86	109	68	98	116				
Capex	28	42	53	32	48				
Net debt at year-end	212	241	239	220	215				
Net debt to equity ratio	45%	45%	44%	44%	50%				
Net debt to EBITDA ratio	2.07	2.07	1.61	1.86	2.52				
Return On Capital Employed <sup>(2)</sup>	7.5%	9.1%	13.4%	10.4%	7.0%				
(1) before Capex, continuing activities (2) Operating income before non recurring items and before tax/ Average Capital Employed									
EBITDA resilience in depresse economic environment	ed				Solid d	)			

- Strong and resilient EBITDA: 14% of sales on average in depressed economic environment (2009 and 2012-2013)
  - o High added value
  - Price resilience
  - Ability to adjust costs to level of sales
- High level of cash-flow generation:
  - Average annual cash-flow from operating activities 2009-2013: €95 million
  - Benefits of the cash initiative program launched in 2008 (2006-2008 average: €63 million)

#### Significant reduction in Capex:

- o End of significant capex period in 2012, especially in the material segment
- o No further large investments needed

#### • Solid debt structure:

Net debt/EBITDA: close to or below 2x on average since 2010

#### Low level of ROCE but high leverage

- Low level in 2013 and 2012 due to low level of industrial capacity utilization in graphite (material segment)
- High ROCE in the Electrical segment
- o No further large investments needed

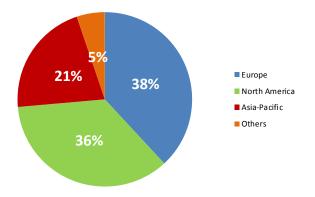
See appendix for comprehensive historical consolidated statements.

## Sales by geography

(in millions of euros)	2013	2012	2011	2010	2009	CAGR 09-13
Consolidated sales	739	811	816	741	587	+6%
Europe	282	284	300	281	229	+5%
North America	262	280	263	237	199	+7%
Asia-Pacific	157	206	213	179	129	+5%
Others	38	41	40	44	30	+6%

- Asia was the growing region until 2012. In 2013, this region was affected by the decrease on the solar market
- North America showed strong growth
- Europe remains a strategic market, and was boosted in 2013 by the Sabic contract.

#### Breakdown of 2013 sales



## **Global footprint**

#### Note:

Workforce figures are restated in accordance with the financial statements to reflect disposals and the plan to divest or discontinue certain operations.

Mersen has developed an industrial and commercial network that allows it to build close relationships with leading industrial groups around the world.

(in number of employees)	2013	2012	2011	2010	2009
Total workforce	6,382	6,745	6,833	7,024	5,617
Europe	2,300	2,437	2,453	2,494	2,201
North America	1,951	2,018	1,988	2,024	1,682
Asia-Pacific	1,645	1,804	1,894	1,949	1,251
Rest of the world*	486	486	498	557	483

<sup>\*</sup> Africa and South America

The Group's global workforce has grown by approximately 14% over the period with **a significant growth in Asia** (>+30%) and in the US (>+15%) and a relative stability in Europe.

Mersen's employees are located in over 35 countries around the world. This worldwide presence ensures a close relationship with customers fosters collaboration at the very early stages of new projects and enables teams to respond rapidly to new developments.

## **Share information**

	2013	2012	2011	2010	2009
Shares outstanding	20,816,364	20,350,969	20,288,354	19,942,777	19,645,409
Price per share					
- High	27.14	29.00	42.81	35.38	28.07
- Low	16.44	18.00	21.17	23.21	14.46
- Year-end	25.19	21.09	23.35	21.17	25.4
Trading volume (daily average)	30,074	28,114	29,888	21,702	48,776
Market capitalization (YE in €m)	524	429	474	422	499
Enterprise Value	736	670	713	642	714
EV/EBITDA	7.4	5.7	5.0	5.6	8.7

Source: Euronext

	2012	2012	2011	2010	2009
Earnings per share (€)	(1.43)	0.28	2.83	1.94	0.89
Earnings per share (€) (continuing operations)	(1.24)	1.64	2.97	2.10	1.55
Dividend per share (€)	0.45	0.45	1.00	0.75	0.50
Yield (based on YE share price)	1.8%	2.1%	4.3%	2.2%	2.0%
Pay-out ratio (on continuing activities)	36%	35%	35%	35%	38%

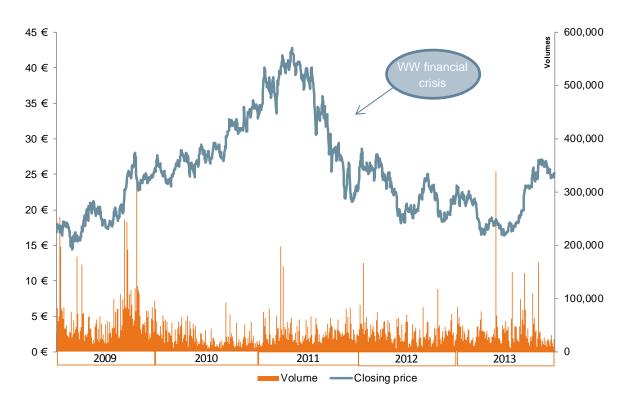
Dividend policy: [30-40]% pay-out ratio

## • A consistent dividend policy

- o An average pay-out ratio above or equal to 35% since 2009
- o For 2013 and 2012, the pay-out ratio is calculated before the impact of exceptional items (respectively €50m and €20m).

## **Share performance**

Mersen's share price performance over the period has been largely influenced by the global macroeconomic crisis.



Performance compared with the SBF 120 index:



## **Shareholding structure**

	2013	2012	2011	2010	2009
ACF Investment	17.4%	17.3%	17.4%	16.9%	16.4%
FSI/CDC	15.2%	15.4%	15.5%	10.4%	9.4%
Sofina	7.8%	8.0%	7.8%	7.6%	7.2%
Ameriprise Financial	0.0%	0.6%	5.6%	8.2%	7.5%
Mondrian	0.0%	6.7%	6.4%	8.0%	6.9%
Other French institutional investors	14.9%	16.2%	14.4%	12.3%	12.7%
Other international institutional investors	28.5%	17.7%	14.0%	18.3%	17.1%
Individuals*	14.1%	17.9%	18.8%	18.1%	22.5%
Treasury shares	1.2%	0.2%	0.3%	0.1%	0.2%

<sup>\*</sup> includes employees

- At December 31, 2013:
  - o French institutional investors represented an aggregate 47.5% of shareholdings.
  - o International institutional investors represented an aggregate 36.5% of shareholdings.

## **BUSINESS SEGMENTS**

Mersen provides technical and technology-based solutions to a large number of customers through its two areas of expertise: Materials and Electrical.

(in millions of euros)	2013	2012	2011	2010	2009	CAGR 09-13
Total consolidated sales	739	811	816	741	587	+6%
Materials	300	346	366	325	256	+4%
Electrical	439	464	450	416	331	+7%
Materials	41%	43%	45%	44%	44%	
Electrical	59%	57%	55%	56%	56%	

Note: Data for 2009, 2008 and 2007 are restated for the disposal of the Automotive and Household Electrical Appliance Brush division (effective May 1, 2009), which was originally in the Electrical segment.

To maintain its expert edge, Mersen drives innovation in its two business segments through close cooperation with customers. This requires a detailed understanding of their challenges, environments and applications, and the ability to develop highly sophisticated products and develop unique components to meet the specific needs of the leading players in each of our markets.

At Mersen, innovation is backed by powerful resources. Knowledge and best practices are shared across our R&D teams, who are organized into specialized labs coordinated by a cross-divisional committee. The labs are equipped with state-of-the-art facilities, able to reproduce customer environments and conditions of use.

#### **Materials**

Mersen offers a range of equipment based on carbon and high-performance materials – including graphite, reactive metals, C/C composite and silicon carbide- for extreme environments that require resistance to high-temperatures and corrosion.

Markets served include energy, electronics, chemicals & pharmaceutical, transportation and process industries.

#### Mersen ranks:

- No1 worldwide in graphite-based anti-corrosion equipment.
- No2 worldwide in high-temperature isostatic graphite applications.

Mersen's expansion strategy is mainly led by organic growth through selective investments tailored to demand, particularly in solar energy and electronics.

#### Product and service portfolio:

Resistance to high temperatures:

- High temperature thermal insulation carbon felt
- Purified and coated graphite parts
- Sintered silicon carbide products
- Carbon/Carbon Composite products

#### Resistance to corrosion:

- Pressure vessels
- Columns
- Heat exchangers
- HCl Anticorrosion systems

## Competitive advantages:

- Expertise in materials and manufacturing processes (graphite formulation, reactive materials brazing and soldering).
- In-depth understanding of customer applications.
- Co-development with customers.
- Products made to customer specifications.
- Global network of local units.

#### Main facilities:

- Europe :
  - Gennevilliers (France): Graphite machining
  - Holytown (UK): Insulation felts
  - Pagny sur Moselle (France): Anti-corrosion equipment

- Asia
  - Chongqing (China): Graphite
  - Yantaï (60% JV China): Graphite machining
  - Xianda (Chine): Anti-corrosion equipment
- North-America
  - Bay City (USA): Graphite machining, silicon carbide
  - Greenville (USA): Graphite machining
  - Oxnard (USA): Anti-corrosion equipment
  - Salem (USA): Anti-corrosion equipment
  - St Marys (USA): Graphite

#### Main competitors:

- Toyo Tanso (Japan): Isostatic graphite
- Tokai Carbon Fine Carbon (Japan): Isostatic graphite
- SGL Carbon Graphite Specialties (Germany): Graphite and fluoropolymer equipment
- Schunk Graphite (Germany)

#### Main changes in the scope of consolidation over the past five years:

(By date of consolidation or de-consolidation)

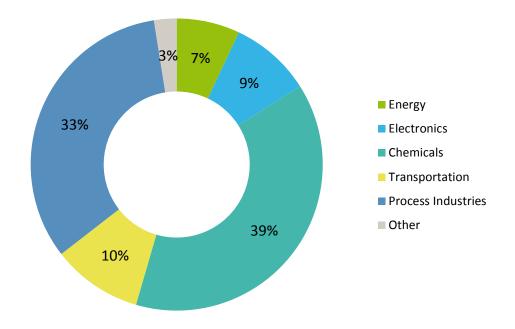
- 2008:
  - January: Acquisition of Xianda (China), manufacturer of advanced technology equipment in steel and stainless steel for the chemicals and pharmaceuticals markets.
  - o May: Sale of the Rail and Motorcycle Braking business to Faiveley Group
- 2009:
  - January: Acquisition of Calcarb (UK), manufacturer of rigid graphite felt that provides sophisticated insulation in very high-temperature furnaces
- 2010:
  - January: Acquisition of an 85% interest in Boostec (France), designer and manufacturer of solid silicon carbide (SiC) components, particularly for large space and ground-based observation telescopes.
  - o January: Acquisition of Lumpp (France), developer of industrial stirrers and mixers.
  - January: Acquisition of 2C Cellier (France), specialist in metallic equipment for nuclear power plants
  - November: Acquisition of a 60% interest in Yantaï (China), specialist in the machining of graphite components used in the production of monocrystalline silicon for the solar photovoltaic industry.
- 2013:
  - July-November: Withdrawal from metal boilermaking equipment for nuclear power stations, metal plate heat exchangers and mixers.

## **Key figures**

(in millions of euros)	2013	2012	2011	2010	2009
Total sales	300	346	366	325	256
Operating income before non-recurring items	19.7	35.2	63.2	39.5	28.5
As a % of sales	6.6%	10.1%	17.3%	12.2%	11.1%
EBITDA	47.7	62.4	87.9	64.0	49.7
As a % of sales	15.9%	18.0%	24.0%	19.7%	19.4%

- High EBITDA margin: between 16% and 24%
- 2012 and 2013 Operating Margin affected by low level of sales
- Margin driven mainly by volume
- Strong leverage on EBIT

## Targeted markets (2013 sales breakdown)



#### **Electrical**

Mersen offers components, systems and services that make electrical power safe, reliable and efficient for Original Equipment Manufacturers and their end users. These solutions are dedicated to three key applications:

- Signal & Power transfer for motors and generators
- Power Distribution & Control
- Power Electronics.

Markets served include energy, electronics, transportation and process industries.

#### Mersen ranks:

- No1 worldwide in carbon brushes and brush-holders for industrial electric rotating machines
- No1 global independent supplier of industrial fuses and fusegears

The Electrical segment's expansion strategy is driven by acquisitions to round out the product range and market coverage and to establish the business as a partner of choice in growing markets.

## Product and service portfolio:

Signal and Power transfer for motors and generators:

- Carbon brushes and brush-holders
- Slip ring assemblies
- Signal transfer systems

#### Power Distribution & Control:

- Fuses & Fusegears
- Surge protection devices
- Current collection and switches for rail vehicles

#### Power Electronics:

- Cooling devices
- Laminated busbars
- Semi-conductor fuses

#### Competitive advantages:

- Largest offer compliant with a variety of electrical standards.
- Efficient worldwide distribution and logistics network.
- Design capabilities and in-depth understanding of applications.

#### Main facilities:

- Europe
  - Amiens (France): Brushes, brush-holders
  - Angers (France): Laminated busbars
  - St Bonnet de Mure (France): Fuses, fusegears, electronic systems, rail vehicules components
  - Hittisau (Austria): Slip ring assemblies, brush-holders
  - Jestetten (Germany): Signal transfer, brush-holders
  - Patrica (Italy): Multiproduct facility
- Asia
  - Bangalore (India): Multiproduct facility (fuses, fusegears, brushes, ...)
  - Seoul (South Korea): Multiproduct facility
  - Shanghai (China): Multiproduct facility (cooling devices, laminated busbars, brushes,...)
  - Wenzhou (China): Fuses and fusegears
- Americas
  - Boonton (USA): Brushes
  - Newburyport (USA): Fuses & fusegears
  - Rochester (USA): Laminated busbars
  - Dorion (Canada): Brush-holders, slip ring assemblies
  - Toronto (Canada): Cooling devices & High power switches
  - Sao Paulo (Brazil): Multiproduct facility (brushes, ...)
  - Juarez (Mexico): Fuses & fusegears
- Africa
  - Tunis (Tunisia): Fuses & fusegears
  - Johannesburg (South Africa): Multiproduct facility (brushes, ...)

#### Main competitors:

- Morgan Advanced Materials (United Kingdom): Brushes, brush-holders, slip-ring assemblies, signal transfer systems, etc.
- Eaton/Cooper Industries (United States): Fuses (Bussmann)
- Schunk (Germany): Brushes, brush-holders, pantograph strips, etc.
- Rogers (USA): Laminated busbars

Following Eaton's acquisition of Cooper Industries on November 30, 2012, Mersen became the single largest independent source of supply for fuses and fusegears.

## Main change in the scope of consolidation over the past five years:

By date of consolidation or de-consolidation

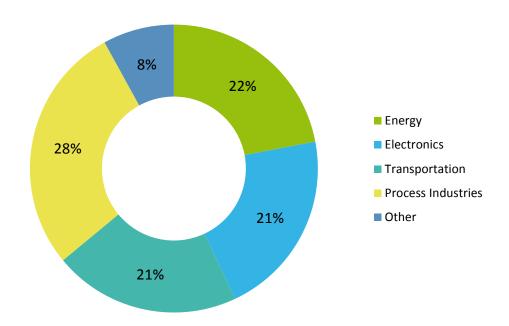
- 2008:
  - June: Acquisition of a 51% interest in Zhejiang Mingrong Electrical Protection (MEP -China), one the leaders in the Chinese fuse and fusegear market.
  - August: Acquisition of R Theta Thermal Solutions (Canada), a specialist in air cooling for power electronics in North America.
- 2009:
  - o May: Sale of the Automotive and Household Electrical Appliance Brush division
- 2010 :
  - January: Acquisition of all outstanding shares in Zhejiang Mingrong Electrical Protection (MEP) (China) (see above).
  - May: Acquisition of M.Schneider (Germany), a top player in German DIN-standard fuses and fuseholders.
- 2012:
  - January: Acquisition of Eldre (USA), a world leader and pure player in laminated busbars.
- 2013:
  - February: Majority stake in Cirprotec (Spain), a specialist in lightning and overvoltage protection (SPD).

#### **Key figures**

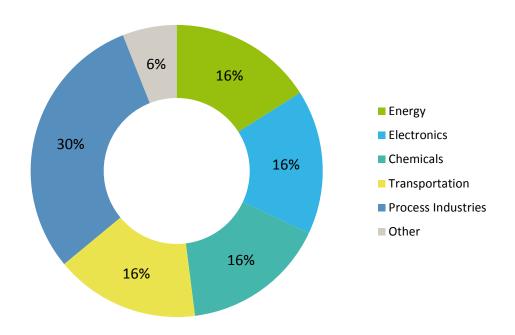
(in millions of euros)	2013	2012	2011	2010	2009
Total sales	439	464	450	416	331
Operating income before non-recurring items	51.0	54.0	57.3	51.6	35.7
As a % of sales	11.6%	11.6%	12.7%	12.4%	10.8%
EBITDA	62.9	66.1	69.5	63.7	45.7
As a % of sales	14.3%	14.2%	15.4%	15.3%	13.8%

- High and stable EBITDA margin: between 14% and 15.5%
- Growth in sales and Operating income over the period including highly relative acquisitions.

## Targeted markets (2013 sales breakdown)



## **MAJOR MARKETS**



2013 sales breakdown

## **Energy**

To support the fast-track development of alternative energies –a key solution to the combined challenges of unrelenting growth in energy demand, long-term depletion of cheap fossil fuel reserves and climate change – competitiveness-enhancing technological advances are crucial.

Mersen is developing new technological solutions that facilitate the use of renewable energies while enhancing their cost-effectiveness.

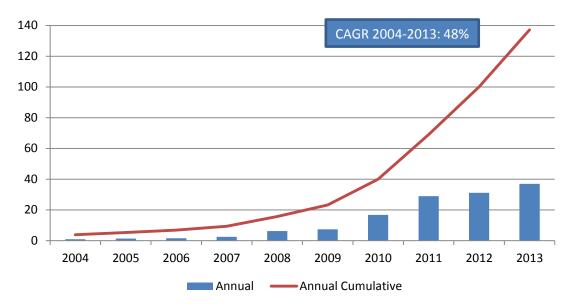
Mersen also provides a host of solutions for conventional energy installations. Certified by the leading turbo-generator manufacturers, our instruments and devices have made us a leading source of equipment for thermal power stations.

#### Solar

#### A) A fast growing industry

Over the last decade, photovoltaic technology has demonstrated the potential to become a major source of power generation worldwide, enjoying continuous, robust growth even during times of financial and economic crisis. At the end of 2013, more than 137 GW were installed globally. New yearly installations over the 2004-2013 period achieved a CAGR of 48%, reflecting the rapid expansion of the market.

In terms of cumulative global installed capacity, Europe still leads the way with less than 60% of the installed base as of 2013. Next comes China (18 GW est.), Japan (14 GW est.) and the United States (12 GW est.). Several countries in large sunbelt regions like Africa, the Middle East, Southeast Asia and Latin America are poised to start their development. And for the first time in 2013, Asia has taken the lead over Europe as the number 1 region for new installations.

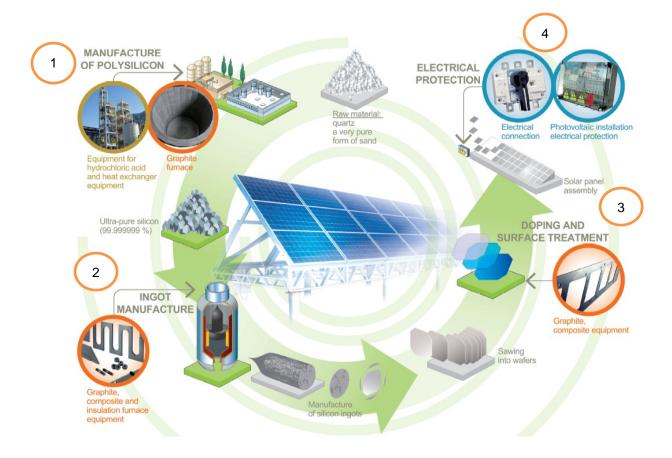


Source Epia (European Photovoltaic Industry Association) - Global Market Outlook 2013-2017 2013 estimates: Solarbuzz

## B - A broad offering across the value chain

Mersen is active across the complex solar cell manufacturing process and is helping to make the industry more competitive:

- Manufacture of polysilicon (1): Complex graphite components (potentially SiC coated) and equipment that can withstand extremely demanding environments during the transformation of quartz into polysilicon rods.
- Ingot production (2): Furnace linings, machined graphite parts, furnace insulation.
- Doping and surface treatments (3): Graphite and composite material equipment.
- Power connection of solar panels (4): Fuses, fusegears, electronic systems, surge protection devices, combiner boxes.
- Power electronics (solar inverters for grid connection) (4): Cooling devices, laminated busbars, fuses



## C – A large customer portfolio

Mersen serves hundreds of customers around the world, among them (in alphabetical order).

#### Polysilicon manufacturers

- GCL
- Hemlock
- MEMC
- OCI Korea
- Wacker Chemie

#### Ingot/Cell manufacturers

- Longi
- REC Solar
- Trinasolar
- Yingli Solar

#### Furnace manufacturers

GT Advanced Technologies

#### Installation of solar panels

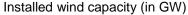
- Shoals, Tenesol, Juwi (turn-key installers)
- SMA, Power One, Omron (inverters)

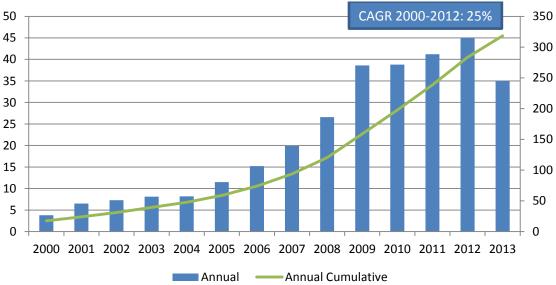
#### Wind

#### A) A still growing market

Rising environmental awareness among the general population and national governments combined with international political will, a favorable legislative and regulatory environment and continuous technological improvements have played a major role in the wind market's expansion.

Over the past decade, the market has grown by an average 25% a year. 2012 was a record year at 45GW as the US were anticipating the end of government subsidies. As a consequence, 2013 showed a decline in annual installation (35GW).





Source: GWEC (Global World Energy Council)- Global Wind Statistics – 07/02/2012

2012: Mersen's estimates

#### B) Solutions to enhance efficiency, reliability and safety

Mersen is a benchmark supplier to the windpower industry, serving both the OEM and replacement markets. Our lineup of solutions and services helps our customers to enhance their efficiency, reliability and safety:

- Blade orientation (1): Signal transmission systems to enhance efficiency of output of windpower, brush and brush-holders for power transfer
- Power generation (2): Slip ring assemblies, brushes and brush-holders for power transfer
- Power distribution (3): Fuses, fusegears
- Power electronics (inverters for grid connection) : Cooling devices, laminated busbars, fuses

Maintenance and other services



## C) High quality customers

Mersen serves a number of customers around the world, among them (in alphabetical order):

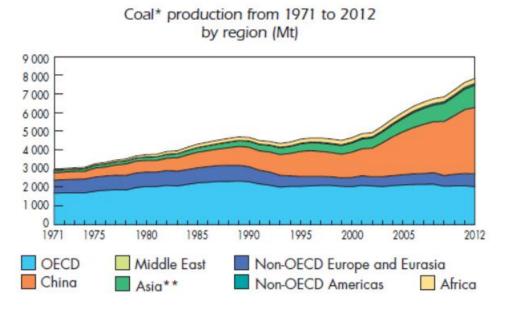
- ABB
- Alstom
- Enercon
- General Electric
- Gamesa
- Goldwind
- Hitachi
- Senvion
- Siemens
- Sinovel
- Vestas

## **Conventional Energies**

Conventional energies include oil, natural gas and coal/peat.

#### A) Coal: A growing market in the BRIC regions

According to World Coal Association statistics, coal serves approximately 30% of global primary energy needs and generates 42% of the world's electricity. In 2012 coal was the fastest growing energy source outside renewables, with China leading the top producers.



Source: IEA, Key World Energy Statistics 2013

#### B) An offer focused on power generation and power conversion

Mersen's solutions for conventional energies focus primarily on power generation and power conversion. Solutions are tested for optimum performance in variable loads and environmental conditions, helping customers to reduce maintenance costs. Mersen has the expertise to reengineer existing solutions and create maintenance tools to improve performance.

- Power generation: Brushes and brushholders for power transfer, brush gear housing (complete metal boxes, designed according to the brushgear specification and air flow calculation), slip-rings.
- Power conversion: Fuses and other components.
- Maintenance and other services.

#### C) A diversified customer base

Mersen serves both motor and generator manufacturers and distribution system operators, among them (in alphabetical order):

Motor and generator manufacturers

- ABB
- Alstom
- Electrosila
- General Electric
- Siemens

Distribution system operators

EdF

## **Hydropower**

#### A) The largest source of renewable energy

Hydropower refers to electrical energy generated by turbines that are driven by flowing water in rivers or lakes, with or without man-made dams forming reservoirs.

Hydropower is currently the world's largest source of renewable electricity. China is the leading hydropower producer, followed by Brazil, the United States, Canada, and Russia.

As of today, hydropower has the potential to produce around 3,400 terawatt-hours.

#### B) A complete lineup for hydro generator performance

Mersen offers the hydroelectric industry a broad range of tailored services, as well as reliable electrical, mechanical and sealing solutions. These include:

- Brush and brush holders for generators
- Slip rings
- Carbon dust collection systems
- Services

## C – A large customer portfolio

Mersen works with hydroelectric power utilities and their critical OEM suppliers, among them (in alphabetical order):

Hydroelectrical power utilities

- EDF
- Enel Green Power
- Hydroelectric Power Corporation of India
- Iberdrola
- Three Gorge Corporation
- US Bureau of reclamation

#### Generator OEM

- Alstom
- Andritz
- BHEL
- Electrosila
- Jeumont
- Koncar
- Voith Hydro

#### **Electronics**

The shift from fossil fuels to renewable energies and the pressing need to enhance energy efficiency are spurring the development of power electronics and low energy consumption electronic components.

From microprocessors to LEDs, new applications are constantly being found for semiconductors. Mersen is active in both the upstream and downstream segments of the electronics market:

- Upstream, we equip the world's leading semiconductor manufacturers with ultra-pure graphite components that help ensure optimal efficiency in their fabrication processes and high quality of their products.
- Downstream, we contribute to energy efficiency with bundled power electronics solutions combining busbars, fuses and cooling devices.

#### Components for semiconductor manufacturers

#### A – Significant market growth in the past and for the future

In past decades, growth in the electronics market was mainly driven by widespread demand for computers, which use silicon-based semiconductors.

Today, the market is being led by:

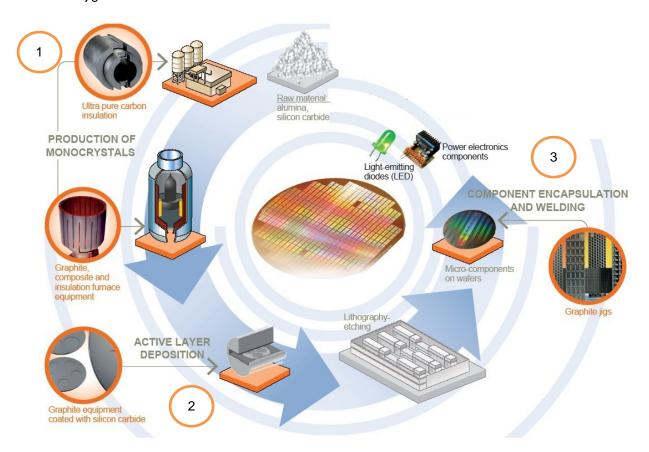
- Mobile communications, with flat screens, smartphones, tablets and wireless connectivity.
- Data networks, with data storage, computing power, cloud computing and optical fiber.
- Energy efficiency, with low-energy lighting (LEDs), power grids and speed drives.

More and more, these applications require non-silicon-based semiconductors, with an increasing need for power, efficiency and miniaturization.

#### B – Increasingly sophisticated graphite products for new substrates

Mersen is active across the semiconductor manufacturing process and is helping to make the industry more efficient.

- Production of monocrystals (1): Complex graphite components (heaters, crucibles...), furnace linings and ultra-pure carbon insulation equipment that can withstand high temperatures during the monocrystal growth process.
- Active layer deposition (2): Ultra-pure graphite wafer carriers (potentially SiC coated) to handle high-temperature and corrosive treatments.
- Component encapsulation and welding (3): High precision graphite and composite machined jigs resistant to oxidation and abrasion.



#### C) Main customers

Mersen serves a number of component manufacturers and OEMs around the world, among them (in alphabetic order):

Component manufacturers:

- Cree
- Infineon
- Samsung
- STMicroelectronics

#### **OEMs**

- Aixtron
- Applied Materials
- GT Advanced Technologies
- Veeco

#### **Power Electronics**

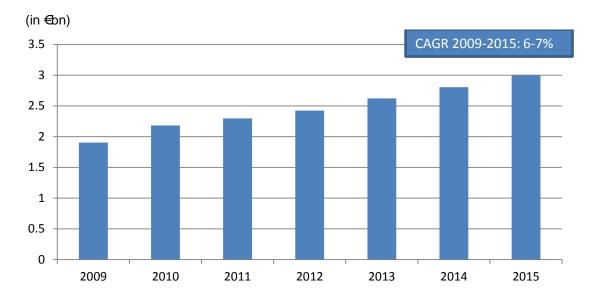
The basic function of power electronics is to convert electrical power as efficiently as possible. This means providing the appropriate energy for each application and converting energy with the best possible performance between input and output, at the right cost to achieve the expected benefit.

Although the need for energy is widespread, Mersen focuses solely on high-end applications.

In the energy and transportation markets, for example, power conversion is required at the generation (from solar, wind, and other energy source) to grid stage and at the grid (or battery) to consumer stage (for transportation). Power conversion is also crucial in a large number of industries and in the IT sector.

## A) Components for power electronics: A significant, growing market

Demand for the conversion of energy is growing, driven by energy efficiency requirements, the need to reduce total cost of ownership, weight, and other factors.



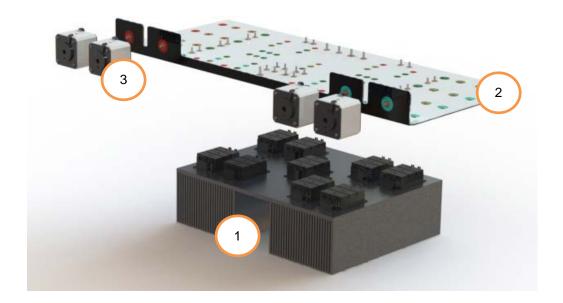
Key components for power inverters

Source: Mersen and Yole (2011) - Excluding EV/ HEV forecasts

## B) A unique bundle offer

Mersen's unique bundle offer gives it a superior ability to target the market. The offer comprises:

- 1- Cooling devices to reduce calories and increase semiconductor lifespan.
- 2- Laminated busbars to facilitate electrical connection, transfer electric current and reduce frequency noise.
- 3- Fuses to protect semiconductors from overvoltage and overcurrent.



## C) Main customers

Mersen serves a number of customers around the world in different end-markets. It also supplies semiconductor manufacturers. The list includes (in alphabetical order):

Industry and IT market

- ABB
- Eaton
- Fuji Electric
- Schneider

#### Semiconductor manufacturers

- Infineon
- Mitsubishi Electric
- Semikron
- Toshiba

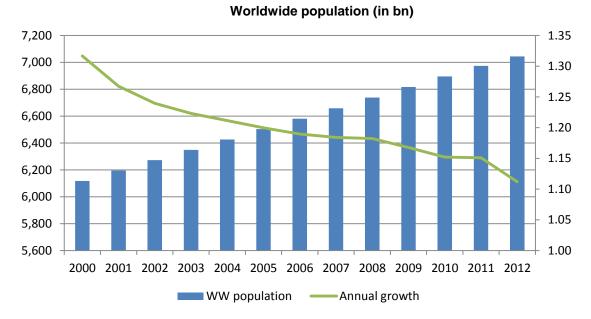
Note: customers in the Energy and Transportation markets are listed in the relevant sections.

#### **Chemicals & Pharmaceuticals**

Chemicals are everywhere in our lives, from the fertilizers needed to meet the global challenge of food production to ever more popular fast-moving consumer goods. As life expectancies lengthen, the pharmaceuticals industry is also facing new healthcare needs and challenges.

#### A) A very large market with key end-drivers

A large part of this market is driven by the size of the world's population, which has increased significantly over the past decade.



#### Source: the World Bank - web site

#### Inorganic chemicals

The inorganic chemicals market, focused essentially on the production of gas, pigments, acids and all products obtained by electrolysis, is driven mainly by worldwide population growth. Among inorganic chemicals, target areas include:

- Fertilizers
- Bromine
- Chlorine and caustic soda
- Gas production

#### Organic chemicals

Organic chemicals - essentially petrochemicals, chemical intermediates and plastics-based materials - are a very demanding market. Among organic chemicals, target areas in construction, automotive and consumer goods include:

- PVC (Polyvinyl chloride)
- Epichlorhydrin Epoxy resin
- Organic silicones
- Acetic acid
- TDI (Toluene Diisocyanate) /MDI (Methylene diphenyl Diisocyanate)
- Rayon fiber

#### Fine chemicals and specialty chemicals

This industry produces pure chemical substances notably for active pharmaceutical ingredients and specialty chemicals used in highly specialized applications. Examples include:

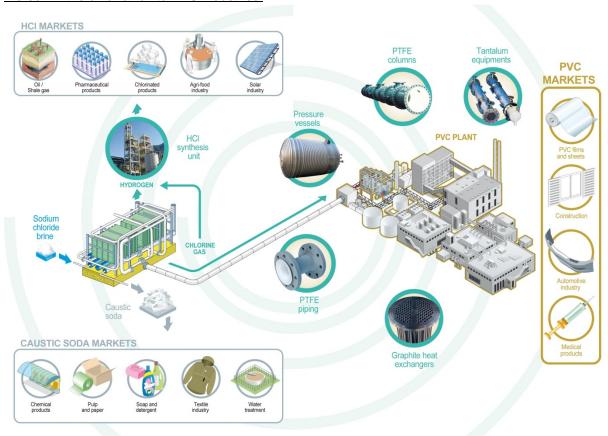
- API (Active Pharmaceutical Ingredients)
- Paints, perfumes, pet food
- Agrochemicals (herbicide, fungicide, etc.)

## B) Mersen's offering

As the world leader in anticorrosion industrial equipment, Mersen has strong expertise in chemical processes, thermal and mechanical design, corrosion and materials, welding and manufacturing processes. Its lineup includes:

- An extensive range of customized equipment (heat exchangers, columns, reactors, etc.) based on graphite and reactive metals (tantalum, zirconium, etc.) to process, mix and store highly corrosive and hot fluids, especially for fertilizers and pharmaceuticals.
- Pre-assembled systems combining synthesis units, columns and heat exchangers in a turnkey package to facilitate customer project management.

#### Mersen in the chlor-alkali to PVC industries:



## C) Main customers

Mersen serves a number of customers around the world, including (in alphabetical order):

## Inorganic chemicals

- Chem One
- Dow Chemicals
- OCP

## Organic chemicals

- BASF
- Bayer
- Célanèse
- Dow Corning
- Reliance
- Sabic

## Fine chemicals and specialty chemicals

- Evonik
- Glaxo
- Monsanto
- Novartis
- Pfizer

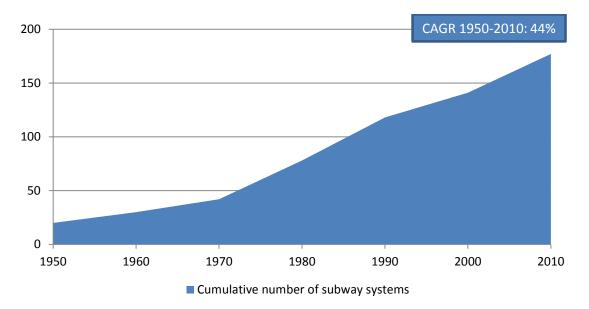
## **Transportation**

#### Rail

Demand for urban transit systems is on the rise in the world's major cities. At the same time, high-speed transportation needs for intercity travel are also growing strongly. Rail represents one of the only viable long-term options, particularly in emerging markets.

#### A) Market

Since 1950, the number of subway systems has increased significantly for an annual growth rate of close to 44%.



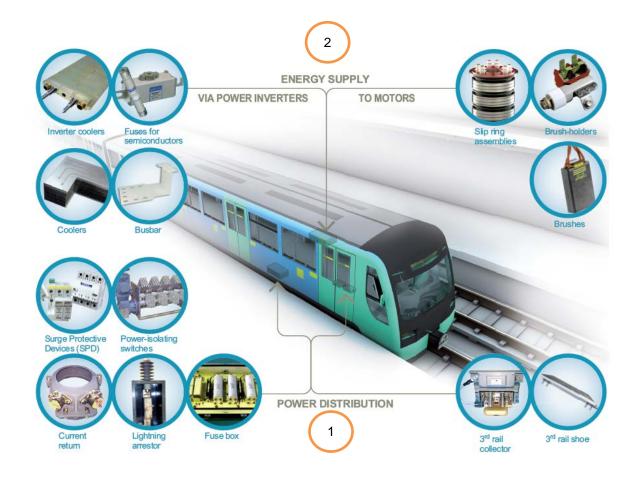
Source: metrobits.org - web site

As of today, approximately 190 subway systems are listed across the world, with several dozen projects under construction, especially in Asia.

#### B) Solutions for both infrastructure and rolling stock

Mersen's solutions are used in both rail infrastructure and rolling stock to enhance efficiency, reliability and safety. Services and solutions include:

- Power distribution (1):
  - o Current collectors and 3rd rail shoes
  - o Fuses and SPDs (Surge Protective Devices) for overcurrent and surge protection
  - o Power isolating switches and lightning arrestors for disconnection and safety
  - Current return for bearings protection
- Energy supply (2):
  - o Brushes, brush-holders and slip ring assemblies for motors
  - o Coolers, laminated busbars and fuses for semiconductors for power inverters



## C) Main customers

Mersen serves a number of railway traction system manufacturers and railway operators around the world, among them (in alphabetic order):

Railway traction system manufacturers

- Alstom
- Bombardier
- Hitachi
- Kawasaki
- Rotem
- Siemens
- Sifang
- Vale

#### Railway operators

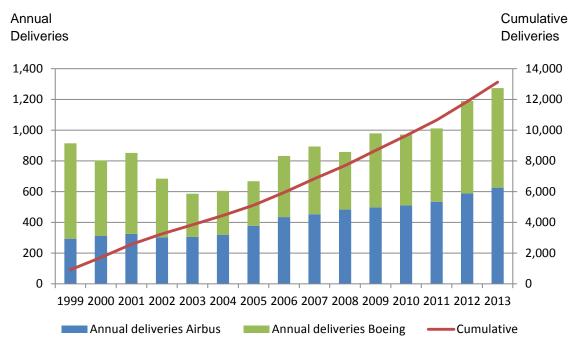
- China Railways Corporation
- Indian Railways
- London Underground
- NYCTA
- SNCF

#### **Aeronautics**

Over the last several years, growing passenger traffic and fleet renewal have led to an increase in demand for aircraft, as can be seen in the number of deliveries in the chart below.

The A380 was the first aircraft (A/C) to use more power electronics technology. This trend will continue as can be seen in the more electric aircraft (MEA) and more electric engine (MEE) concepts.

## A) A growing market since 2003



Source: Airbus and Boeing (web sites)

## B) New opportunities in a mature market

Mersen is a leading partner for the aerospace and aeronautic industries, where reliable components and materials are required to handle extreme environmental conditions and meet strict safety specifications.

Its offer consists of:

Products resistant to extreme temperature and abrasion

- Refractory components
- C/C products for brakes

Reliable components to meet stringent safety requirements

- Sealing components and materials
- Aerospace mechanical components
- Cooling for power electronics
- Carbon brushes for electrical rotating machines

In the area of aerospace propulsion, Mersen's materials and solutions are also essential in the production of key components such as turbo-reactor turbine blades made from special alloys:

- EDM (Electrical Discharge Machining)
- Metal processing

## C) Serving the major industry players

Mersen serves the major industry players around the world, among them (in alphabetical order):

- Airbus
- Boeing
- Bombardier
- Thales

#### **Process industries**

Mersen is active in the process industries through both its materials and electrical business segments.

#### A) Expertise from the materials segment

The materials segment brings its expertise in environments that require resistance to high-temperatures or corrosion or when high conductivity is needed:

Resistance to high temperatures

- Graphite parts for the glass industry
- · Graphite for continuous casting of nonferrous metals

#### Anti-corrosion

- Coke oven gas treatment
- Hydrometallurgy (including for rare earths)
- Oil & gas extraction processes (in particular shale gas)
- Surface treatment for metallurgy
- Water and wastewater treatment

#### Electrical conductivity

 Graphite parts for EDM (Electrical Discharge Machining), a manufacturing process used in the molding industry in which a desired shape is obtained using electrical discharges between two electrodes.

#### B) Expertise from the electrical segment

The electrical segment contributes to the safety and performance of electrical installations and power electronics, making Mersen a key partner in a large number of industries.

We leverage the full range of our electrical product portfolio to serve these markets.

Signal & power transfer for motors and generators:

- Carbon brushes and brush-holders
- Slip ring assemblies
- Signal transfer systems

#### Power distribution and control:

- Fuses & Fusegears
- Surge protection devices
- High power switches and contactors

#### Power electronics:

- Cooling devices
- Laminated busbars
- Semi-conductor fuses
- Surge protection devices

#### Markets served include:

- Metallurgy: Electrical solutions for foundries and furnaces, hot and cold rolling mills and galvanic lines.
- Cement: Electrical solutions for DC motors, asynchronous motors with wound rotors in the processes of raw material extraction, crushing, grinding, cooking, cooling, etc.
- Rubber and plastics industry: Solutions designed for very specific operations (extrusion, injection, hot working, constant or variable speed, etc.)
- Mining: Solutions designed for the optimal performance of power shovels, draglines, loaders, dump trucks, underground equipment, etc.
- Pulp and paper industry: High-performance electrical solutions (for pulping machines, winders, rollers, driers, etc.), and mechanical and sealing solutions (for pumps and other systems)
- Assembly manufacturing: Optimized solutions and services for electrical rotating machines and power and signal transfer.

## **APPENDICES**

## Consolidated income statement

## **Consolidated statement of financial position**

## Consolidated statement of cash-flows

Data for 2012 are restated to take into account the application of IAS19.

Data for 2012 and 2011 are presented in accordance with IFRS5, in light of the plan to divest or discontinue certain non-strategic businesses that are part of the materials segment, as disclosed on February 14, 2013.

Data for 2009, 2008 and 2007 are restated for the disposal of the Automotive and Household Electrical Appliance Brush division (effective May 1, 2009).

## **Consolidated income statement**

(in millions of euros)	2013	2012	2011	2010	2009	2008
Consolidated sales	738.8	810.7	816.2	741.2	587.3	661.9
Gross margin	213.4	243.4	263.1	231.1	174.8	216.2
As a % of sales	28.9%	30.0%	32.2%	31.2%	29.8%	32.7%
Selling and marketing costs	(72.7)	(76.7)	(72.4)	(73.6)	(60.3)	(64.7)
Administrative and research costs	(81.2)	(86.5)	(79.5)	(74.5)	(61.3)	(66.3)
Other operating costs	0.3	(2.6)	(4.7)	(5.4)	(2.3)	(2.2)
Operating income before non- recurring items	59.8	77.6	106.5	77.6	50.9	83.0
As a % of sales	8.1%	9.6%	13.0%	10.5%	8.7%	12.5%
Non-recurring income/(charge)	(50.5)	(12.2)	(4.4)	(3.0)	(5.3)	10.3
Operating income	9.3	65.4	102.1	73.6	45.6	93.3
Net finance income/(costs)	(11.0)	(13.0)	(10.2)	(10.8)	(10.4)	(12.1)
Income before tax and non- recurring items	(1.7)	52.4	91.9	62.8	35.2	81.2
Current and deferred income tax	(23.1)	(17.5)	(29.5)	(19.9)	(9.5)	(24.2)
Net income from assets held for sale or discontinued operations	(3.8)	(27.7)	(2.7)	(3.1)	(10.8)	(27.2)
Net income for the year	(28.6)	7.2	59.7	39.8	14.9	29.8
- Group share	(29.2)	6.5	56.9	38.4	14.6	29.1
- Minority interests	0.6	0.7	2.8	1.4	0.3	0.7

## **Consolidated statement of financial position**

In millions of euros	2013	2012	2011	2010	2009	2008
NON-CURRENT ASSETS						
Intangible assets						
- Goodwill	263	269.7	264	260.8	231.3	181.2
- Other intangible assets	32.9	40.1	40	37.1	31	8.2
Property, plant and equipment						
- Land	28.6	29.4	28.5	29.5	32.1	30.9
- Buildings	61.9	62.7	58.6	51.1	47.8	39.2
- Plant, equipment and other assets	161.8	189.4	189.5	172.5	146.2	135.8
- Assets in progress	21.9	30.3	29.6	34.1	37.6	29.1
Non-current financial assets						
- Investments	1.4	3.3	4.9	6.2	21.8	69.1
- Non-current derivatives						2.8
- Other financial assets	5.4	7	8.6	9.7	9.4	23.8
Non-current tax assets						
- Deferred tax assets	28.1	32.2	25.7	25.5	20	10.3
- Non-current portion of current tax assets	5.7	3.7	2.1	1.1	0.1	
TOTAL NON-CURRENT ASSETS	610.7	667.8	651.5	627.6	577.3	530.4
CURRENT ASSETS						
- Inventories	154.3	173.6	188.7	168	138.5	165.9
- Trade receivables	108	112.3	128	117.7	92	121
- Other receivables	13.5	14.4	20.7	17.8	15.8	29.1
- Current portion of current tax assets	13.3	7.6	4.6	4.3	7.6	10.4
- Other current assets				0.4	1.7	9.5
- Current financial assets	8.4	7	5.3	4.6	6	0.5
- Current derivatives	1.8	1.7	0.5	0.7	0.5	2
- Financial assets				0.3	1.2	3.2
- Cash and cash equivalents	20.2	21.4	52.2	48.3	32.9	46.8
- Assets held for sale and discontinued operations	2.4	5.6		0	1.3	24.1
TOTAL CURRENT ASSETS	321.9	343.6	400	362.1	297.5	412.5
TOTAL ASSETS	932.6	1,011.4	1,051.5	989.7	874.8	942.9

In millions of euros	2013	2012	2011	2010	2009	2008
EQUITY - Share capital	41.6	40.7	40.6	39.9	39.3	28.6
- Premiums and retained earnings	473.8	467.3	455.8	432.2	420.5	313.4
- Net income for the year	(29.2)	6.5	56.9	38.4	14.6	29.1
- Cumulative translation adjustments	(43.4)	(25.8)	(20.8)	(29.7)	(53.8)	(49.9)
EQUITY ATTRIBUTABLE TO MERSEN'S SHAREHOLDERS	442.8	488.7	532.5	480.8	420.6	321.2
- Non-controlling interests	10	10.5	10.4	12.9	4.3	4
EQUITY	452.8	499.2	542.9	493.7	424.9	325.2
Non-current liabilities						
- Non-current provisions	8.5	0.7	0.5	0.5	0.4	43.2
- Employee benefits	66.5	77.1	35.6	36.7	34.2	34.9
- Deferred tax liabilities	22.1	19.7	24.8	22.4	15.6	6.1
- Borrowings	190	234.3	261.7	227.1	192.7	297.6
- Non-current derivatives	0.6	1.9	2.1	1.5	1.2	0.5
TOTAL NON-CURRENT LIABILITIES	287.7	333.7	324.7	288.2	244.1	382.3
CURRENT LIABILITIES						
- Trade payables	58.9	60.5	64	71.6	53.7	72
- Other payables	59.1	58.7	67.8	66.8	51.4	64.3
- Current provisions	5.1	2.6	5	4.1	0.6	3
- Current portion of current tax liabilities	12.2	6.8	5.5	8.4	2	4.4
- Other liabilities	2.7	2.1	5.1	8.6	33.6	14
- Other current financial liabilities	11.5	10.3	5.3	35	29.4	39.2
- Current derivatives	0.6	0.7	1.2	2.1	0.1	3.9
- Current advances	0.3			4.3	1.9	1.3
- Bank overdrafts	38.8	25.3	30	6.9	31	18.3
- Liabilities related to assets held for sale and disc.ontinued operations	2.9	11.5		0	2.1	15
TOTAL CURRENT LIABILITIES	192.1	178.5	183.9	207.8	205.8	235.4
TOTAL LIABILITIES AND EQUITY	932.6	1,011.4	1,051.5	989.7	874.8	942.9

## **Consolidated statement of cash-flows**

In millions of euros	2013	2012	2011	2010	2009	2008
Income before tax	(1.7)	52.4	91.9	62.8	35.2	81.2
Depreciation and amortization	40.2	39.7	37.0	36.6	31.4	25.1
Additions to/(write-backs from) provisions	39.0	(1.6)	(8.0)	0.3	(3.9)	(5.2)
Net finance income/(costs)	11.0	13.0	10.2	10.8	10.4	12.1
Capital gains/(losses) on asset disposals	1.9	(1.2)	1.3		2.3	0.3
Other	(0.3)	1.5	(4.2)	0.5	1.8	(10.6)
Cash generated by operating activities before change in WCR	90.1	103.8	135.4	111.0	77.2	102.9
Change in the working capital requirement	13.9	27.7	(35.6)	(2.6)	43.1	(24.2)
Income tax paid	(17.7)	(22.6)	(31.8)	(10.0)	(4.8)	(13.1)
Net cash generated by continuing operations	86.3	108.9	68.0	98.4	115.5	65.6
Cash generated by discontinued operations	(8.6)	(7.1)	(5.5)	(0.9)	(20.2)	(5.2)
Net cash generated by operating activities	77.7	101.8	62.5	97.5	95.3	60.4
Investing activities						
Intangible assets	(1.3)	(0.8)	(0.2)	(0.2)	(0.9)	(0.5)
Property, plant and equipment	(26.8)	(41.5)	(47.6)	(36.3)	(42.5)	(57.0)
Financial assets	(0.1)	0.4		(1.2)	(0.5)	(0.3)
Impact of changes in the scope of consolidation	(2.6)	(28.5)	(9.5)	(16.7)	(24.5)	(73.4)
Other changes in cash generated/(used) by investing activities	(1.0)	(0.3)	3.0	8.8	(5.9)	(4.6)
Cash generated/(used) by investing activities from continuing operations	(31.8)	(70.7)	(54.3)	(45.6)	(74.3)	(135.8)
Cash generated/(used) by investing activities from discontinued operations	(5.8)	(0.6)	(0.6)		2.2	(1.5)
Cash generated/(used) by investing activities	(37.6)	(71.3)	(54.9)	(45.6)	(72.1)	(137.3)
Cash generated/(used) by operating and investing activities	40.1	30.5	7.6	51.9	23.2	(76.9)
Non-recurring cash outflow (EU fine)				(29.1)		
Proceeds from issue of new shares and other increases in equity	(3.4)		(0.2)	0.3	87.6	(0.5)
Net dividends paid to shareholders and minority interests	(3.7)	(19.4)	(5.2)	(3.5)	(2.5)	(12.8)
Interest payments	(10.7)	(12.3)	(9.8)	(9.6)	(10.5)	(9.1)
Change in debt (Note 15)	(23.3)	(30.7)	10.0	1.1	(111.0)	138.6
Cash generated/(used) by financing activities	(41.1)	(62.4)	(5.2)	(11.7)	(36.4)	116.2
Change in cash	(1.0)	(31.9)	2.4	11.1	(13.2)	39.3
Cash at beginning of fiscal year	21.4	52.2	48.6	34.1	50.1	26.4
Cash at end of fiscal year	20.2	21.4	52.2	48.6	34.1	50.1
Impact of changes in the scope of consolidation			(0.4)	(1.6)	(1.5)	1.0
Impact of currency fluctuations	0.2	(1.1)	(0.8)	(1.8)	4.3	14.6
Change in cash	(1.0)	(31.9)	2.4	11.1	(13.2)	39.3



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