




















# *ATLASBX CO., LTD*

*2015.01*



# HANKOOK TIRE GROUP STRUCTURE

## HANKOOK WORLDWIDE (Holding Company)

	 (Company Shares) (25%)	 (31%)	 (30%)	  (100%)		
			  			
Products	 Automotives Tires	 Lead Acid Batteries for Automotives, Industrial App.	 IT solution	 Machinery for Tire Manufacturing	 Tire mold, Aero Space Component	 Brake Pad
2014 Turnover	U\$ 7,000M	U\$ 466M	U\$ 78M	U\$ 82M	U\$ 44M	U\$ 43M
Founded	1941	1944	2000	1991	1967	1991

Stock Market

 한국거래소  
KOREA EXCHANGE



Established | **1941**

Sales Revenue | **US\$ 7 Billion** (2013)

World Rank in Tire Sales | **7<sup>th</sup>**

Employees | Approximately **21,000** Personnel

Products | Tires for Motorsports, Passenger cars, Light Trucks, Trucks and Buses

Global Corporate Organization	<b>5</b>	Offices for Global OE Network : Korea, USA, Germany, Japan, China
	<b>30</b>	Regional Sales Subsidiaries
	<b>5</b>	R&D Centers : Main R&D Center, ETC, ATC, CTC, JTC
	<b>8</b>	Plants : Korea(2), China(3), Hungary (1), Indonesia (1) America (1, Under Construction)

Number of Exporting Countries | Approximately **180** Countries worldwide



Established **1944**

Sales Revenue **US\$ 466 Million** (2014)

World Rank in Lead Acid Battery Sales **8<sup>th</sup>**

Employees Approximately **880** Personnel (R&D **45** Personnel)

Products Lead Acid Batteries for Automotives and Industrial Applications

Operation

Sales



Jeonju Plant



R&D,  
Daejeon Plant

Customers OEM :  (1998~)  (2004~)

After Market : **287** Customers in **130** Countries



**BOSCH**  
Invented for life





## 70 YEARS WITH LEAD ACID BATTERY

### Establishment

1944 Established as the  
ISAN Corporation



1952 Renamed to the  
Korean Battery Corp.

1977 Acquisition by  
Hankook Tire Co., Ltd.

### Development

1979 Daejeon Plant started  
\* Technical License Agreement  
with GNB, USA

1980 First Development  
of MF Battery in Korea



1992 R&D Center open

1994 ISO9001 certified

1994 Listed on Stock Market

1998 ISO14001 certified

### Growth

2000 Jeonju Plant started

2001 Launching SMF series

2003 ISO/TS16949 certified

2004 Reborn with the name of  
ATLASBX Co., Ltd.

2005 Launching AGM series

2008 Development of  
"X frame technology"



2009 First to get Reliability Mark  
by Korea Government

2011 Launching SHD series

2013 Launching UHPB series  
as flagship segment

2014 Launching EFB series  
for ISS vehicles

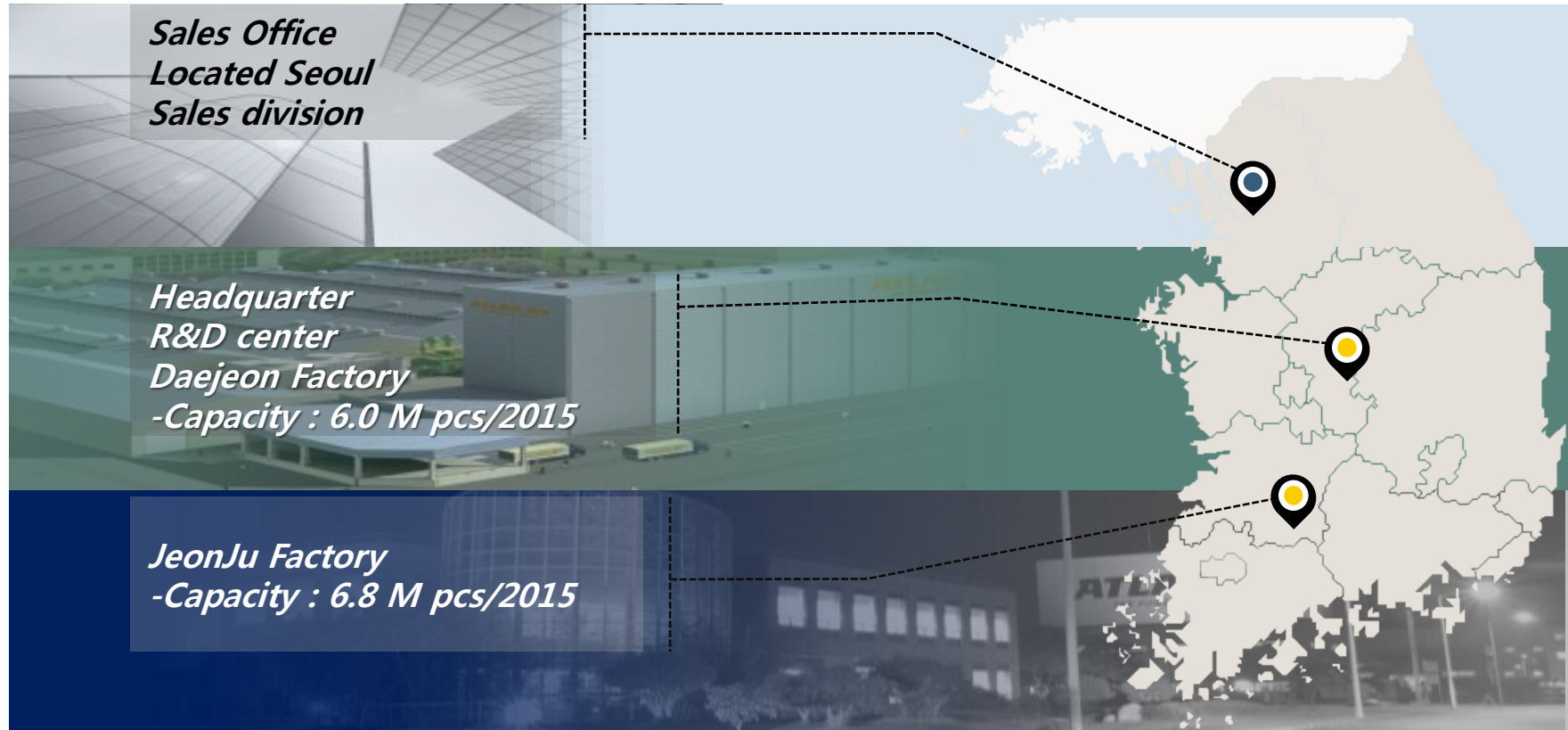


2014 1<sup>st</sup> Plant Expansion  
finished + 3.0M capa

### Leader

**TOWARD  
ATLASBX VISION 2020**

## OFFICE & PRODUCTION SITE



## FACTORY



### 1<sup>st</sup> Plant

*S.O.P : Oct. 1979*

*Capacity : 6.0M Units/Year*

*Production Items : Dry, SMF*

*Location : Dae-Jeon, Korea*

### 2<sup>nd</sup> Plant

*S.O.P : Dec., 2000*

*Capacity : 6.8 M Units/Year*

*Production Items : SMF, AGM*

*Location : Jeon-Ju, Korea*

*Expansion completed in Oct 2014*



# ATLASBX OVERVIEW

## OES CUSTOMER



***GENERAL MOTORS (SPO)***

*NORTH AMERICA, AFRICA, MIDDLE EAST, ASIA*





## OE CUSTOMERS



### **GENERAL MOTORS KOREA**

- ✓ SEDAN : AVEO, CRUZE, MALIBU, ALPHEON
- ✓ SUV/CUV : TRAX, CAPTIVA, ORLANDO



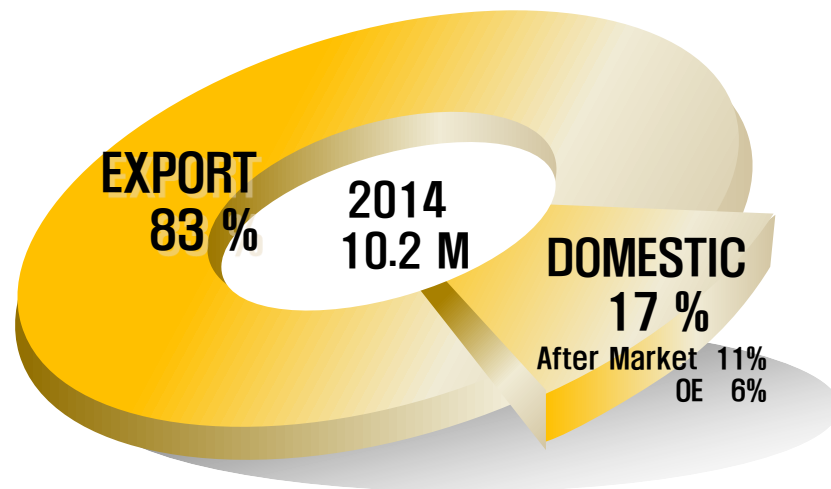
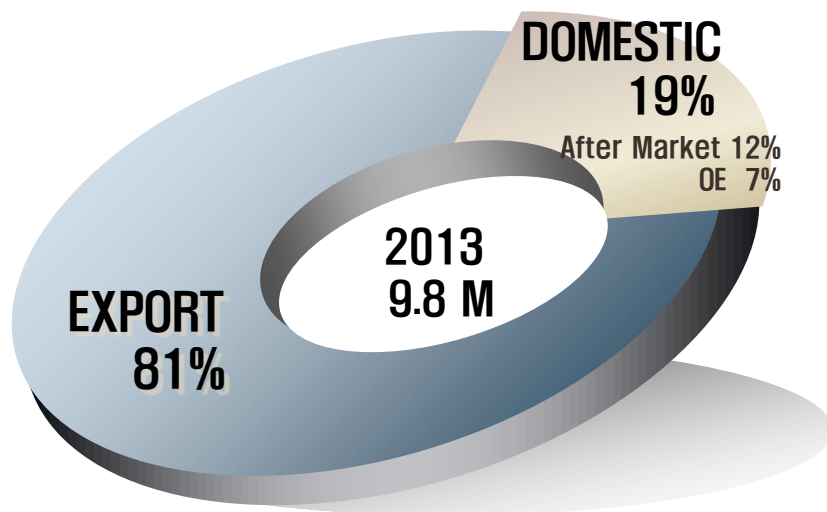
### **RENAULT-SAMSUNG MOTORS**

- ✓ SEDAN : SM3, SM5, SM7
- ✓ SUV : QM5, ROGUE

# ATLASBX OVERVIEW

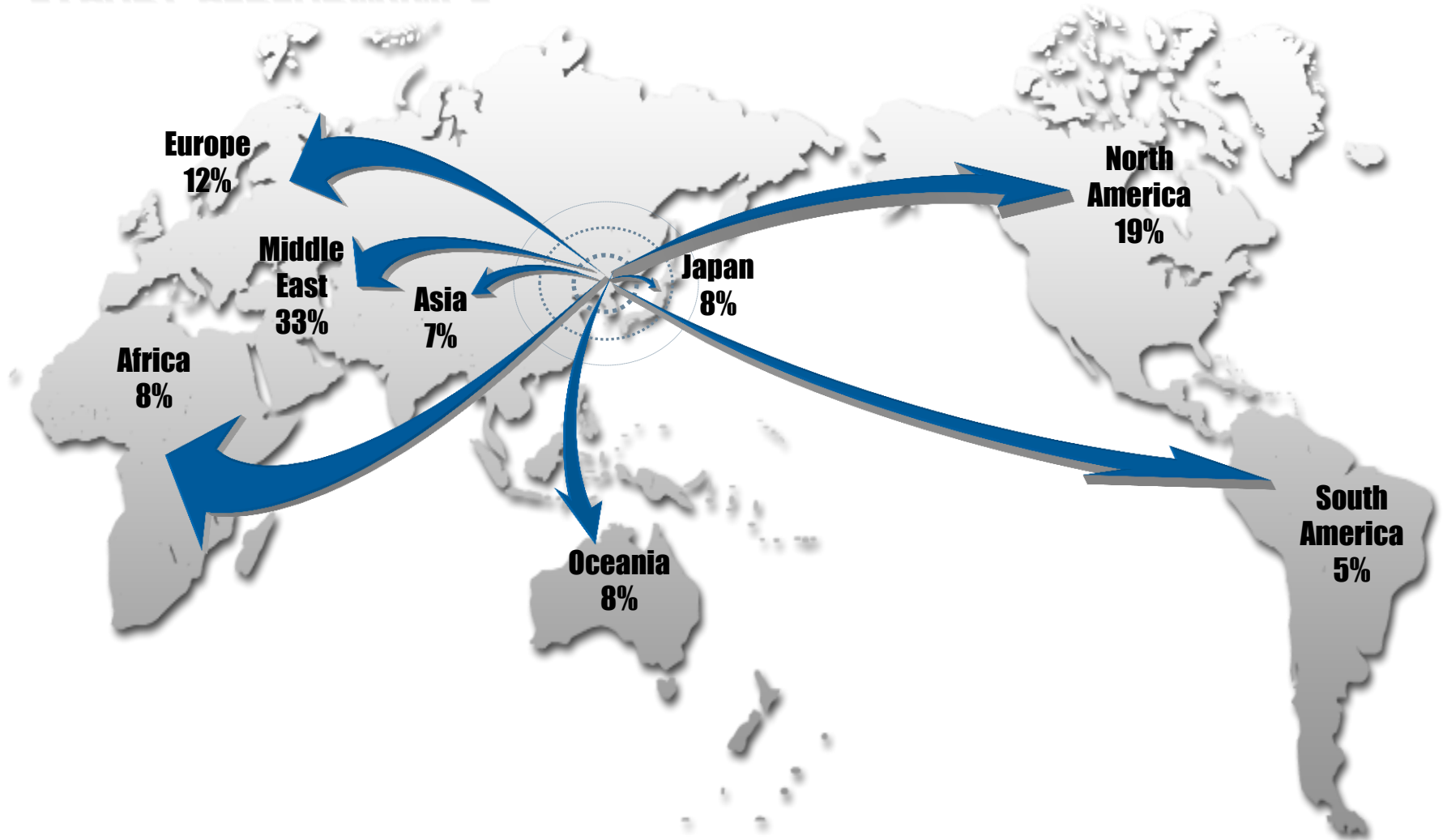
## 2014 Turnover : US\$ 466M (10.2M units)

- ✓ Export Sales : 8.5M units
- ✓ Domestic Sales : 1.7M units - OE 0.6M units / REP 1.1M units



\* Volume in Million Units

## EXPORT PERFORMANCE



## VISION 2020

Year 2020

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Sales volume 20 mil. pcs

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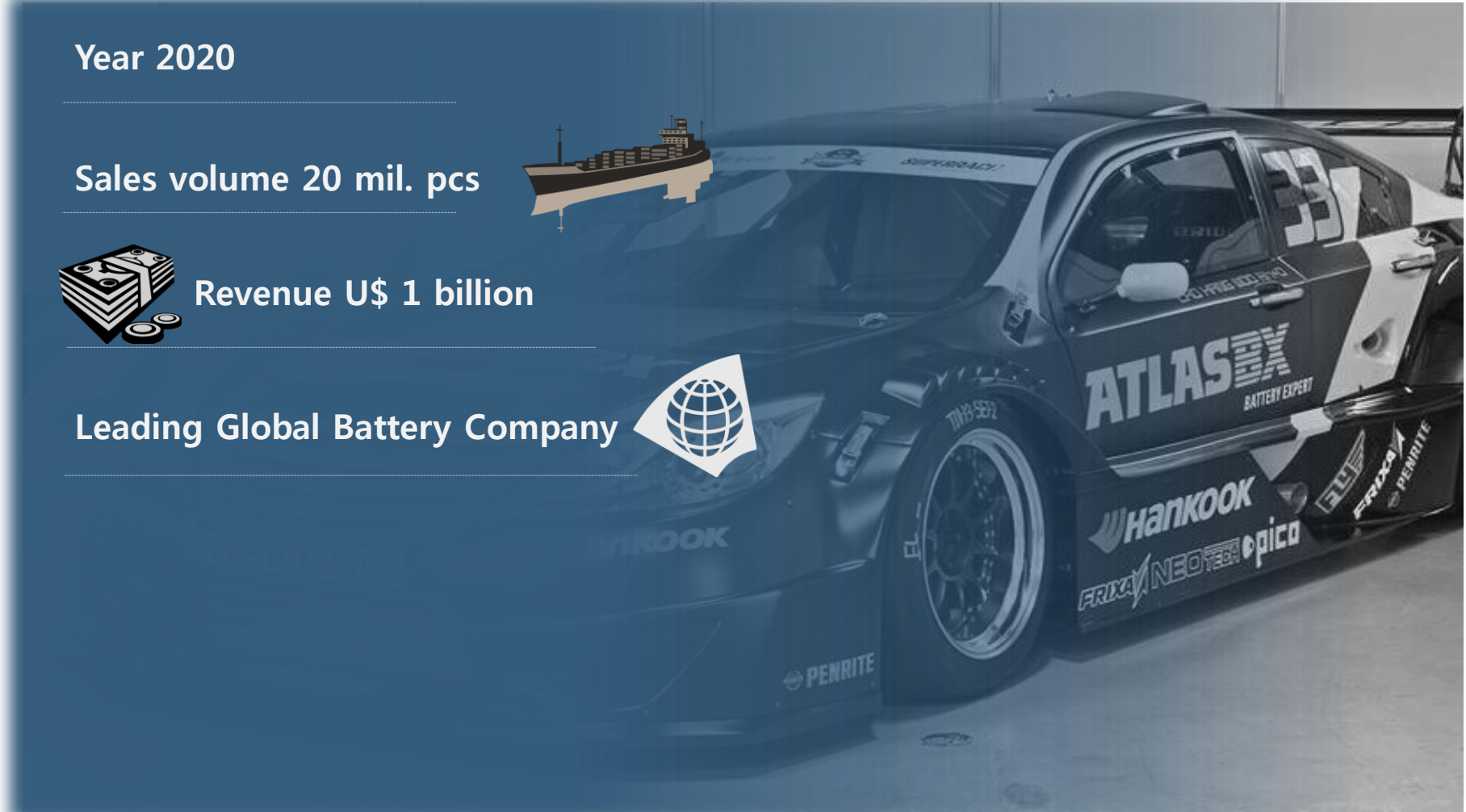


Revenue U\$ 1 billion

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Leading Global Battery Company

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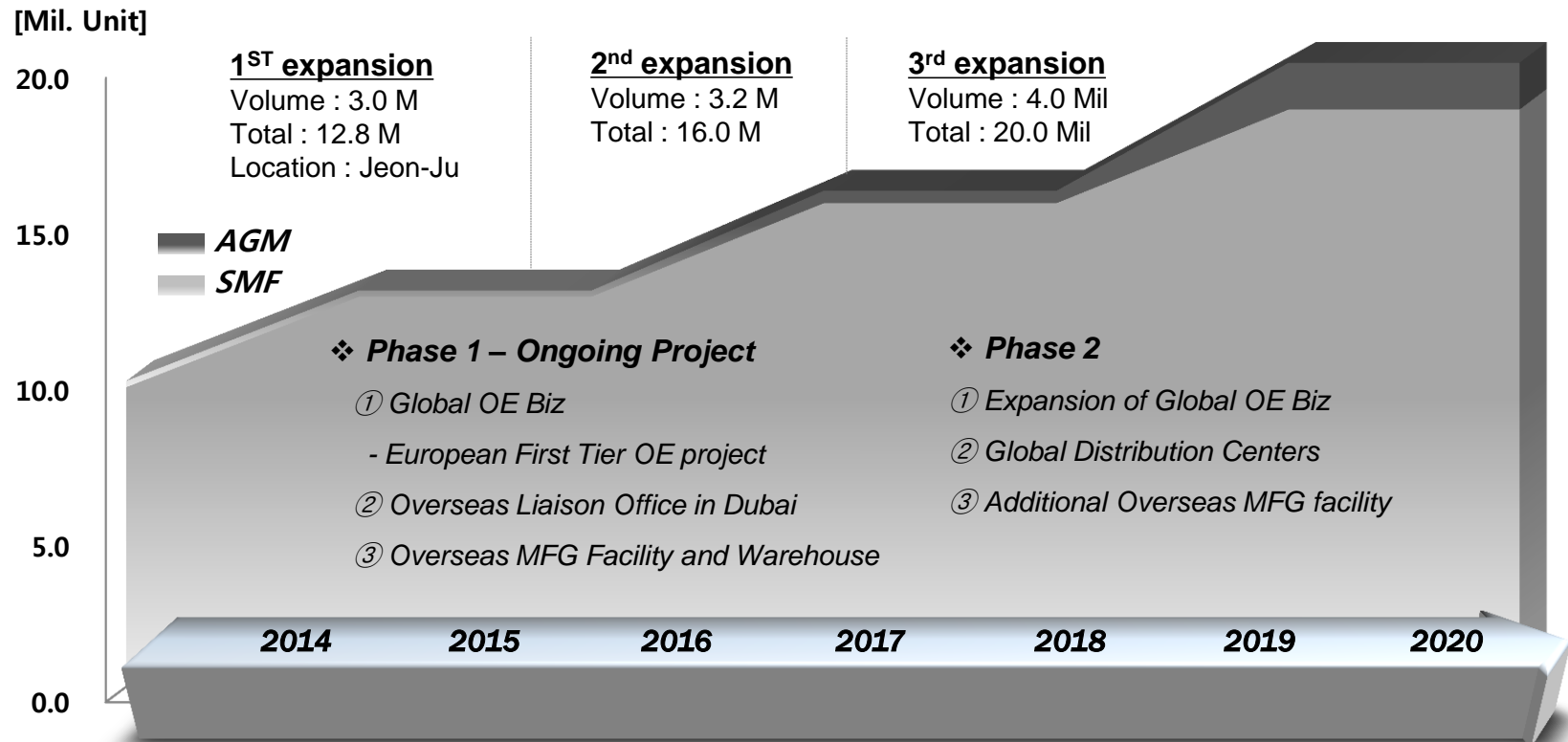




## 3 STEP CAPACITY EXPANSION

*1st expansion has been successfully completed in October 2014*

*2nd & 3rd expansion plan will be considered **Korea / overseas manufacturing***



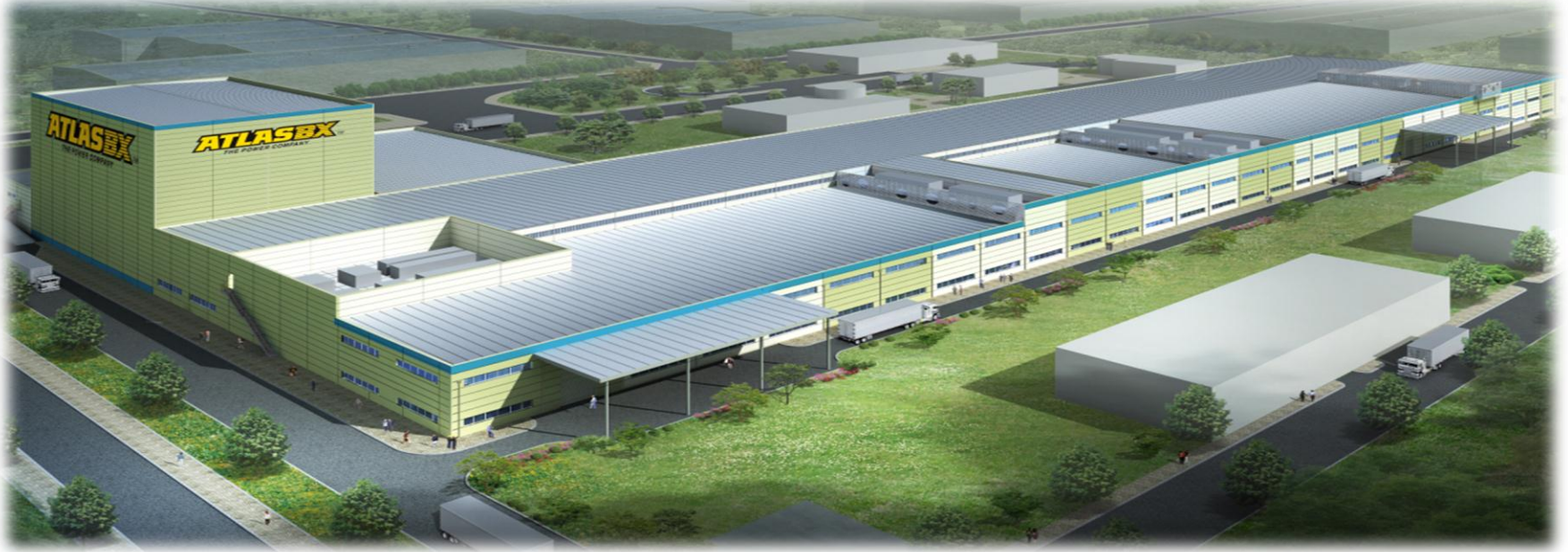
# ATLASBX *PLANT EXPANSION (AERIAL VIEW)*



  : Expansion Buildings



# ATLASBX *PLANT EXPANSION*



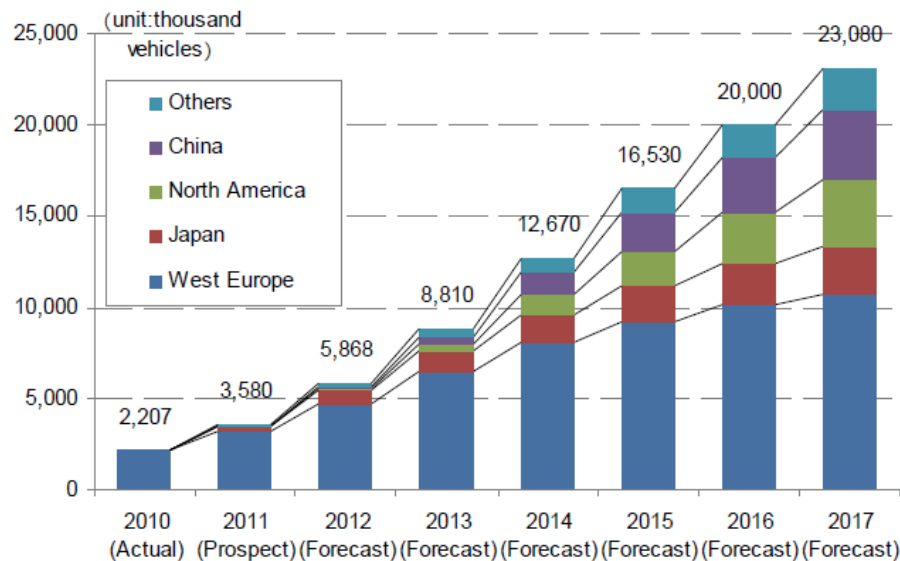
## New Trend

*ISS(Idle Start-Stop) technology has become the new trend*

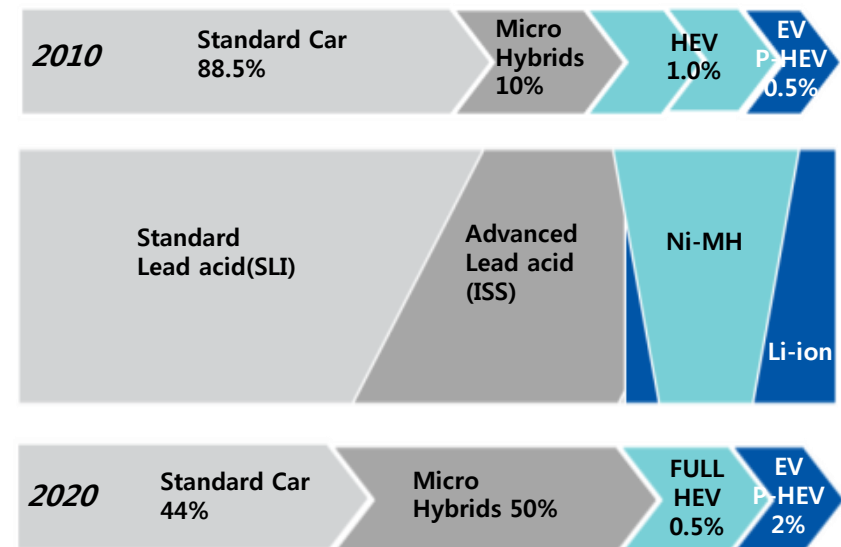
*By 2020, ISS battery OE sales portion will be more than 50% of all*

*Actual ISS car sales in 2013 was 8 mil.pcs, and this is close to the figure shown below*

**2010-2017 ISS Car Sales**



**2010-2020 Battery OE Sales**



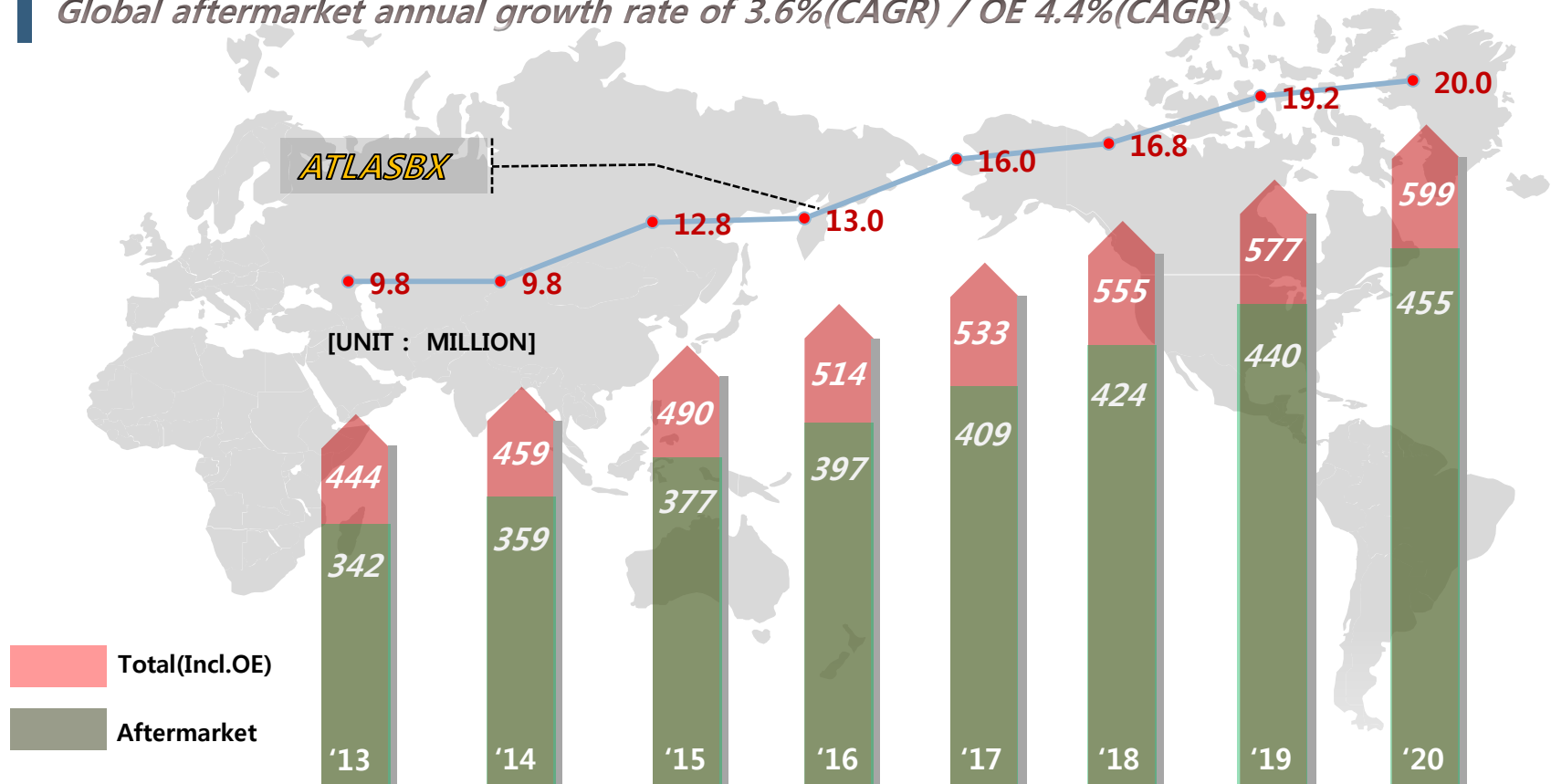
Source : BCI Conference(2011), YANO Research(2011)



## ***Growing Market***

*By 2020, global total market size will grow to approximately 600 mil. pcs*

*Global aftermarket annual growth rate of 3.6%(CAGR) / OE 4.4%(CAGR)*

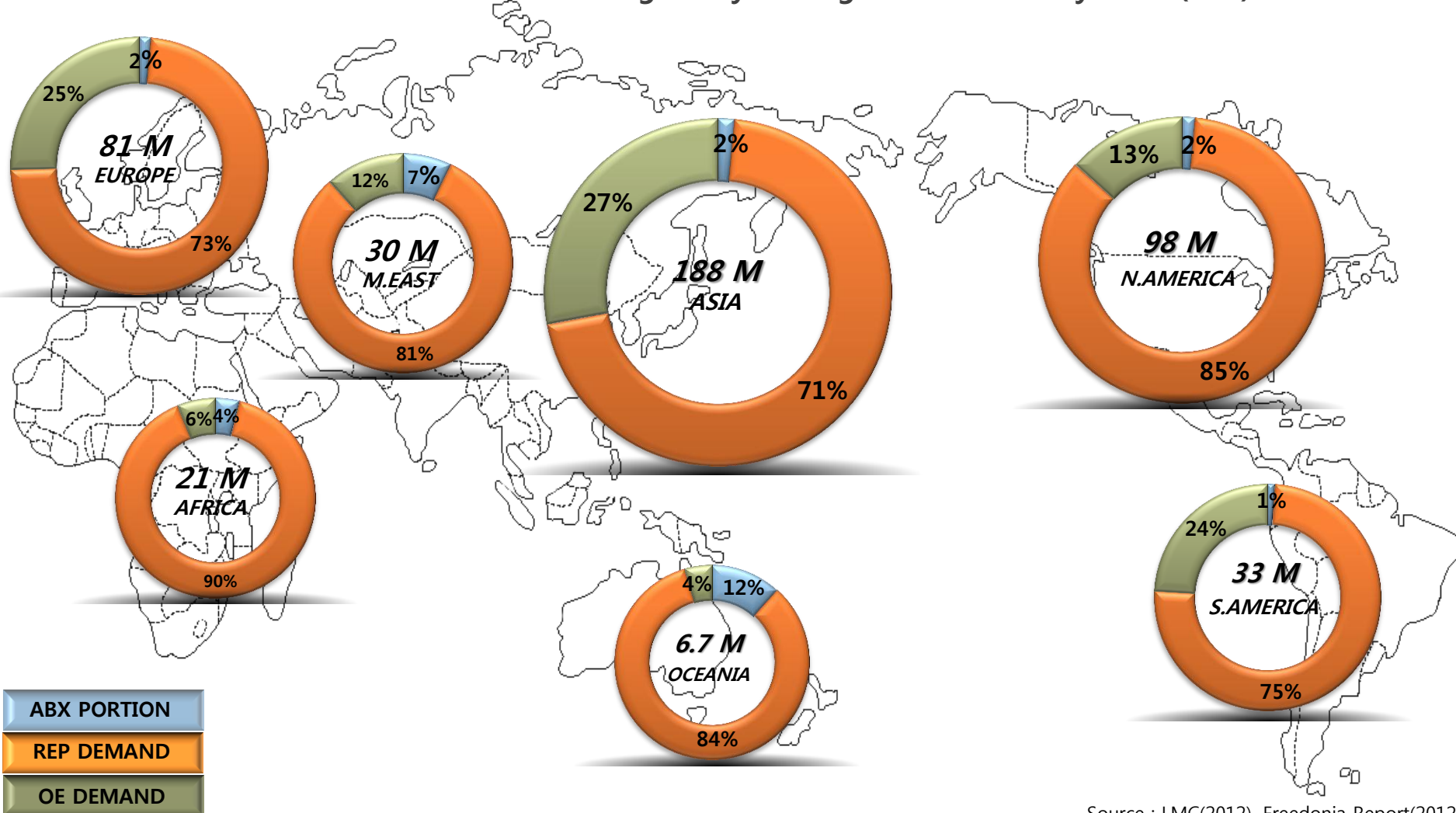


Source : LMC(2012), Freedonia Report(2012)

# ATLASBX *WORLDWIDE SALES PERFORMANCE*

ABX annually supply 10.2 M batteries to over 287 customers in the global market

ABX have 2.7% of Aftermarket Share globally → Target : over 4.0% by 2020 (REP)



Source : LMC(2012), Freedonia Report(2012)

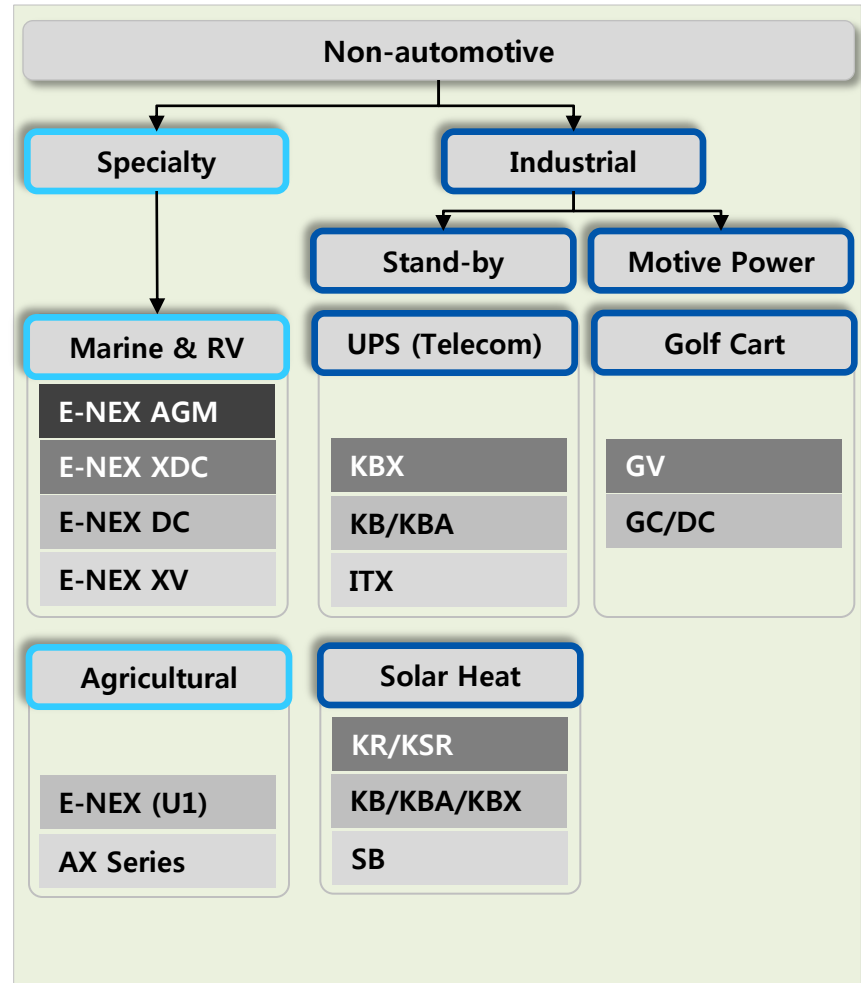
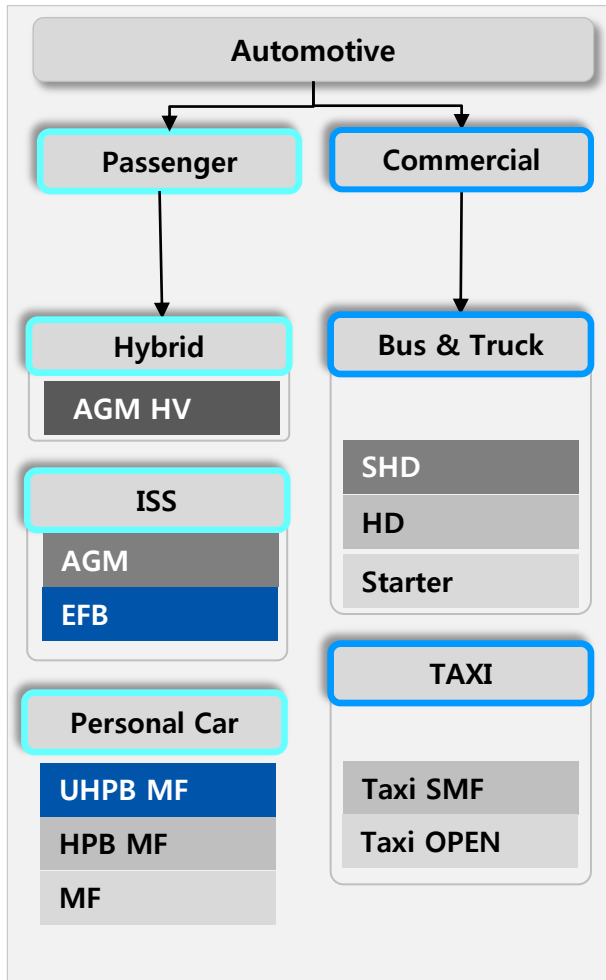
## **Product Information**

Product Lineup/ New Products



# ATLASBX *PRODUCT LINE UP*














*Wide range of products to give customers more options*





# ATLASBX *PRODUCT LINE UP*

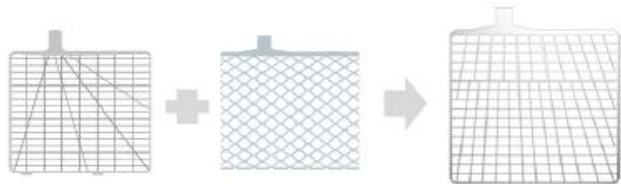
## ❖ Automotive Line Up *Passenger / Commercial / Marine & RV / Hybrid Vehicle*

Product Segment	Passenger		Commercial	MARINE / RV		Hybrid Vehicle
	SMF	ISS	SMF/OPEN	SMF	AGM	
Premium	 <b>NEW UHPB</b>	 <b>AGM</b>	 <b>SHD</b>	 <b>XDC</b>	 <b>AGM</b>	 <b>NEW HV</b>
High performance	 <b>NEW HPB</b>	 <b>NEW EFB</b>	 <b>HD</b>	 <b>DC</b>		
Standard	 <b>SMF</b>		 <b>STARTER</b>	 <b>XV</b>		

## Sealed Maintenance Free

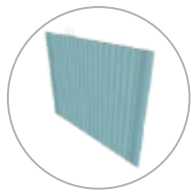
### 1 Full Framed Stamped Calcium-Tin Grid

- Reduce Grid-growth
- Low electric resistance
- Taking advantage from cast and expanded



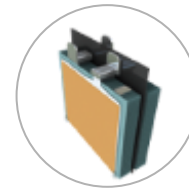
### 2 Enveloped Separator for low electric resistance

- Reliable starting power prevents internal short between positive and negative



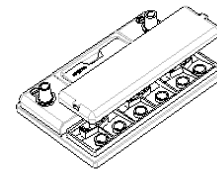
### 3 Advanced center lug technology and cast on strap

- Guarantees against vibration
- Reliable starting power
- Stability of plates



### 4 Special sealed cover structure

- Protects from acid leakage
- Minimizes gassing
- Frame arrestor prevents an inflow of outside sparks



### Reinforced container

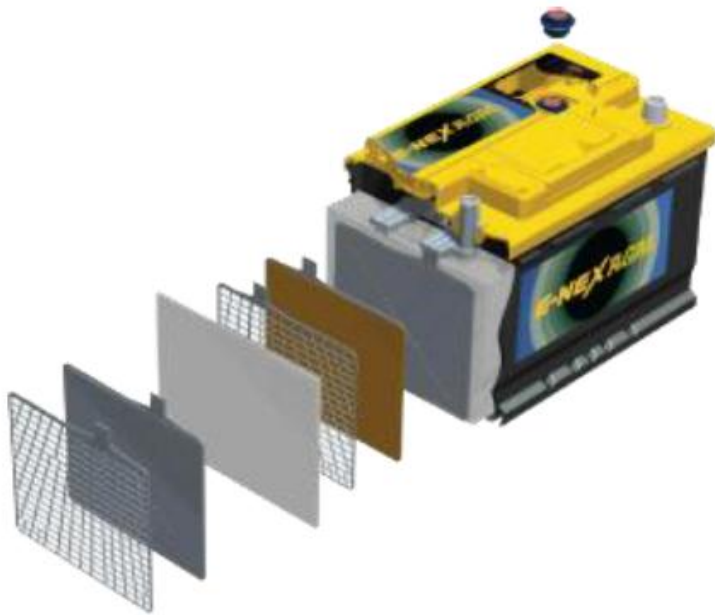
- Protects the battery from vibration and impact

### 5 Magic eye indicator

- Easy to check charging-state

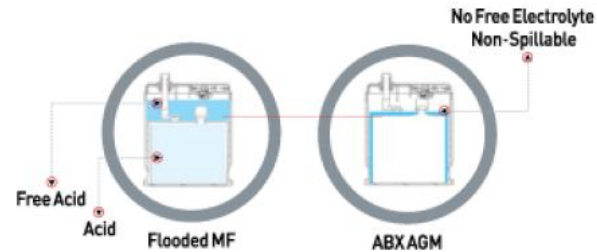


## Absorbent Glass Mat



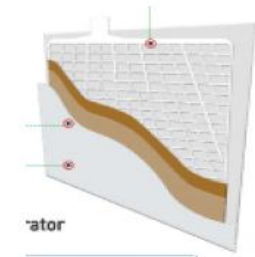
### 1 AGM Separator Technology

- Completely spill-proof plate
- Minimized electric resistance



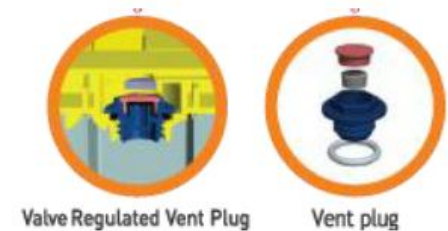
### 2 High Density Active Material

- High pressure of glass mat
- Special tissue on the plates



### 3 High Technology Vent plug Structure

- Gas re-combination system
- Free from explosion



# ***ATLASBX STANDARD AUTOMOTIVE***



- ***Standard Automotive Application***
- ***Wide Range covers 98% of all vehicles***
  - DIN : L1 ~ L5
  - JIS : B19 ~ E41
  - BCI : G21 ~ C31
- ***Sealed MF & Open Vented***





## ▪ *Range*

- *DIN : A, B, C, MAC 110, MAC 140, DIN 630*
- *JIS : F51, G51, H52*
- *BCI : 4DLT, 4D, 8D*

## ▪ *Series*

- *Heavy Duty (Wet/Hybrid)*
- *Heavy Duty (Sealed Maintenance Free)*
- *Super Heavy Duty (SMF) : DIN A/B/C*

## ▪ *Application*

- *Trucks & Buses/ Construction / Agricultural Vehicles*





## ▪ *Range*

– *Group 24 , 27, C31*

## ▪ *Series*

- *XDC : Deep Cycle & Starting*
- *DC : Dual Purpose (Starting & Cycling)*
- *XV : Marine Starting*
- *E-NEX AGM : D26, C31 w/ Marine Twin Post*

## ▪ *Application*

– *Recreational Vehicle, Camper Van, Yacht, Boat*



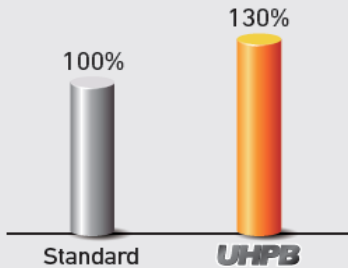
Marine & RV  
**E-NEX**  
Link to Your Life

# ATLASBX NEW PRODUCT

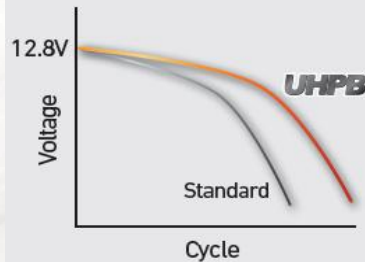
## Ultra High Performance Battery (UHPB)



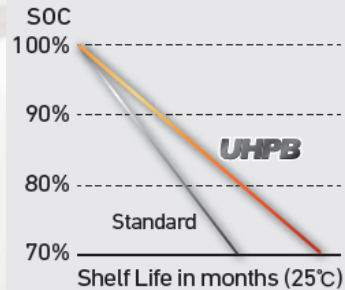
Cold Cranking Power **+30%**



Life Cycle **+25%**



Shelf Life **+25%**



## ATLASBX HV

### Key Features

- Absorbed Glass Mat Separator
- VRLA Sealed Construction
- X-Frame Grid Technology
- Reinforced Case Design

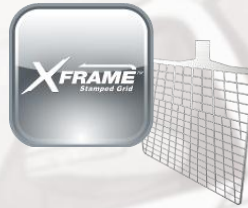
### Benefits

- High operational reliability
- Charge Acceptance 50% up
- starting power 30% up
- Optimal safety for installation

Type No.	20HR Rate	CCA SAE	Post	Hold Down	Application
AX S46B24R	45	370	Small	B0	Toyota Prius & Lexus CT200h
AX S55D23R	55	550	STD	B0 / B1	Toyota Camry Hybrid

# ATLASBX NEW PRODUCT FOR ISS APPLICATION

## Enhanced Flooded Battery IEFBI



### Application



Start Stop System



Urban Intensive Use



Heavily Equipped  
Electronics Devices



## AGM DIN BATTERY

Description	Details
Interior	• 6 Valve Structure / New vent cap
Exterior	• Reinforced case design / Meets OE specification
Types	• AGM L2 / L3/ L4 / L5

### Application



Start Stop  
System



Urban  
Intensive Use



Regenerative  
Braking System



Heavily Equipped  
Electronics Devices

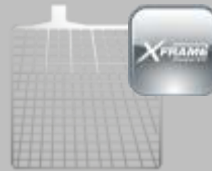


# NEW PRODUCT **SMF UHPB COMPARISON**



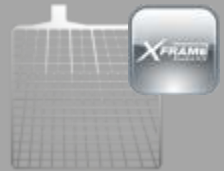
## Full framed grid

- Positive plate
- Minimize grid growth
- Low electric resistance



## 1. Full framed grid

- Minimize grid growth
- Low electric resistance



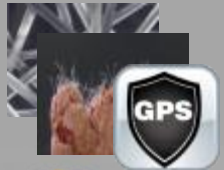
## 2. Calcium-Tin alloy

- Anti corrosion
- Reduces self discharge



## 3. Grid protect system

- Special Tissue/Ultra micro fiber
- Reduced aging of AM



*Standard capacity 100%*

*Capacity **125%***

*Cranking power **130%***

*Service life **150%***



# NEW PRODUCT **ISS**



1. Full framed grid



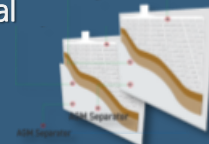
2. Thicker plates & high density active material  
- Providing high durability on deep cycle

3. Carbon black  
- Optimized carbon black to ultimate charging acceptance

1. Advanced vent plug



2. High density active material  
- High pressure glass mat



3. AGM separator technology



Cycle performance **130%**

Charging acceptance **130%**

Cranking power **110%**

Cycle performance **150%**

Charging acceptance **150%**

Cranking power **120%**





## Certificate

Standard **ISO 9001:2008**

Certificate Registr. No. 01 100 096462

TÜV Rheinland Cert GmbH certifies:

Certificate Holder: **ATLASBX**  
THE POWER COMPANY  
ATLAS BX Co., Ltd.  
185, Daejeon-ro 1331 beon-gil, Daedeok-gu,  
Daejeon, 306-802, Republic of Korea

including the locations according to annex


Scope: Design and Production of Lead Acid Batteries

An audit was performed, Report No. 096462. Proof has been furnished that the requirements according to ISO 9001:2008 are fulfilled.  
The due date for all future audits is 11-11 (dd.mm).

Validity: The certificate is valid from 2013-01-22 until 2016-01-21.  
First certification 2009

2013-01-10

TÜV Rheinland Cert GmbH  
Am Grauen Stein · 51105 Köln

 DGA-ZM-58-95-00

www.tuv.com



**ISO 9001**  
Certified in 1994  
Renewal Jan. 2013

## Certificate

Standard **ISO 14001:2004 + Cor. 1:2009**

Certificate Registr. No. 01 104 7071

TÜV Rheinland Cert GmbH certifies:

Certificate Holder: **ATLASBX**  
THE POWER COMPANY  
ATLAS BX Co., Ltd.  
Daejeon Plant & Head Office: # 40-42 Daewha-Dong,  
Daeduk-Ku, Daejeon, 306-802, Republic of Korea

including the locations according to annex


Scope: Design, Development and Production of Lead Acid Batteries

An audit was performed, Report No. 7071. Proof has been furnished that the requirements according to ISO 14001:2004 + Cor. 1:2009 are fulfilled.  
The due date for all future audits is 12-12 (dd.mm).

Validity: The certificate is valid from 2013-01-31 until 2016-01-30.  
First certification 1998

2013-01-04

TÜV Rheinland Cert GmbH  
Am Grauen Stein · 51105 Köln

 DGA-ZM-58-95-60

www.tuv.com



**ISO 14001**  
Certified in 1998  
Renewal Jan. 2013

## Certificate

Standard **ISO / TS 16949:2009**  
(3<sup>rd</sup> edition, 2009-06-15)

Certificate Registr. No. 01 111 4814/01  
IATF Certificate No. 0154108

TÜV Rheinland Cert GmbH certifies:

Certificate Holder: **ATLASBX**  
THE POWER COMPANY  
ATLAS BX Co., Ltd.  
185, Daejeon-ro 1331 beon-gil, Daedeok-gu,  
Daejeon, 306-802, Republic of Korea

with remote location according to annex


Scope: Production of Lead Acid Batteries for Automobiles  
- with product design and development -

An audit was performed, Report No. 4814/01. Proof has been furnished that the requirements according to ISO / TS 16949:2009 are fulfilled.  
The due date for future audits is 01-11 (dd.mm).

Validity: The certificate is valid from 2012-12-31 until 2015-12-30.

2012-12-31

TÜV Rheinland Cert GmbH  
Am Grauen Stein · 51105 Köln  
Deutschland

 2-IAO-QMC 01003

www.tuv.com



**ISO/TS16949**  
Certified in 2003  
Renewal Dec. 2012



Certificate No. : 2009-89

## Certificate of Reliability

Product : Automotive Lead Acid Battery

- Category/Purpose : Automotive Lead Acid Battery(BX080L)

- Class : Product Life 24 months(B<sub>50</sub> C.L. 70%)

Company : ATLAS BX Co., Ltd.

Representative : Jong-Chul, Lee

#40-42, Daewha-dong, Daeduk-ku, Daejeon Korea

Assessment Standard : RS R 0066

This is to certify that the above mentioned product has been recognized as reliable product in accordance with the clause 1 Article 25 of the Act on Special Measures for the Promotion of Specialized Enterprise for Components and Materials and the clause 3 Article 17 of the enforcement regulation of the Act.

Jun 26, 2009

*Nam, Insuk*

Administrator



Korean Agency for Technology and Standards  
Ministry of Knowledge Economy

Republic of Korea

## BEST PRACTICES RECOGNITION



DUNS:

YOU ARE RECOGNIZED FOR SUCCESSFUL  
IMPLEMENTATION OF QUALITY SYSTEMS BASICS.

PRESENTED:

27-05-13

EXPIRATION:

27-05-16

*Sheri E. Hickok*

SHERI E. HICKOK  
EXECUTIVE DIRECTOR  
GENERAL MOTORS GLOBAL SUPPLIER QUALITY



*Guy D. Lynch*

GUY D. LYNCH  
SUPPLIER QUALITY DIRECTOR  
GENERAL MOTORS INTERNATIONAL OPERATIONS

# ATLASBX CORPORATE COMMUNICATION

## Baseball Stadium Advertisement



## Exhibition



## Magazine Advertisement

A magazine advertisement for AtlasBX. The top half features a close-up of a car's headlight. The bottom half is a detailed image of the "BX Battery Expert" unit, which is a car stereo/radio with various controls like "Setup Radio", "Settings", "Traffic programme", "Regional stations", "Station reception", "Station display", "Alt. frequency", "PTY filter", "Display", "FM Radio", "Frequency", "Balance", "Fader", "Treble", "Bass", "Subwoofer", "DSP", and "Setup". Below the unit, there is text in Korean and English, including "BX Battery Expert", "Since founded in 1944", and "ATLASBX". A small image of a car battery is also shown.

## Racing Team



*THE END*

*THANK YOU FOR YOUR ATTENTION*

