

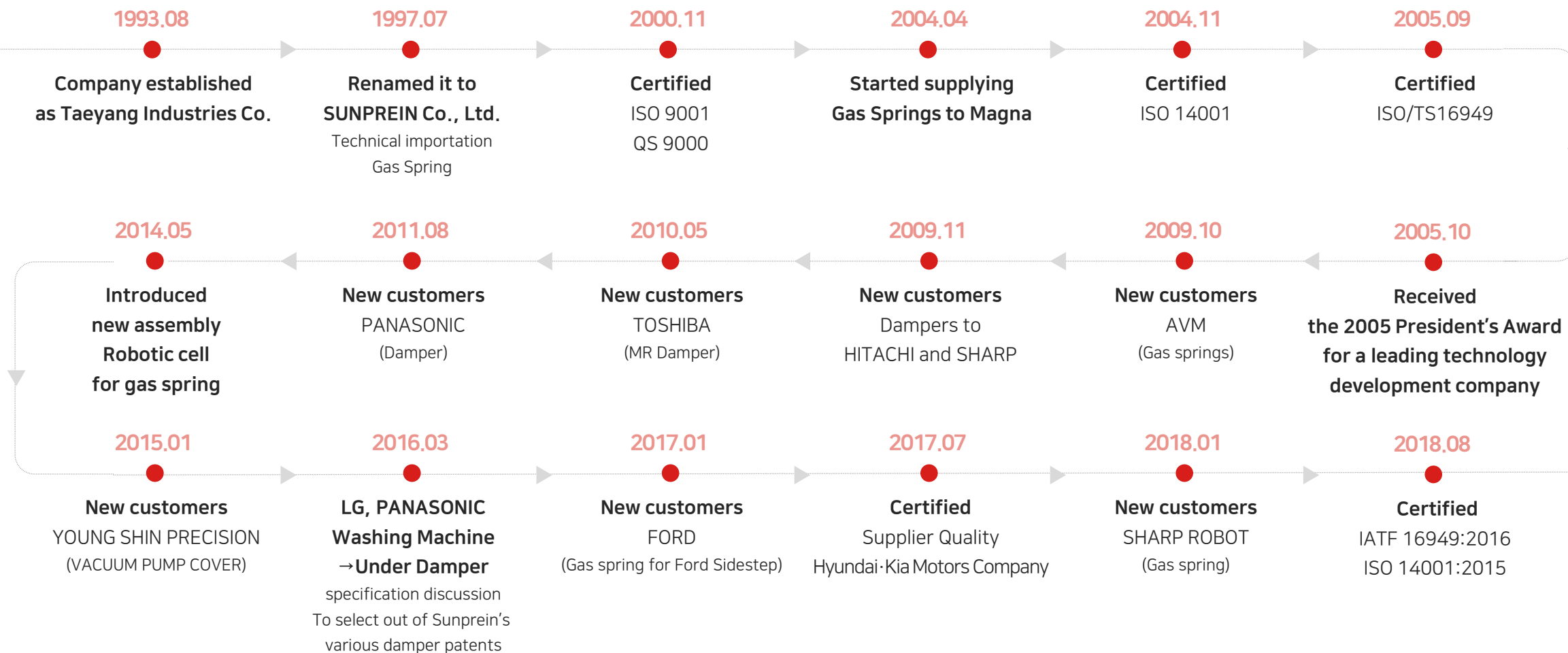
New Vision !!

New Challenge 2019 !!



1

Facts & History



2

Certificates

CERTIFICATE OF REGISTRATION

This certifies that the Quality Management System of

SUNPREIN CO., LTD.

(주)썬프라인코

626, Saengnim-daero, Saengnim-myeon, Gimhae-si, Gyeongsangnam-do, KOREA, 50801

경상남도 김해시 생림면 생림대로 626, 50801

has been audited in accordance with

the Rules for registration scheme for IATF16949:2016
and found to be in conformance to the following standard:

IATF16949:2016

Scope of Registration

Manufacture of Gas spring & press parts
가스 스프링 및 프레스 부품의 제조

Exclusions: Product Design

Registration Date: Oct 16, 2018

Expiration Date: Oct 15, 2021

IATF Certificate No: 0339048

CASC Certificate No: 2018A786



General Manager: Tao Jintong

China Jiuding Automotive Supplier Certification Co., Ltd.

Floor 18, Zhongren Building, Jia10, Chaowai Street, Chaoyang District, Beijing P.R.China



This certificate is the property of CASC and must be returned upon request. To keep the valid of registration, Surveillance Audit for conformance is mandatory. To visit at www.casc-cert.com and www.iatfglobaloversight.org to verify registration.

Version: A

Revision Date: None

Page 1 of 1

IATF 16949:2016



Certificate of Registration

환경경영시스템인증서

(주)썬프라인코

경남 김해시 생림면 생림대로 626

ICR 은 상기업체의 환경경영시스템이
아래의 인증규격에 적합함을 인증합니다

KS I ISO 14001:2015 / ISO 14001:2015

인증관련 규정을 명시 준수한다는 조건으로 등록증인을 부여합니다.

인증범위

자동차용 부품(Gas spring, Stamping)의 제조

인증일자 : 2018년 09월 11일
유효기간 : 2021년 09월 10일

최초 인증일 : 2004년 11월 02일
인증서 번호 : EK003418

The Seal of ICR Limited was here to affixed
in the presence of:

[Signature]

President



ISO 14001:2004 / KS A 14001:2004



CERTIFICATE OF SUPPLIER QUALITY

인증번호 : WD845

SQ 인증서

회 사 명 : (주)썬프라인코

[안전부품]

대 표 자 명 : 선철곤

인증업종 : 용접

사업자번호 : 6228124155

인증등급 : B

업 체 코 드 : #0229

사업장코드 : #022901

회 사 주 소 : 경남 김해시 생림면 생림대로 626

협력사 품질평가 규정에 인거
상기와 같이 SQ(협력사 품질보증)
요구사항에 적합함을 인증합니다.

인증일자 : 2017년 07월 03일

유효일자 : 2020년 12월 31일 까지

최종평가일자 : 2017.05.24 [SQ인증평가]

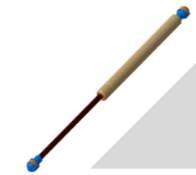
◆ 주 관 : 영신정공(주)

◆ 후 원 : 현대 기아자동차

HKMC SQ Certificate

3

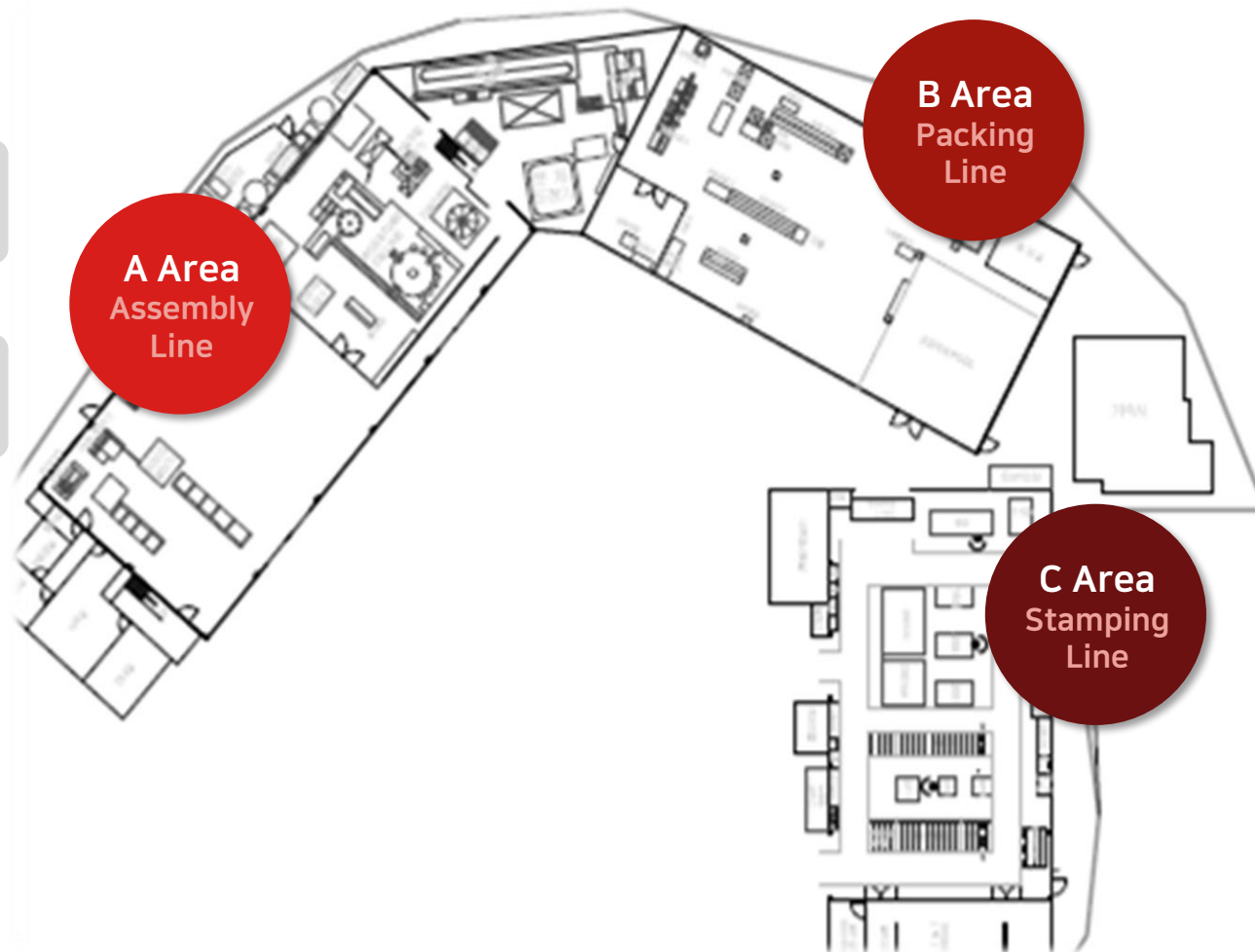
Sunprein Lay out



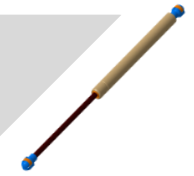
Gas Spring



Damper



Gas Spring



Damper



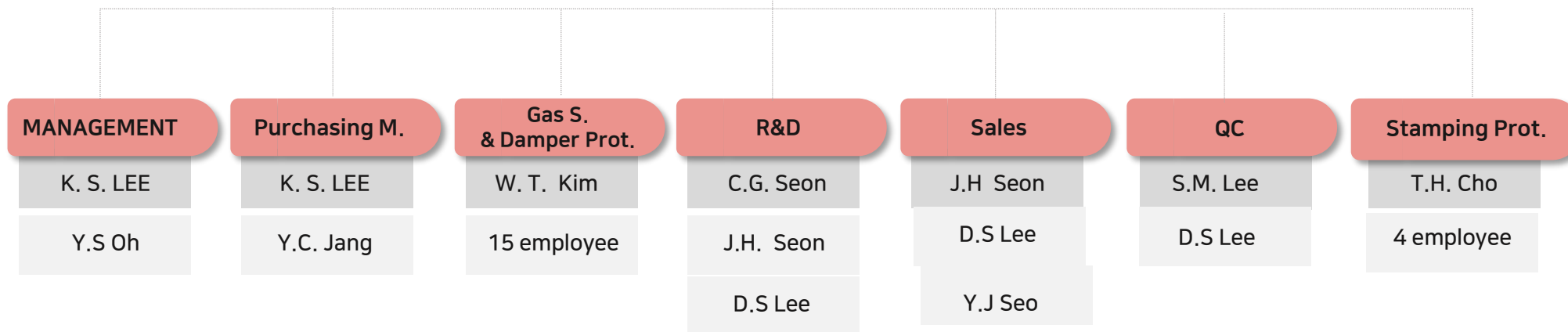
C Area
Stamping
Line

Bracket



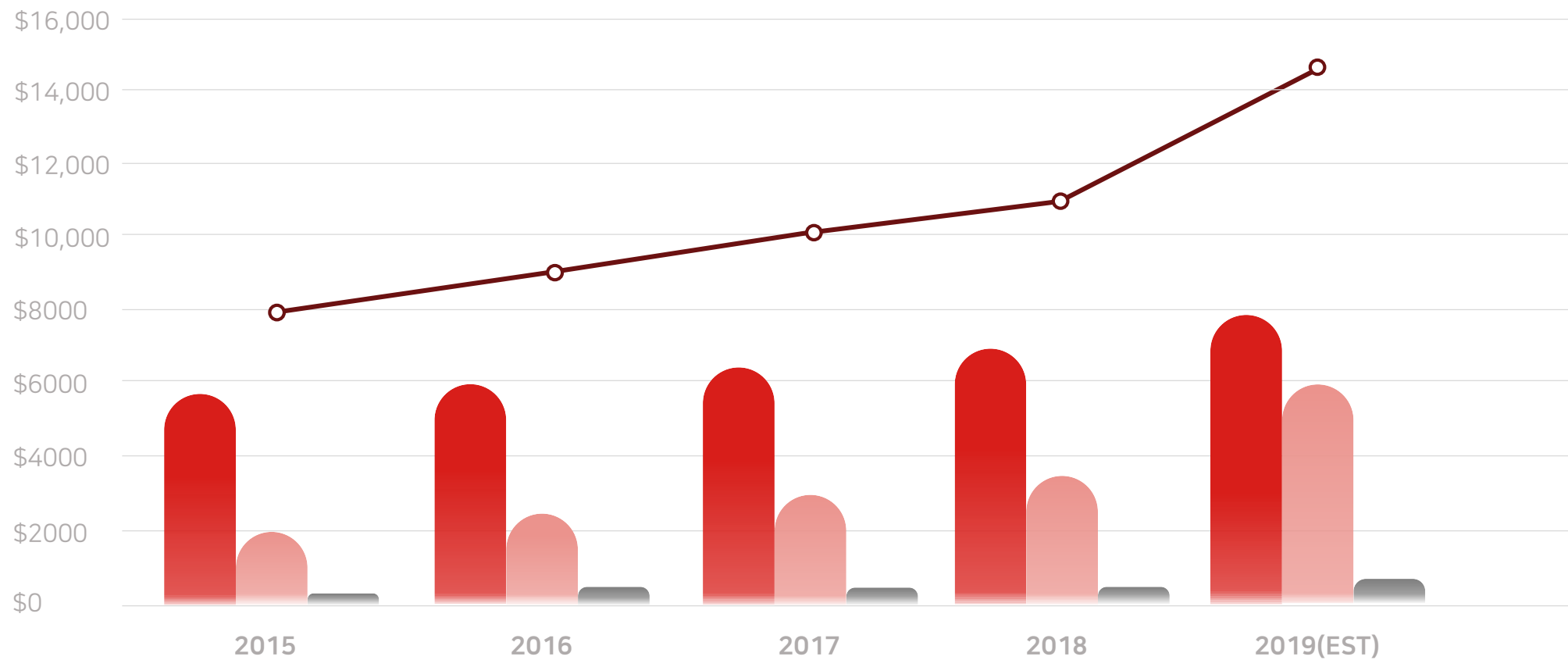
4

Manpower



5

Yearly Sales

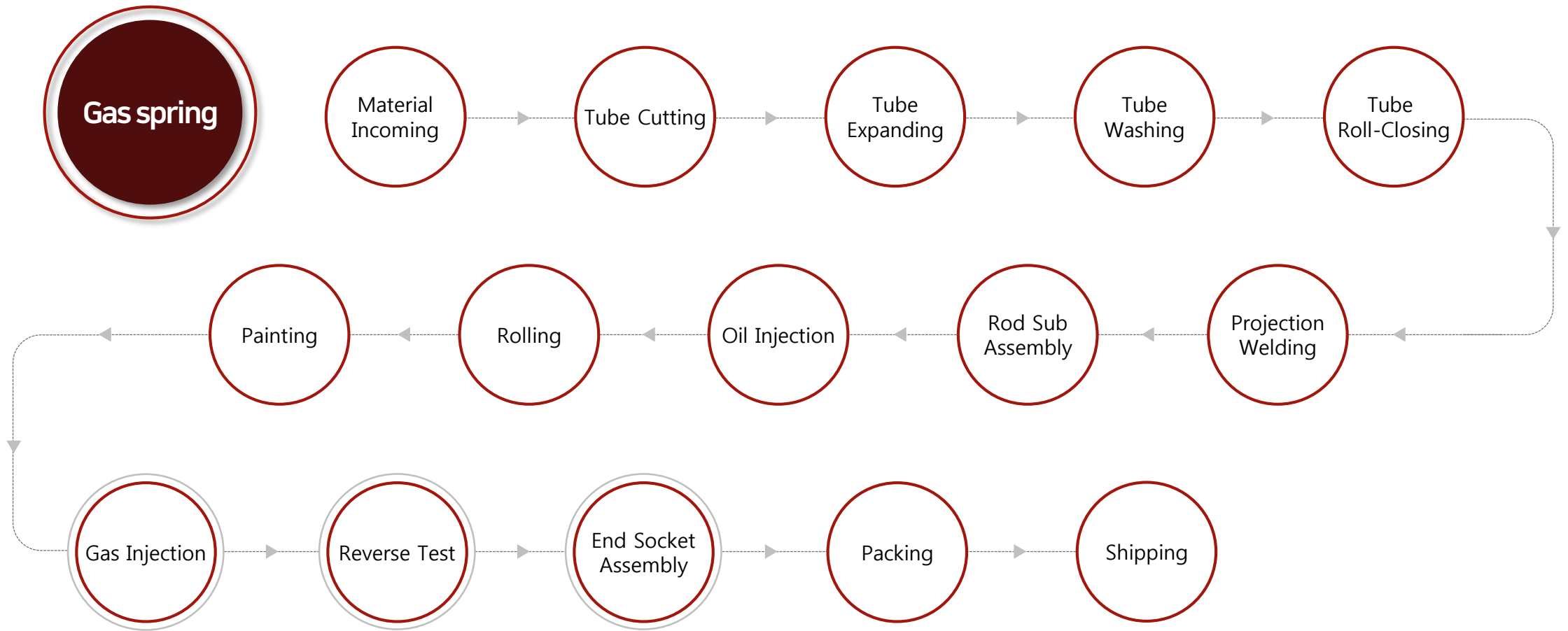


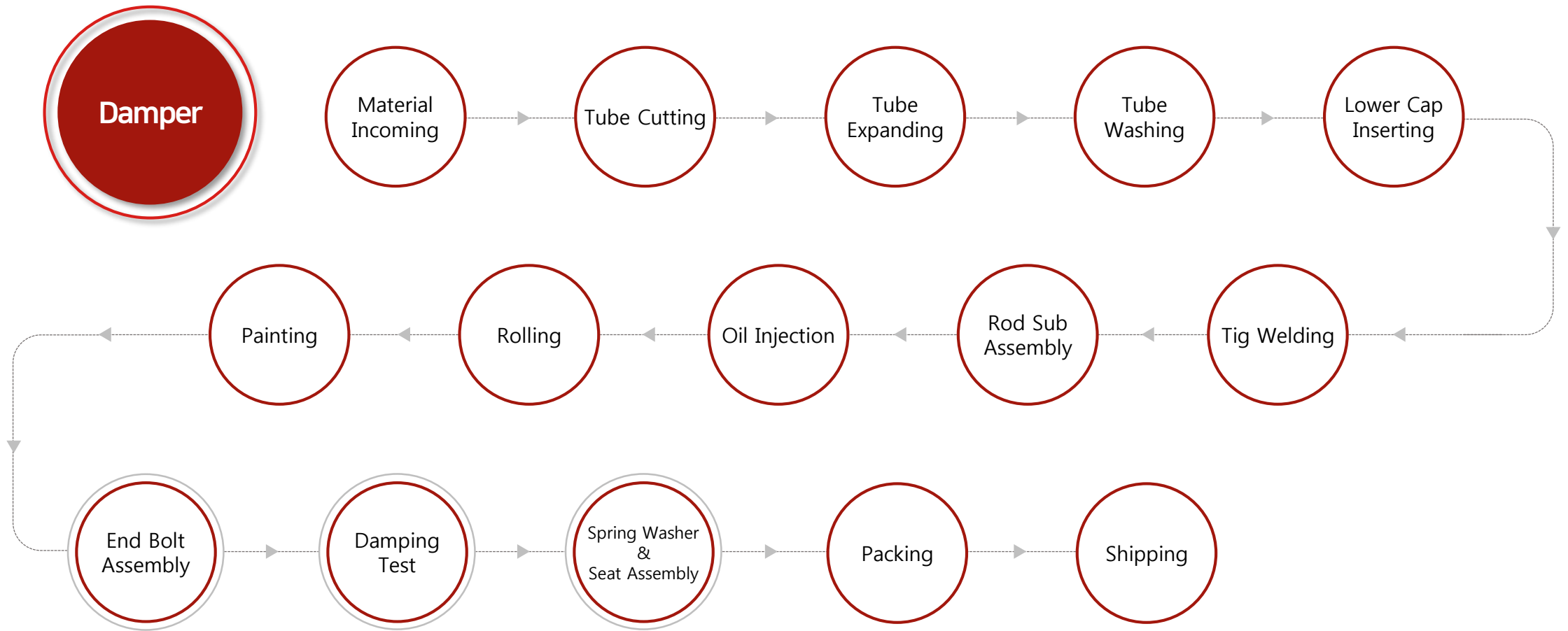
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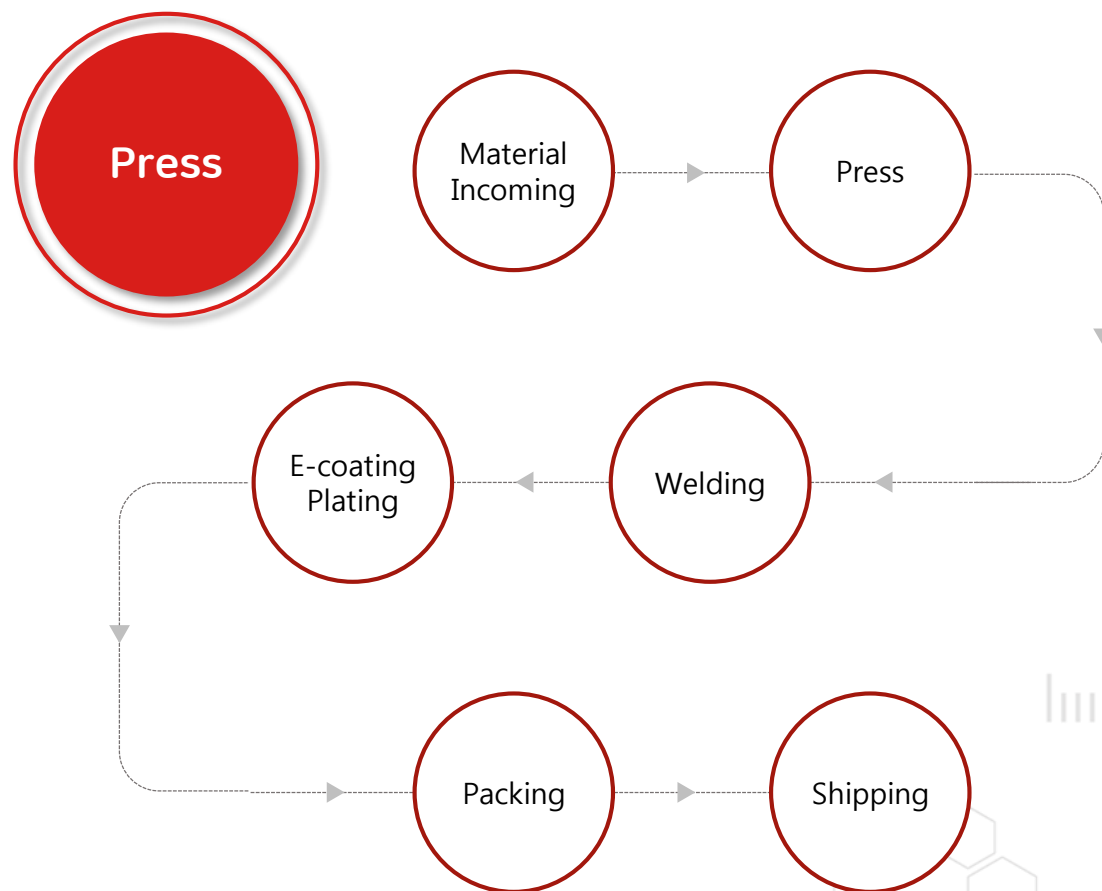
Gas Spring & Damper

Product	Description	Car Type	Customer
Door & seat Gas struts		Chrysler (Caravan)	Magna(USA) AVM(USA)
Free Lock Damper		Bus Seat ATV	CBOL Corp(THAI)
Oil & MR Damper		Laundry Machine	TOSHIBA / HITACHI SHARP / Panasonic
Friction Damper			Panasonic
Suspension Damper			Hitachi

Product	Description	Car Type	Customer
Bracket		Vacuum Pump Mounting Bracket	Youngshin Cop Hyundai & Kia Renault Samsung Nissan
Clip		-	
Cover		Vacuum Pump Cover	







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Major Appliances (1/7)

Gas Spring & Damper

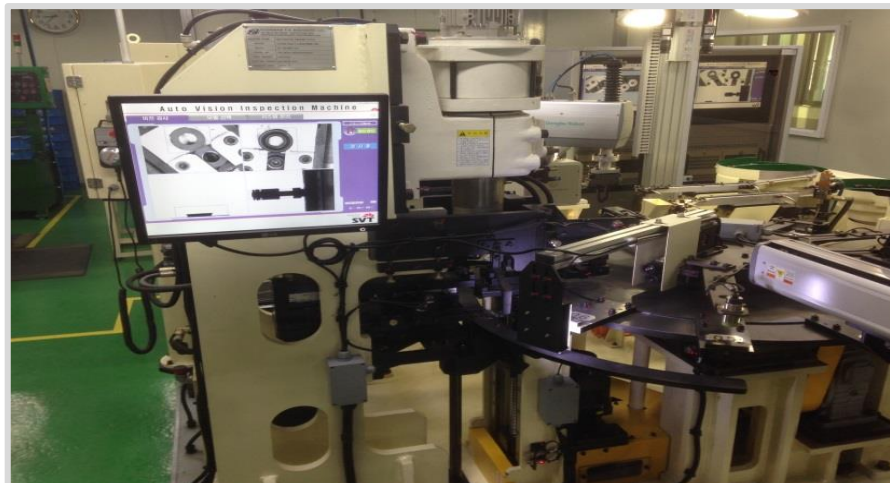


**Gas Spring
Robotic Automatic
Machine**
(600EA/1hour)

9

Major Appliances (2/7)

Gas Spring & Damper



Gas Spring
Robotic Automatic
Machine
(600EA/1hour)



9

Major Appliances (3/7)

Gas Spring & Damper



Robotic Automatic Machine's Strong points

- Reduce production time
- Streamline production manpower
- Real-time vision system
 - Assembling parts positively and detecting missing parts
 - Poor assembly / malfunction prevention
 - All parts LOT number can be traced back by memory storage system

9

Major Appliances (4/7)

Press

Press	Amount
250 Ton	1
200 Ton	2
160 Ton	1
120 Ton	1
60 Ton	1



9

Major Appliances (5/7)

Press

Press	Amount
250 Ton	1
200 Ton	2
160 Ton	1
120 Ton	1
60 Ton	1



9

Major Appliances (6/7)

Press



SPOT Welding Machine No. 1



SPOT Welding Machine No. 2



F/PROOF Monitor

Press	Amount
SPOT Welding MC	3
F/PROOF Monitor	3
Weld Checker	1

9

Major Appliances (7/7)

Gas Spring & Damper



Tube Cutting M/C



Tube ROLL CLOSING M/C



Automatic Welding M/C

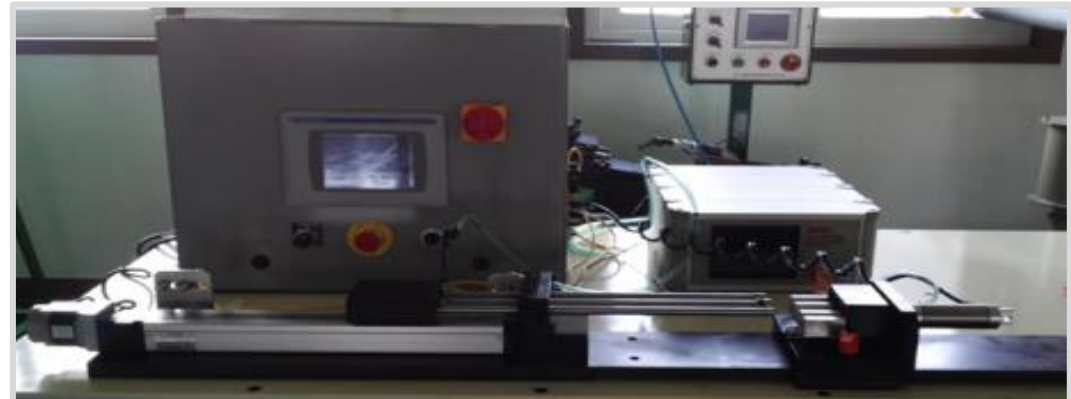


Powder coating M/C

10

Test equipment (1/6)

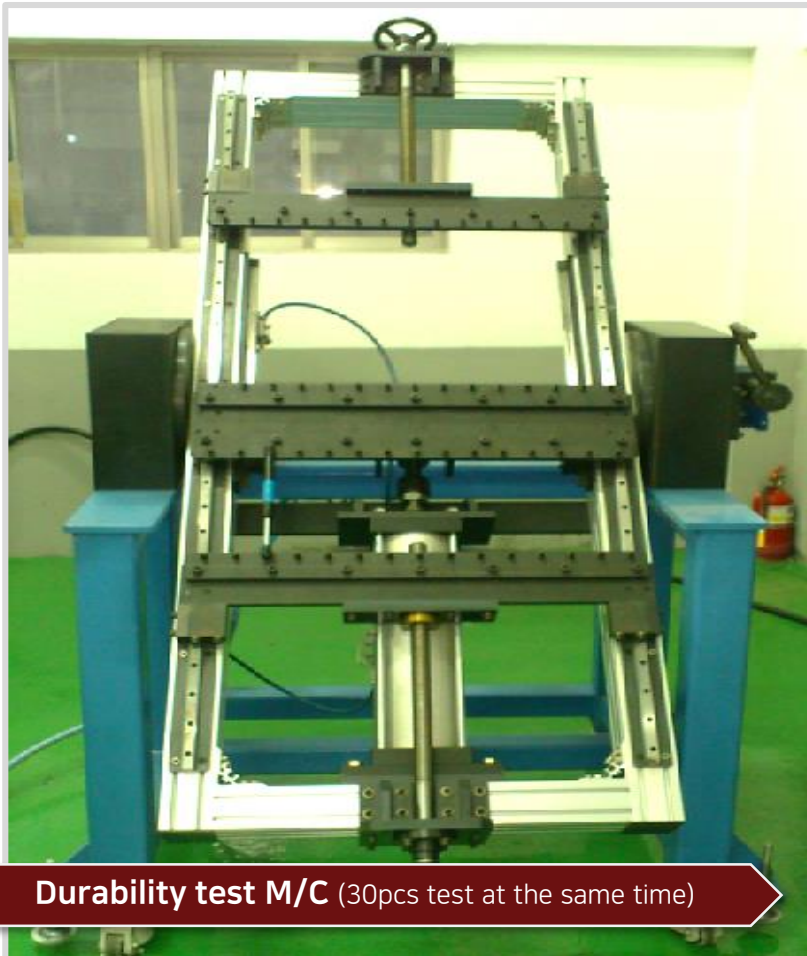
Gas Spring



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Test equipment (2/6)

Gas Spring



Durability test M/C (30pcs test at the same time)



Vibration test M/C

10

Test equipment (3/6)

Oil Damper



Damper Reaction test M/C



Vibration test M/C

10

Test equipment (4/6)

Common



10

Test equipment (5/6)

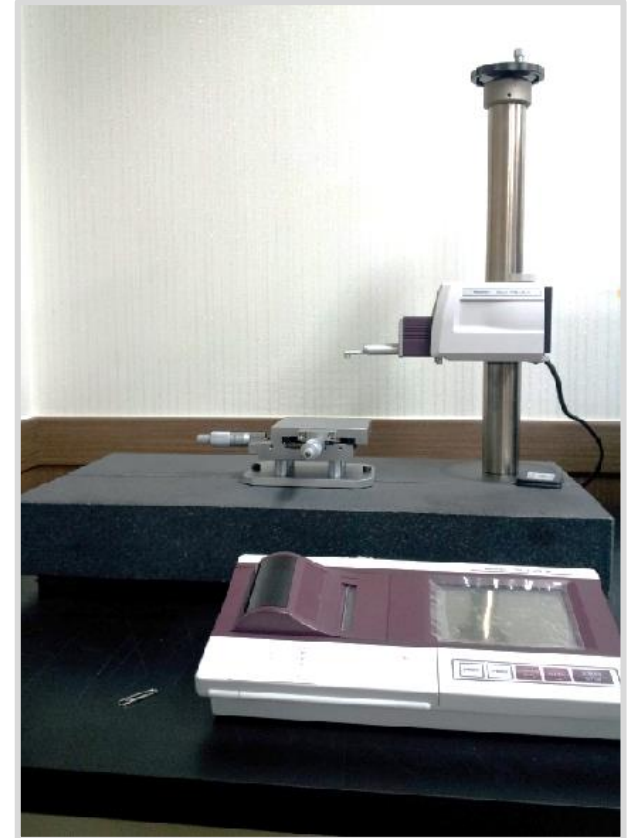
Receiving Inspection



Hardness testing machine



Micro scope



Roughness tester

10

Test equipment (6/6)

Receiving Inspection

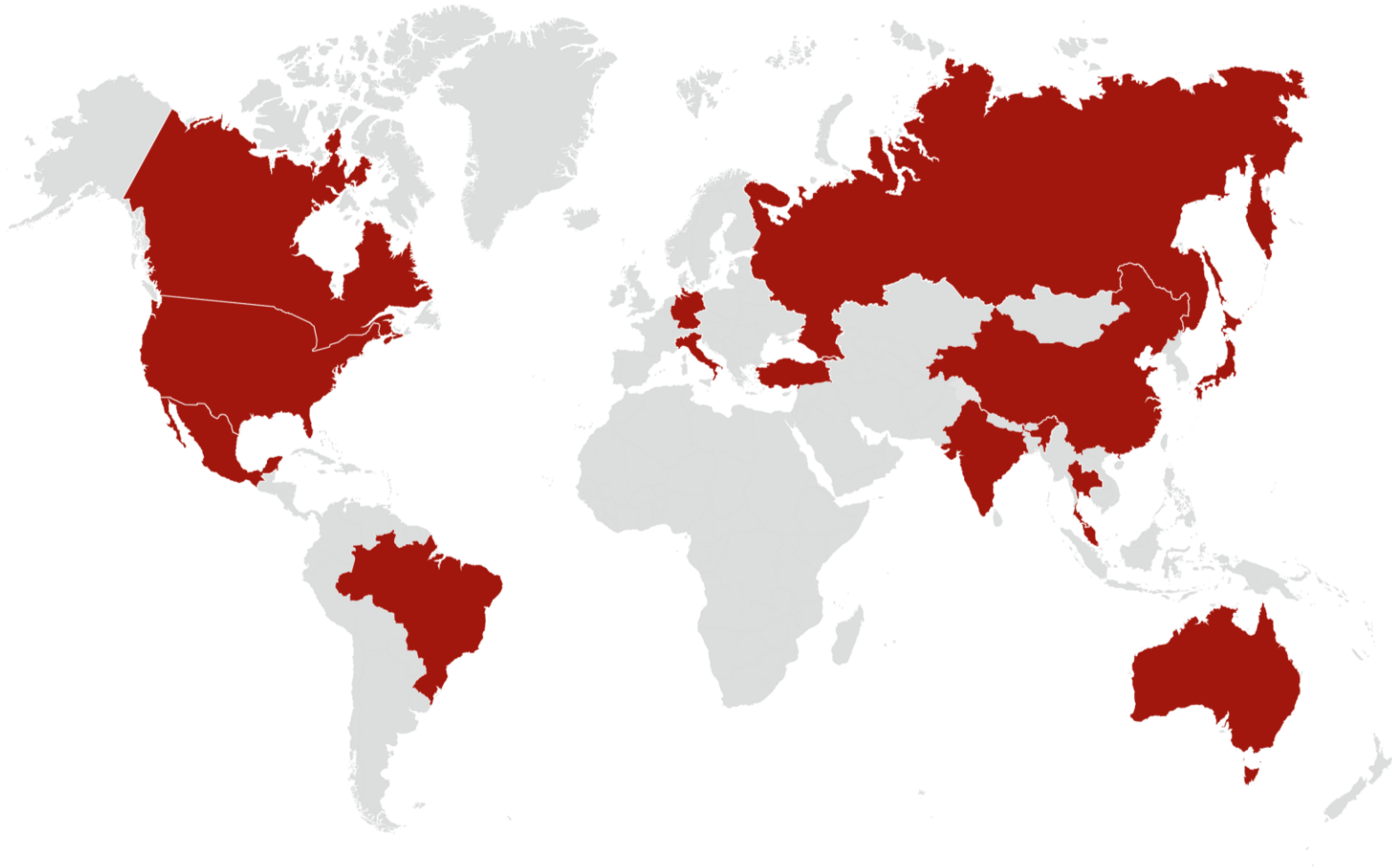


2D Gage



Projector

Global SUNPREIN – Exporting country



Exporting country

America

- USA
- CANADA
- MEXICO
- BRAZIL

Europe

- GERMANY
- ITALY
- TURKEY
- RUSSIA

Asia

- JAPAN
- CHINA
- INDIA
- THAILAND
- SINGAPORE

OCEANIA

- AUSTRALIA

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Global SUNPREIN - Main customer (1/7)

MAGNA Seating

Gas Spring & Damper



Supplying 100% of
Chrysler Caravan Requirement

annual production

: Gas Spring → 1,400,000 EA/Yr

Prop Rod → 700,000 EA/Yr



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Global SUNPREIN - Main customer (2/7)

MAGNA Seating

Gas Spring & Damper



11

Global SUNPREIN - Main customer (3/7)

Trico(Strong Arm)

Gas Spring & Damper

USA After Market

annual production

: Gas Spring → 300,000 Ea/yr

  				
Part No.	Extended Length (mm)	Appearance	Car Model	Model Year
4026	212.9		Ford Explorer Hood	1995-1999
4048	287.8		Jeep Grand Cherokee Hood	1999-2004
4524	352.9		Nissan Maxima Hood	1995-1998
4557	627.1		GMC Yukon Liftgate	1999-2004
4956	264.8		Chrysler Concorde Trunk	1998-2000
4418	437.0		Universal part	
4892	474.0		Toyota Camry Hood	1992-1996
4259	368.0		Jeep Cherokee Liftgate	1997-2000
4699	468.1		Jeep Cherokee Liftgate	1998-2000
4291	564.0		Jeep Grand Cherokee Liftgate	1993-1998

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Global SUNPREIN - Main customer (3/7)

Multimatic

Gas Spring & Damper

Supplying 100% of
Ford Pickup Truck Requirement

annual production

: Gas Spring → 300,000 EA/Yr



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Global SUNPREIN - Main customer (4/7)

Heavy Equipment Company (Japan)

Gas Spring & Damper

annual production
: 35,000 EA/Yr



MAEDA
Mini Cranes



TAKEUCHI

KOMATSU



YANMAR

 **Kubota**

11

Global SUNPREIN - Main customer (5/7)

FORMWELL (Russia)

MAKMART(Singapore)

Gas Spring & Damper

FORMWELL



MAKMART
components and mechanisms for furniture industries



DY



New Vision !! New Challenge 2018 !!

11

Global SUNPREIN - Main customer (6/7)

Washing Machine Company (Japan / THAI)

Gas Spring & Damper

SHARP



Panasonic
ideas for life



HITACHI



11

Global SUNPREIN - Main customer (7/7)

Young Shin Precision (KOREA)

ITW (KOREA)

Press

Bracket



Wheel Cap / Clip



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SUNPREIN's Patent List (1/2)

Automobile (9 case)

NO	Patent No	Patent Name	Registered Date	Classification
1	200309685	Valve for Gas Spring	2003-03-25	Gas Spring
2	10-0575898	Noise Prevention Device for Stick Spring	2006-04-25	Prop Rod
3	40-0677321	Spiral Spring etc	2006-09-06	Gas Spring
4	10-0666732	Solid Prop Rod for Folding Seat	2007-01-03	Prop Rod
5	10-0699427	Ball Joint Structure and Manufacturing Method	2007-03-09	Gas Spring & Prop Rod
6	10-0743577	Ball Joint connecting system	2007-07-23	Gas Spring & Prop Rod
7	30-0770620	Guid Stopper for Gas Spring	2014-11-06	Gas Spring
8	30-0770621	Road Guide for Gas Spring	2014-11-06	Gas Spring
9	10-1538020	Temperature Compensation Control System	2015-07-14	Gas Spring

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SUNPREIN's Patent List (2/2)

Laundry M/C (31case)

NO	Patent No	Patent Name	Registered Date	Classification
10	10-1366736	Groove Type Continuous Change Oil Damper (Fixed Type)	2014-02-18	Oil Damper
11	10-1318371	Continuous Change Oil Damper (Movable Type)	2013-10-08	
12	10-1375877	Valve Plate Attached CC Type Oil Damper (Movable Type)	2014-03-11	
13	10-1318373	Solenoid Oil Damper	2013-10-08	
14	101197309	Magnetic Oil Damper for Washing Machine	2012-10-29	
15	101202312	Adjustable Valve Type Damper System	2012-11-12	
16	30-0678836	Damper for Drum Type Washing Machine	2013-01-25	
17	10-1333321	Piston Damping Plate Attached Damper	2013-11-20	
18	10-1233651	Magnetic Damper	2013-02-08	
19	101192155	Dynamic MR Fluid Damper	2012-10-11	MR Damper
20	101192158	Jig Type MR(MagneticRheological) Fluid Damper	2012-10-11	
21	101176854	Assembling Method for Jig Type MR Fluid Damper	2012-08-20	
22	101202310	Assembling Method for Inner Tube MR Fluid Damper	2012-11-12	
23	101192156	Inner Tube MR Fluid Damper	2012-10-11	
24	PCT/KR2011/003760	MR-FLUID DAMPER AND METHOD FOR ASSEMBLYING SAME	2011-05-26	
25	PCT/KR2011/008376	MULTI-STAGE TUBE MAGNETIC MR DAMPER	2011-11-04	
26	10-1266063	Clip attached MR Fluid Damper	2013-05-14	
27	10-1285186	York for MR Fluid Damper	2013-06-28	
28	10-1332731	Multi Tube Magnetic MR Damper	2013-11-19	Air Damper
29	10-1375870	Steel Tube Type Air Damper for Damping force up	2014-03-11	
30	101192153	Friction Damper	2012-10-11	Friction Damper
31	101192154	Friction Damper	2012-10-11	
32	10-1461040	Damping Manufacturing Method	2014-08-04	
33	PCT/KR2013/004422	METHOD FOR MANUFACTURING DAMPER	2013-05-21	
34	PCT/KR2014/004719	DYNAMIC DAMPER FOR WASHING MACHINE	2014-05-28	Full Auto Friction Damper
35	10-1398070	DYNAMIC DAMPER FOR WASHING MACHINE	2014-05-15	
36	10-1398083	Plastic Upper Tube combined Friction Damper	2014-05-15	
37	10-1398078	Friction Force Control Function Damper	2014-05-15	Drum Friction Damper
38	1015860590000	Slim Tube Damper	2015-07-07	
39	10-2016-0003316	Adjustable Damper for washing machine	2016.01.11	
40	10-2016-0010330	Multi Combined Friction Damper	2016.01.27	Drum Multi Step Friction Damper

Patent certificate



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Why SUNPREIN?



It is Sun Prein's goal To fulfill customer 's pursuit of quality and delivery schedules, to provide high quality products at reasonable prices and to enhance customer' s convenience.

Thank You



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ktyi@sunprein.co.kr / jhseon@sunprein.co.kr

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