# The powerhouse.

Boost your fleet and reduce your operating costs with our Vented Material Handling Ultimate batteries.







# They call it extreme duty application. We call it daily routine.

Move more goods faster - and leave conventional batteries behind. See all the benefits for yourself:

#### Setting new standards:

- · Breaking the barrier: Electric drive for applications with extreme requirements dominated by internal combustion engines.
- Longer operating life, runtime and investment depreciation.

#### Reduced operating costs:

· Increased throughput and best-in-class total cost of ownership.

#### **Eco-friendly energy:**

• Excellent carbon footprint - sustainable and supported by government programs in most countries.



# The shift changes. Our powerhouse just keeps going.

No matter how complex your business is, we are the perfect partner: For us, problems are challenges that we like to take care of. That is why we are able to offer you innovative and reliable best-of-class solutions. Topics such as sustainability and environmental protection are becoming

#### Flexible applications.

Fewer battery changes: Depending on the application, Vented Material Handling Ultimate - our powerhouse for extreme duty applications, can reduce the number of battery changes or make them obsolete.





Three shifts, one battery: No need to change batteries during shifts for many applications.

Every 5th battery can be omitted: Less battery change and full

#### It's time for a new standard.

Our Vented Material Handling Ultimate battery is the best in its class. Forklifts run significantly more hours per charging cycle. Even for the same cyclic life the total operating hours will be much higher compared to standard batteries. Moreover, thanks to its lower average operating temperature, the overall battery lifetime will be increased as well.



**Vented Material Handling Ultimate** battery

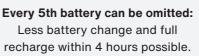


Standard lead battery



- increasingly important for us, because we want to leave a liveable future for next generations.
- Our best high-performance battery, which combines all these features, is the Vented Material Handling Ultimate -
- our solution for extreme duty applications.







**Opportunity charging during breaks:** Offers longer working time without changing the battery.



# **Often the strongest** are not also the smartest.



Luckily, our **Vented Material Handling Ultimate** battery tells you better.



# The business is changing fast. That is why our batteries recharge faster.

In just 5 hours, Vented Material Handling Ultimate batteries can be fully recharged from 80% depth of discharge. This is possible due to its unique charge acceptance which leads in addition to lower operating temperatures and less energy loss.

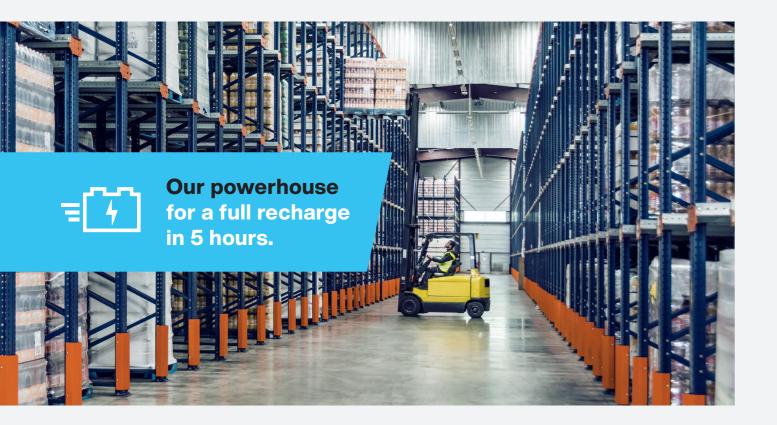
#### Our fast charging solution.

The components of the fast-charging package are perfectly matched – so that the Vented Material Handling Ultimate battery charges reliably, efficiently and powerfully.



#### Z-profile: the smart charging system.

The sophisticated Z-profile together with air agitation and temperature probe enable fast- and intermediate charging during available downtimes of Vented Material Handling Ultimate batteries. The air agitation successfully prevents acid stratification and keeps the battery powerful and healthy.





# Most batteries are stressed in the cold. The ultimate battery stays cool.

Batteries operated at low temperature areas are typically affected by capacity loss and performance degradation. Our Vented Material Handling Ultimate batteries are completely different:

#### Extended running time at low temperatures.

At freezing temperatures, most batteries show a significant capacity loss. When batteries need to be changed or recharged more frequently, it reduces operating efficiency. Vented Material Handling Ultimate batteries have significantly longer operating times and guarantee your business more productivity, perfect in cold storage or outdoor applications.

#### **Outdoor applications.**

Industrial trucks in outdoor applications are exposed to a wide range of temperatures: from high in summer to freezing in winter. Vented Material Handling Ultimate batteries remain powerful even at low temperatures and minimize the effects caused by temperature fluctuations.



Vented Material Handling Ultimate battery



Standard lead battery

# Well thoughtout down to the tiniest detail.



Our powerhouse, so you can focus on more important things.

# We are taking on the challenges of today. To embrace the future of tomorrow.

Our Vented Material Handling Ultimate batteries are based on an innovative lead technology that overcomes the limitations of standard forklift batteries. This makes them ideal for modern forklift trucks (three-phase motors, energy recovery systems) and heavyduty applications. It features strong and robust performances in all demanding environments.



#### Heavy-duty applications.

More and more battery-powered heavy-duty forklifts are entering the market and replace internal combustion forklifts. Tensor delivers the power and performance required for these demanding tasks.

#### **Reduce emissions.**



By using electric forklift trucks, companies reduce carbon dioxide, nitrogen oxide and soot emissions. Our Vented Material Handling Ultimate battery simplifies the switch by offering the performance typically associated with internal combustion engines. This enables to improve conditions for employees, achieve environmental targets and reduce noise pollution. Best of all, electric forklifts save money and are even subsidized by the government, depending on the country.

#### Environmentally friendly battery.

For any business that want to minimize environmental impact: Vented Material Handling Ultimate is fully recyclable and has a longer life than conventional traction batteries. In addition, the charging and discharging processes are tuned for maximum efficiency, so you save significantly on energy costs.







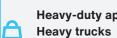
### **Other batteries have limits.** Limits that we confidently leave behind.

Vented Material Handling Ultimate offers outstanding performance in a wide variety of applications - with impressive power, high energy content and low operating temperature. But it is not only strong, but also smart. In short: With the Material Handling Ultimate battery, you are optimally equipped for every challenge.



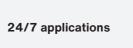
High-rack facilities / Narrow aisle





Heavy-duty applications /





Cold storage /

**Outdoor applications** 

Seasonal business / Activity peaks

Forklift attachments /

Additional electrical

consumers

Our best high-performance battery convinces with the

rental models are also an option for responding optimally

to short-term peaks in seasonal business. If you have any

elimination of idle times and the ability to respond to

seasonal increases when used optimally. Leasing or

questions, please do not hesitate to contact us.

# Strong and smart. So are the numbers that prove it.

Of course, our Vented Material Handling Ultimate is no less convincing on paper than it is in its versatile applications. Because behind the hard core are also hard-core numbers that stand up to anything.

#### Available cells:

Standard	Cell dimensions <sup>1</sup>		Vented Material Handling Ultimate					
EPzS cell type	Height h1² [mm] Height h2³ [mm]	Length (I) [mm]	PCSM cell type	Cell weight⁴ [kg]	Nominal capacity [Ah]	Energy content⁵ [Wh]	Transshipment plus <sup>6</sup>	No. of positive plates
3 EPzS 270	463 / 493	65	04PCSM0300SC	17.3	300	585	+20%	4
4 EPzS 360	463 / 493	83	05PCSM0375SC	22.0	375	730	+13%	5
5 EPzS 450	463 / 493	101	07PCSM0525SC	27.0	525	1025	+27%	7
6 EPzS 540	463 / 493	119	08PCSM0600SC	31.0	600	1170	+20%	8
7 EPzS 630	463 / 493	137	09PCSM0675SC	36.1	675	1315	+16%	9
8 EPzS 720	463 / 493	155	11PCSM0825SC	41.0	825	1610	+24%	11
9 EPzS 810	463 / 493	173	12PCSM0900SC	45.6	900	1755	+20%	12
10 EPzS 900	463 / 493	191	14PCSM1050SC	50.3	1050	2050	+27%	14
10 EI 20 300	4007 400	131	141 0010100000	50.5	1050	2000	12170	14
3 EPzS 375	573 / 603	65	04PCSM0390SC	20.1	390	760	+13%	4
4 EPzS 500	573 / 603	83	05PCSM0500SC	25.0	500	975	+9%	5
5 EPzS 625	573 / 603	101	07PCSM0660SC	33.1	660	1285	+15%	7
6 EPzS 750	573 / 603	119	08PCSM0780SC	38.0	780	1520	+13%	8
7 EPzS 875	573 / 603	137	09PCSM0880SC	44.5	880	1715	+9%	9
8 EPzS 1000	573 / 603	155	11PCSM1040SC	50.7	1040	2030	+14%	11
9 EPzS 1125	573 / 603	173	12PCSM1125SC	56.9	1125	2195	+9%	12
10 EPzS 1250	573 / 603	191	14PCSM1320SC	63.0	1320	2570	+15%	14
3 EPzS 465	713 / 743	65	04PCSM0495SC	25.5	495	955	+16%	4
4 EPzS 620	713 / 743	83	05PCSM0640SC	31.7	640	1235	+12%	5
5 EPzS 775	713 / 743	101	07PCSM0840SC	41.7	840	1620	+18%	7
6 EPzS 930	713 / 743	119	08PCSM0990SC	48.6	990	1910	+16%	8
7 EPzS 1085	713 / 743	137	09PCSM1135SC	53.6	1135	2190	+13%	9
8 EPzS 1240	713 / 743	155	11PCSM1320SC	63.6	1320	2545	+16%	11
9 EPzS 1395	713 / 743	173	12PCSM1475SC	71.3	1475	2835	+15%	12
10 EPzS 1550	713 / 743	191	14PCSM1680SC	79.9	1680	3240	+18%	14

1 width (w) 198mm <sup>2</sup> over cell lid

<sup>3</sup> total hight incl. connector and screw <sup>4</sup> filled and charged // tolerance +/-5%

<sup>5</sup> average discharge voltage 1.95 Vpc <sup>6</sup> according to the product-specific driving profile







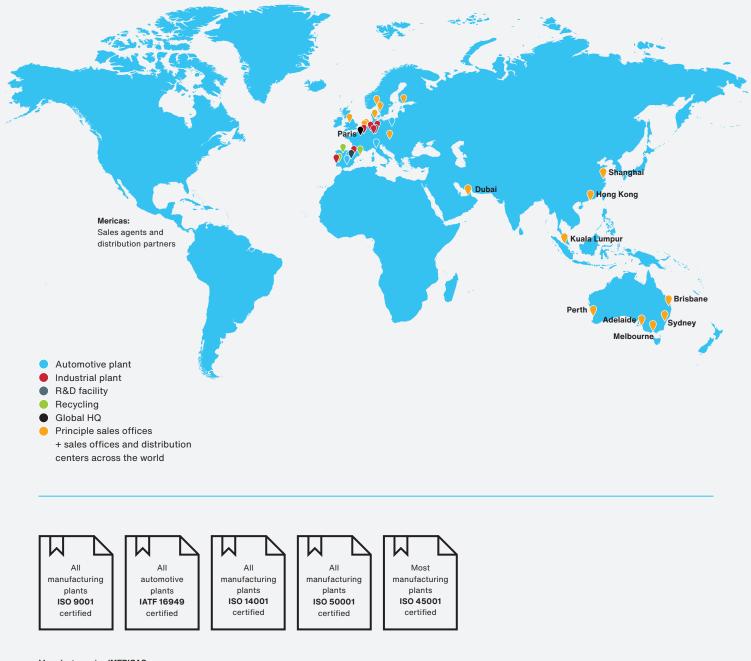






# **Progress knows no borders.** Like our dedication for a sustainable future.

Mericas<sup>®</sup> battery solutions are designed and manufactured in Europe. Transforming the future of energy storage and driving the electrification from all our locations around the world.



#### Manufacturer: by /MERICAS

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