

Industrial Batteries / Motive Power

**TENSOR xGEL**

*High performance and  
zero maintenance*

**MORE POWER  
FASTER RECHARGE  
EXTENDED CYCLE LIFE**

**TENSOR**<sup>®</sup>  
**xGEL**

## TENSOR xGEL

High performance and zero maintenance



**TENSOR x SONNENSCH EIN GEL = TENSOR xGEL**

GNB® Industrial Power, inventor of Sonnenschein Gel and TENSOR technology, announces **TENSOR xGEL**:  
A revolutionary battery technology which multiplies the benefits of Sonnenschein Gel and TENSOR.

### The revolutionary fusion of Sonnenschein Gel and TENSOR technology

With the expertise of Sonnenschein Gel and TENSOR technology, GNB® Industrial Power was in an excellent position to create something new which meets the demands of the market: A battery offering high performance and requiring zero maintenance.

Based on this starting position, GNB's global R&D team has developed a revolutionary battery technology which multiplies the benefits of Sonnenschein Gel and TENSOR batteries.

### The Xtra of TENSOR xGEL technology

Compared to standard Gel batteries, the unique TENSOR xGEL technology offers increased available capacity and decreased time required for recharging. Additionally, TENSOR xGEL cells are designed to minimize heat evolution inside the cells which is beneficial for the efficiency and service life of batteries. The result is a versatile maintenance-free battery technology setting a new standard of valve regulated lead-acid (VRLA) batteries.

#### Technical advantages & your benefits

- > dryfit® Gel technology - No water refilling
- > High energy content - Long run time
- > Large battery sizes - High Power
- > High charge acceptance - Quick recharge
- > Intrinsic deep discharge protection - High cycle life
- > Low internal resistance - High efficiency

#### Maximum availability



- > Full recharge in 8 hours by using the exclusive X-Profile
- > Suitable for intermediate/opportunity charging in conjunction with the X-profile
- > Operational time comparable to standard flooded batteries

### Light Duty

- Limited handling performance
- 1 or 2-shift operations
- Normal environmental conditions
- Indoor applications, even ground
- Example: hand pallet truck in a supermarket

### Medium Duty

- Medium handling performance
- 1 or 2-shift operations
- Temperature variations, dust
- Partial outdoor applications, uneven ground
- Example: 1-2t forklift at a loading ramp

### Heavy Duty

- High handling performance
- 2 or 3-shift operations
- Elevated temperatures, dust
- Partial outdoor applications, uneven ground
- Examples: 3-5t forklift, order picker, VNA truck in warehouse

### Extreme Duty

- Intense handling performance
- 2 or 3-shift operations
- High dust load, very high or low temperatures
- Indoor/ outdoor applications
- Accessory equipment (clamps, multiple forks)
- Examples: forklift over 5t, distribution center, cold storage, mining, chemical industry

SONNENSCHN

TENSOR XGEL

SONNENSCHN LITHIUM

TENSOR

MARATHON CLASSIC

MARATHON EXCELL

MARATHON AQUA

● ● ● ● Optimal area of operation  
● ● ● ● Potential area of operation

## Available TENSOR xGEL cells

MARATHON Classic	Sonnenschein
EPzS cell type	EPzV cell type
3 EPzS 270	3 EPzV 240
4 EPzS 360	4 EPzV 320
5 EPzS 450	5 EPzV 400
6 EPzS 540	6 EPzV 480
7 EPzS 630	7 EPzV 560
8 EPzS 720	8 EPzV 640
9 EPzS 810	9 EPzV 720
10 EPzS 900	10 EPzV 800
3 EPzS 375	3 EPzV 300
4 EPzS 500	4 EPzV 400
5 EPzS 625	5 EPzV 500
6 EPzS 750	6 EPzV 600
7 EPzS 875	7 EPzV 700
8 EPzS 1000	8 EPzV 800
9 EPzS 1125	9 EPzV 900
10 EPzS 1250	10 EPzV 1000
3 EPzS 465	3 EPzV 360
4 EPzS 620	4 EPzV 480
5 EPzS 775	5 EPzV 600
6 EPzS 930	6 EPzV 720
7 EPzS 1085	7 EPzV 840
8 EPzS 1240	8 EPzV 960
9 EPzS 1395	9 EPzV 1080
10 EPzS 1550	10 EPzV 1200

TENSOR xGEL				
TCSV cell type	Height h1* [mm] / Height h2** [mm]	Length l [mm]	Cell weight*** [kg]	Nominal capacity C5 [Ah]
3 TCSV 300	462 / 492	65	16,9	300
4 TCSV 365	462 / 492	83	21,2	365
5 TCSV 490	462 / 492	101	28,2	490
6 TCSV 545	462 / 492	119	31,9	545
7 TCSV 625	462 / 492	137	36,0	625
8 TCSV 740	462 / 492	155	42,7	740
9 TCSV 825	462 / 492	173	47,2	825
10 TCSV 940	462 / 492	191	53,4	940
3 TCSV 380	553 / 583	65	20,6	380
4 TCSV 450	553 / 583	83	26,5	450
5 TCSV 610	553 / 583	101	33,7	610
6 TCSV 690	553 / 583	119	38,6	690
7 TCSV 765	553 / 583	137	43,5	765
8 TCSV 950	553 / 583	155	52,0	950
9 TCSV 1035	553 / 583	173	56,7	1035
10 TCSV 1195	553 / 583	191	65,3	1195
3 TCSV 450	672 / 702	65	25,1	450
4 TCSV 545	672 / 702	83	31,3	545
5 TCSV 750	672 / 702	101	40,7	750
6 TCSV 870	672 / 702	119	47,1	870
7 TCSV 920	672 / 702	137	51,8	920
8 TCSV 1130	672 / 702	155	63,0	1130
9 TCSV 1210	672 / 702	173	70,2	1210
10 TCSV 1540	672 / 702	191	79,0	1540

\*over cell lid, \*\*total height incl. connector and screw, \*\*\*filled and charged (tolerance +/-5%)



**Exide Technologies**, with operations in more than 80 countries, is one of the world's largest producers and recyclers of lead-acid batteries. Exide Technologies provides a comprehensive and customized range of stored electrical energy solutions. Based on over 120 years of experience in the development of innovative technologies, Exide Technologies is an esteemed partner of OEMs and serves the spare parts market for industrial and automotive applications.

**GNB Industrial Power** – A division of Exide Technologies – offers an extensive range of storage products and services, including solutions for telecommunication systems, railway applications, mining, photovoltaic (solar energy), uninterrupted power supply (UPS), electrical power generation and distribution, fork lifts and electric vehicles.

**Exide Technologies** takes pride in its commitment to a better environment. An integrated approach to manufacturing, distributing and recycling of lead-acid batteries has been developed to ensure a safe and responsible life cycle for all of its products.

**GNB® INDUSTRIAL POWER** devises enduring energy concepts that convince with efficiency, flexibility and profitability.