

**Honshu®**

**HONSHU BATTERY (YINGDE) CO.,LTD**

Address: Dongbao industrial Zone, Donghua Town, Yingde City, Guangdong Province

TEL:020-86860028 / 86861998

FAX:020-86878822

WWW.HONSHU-BATTERY.COM



Professional traction  
battery manufacturer  
**Honshu®**

# TRACTION BATTERY



 GB  BS  DIN



## COMPANY PROFILE

Honshu(Yingde)battery Co.,Ltd, is a professional enterprise engaged in traction lead-acid battery research, development,production and sales,is the only one traction lead-acid battery manufacturer in Guangdong province.Existing product are widely used in mines,station,docks and postal services,food and other place to avoid exhaust pollution of the internal combustion of the internal combustion engine and outage frequently alternate short-distance transport.Formerly Honshu battery which was Japan Honshu corporation owned the lead-acid battery manufacturers in China, now is funded solely by the domestic registered company. The Honshu battery is located in QingyuanYingde city(with the nickname garden city),with the address in Dongbao industrial park,Donghua town,Yingde city,covers an area of 33300 square meters,excellent surroundings,convenient traffic,only 500meters from the exit of Jingzhu express way Yingde north town. Our factory have the production capacity with an annual output of 800,000 Vah lead-acid battery,was listed as one of the seven key projects of Yingde city.

Honshu battery self-development,design and production traction lead-acid battery with the requirements standard of GT/T 7403.2-2008 in the people's republic of China.Our company has a number of domestic industry professional technical team,from battery design,material selection to process development and battery manufacturing equipment,are the world's highest level.

Our company has passed ISO9000,TS16949 and a series of international quality system certification,with our own unique products and production technology,cost-effective and other advantages,to provide customers with reliable and durable traction lead-acid battery products. Refer to quality first,the credibility first and the customer first principle,to provide customers with products meanwhile provide technical support,technical advice and after-sales services to meet the growing needs of society and customers.

# TRACTION BATTERY



**PRODUCTION  
CAPACITY**



## PRODUCT STRUCTURE CHARACTERISTICS



Genuine ribs made of multi-alloy die-casting, the battery life is much higher than other lead-acid batteries, with a unique extrusion paste process, effectively improve the conductivity of the plate, paste corrosive, lead paste combination, product consistency;

Negative plate with concave and convex structure, large amount of paste, with enhanced lead paste combination, improve the corrosion resistance of the grid and battery shock;

Improve the plate strength, effectively reduce the plate cracking, slow down the lead plaster off due to softening plaster;

Fully insulated soft cable, to avoid current leakage;

Bounce the top plug of the valve structure, with a special electrolyte liquid level indicator;

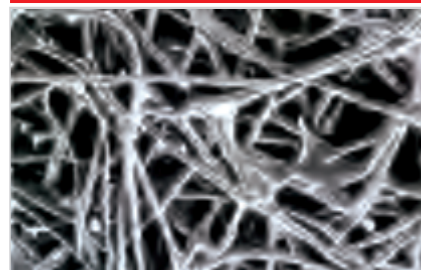
Wear automatic filling of the liquid cap;

Use of multi-microporous imports of high-quality oblique partitions, high porosity, low resistance;

PP materials for battery cover material, impact resistance;

The patented terminal seal structure completely prevents plate growth and leakage.

POLYACID FIBER



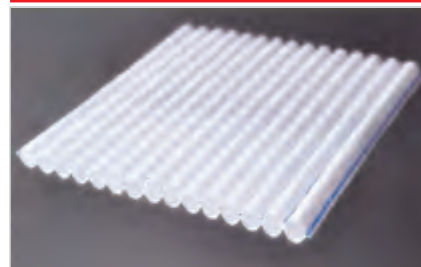
TOP PLUG



AUTOMATIC FILLER CAP



POLYESTER FIBER TUBE



FLEXIBLE CONNECTOR



LEAD CONNECTOR



## PRODUCT PERFORMANCE ADVANTAGES

Long design life, more than 1500 cycles at 80% DOD

Excellent cycle performance and recovery ability after deep discharge

Excellent low temperature performance

Reliable sealing structure

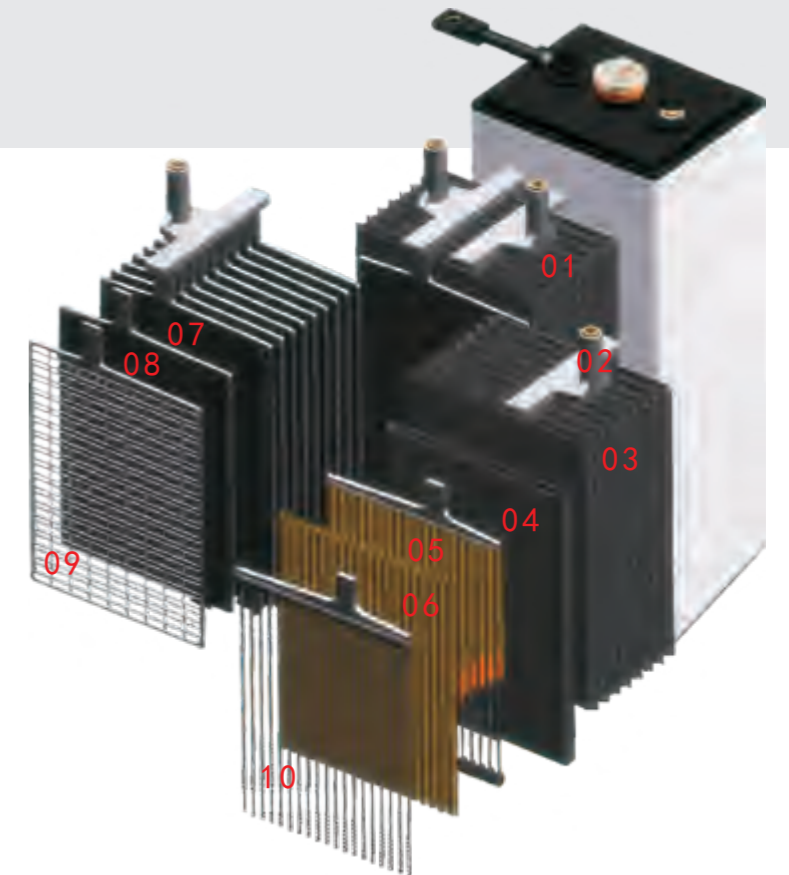
Special design to prevent the short circuit of battery

Automatic watering system and gas mixing system (optional)



## INTERNAL STRUCTURE OF CELL

- 01 Group Bar
- 02 Terminal
- 03 Positive group
- 04 Separator
- 05 Tubular positive plate
- 06 Dacron tube
- 07 Negative group
- 08 Negative plate
- 09 Negative grid
- 10 Positive grid

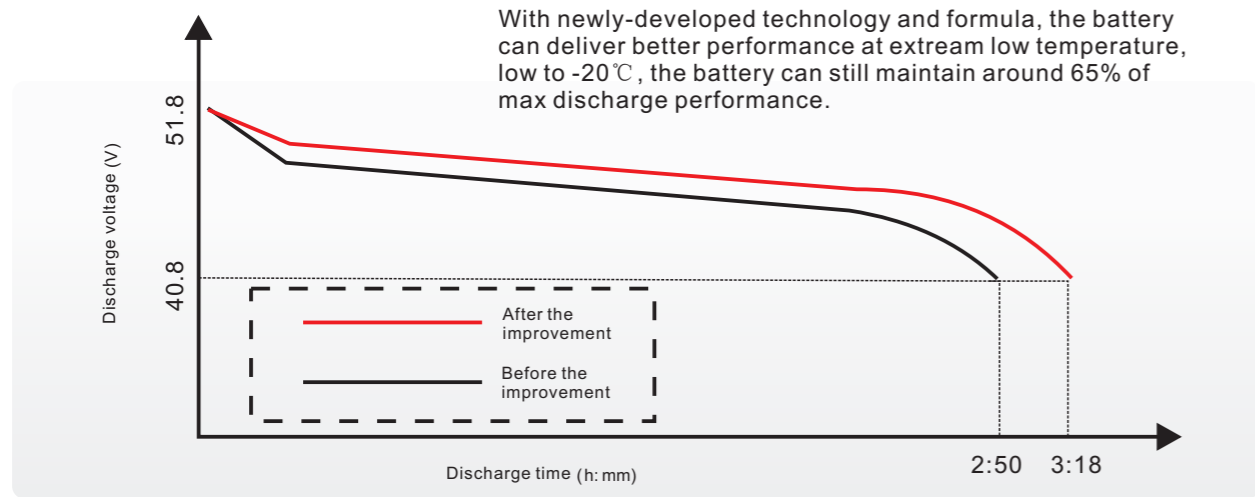


## MAIN APPLICATION RANGE

Honshu traction lead-acid batteries as a DC power widely supplied in forklifts, tractors and other equipment. Widely used in airports, stations, ports, vegetables and fruit market, factory warehouses and so on. At the same time, it widely used in buses, sports and entertainment as a clean and pollution-free DC power supply. Battery size in line with Chinese GB standards, the British BS standards, the Germanic DIN standard, also respectively passed DIN / N60254-2 and IEC60254-2 standards.



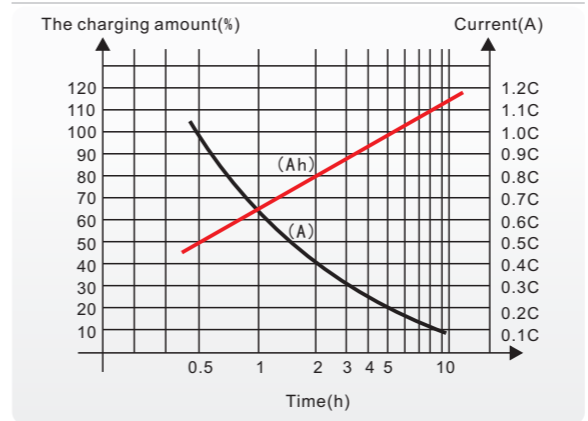
### Low temperature performance comparison (-20°C)



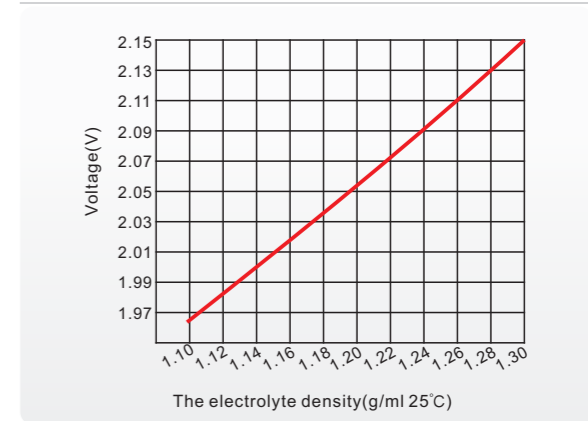
# TRACTION BATTERY

## PRODUCT CHARACTERISTIC

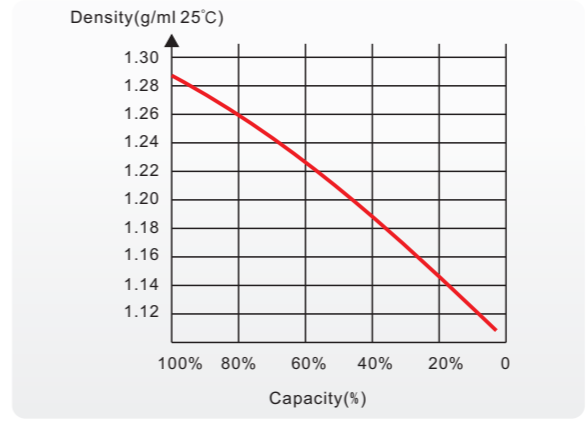
### Discharge characteristic



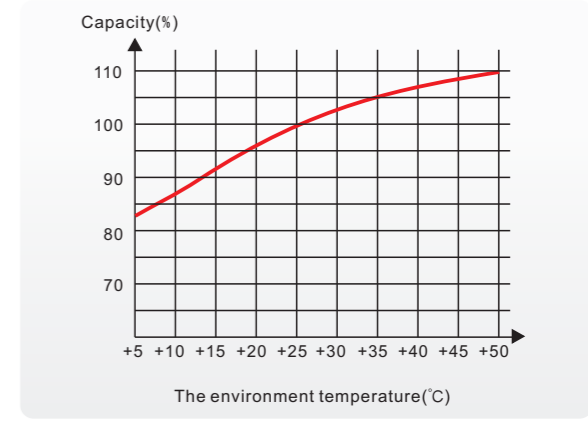
### Electrolyte Density vs. Voltage



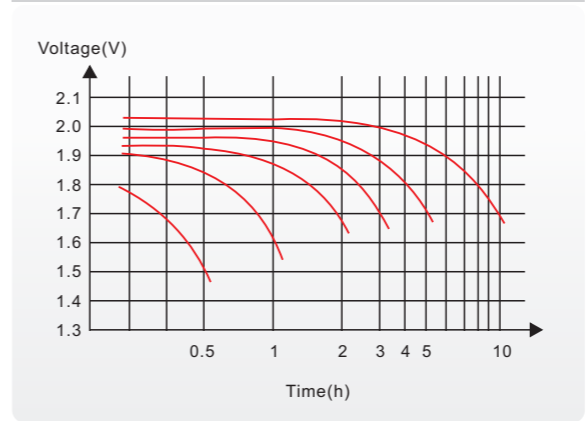
### Electrolyte density and capacity



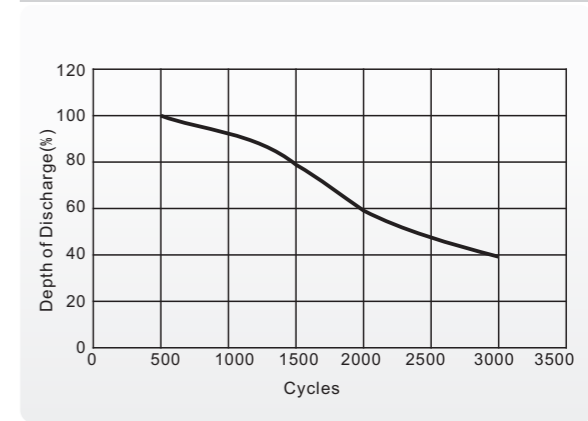
### Temperature and capacity



### Discharge characteristic



### The cycle life and DOD



## PRODUCT SPECIFICATIONS



### DIN Standards

Model	Nominal Capacity (Ah)-5hr	Overall Dimensions(mm)				Weight (Kgs)	
		L	W	H1	H2	Dry	With Acid
<b>(60Ah/plate)</b>							
2PZS120	120	47	198	335	370	4.8	6.6
3PZS180	180	65				7.2	9.9
4PZS240	240	83				9.6	13.2
5PZS300	300	101				12.0	16.5
6PZS360	360	119				14.4	19.8
7PZS420	420	137				16.8	23.1
8PZS480	480	155				19.2	26.4
9PZS540	540	173				21.6	29.7
10PZS600	600	191				24.0	33.0
<b>(70Ah/plate)</b>							
2PZS140	140	47	198	395	430	5.6	7.7
3PZS210	210	65				8.4	11.6
4PZS280	280	83				11.2	15.4
5PZS350	350	101				14.0	19.3
6PZS420	420	119				16.8	23.1
7PZS490	490	137				19.6	27.0
8PZS560	560	155				22.4	30.8
9PZS630	630	173				25.0	34.7
10PZS700	700	191				28.0	38.5
<b>(80Ah/plate)</b>							
2PZS160	160	47	198	430	465	6.3	8.5
3PZS240	240	65				9.0	12.1
4PZS320	320	83				11.8	16.4
5PZS400	400	101				15.6	21.8
6PZS480	480	119				17.8	25.1
7PZS560	560	137				21.3	28.6
8PZS640	640	155				24.2	33.8
9PZS720	720	173				27.5	38.6
10PZS800	800	191				29.4	42.9

### DIN Standards

Model	Nominal Capacity (Ah)-5hr	Overall Dimensions(mm)				Weight (Kgs)	
		L	W	H1	H2	Dry	With Acid
<b>(90Ah/plate)</b>							
2PZS180	180	47	198	505	540	7.2	9.9
3PZS270	270	65				10.7	14.9
4PZS360	360	83				14.4	19.8
5PZS450	450	101				18.0	24.8
6PZS540	540	119				21.6	29.7
7PZS630	630	137				25.2	34.7
8PZS720	720	155				28.8	39.6
9PZS810	810	173				32.4	44.6
10PZS900	900	191				43.2	59.4
<b>(100Ah/plate)</b>							
2PZS200	200	47	198	535	570	8.0	11.0
3PZS300	300	65				12.0	16.5
4PZS400	400	83				16.0	22.0
5PZS500	500	101				20.0	27.5
6PZS600	600	119				24.0	33.0
7PZS700	700	137				28.0	38.5
8PZS800	800	155				32.0	44.0
9PZS900	900	173				36.0	49.5
10PZS1000	1000	191				40.0	55.0
<b>(120Ah/plate)</b>							
2PZS240	240	47	198	600	635	10.0	14.2
3PZS360	360	65				14.1	20.4
4PZS480	480	83				18.3	26.7
5PZS600	600	101				22.5	33.0
6PZS720	720	119				26.4	39.0
7PZS840	840	137				31.4	46.1
8PZS960	960	155				35.6	52.4
9PZS1080	1080	155				40.8	59.7
10PZS1200	1200	155				44.0	65.0
<b>(140Ah/plate)</b>							
2PZS280	280	47	198	680	715	11.2	15.4
3PZS420	420	65				16.8	23.1
4PZS560	560	83				22.4	30.8
5PZS700	700	101				28.0	38.5
6PZS840	840	119				33.7	46.3
7PZS980	980	137				39.5	54.2
8PZS1120	1120	155				45.4	62.2
9PZS1260	1260	155				51.4	70.3
10PZS1400	1400	155				57.5	78.5

TRACTION BATTERY



### BS Standards

Model	Nominal Capacity (Ah)-5hr	Overall Dimensions(mm)				Weight (Kgs)	
		L	W	H1	H2	Dry	With Acid
<b>(50Ah/plate)</b>							
2PZB100	100	45	158	385	420	4.0	5.5
3PZB150	150	61				6.0	8.3
4PZB200	200	77				8.0	11.0
5PZB250	250	93				10.0	13.8
6PZB300	300	109				12.0	16.5
7PZB350	350	125				14.0	19.3
8PZB400	400	141				16.0	22.0
9PZB450	450	157				18.0	24.8
10PZB500	500	173				20.0	27.5
<b>(55Ah/plate)</b>							
2PZB110	110	45	158	395	430	4.4	6.1
3PZB165	165	61				6.6	9.1
4PZB220	220	77				8.8	12.1
5PZB270	275	93				11.0	15.1
6PZB330	330	109				13.0	18.2
7PZB385	385	125				15.4	21.2
8PZB440	440	141				17.6	24.2
9PZB495	495	157				19.8	27.2
10PZB550	550	173				22.0	30.3
<b>(65Ah/plate)</b>							
2PZB130	130	45	158	450	485	5.2	7.2
3PZB195	195	61				7.8	10.7
4PZB260	260	77				10.4	14.3
5PZB325	325	93				13.0	17.9
6PZB390	390	109				15.6	21.5
7PZB455	455	125				18.2	25.0
8PZB520	520	141				20.8	28.6
9PZB585	585	157				23.4	32.2
10PZB650	650	173				26.0	35.8
<b>(70Ah/plate)</b>							
2PZB140	140	45	158	480	515	5.6	7.7
3PZB210	210	61				8.4	11.6
4PZB280	280	77				11.2	15.4
5PZB350	350	93				14.0	19.3
6PZB420	420	109				16.8	23.1
7PZB490	490	125				19.6	27.0
8PZB560	560	141				22.4	30.8
9PZB630	630	157				25.2	34.7
10PZB700	700	173				28.0	38.5

# TRACTION BATTERY

### BS Standards

Model	Nominal Capacity (Ah)-5hr	Overall Dimensions(mm)				Weight (Kgs)	
		L	W	H1	H2	Dry	With Acid
<b>(75Ah/plate)</b>							
2PZB150	150	45	158	505	540	7.7	9.9
3PZB225	225	61				10.9	14.2
4PZB300	300	77				14.1	17.2
5PZB375	375	93				17.3	21.3
6PZB450	450	109				20.5	25.4
7PZB525	525	125				23.7	29.5
8PZB600	600	141				26.9	33.6
9PZB675	675	157				30.1	37.7
10PZB750	750	173				33.3	41.8
<b>(90Ah/plate)</b>							
2PZB180	180	45	158	580	615	7.4	10.1
3PZB270	270	61				10.8	14.9
4PZB360	360	77				13.6	19.7
5PZB450	450	93				17.4	24.5
6PZB540	540	109				21.2	29.3
7PZB630	630	125				24.6	34.1
8PZB720	720	141				28.8	38.9
9PZB810	810	157				32.6	43.7
10PZB900	900	173				36.5	48.5
<b>(95Ah/plate)</b>							
2PZB190	190	45	158	600	635	7.6	11.5
3PZB285	285	61				11.4	15.7
4PZB380	380	77				15.2	20.9
5PZB475	475	93				19.0	26.1
6PZB570	570	109				22.8	31.4
7PZB665	665	125				26.6	36.6
8PZB760	760	141				30.4	41.8
9PZB855	855	157				34.2	47.0
10PZB950	950	173				38.0	52.3
<b>(100Ah/plate)</b>							
2PZB200	200	45	158	690	720	8.0	11.0
3PZB300	300	61				12.0	16.5
4PZB400	400	77				16.0	22.0
5PZB500	500	93				20.0	27.5
6PZB600	600	109				24.0	33.0
7PZB700	700	125				28.0	38.5
8PZB800	800	141				32.0	44.0
9PZB900	900	157				36.0	49.5
10PZB1000	1000	173				40.0	55.0