

Company Introduction

THESUNTECH



Company Profile

- Corporate Name : The Sun-Tech Corporation
- CEO: Gi Yeon Kim
- Head Office : #805-2, 217, Heo Jun Street, Gangseo-gu, Seoul, 157-793, Korea
- Branch : #202, 16-9, High-Tech venture Street, Buk-gu, Gwangju, 500-470, Korea
- 1st Factory : #701, 217, Heo Jun Street, Gangseo-gu, Seoul, 157-793, Korea
- 2nd Factory : #809-810, 172, LS Street, Gunpo-si, Gyeonggi-do, 435-050, Korea
- Products : LED Train lighting / LED Panel lighting / Li-Po Secondary Battery

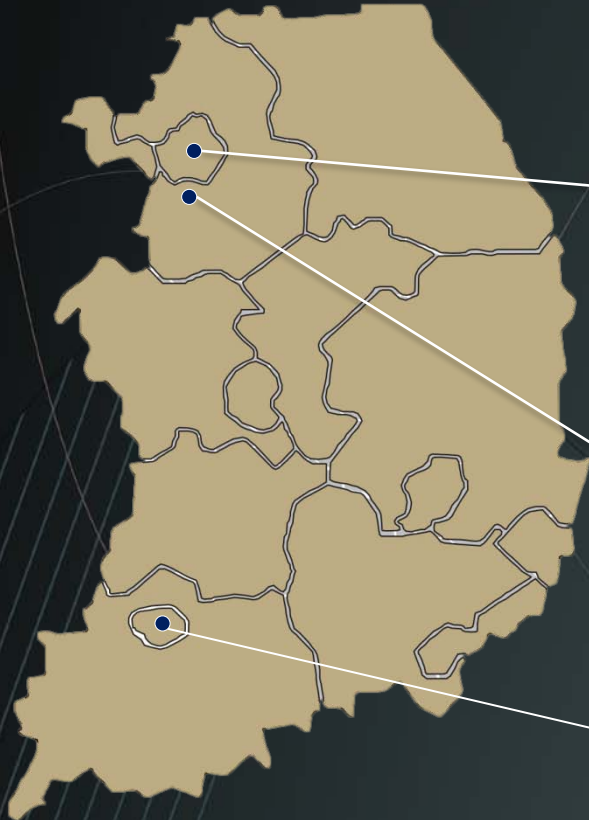


History

- Jun, 2008 Founded the company
- Nov, 2008 Established the factory (Hwaseong City, Gyeonggi-Do)
- Feb, 2009 Acquired the ISO9001 / KSA9001 Certifications
- Mar, 2009 Recognized as company specialized in components and materials.
Successfully performed the KORAIL actual car test (Official reply from KORAIL)
- Apr, 2009 Purchased the land for factory in Optical Cluster High Tech Complex)
- May, 2009 Registered as LED lighting supplier in Public Procurement Office
- Oct, 2010 Acquired ISO 9001 Certification
- Jun, 2010 Received Golden Award in the LH Construction Lighting Design Contest
- Aug, 2010 Approved the corporation institute
- Nov, 2010 Acquired KS Certification
- Dec, 2010 Concluded the MOU with Gwangju City
- Mar, 2011 Established the Li-Po secondary battery factory (Gunpo City, Gyeonggi-Do),
Acquired the direct production certificate (LED lightings)
- Apr, 2011 Built the additional LED lighting factory (Gangseo-Gu, Seoul), Acquired the
Green Technology Certification (LED passenger car lightings for railway cars)
- Jun, 2011 Acquired the Green Enterprise Certification



Operation



Head quarter (Seoul)

- Business Planning & Overall Management
- Sales + Technology Development

The 1st Factory (Seoul)

- Producing goods for Railway vehicle
- Testing Prototype

The 2nd Factory (Goon po)

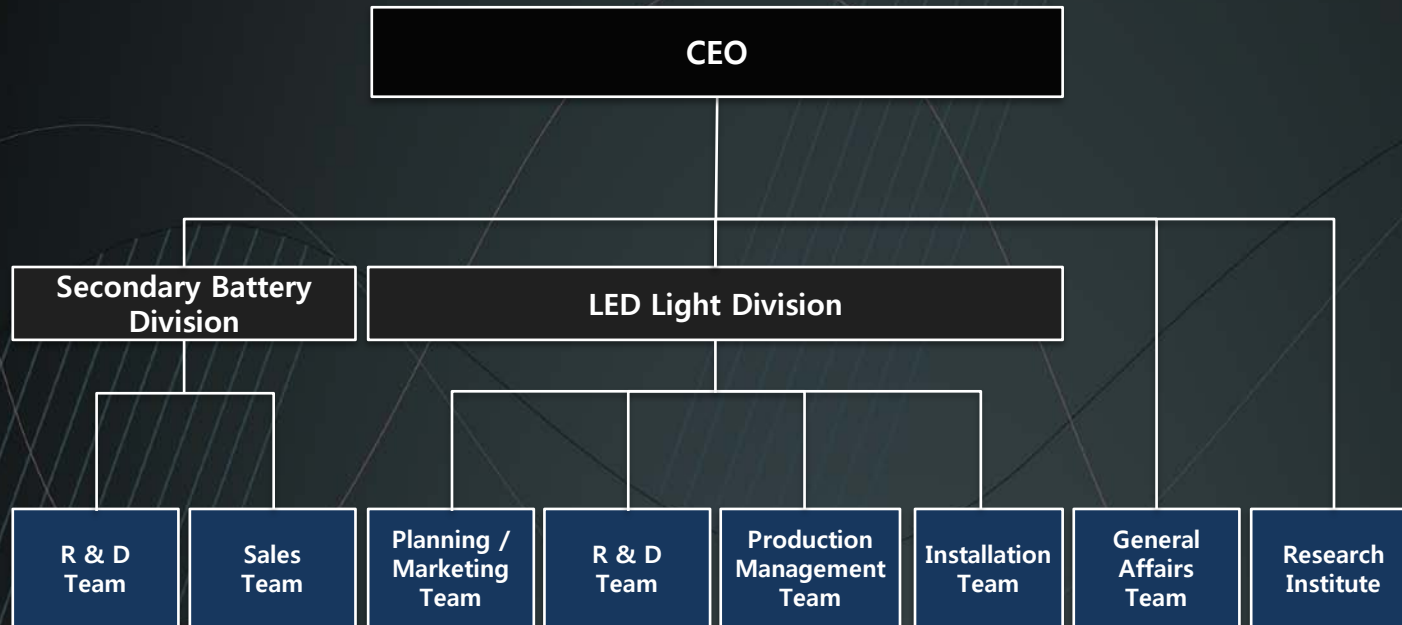
- Developing & Producing Li-Po Secondary Battery
- Keeping SK-ME Cooperative Relationship

Honam Branch (Gwang joo)

- Research Institute Located
- Sales in Honam Region
- Relationship with KPID & KOPTI



Organization chart



		Name	Academic Background	Career	Note
Board of Directors	CEO/ President	Gi Yeon Kim	Bachelor's Degree in Hanyang Univ.	<ul style="list-style-type: none"> • Congressman Policy Aid (Class 4/Construction and Transportation Committee) • CEO/President of Ledel Inc. 	Ledel Inc - 1 st Delivered Co. to Congress - Delivered LED Light to Yoobi Park
	Vice President	Jong Wook Gang		<ul style="list-style-type: none"> • Former Director in Samgong Elcactrics (For 35 years) • Patent & Utility Model: Vehicle Light(6) / General Electrics(5). • Develop and produce vehicle lights for Hyundai / Kia / Daewoo / Ssangyong • Design/Develop/Produce Indoor Illumination & Signal Lamp of Line No. 1~9 of Seoul Metro • Design/Develop/Produce Indoor Illumination & Signal Lamp of Cabin room of Korail Subway, Moogoongwa, Semaeu, KTX • Design/Develop/Produce Illumination System of Overseas Export vehicle of Rotem • (Monorails in Tokyo/Hitach Cabin Cars in Taiwan/Cabin Cars in Nigeria/ Subway in Hongkong/Subway in Athens/Electric Locomotives in Philadelphia) 	Samgong Electric Inc. - Prior Vendor of Hyundai Motors - Prior Vendor of Hyundai Rotem - 1 st Enterprise to Supply Railway Vehicle with Light system
	Management Director	Jin Hah Choi	Bachelor's Degree in Univ. of Seoul	<ul style="list-style-type: none"> • Bachelor's Degree of Date Processing and Statistic in Univ. of Seoul • Chief of General Affair Division in Hyunjoo Inc. • Head of Department in TGI Digital Inc. 	
Engineering Team	General-Director	Nak Jong Choi	Master's Degree in Univ. of Incheon	<ul style="list-style-type: none"> • ICSUN Inc. • Daehan Trans Inc. • Gwangu Intops Inc. 	
	Leader of LED Light Development Team	Seong Woo Park	Bachelor's Degree in Suwon Science Collage	<ul style="list-style-type: none"> • Leader of R & D Team in Samgong Electric Inc. • Design POWER Circuit 	
	Deputy Head of LED Light Development Team	Gyoo Rin Park	Master's Degree in Josun Univ.	<ul style="list-style-type: none"> • LG ELECTRONICS U.K MOBILE R&D • LG CNS 	Director in charge of the present Secondary Battery Division



녹색기술 인증서

인증번호 : 제 GT-11-00075 호
 기관명 : (주)더선테크
 대표자명 : 김기연
 주소 : 서울 강서구 가양3동 가양테크노타운 805-2호
 기술명칭 : 철도차량용 LED객실조명 기술
 분류번호 : T040104

『저탄소 녹색성장 기본법』 제32조 및
 『녹색인증제 운영요령』 제27조에 의거하여
 위의 기술을 녹색기술로 인증합니다.

인증일자 : 2011.4.13
 유효기간 : 2011.4.13~2013.4.12

지식경제부장관



제품인증서

인증번호 : 제 10-0648 호
 제조업체명 : (주)더선테크
 대표자성명 : 김기연
 공장소재지 : 서울특별시 강서구 가양동 1487 가양테크노타운805-2
 인증제품
 • 표준명 : 매입형 및 고정형 LED 등기구의 안전 및 성능요구사항
 • 표준번호 : KS C 7653
 • 종류·등급 또는 호칭 :
 매입형:10W 초과 30W 이하. 곱.

산업표준화법 제17조 제1항에 따른 인증심사를 실시한 결과
 한국산업표준(KS)과 인증심사기준에 적합하므로 산업표준화법 제15조에 따라
 위와 같이 한국산업표준(KS)에 적합함을 인증합니다.

2010년 11월 24일

한국표준협회장



1. 최초인증일 : 2010.11.24

제 6593 호

부품·소재전문기업확인서

업 체 명 : (주)더선테크 (108-81-84813)

대 표 자 : 신동석

소 재 지 : 서울 영등포구 도림동 265-1
하나아파트1차 214호

유효기간 : 2009.03.24 ~ 2012.03.23

위 업체는 부품·소재전문기업등의육성에
관한특별조치법시행령 제3조제3항의 규정에
의하여 부품·소재전문기업임을 확인합니다.

2009년 3월 24일

지식경제부장관



CERTIFICATE

인증번호 : KorQ-094686

㈜더선테크

서울특별시 영등포구 도림동 265-1 하나아파트 1차 214호

인증범위

LED 등기구 및 PSU(안정기)의
설계, 제조, 설치, 시공, 판매 및 부가서비스

심사규격

품질경영시스템

MSA인증원은 위 회사의 인증범위와 심사규격이
아래의 규격의 요구사항을 모두 충족하고 있음을 검증하고 인증 등록을 승인하였습니다.

ISO 9001: 2000
KS A 9001: 2007

인증서 발행일 : 2009년 02월 06일 - 인증서 만료일 : 2010년 02월 05일

최초 인증일	2009년 02월06일
MSA 인증일	2009년 02월06일
갱신 인증일	2012년 02월05일

Robert Plee
Scheme Manager

MSA Certification Co., Ltd.
website: <http://www.msa-cert.com>
e-mail: msa@msa-cert.com



TSA 2012-02-05-00

☛ This certificate is the property of MSA Certification Co., Ltd. and shall be returned upon request by MSA Certification Co., Ltd. PMP26103(Ren-2)

제 20090108842 호

벤처기업확인서

업 체 명 : (주)더선테크
대 표 자 : 김기연
소 재 지 : 서울 영등포구 여의도동 13-6 기계진흥회관내 신관 3층
확 인 유 형 : 기술평가보증기업(기술보증기금)
평 가 기 관 : 기술보증기금
유 효 기 간 : 2009년 09월 29일 - 2010년 09월 28일

위 업체는 벤처기업육성에관한특별조치법 제25조의 규정에 의하여 벤처기업임을 확인합니다.

2009년 09월 29일

KIBO 기술보증기금 이사장



원본대조

제 2009210324 호

기업부설연구소인정서

1. 연 구 소 명 : (주)더선테크 기업부설연구소
[소속기업명 : (주)더선테크]
2. 소 재 지 : 광주 광산구 오선동 548-6
3. 신고연월일 : 2009년 8월 7일

※ 유효기간: 중소기업인정요건 한시적 규제완화 적용 만료일(2011년 06월 30일 까지)

기술개발촉진법 제16조 및 동법 시행령 제15조 제1항의 규정에 의하여 위와 같이 기업부설연구소로 인정합니다.

2009년 8월 21일



사단법인 한국산업기술진흥협회장



[별지 제3호서식.]

제 2010-06872 호

직접생산확인증명서

- 경쟁제품명 : 형광등기구(LED용기구 포함)
- 생산업체명 : (주)더선테크
- 사업자번호 : 108-81-84813
- 대표자성명 : 김기연
- 소재지(본사) : 서울 강서구 가양동 1487번지 가양테크노타운 305-2호
(공장1) : 서울 강서구 가양동 1487 가양테크노타운 805-2호
- 유효기간 : ※ 붙임의 세부품명별 유효기간 참조

「중소기업제품 구매촉진 및 판도지원에 관한 법률」 제 9조제4항 본문 및 같은 법 시행규칙 제5조제3항에 따라 위와 같이 직접생산을 증명합니다.

2010년 02월 20일

중소기업중앙회



★ 이 증명서는 중소기업제품 공공구매종합정보망(www.smpp.go.kr)을 통해 정보를 확인하고 출력(2010-02-20 10:44, (주)더선테크)한 증명서입니다.

[별지 제2호서식]

접수번호 : 20091230 - 0040



전기용품안전인증서 Electrical Appliances Safety Certificate

안전인증번호: HH11527-9002B
(Certificate No.)
제조업자명: (주)더선테크
(Manufacturer)
대표자명: 김기연
(President)
제조공장의소재지: 서울 강서구 가양동1487 가양테크노타운 805-2
(Factory Address)
제품명: 조명기구(매입형LED등기구)
(Product)
기본모델명: TST-ILLUMI-001
(Basic Model)
정격: 220 V~, 60 Hz, 28 W (LED 0.18 W x 156)
(Rating)
파생모델명(Series Model):

적용기준: K60598-1 K60598-2-2
(Standard) K00015 K61547

「전기용품안전 관리법 시행규칙」 제6조제2항에 따라 위의 전기용품에 대하여 안전인증서를 발급합니다.

We Issue Electrical Appliances Safety Certification as above product by Article 6 Section 2 of the Electrical Appliances Safety Control Law Enforcement Regulation.

2010년 3월 12일
(Year) (Month) (Day)



한국전기전자시험연구원
Korea Electric Testing Institute

※ 본 인증서는 「전기용품안전 관리법」에 따른 전기제품 안전성확인에 합격된 것이며 그 밖의 다른 법률이 적용되는 제품의 경우에는 해당 법률에 따라 추가적으로 인증·허가 등을 받아야 합니다.

- 첨부서류
1. 안전관리부품 및 재질목록 (List of Critical Components)
 2. 기본모델·파생모델의 내용 (General Descriptions of Certified Products)
 3. 전기용품안전인증의 변경현황 (Status of Certificate Revisions)



Equipment

Maintenance No.	Measuring Device	Producer	Model	Device No.	Maintaining Date	Next Date	Maintaining Sequence	Location
TS-09-001	DC POWER SUPPLY	TOPWARD	6603D	708091	2010-09-08	2011-09-08	1 Year	Lab
TS-09-002	DC POWER SUPPLY	TOPWARD	6603D	708092	2010-09-08	2011-09-08	1 Year	Test Lab
TS-09-003	Slidacs	Daelim	3KV	708095	2010-07-30	2011-07-30	1 Year	Test Lab
TS-09-004	Insulation-resistance Tester	Dong Hwa	DH8050-04	48667857	2010-07-30	2011-07-30	1 Year	Production Line
TS-09-005	REGULATED DC POWER SUPPLY	ITECH	IT-10010	91179	2010-08-02	2011-08-02	1 Year	Production Line
TS-09-006	Leakage Currant Tester	POINTECH	PTI-6400	K082502	2010-07-30	2011-07-30	1 Year	Test Lab
TS-09-007	VERNIER CALIPERS 【200mm】	MITUTOYO	200(0.05)	41312035	2010-07-30	2011-07-30	1 Year	Test Lab
TS-09-008	VERNIER CALIPERS 【150mm】	MITUTOYO		TS-01-008	2010-07-30	2011-07-30	1 Year	Test Lab
TS-09-009	TRUE RMS MULTI METER	FLUKE	87V	95880428	2010-07-30	2011-07-30	1 Year	Lab
TS-09-010	ILLUMINANCE METER		TES1330A	021118189	2010-08-09	2011-08-09	1 Year	Test Lab
TS-09-011	Digital Thermometer	TES	TES 1300	081014436	2010-07-30	2011-07-30	1 Year	Test Lab
TS-09-012	Voltage Withstand Tester	Hanyoung	HYPT-5020B	290704	2010-07-30	2011-07-30	1 Year	Production Line
TS-09-013	Digital Range Finder	BOSCH	DLO50	7921135112	2010-08-03	2011-08-03	1 Year	Lab
TS-09-014	VERNIER CALIPERS 【1000mm】	MITUTOYO	1000(0.05)	08002511	2010-07-30	2011-07-30	1 Year	Test Lab
TS-09-015	Photo Illuminance Tester	LUTRON	LX-101	L478529	2010-08-03	2011-08-03	1 Year	Test Lab
TS-09-016	Electric Indicating Weighing Machine	CAS	10kg(5g)	CFC106145	2010-07-30	2011-07-30	1 Year	Test Lab
TS-09-017	RECORDER	YOKOGAWA	S5H108164	S5H108164	2011-03-03	2012-03-02	1 Year	Test Lab

Equipment

Maintenance No.	Measuring Device	Producer	Model	Device No.	Maintaining Date	Next Date	Maintaining Sequence	Location
TS-09-018	Photo Illuminance Tester	KONICA MINOLTA	CL-200	76921001	2011-03-09	2012-03-08	1 Year	Lab
TS-09-019	POWER METER	AD POWER	HPM-300A	064717	2011-03-04	2012-03-03	1 Year	Production Line
TS-09-020	DIGIMATIC CALIPER	MITUTOYO	CD-20CPX	08411975	2011-03-08	2012-03-07	1 Year	Lab
TS-09-021	VERNIER CALIPERS(Dial)	MITUTOYO	505-673	08608365	2011-03-08	2012-03-07	1 Year	Lab
TS-09-022	RADIUS GAGE	JAPAN	NO.137	-	-	-	-	Lab
TS-09-023	PITCH GAGE	JAPAN	178MA	-	-	-	-	Lab
TS-09-024	THICKNESS GAGE	HANDO-JO	100MZ-G	-	-	-	-	Lab
TS-09-025	Protractor	NIIGARASOIKI	NO.19	-	-	-	-	Test Lab
TS-09-026	Test Finger	Wha Shin Inst.	ILO-700	-	-	-	-	Test Lab
TS-09-027	Make and Break Tester	Daeshin Electric	ACONOFF	-	-	-	-	Test Lab
TS-09-028	Push Pull Gauge(Digital Type)	OKKO	OKKO-20FGN	1160	2011-03-21	2012-03-20	1 Year	Test Lab
TS-09-029	Impact Hammer	GSIS	GSI-I 501	091223	2011-03-08	2012-03-07	1 Year	Test Lab
TS-09-030	Torque Gauge	TOHNICHI	6BTG	504134Y	2011-03-08	2012-03-07	1 Year	Test Lab
TS-09-031	LCR METER	ESCORT	ELC-133A	880300026	2011-03-07	2012-03-06	1 Year	Test Lab
TS-09-032	Outside Micrometer	MITUTOYO	0~0.25mm	96006711	2011-03-08	2012-03-07	1 Year	Test Lab
TS-09-033	OSCILLOSCOPE	TEKTRONIX	DPO3032	C010438	2010-07-27	2011-07-27	1 Year	Lab
TS-09-034	CHROMA METER	KONICA MINOLTA	CS-100A	13025006	2010-07-26	2011-07-26	1 Year	Test Lab

Equipment

Maintenance No.	Measuring Device	Producer	Model	Device No.	Maintaining Date	Next Date	Maintaining Sequence	Location
TS-09-035	Infrared Thermo Hitester	HIOKI	3419-20	February2010	2011-03-03	2012-03-02	1 Year	Test Lab
TS-09-036	Digital Power Meter	YOKOGAWA	WT210	91K208135	2011-03-04	2012-03-03	1 Year	Test Lab
TS-09-037	POWER METER	AD POWER	HPM-300A	300157	2011-03-04	2012-03-03	1 Year	Test Lab
TS-09-038	Noise Tester	LUTRON	SL-4001	J032462	2011-03-04	2012-03-03	1 Year	Test Lab
TS-09-039	Withstand Voltage, Insulation Resistance Tester	GW INSTEK	GPI-745A	EK892917	2011-05-20	2012-05-19	1 Year	Test Lab
TS-09-040	Electronic Load	KIKUSUI	PLZ 164W	RA003518	2011-05-23	2012-05-22	1 Year	Lab
TS-09-041	PROGRAMMABLE DC POWER SUPPLY	ODA	OPS-15010	ODA-01-0923-07573	2011-05-23	2012-05-22	1 Year	Test Lab
TS-09-042	TRUE RMS MULTI METER	FLUKE	87V	15180078	2011-05-20	2012-05-19	1 Year	Test Lab
TS-09-043	TRUE RMS MULTI METER	FLUKE	87V	15730566	2011-05-20	2012-05-19	1 Year	Lab
TS-09-044	Slidacs	Daelim	3KV	110519	2011-05-20	2012-05-19	1 Year	Test Lab
TS-09-045	Coating Thickness Tester	Defelsko	Positector 6000	159023	2011-05-20	2012-05-19	1 Year	Test Lab
TS-09-046	DIGITAL MΩ HITESTER	HIOKI	3454-11	091223261	2011-05-20	2012-05-19	1 Year	Test Lab
TS-09-047	Illuminance meter	UDT211		08033	2011-04-01	2012-03-31	1 Year	Light Distribution Measuring System
TS-09-048	DETECTOR	UDT211		08033	2011-04-01	2012-03-31	1 Year	Light Distribution Measuring System
TS-09-049	GONIOMETER	UDT211		08033	2011-06-08	2012-06-07	1 Year	Light Distribution Measuring System
TS-09-050	PROGRAMMABLE DC POWER SUPPLY	ODA	OPS-15010	ODA-01-0923-07572	2011-05-23	2012-05-22	1 Year	Light Distribution Measuring System
TS-09-051	AC POWER SOURCE	EXTECH	6710	1480673	2011-05-16	2012-05-15	1 Year	Light Distribution Measuring System

Equipment

Maintenance No.	Measuring Device	Producer	Model	Device No.	Maintaining Date	Next Date	Maintaining Sequence	Location
TS-09-052	POWER METER	CHROMA	66202	662022004091	2011-05-13	2012-05-12	1 Year	Light Distribution Measuring System
TS-09-053	SPECTROSCOPY	Avantes	Avaspec-2048-USB2-VA	1104053UI	2011-06-08	2012-06-07	1 Year	Light Distribution Measuring System
TS-09-054	Thermo-hydrostat	ALL THREE	ATH-170M	20110520	2011-06-13	2012-06-12	1 Year	Test Lab
TS-09-055	Temp/Humidity Controller/Monitor (DC Voltmeter)	SAMWONTECH	TEMP2500-00/SD	S7800LA646 0318C	2011-05-13	2012-05-12	1 Year	Test Lab



Business Context

- I. LED Light Division**
 - 1. LED Light for Railway Vehicle**
 - 2. LED Light in General**

- II. Secondary Battery Division**
 - 1. Secondary Battery for Railway Vehicle**
 - 2. UPS Storage Battery**

I -1. LED Light for Railway Vehicle_ LED Light Division

We lead markets with high technology of LED light for railway vehicle.

※ 1st Patent of LED Light for Railway Vehicle

- Patent 10-0975015

※ 1st KS Certification of LED Light for Railway Vehicle

- Certification 10-0648

※ Registration of a Utility Model

- Registration 20-0450229

- Application No. 20-2010-006725

※ Design Registration Application

- 30-2010-0021278

- 30-2010-0029038

- 30-2010-0029039



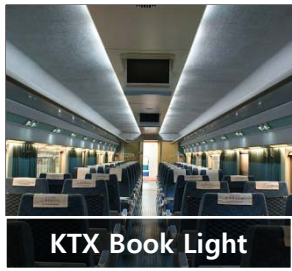
Design Confirm KTX Book Light / Cabin Light	Book Light / Cabin Light / KTX Design Confirm – Applied every remodeled vehicle Protect right of Industrial property with utility model.
Joint-Developing Light for Next Generation Electric rail car	Developing Cabin Light for Electric Rail Car / Jointly-Development with Korea Railroad Research Institute Easy to apply Existing Cars through Jointly-Development with Organization in Korail and Expect Stable Sales
Headlight for Carrier Option to Purchase Development	Developing Headlight for Carrier/ Korail Option to Purchase Development Expected to apply to existing car due to Option to Purchase Development – Already have Technology
Secondary Battery + LED Light	Electric Rail Car Cabin Light + Secondary Battery / SeoulMetro Option to Purchase Development It stands for not only Secondary Battery Business itself, Penetration Business to apply LED Light.

I -1. LED Light for Railway Vehicle_ LED Division

We are continuously growing up through steady effort for technical development and competitive products.

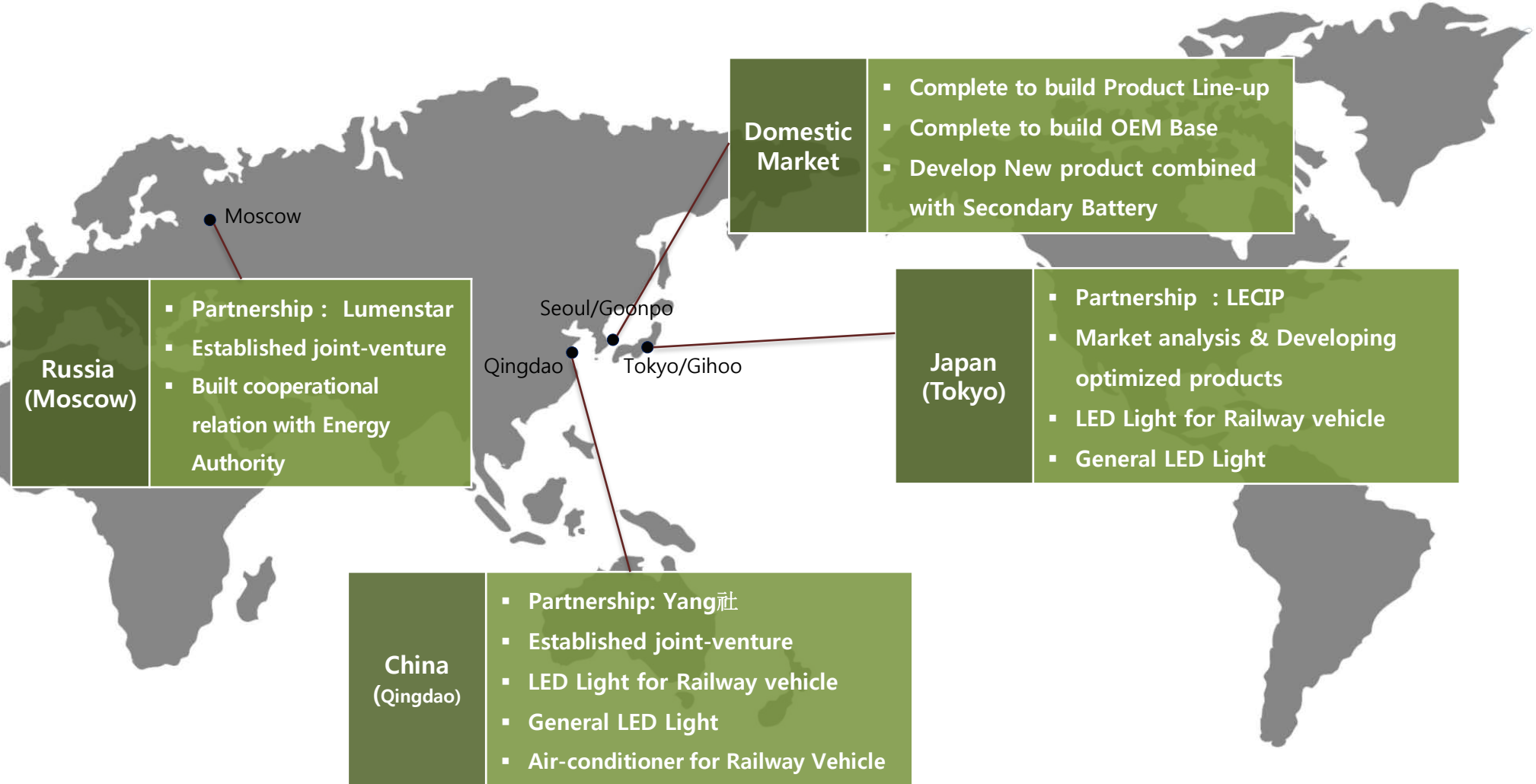
Accomplishment List

	Install Site	Kind	Installation Date
KORAIL	Metropolitan area Electric Railway car 1 st (250 Cars)	LED Cabin Light, Side Lamp, Tail Lamp	Done in Nov. 2009
	Metropolitan area Electric Railway car 2 nd (390 Cars)	LED Cabin Light, Side Lamp, Tail Lamp	Done in Apr. 2010
	Moogoonghwa Cabin room / Semaoul Cabin room(342 Cars)	LED Recessed Lamp, 3 kinds of Accessory Lamp	Done in May 2010
	Metropolitan area Electric Railway car 3 rd (652 cars)	LED Cabin Light, Side Lamp, Tail Lamp	Done in Nov. 2010
	Moogoonghwa Cabin room (348 cars)	LED Cabin Light, 4 kinds of Accessory Lamp	Done in Dec. 2010
	KTX Express Railway Vehicle (36 cars)	LED Book Light, 3 kinds of Accessory Lamp	Done in Dec. 2010
	Metropolitan area Electric Railway car 4 th (522 cars)	LED Cabin Light, Side Lamp, Tail Lamp	Contract in Apr. 2011
	Moogoonghwa Cabin room (106 cars)	LED Cabin Light, 4 kinds of Accessory Lamp	Contract in May 2011
Gwangju subway	Gwangju Subway Line 1 (8 cars)	LED Cabin Light	Done in Ju.l 2009



I -2. General LED Light _ LED Light Division

We are having progress to entering market of General LED Light applied and fused with advanced Technology for Railway Vehicle LED Light.



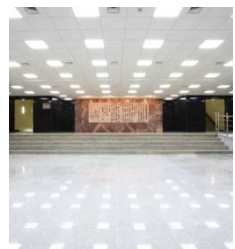
I -2. General LED Light _ LED Light Division



We provide LED light, based on advanced technology and settled quality, to train stations and public institutions.

Accomplishment List

	Install Site	Kind	Installation Date
Korea Rail Network Authority	Chyeongpyeong Station in Line Gyeongchun	LED Down Light	Jul. 2009
	9 Stations in Line Gyeong-Ui (Neungok, Seongsan, Goksan , Pajoo , Tanhyeon , Ilsan, Poongsan , Bakma)	LED Panel, Down Light	Jul. 2009
Korea Railroad Research Institute	Building of New technology for Next generation	LED Panel	Jul. 2009
Government Office	Suwon Office of Express Co.	LED Down Light & 2 more	Completed in Jan. 2010
	Pyeongtek base of Korean Gas Co.	LED Bulb	Jun. 2009
	Office Building of Ministry for Food, Agriculture, Forestry and Fisheries(MIFAFF)	LED Tube Type	May 2009
	Herb arbor in Central Government Complex	LED Land Scape Light	Apr. 2009
	National Rehabilitation Center	LED Down Light	Mar. 2009
	Korea Racing Authority	LED Panel CLIP-BAR	Mar. 2009
	Minister's office, Ancillary room, Conference room of MIFAFF	LED Panel	Jan. 2009
	Gwacheon Government Complex	LED Emergency Light	Nov. 2008
	Arbor & Lobby in Central Government Complex	LED Land Scape Light	Aug. 2008
	Congressman Lounge	LED Panel	Jul. 2008



II-1. Secondary Battery for Railway Vehicle_ Secondary Battery Division

We propose Railroad environment the new material storage battery based on differentiation in sales and competitive technology.

Railroad Market



Validity of Secondary Battery Business

Political Validity	Growth for Quality Demand due to Environmentally Friendly and Low Energy Consumption Issue.
Technological Validity	Increase Needs for Innovative Technology of Capacity, Output, Stability, Cost
Economical Validity	Expected to grow approximately 40~50 times in next 10 years (About ₩2,800 Billion in 2020)

“Secondary Battery Market is Rapidly Growing in 2020s Whole Market (₩100 Trillion)”

Secondary Battery for Railway Vehicle

Secondary Packing Factory

Pilot Project of Domestically Producing Storage Battery of Seoul Metro (Pilot Project of Option to Purchase)

Project of Replacing Seoul Metro Storage Batteries to Domestic Products

SKME Packaging Work for SKME Storage Battery (Lithium-Polymer)

Storage Battery for LIG Nex1 Tactical Multiple Bandwidth Multi-Functional Radio

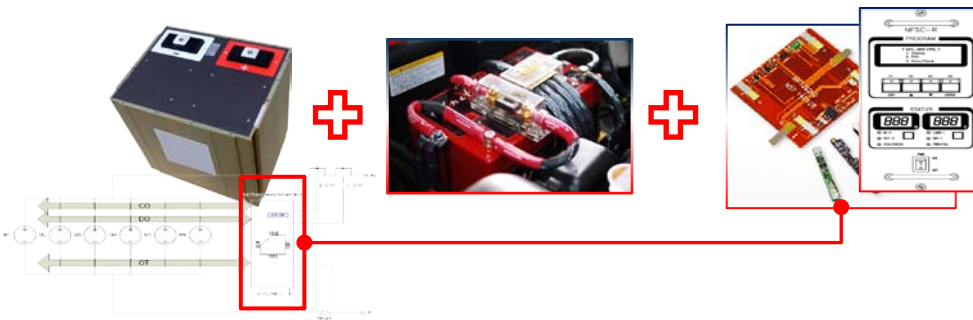
II-1. Secondary Battery for Railway Vehicle_ Secondary Battery Division

We satisfy various needs of special environment (Railroad Market, User Customizing) through the design considered stability and capability.



Safety Circuit Loaded Type

- High Stability in Rush Current
- Cutting off Current in Unit Time(Ns)
- Increasing Unit Cost
- Impossible to inner Circuit and Install Module



Safety Circuit External Type

- Integration of Control and Display Device
- Decreasing Unit Cost / Easy to add more functions.
- Concerning for Prototype to be extended

- Developing Customizing Production Goods Considered by Special Environment
- Increase Visual Effect with Stability Monitoring System.

II-2. UPS Storage Battery_ Secondary Battery Division

We guarantee high performance and subsidiary facilities due to less weight than existing ones.

<Unit : ₩ Million>



Corporation	Number of Station	Number of UPS	Price	Note
Seoul Metro	125	Approx. 1,000	10,000	Line 1 ~ 6
KORAIL	Approx. 700	Approx. 10,000	100,000	Normal Station
Metro	150	Approx. 1,200	12,000	Line 5 ~ 8
Power Distribute Station	Many others	Many others	Unknown	Large Station

Business Field	Number of Storage Battery	Price	Note
Signal in Station	Approx. 250,000	5,000	Pb Storage Battery
UPS in Station	Approx. 1,200,000	25,000	Pb, Ni-Cd
Expected Sales Total		30,000	

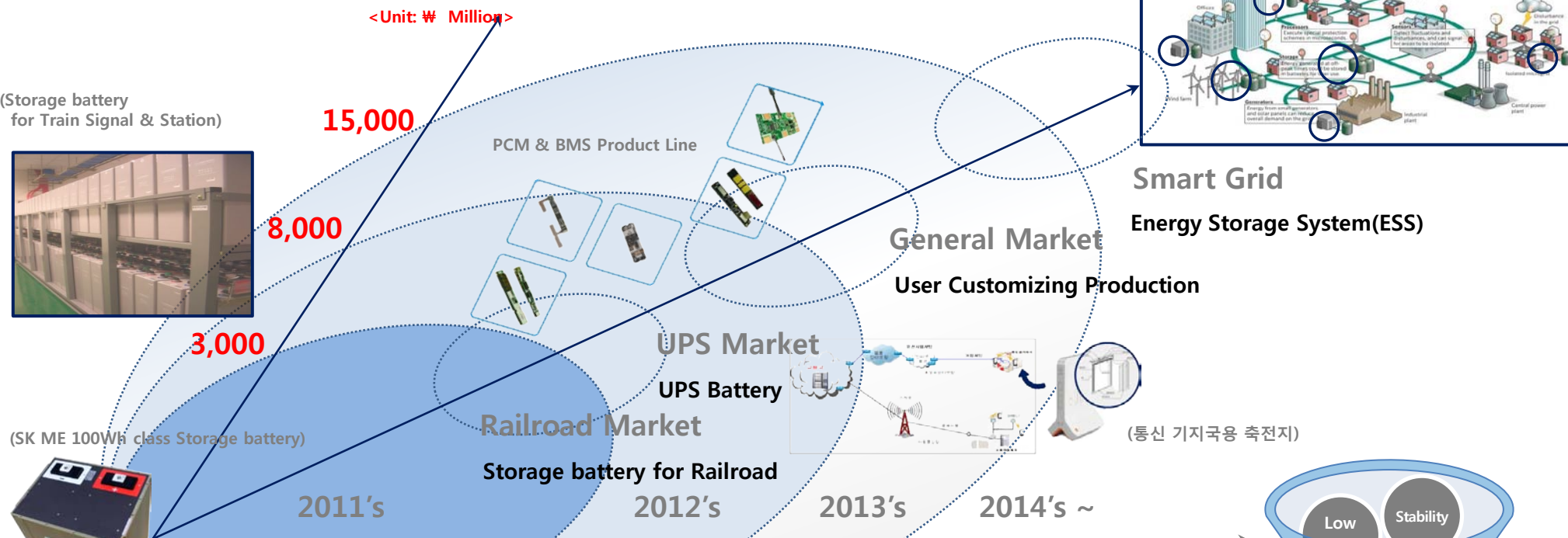
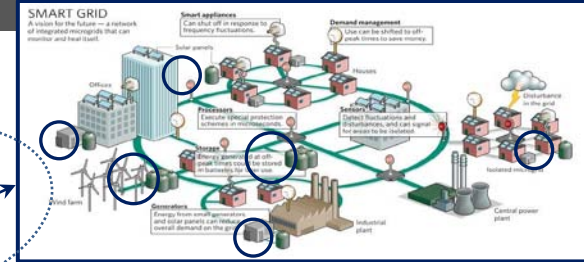
■ UPS Market 2011 ~ 2013

<Unit : Million>

List	Delivery & Business Target	2011		2012		2013		Note
		Contract plan	Sales Plan	Contract plan	Sales Plan	Contract plan	Sales Plan	
UPS Storage Battery	02-01. Railway Station & Power Distribute Station	-	-	2,000	2,000	2,000	2,000	Annually Expected 20% of Sales Plan
Total		-	-	2,000	2,000	2,000	2,000	

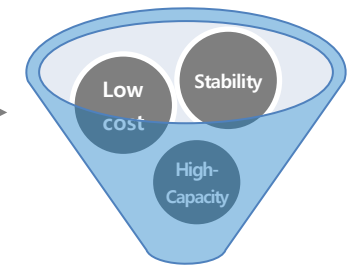
II-2. UPS Storage Battery_ Secondary Battery Division

We are aiming developing storage battery for energy storage device of next generation, beginning with mass storage battery.



- 2011 Pilot Project of Seoul Metro Storage Battery
- Manufacture & Produce SK ME Storage Battery Packaging
- Replace Seoul Metro Storage Battery.
- Replace KORAIL Storage Battery / Replacing City Metro Storage Battery
- Develop & Deliver PCM (Safety Circuit)
 - Develop BMS (Battery Management System)
 - Research and Develop Energy Reduction Device
- Deliver LIG Nex1 Storage Battery as Military Business

Smart Grid
Energy Storage System(ESS)
General Market
User Customizing Production



Core Strategy of Secondary Battery Division

Introducing Achievements



National Assembly Building
Panel Light, Down Light, Light Bay



After



Lounge in the Secretariat of the National Assembly

Panel Light Warm White Type

Before



LED3838 20W



Paju LH Co. Ubi-Park

Panel Light, Slim Bar,
Land-Scape Light,
Interior Light





Central government office in Se-jong Lo
Lobby, Indirect Light





Office /meeting room for
Korean minister of agriculture and fisheries

LED 1200 50W







EX co. Suwon Office
Down Light, 300*1200



National rehab center
Down Light



Central government complex park
Led Bollard



Line No. 4 KORAIL

Direct Type

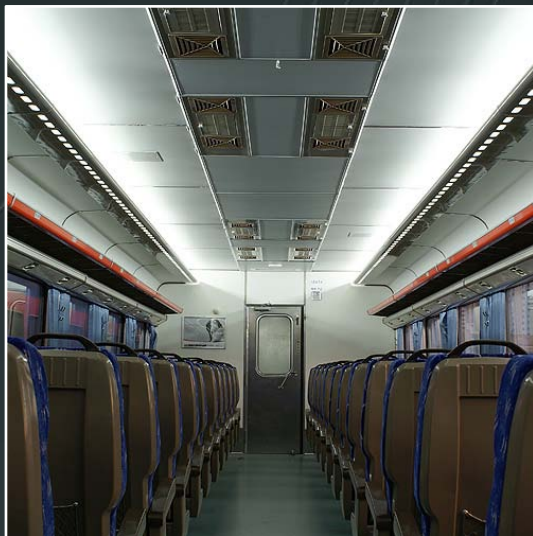




Gwangju Subway Line No. 1

Direct Type





Mugoonghwa Train Cabin room

Indirect Type



Before



After

Mugoonghwa Train Cabin room

Direct Type



KTX
LED Read Light



Thank-you

Today's meeting the beginning of a Good Future, I hope.

From 'THESUNTECH' Family