

Technology For The Best



BESTEC CO., LTD.





Information

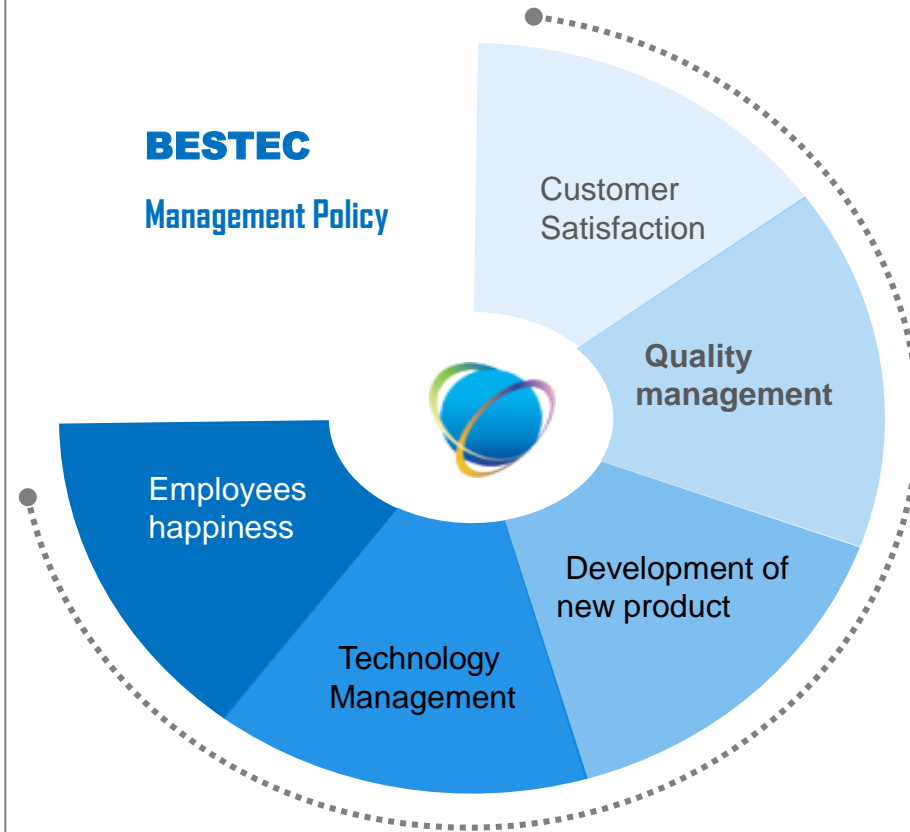
- 1 Company Outline
- 2 History & Certifications
- 3 Core Technology
- 4 Customers
- 5 Bestec Advantages
- 6 Charging Booster

Company Outline

Company Information

- **Company Name** : BESTEC CO., LTD
- **Establishment** : 01. 12. 1998
- **C.E.O** : KIM SUNG BONG
- **Address** : 390, cheomdan yeonsin-ro, Buk-gu
Gwangju, Republic of Korea
- **MISSION**
Making better products consistently
- **VISSION (Target for 2021yrs)**
Bestec pursues employees happiness

Management policy



History & Certifications

- **Dec. 1998** Established Bestec Co. Ltd.
- **Mar. 2000** Started overseas sales (Japan, China, Asia)
- **Nov. 2001** Received “Excellent Domestic Capital Goods” (Prime Minister Trophy)
- **Jul. 2005** Established a Chinese Corporation (Tianjin)
- **Oct. 2007** Acquired the Patents for “Gas Spring with built-in Gauge”
- **Aug. 2008** Recognition of the “R&D Center” from Korea Industrial Technology Association
- **Jul. 2010** Assigned the distributor in Malaysia “Loyal Tools / V.C.M”
- **May. 2011** Assigned sole agency in Turkey “Delta”
- **Sep. 2011** Acquired the Patents for “Gas Filling apparatus for gas spring”
- **Dec. 2011** Acquired 1 Million Dollar Export Trophy (1.3Million Dollar)
- **Feb. 2012** Assigned sole agency in Japan “HAYASHI”
- **Mar. 2013** Recognized as a standard component in Mitsubishi
- **Dec. 2013** Moved & Expanded plant to Cheomdan Industrial Complex
- **Jul. 2014** Recognized as a standard component in Mazda
- **Apr. 2015** Recognized as a standard component in Suzuki
- **Jul. 2015** Assigned the distributor in Germany “Anchor Lamina”
- **May. 2016** Assigned the distributor in Thailand “K-Tech”
- **Oct. 2018** Assigned the distributor in Vietnam “Hoang Lien”

Certificates: 5 / Patents : 6



ISO 9001



ISO 14001



Patent No.0314598



Patent No.100773590



CE



PED



Patent No.101066258



Patent No.101137998



RoHS

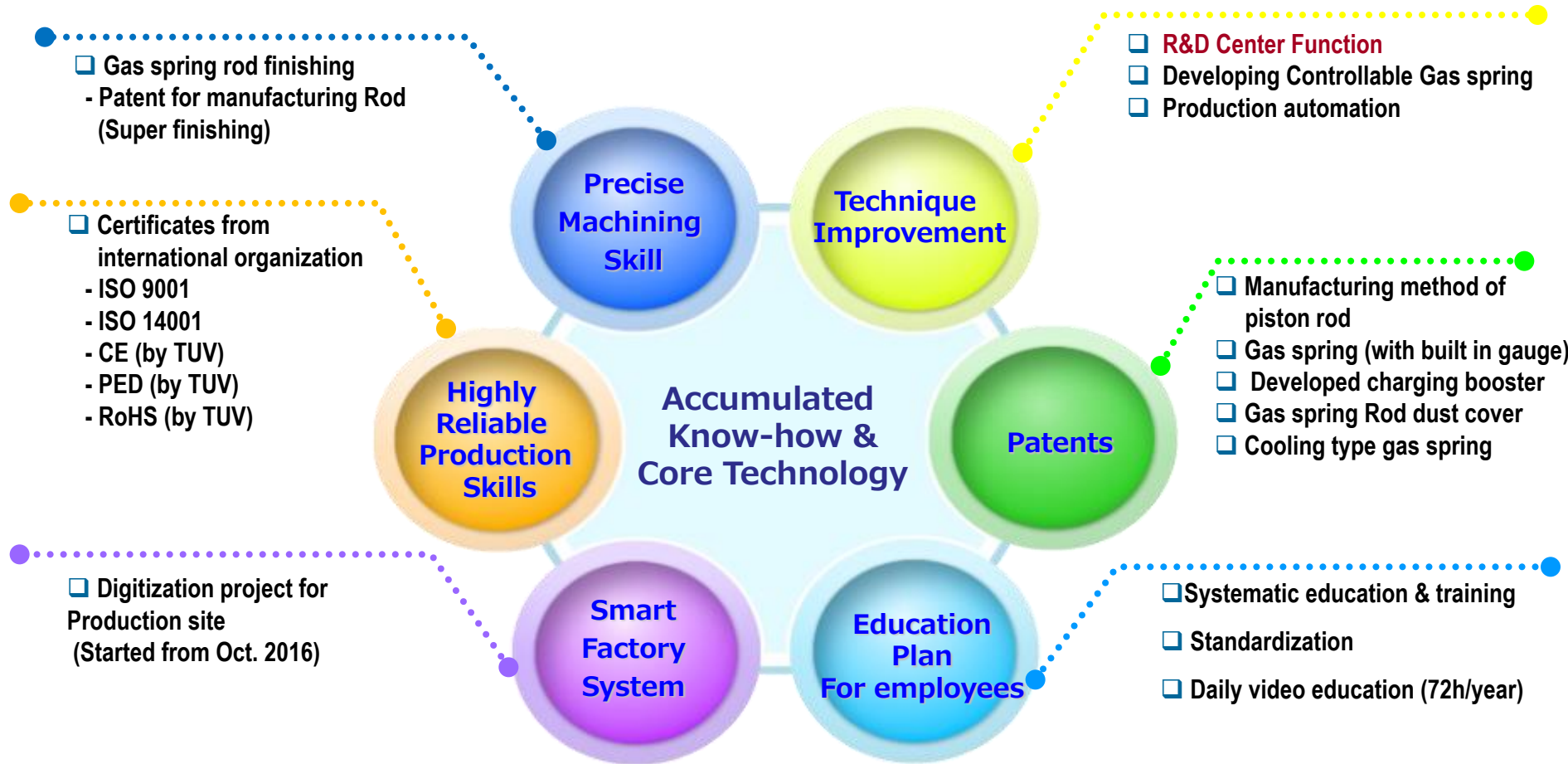


Patent No.101283675



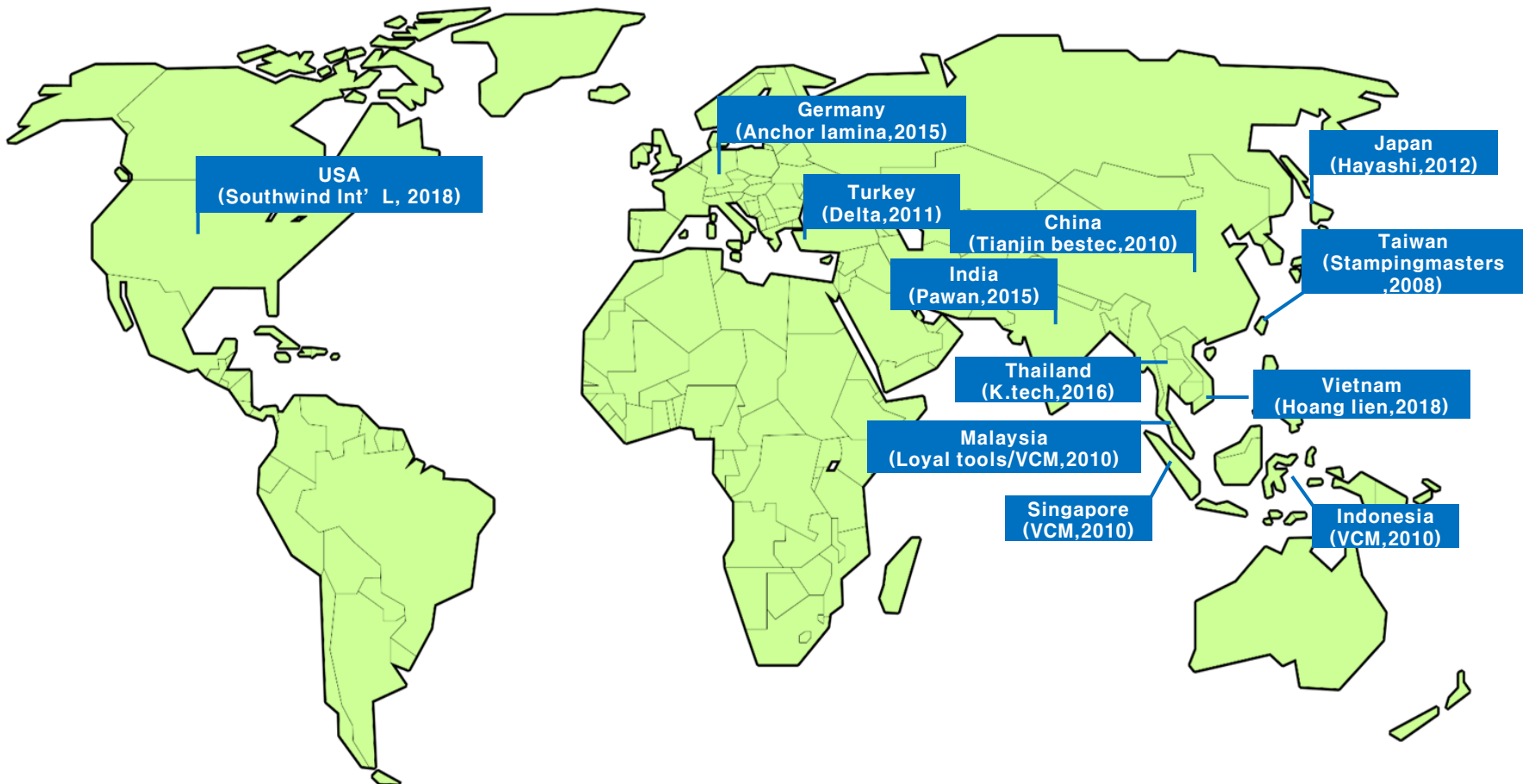
Patent No.101701994

Core Technology



Customers

Overseas Distributors



Customers

Overseas Distributors

CHINA

Company Name : TIANJIN BESTEC
Adress : #15-1-302, Yihuali. Xianshuiguzhen, Jinnan District,
Tianjin, CHINA. 300350
Tel : +86-022-28542171 / Fax : +86-022-28542172
E-mail : tjbiete@sina.cn

USA

Company Name : SOUTHWIND INT'L USA
Contact person : Mr. John B. Graef
Tel : +1 786 292-3015 / Mobile : + 1 407 666-0236

GERMANY

Company Name : Anchor Lamina GmbH
Adress : Anchor Lamina GmabH 7 An der Wiesenmuhle 19
D-09224 Chemnitz, OT Gruna
Tel : +49 (0) 371/8 42 45-34 / Fax : +49 (0) 371/8 42 45-50

TURKEY

Company Name: DELTA
Adress : Tevfilk Fikret Sokak no: 29 Soqanlik 34880 Kartal Istanbul
Tel : +90 (216) 452 00 33 / Fax : +90 (216) 452 69 81



TAIWAN

Company Name : STAMPING MASTERS
Adress : NO.20 HSIN-BEI-YUAN ROAD CHUNG LI IND. ZONE,
TAOYUAN HSIEN TAIWAN. ROC
Tel : +886-3-461-082 / Fax : +886-3-452-7515

INDIA

Company Name : Deceler Vibrotek Controls Pvt Ltd
Adress : No 38, 1st Floor, Arul Mary Street, Soosaiya Nagar,
Noombal, Chennai 600077
Tel : +91-9500058831 / E-mail : jy@deceler.in

Company Name : Select Exim
Adress : Wellington Society Estate, Opp. Ethiraj College No.1, 2nd
Floor, No. 53, Ethiraj Salai Egmore - 600 008
Tel : +44 - 28280013/14/15 & 16 / Fax : +44 - 28280017

Company Name : M/S Shri Balaji Industrial Products
Adress : C-94, Rishi Nagar, Chawla Colony, Ballabgarh
FARIDABAD - 121004 State - Haryana (India)
Tel : +91-9891 45 1067 / Mobile : +91-9891 90 1067

<http://www.jubestec.co.kr/p/outside>

※Overseas Agency Information

Customers

Overseas Distributors



JAPAN

Company Name: HAYASHI
Address : 3-6-1, Kigawa-Higashi, Yodogawa-Ku, Osaka-City
Tel : +81-6-6390-1544 / Fax : +81-6-6307-9670
E-mail : hauashi@hayashinet.co.jp

THAILAND

Company Name : K.TECH EQUIPMENT
Address : 225/221 Sintavee Greenville 2 VillageMoo 1, Bankhlongsuan,
PhraSamutchedi Samutprakan 10290
Tel : +66 02 408 5154 / Fax : +66 02 408 5155

VIETNAM

Company Name : THT VIET NAM INDUSTRY COMPANY LIMITED
Address : Số 37/ 663 đường Lĩnh Nam, Q. Hoàng Mai, TP. Hà Nội
Tel : 0242-124-8518 / Fax : 024-3224-7126
E-mail : congnghieptht@gmail.com

Company Name : Hoang Lien Engineering Service and Trading
Company Limited
Address : G903 The Manor Officetel, 91 Nguyen Huu Canh, ward
22, Binh Thanh Dist, HCMC
Tel : 028-6258-6457 / E-mail : hoanglienservices@yahoo.com.vn

MALAYSIA

Company Name : Loyal Tools
Address : NO.5 JALAN USJ 1/33, TAMAN SUBANG PERMAI,
47500, SUBANG JAYA, SELANGOR,
Tel : 603-8024-7586 / Fax : 603-8024-87542

SINGAPORE

Company Name : V.C.M Precision
Address : NO:39 JALAN PEMIMPIN #05-01 TAI LEE INDUSTRIAL
BLDG SINGAPORE 577182.
Tel : 685-17582 / Fax : 685-17563

INDONESIA

Company Name : PT. HIROMINDO PERKASA | INDONESIA
Address : KOMP. METRO SUNTER JL. METRO KENCANA VII Blok
Q No. 30 RT010/RW004, PAPANGO TANJUNG PRIOK
JAKARTA UTARA, DKI 14340
Tel : 021 - 6522 777 / Fax : 021 - 6522 021 / 6521 750
HP : 0877 822 77841 / WA : 0895 1942 5324

<http://www.jubestec.co.kr/p/outside>

※Overseas Agency Information

Customers

- Electronics -



- Automotives -



- Domestic Tier #1 Vendor -



Documents for standard part recognition

-MAZDA-



MES

設備管理課
設備管理
ガススプリング
MES: R7231-PG230.11
配布区分
一般
特記

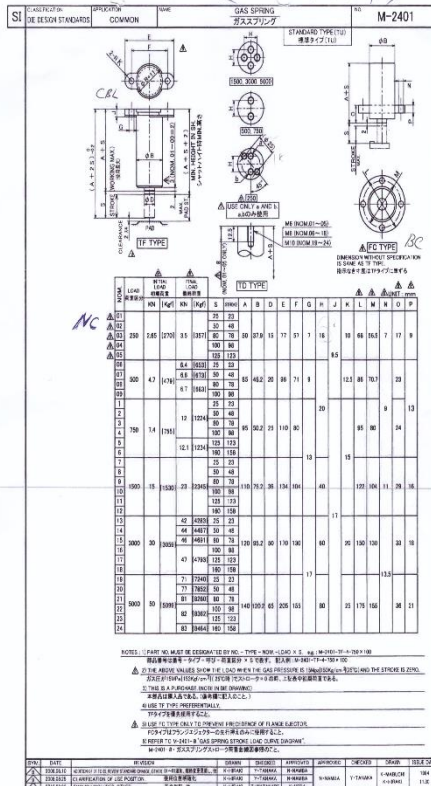
マツダ技術標準

マツダ株式会社
広島市外府中町
郵便番号 730-8670
電話番号 082-828-1111



仕様書
金
制定年月日 1989年 1月 6日
改定年月日 2015年 1月 7日 (11)
適用年月日 2015年 1月 7日
1. 規格・基準は、必要に応じてその新案の改正を実施する。ただし、全期10年以上経過したものは、継続・改正又は廃止を行う。
2. 配布を受けた規格・基準は、次の要領で処理する。
(1) 規格内には必ず見知度を図る。
(2) 規格・基準は、前定のファイルに正しく読み込み(追加・更新・削除)を行い配布すること。
(3) 規格・基準に意見又は質問がある場合は、生産企画課の事務員(又は規格・基準の主管者)に連絡のこと。
承認者 生産企画課長
承認者 生産企画課長
承認者 生産企画課長







-MITSUBISHI-



Bestec Quality Control and Caution

The Bestec cylinders will last more than 100,000,000mm of total stroke working distance.

-Warning-

 <p>Charge only with N2 gas</p>	 <p>Mount with screws</p>	 <p>Avoid any mechanical modification</p>
 <p>Vertical installation (within less than 0.15°)</p>	 <p>Use lubricants only (NO WD-40)</p>	 <p>Keep operating temperature under 80 °C</p>

Advantages of Bestec products

#1

☐ **More Compact and More Powerful**

#2

☐ **Space & Cost Saving**

#3

☐ **Various Models and offers 100% drop-in replacement (Bestec' s Cross Reference)**

#4

☐ **Ensures for better longevity (100 million mm)**

#5

☐ **Patent for piston rod finishing**

#6

☐ **Better in Roughness**

#7

☐ **Better Hardness (HV900 or higher)**

#8

☐ **Better Safety Mechanism**

More Compact and More Powerful #1

Integral in cylinder with Rod

**100% Safe
at any cases**

Latch
Structure

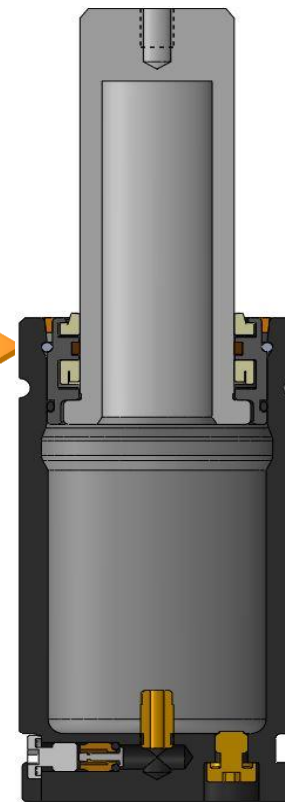


Separate assembly in cylinder with Rod

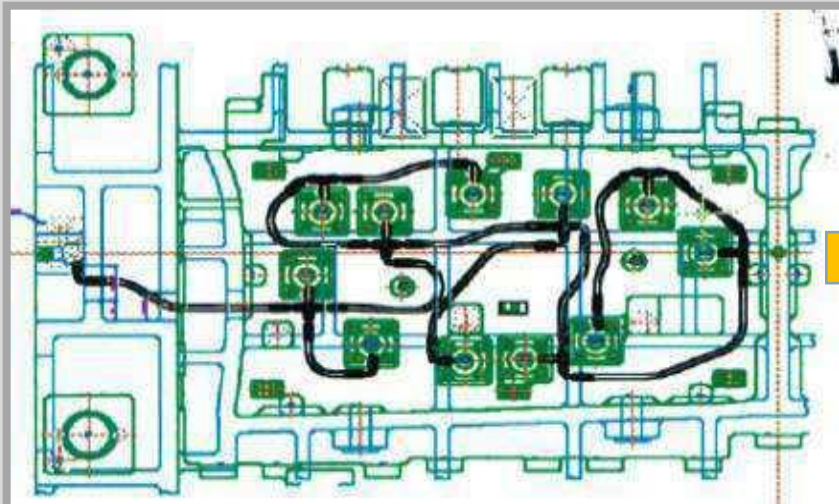
Lock ring

**Gas Relief valve
will prevent from
damage caused by
the over-stroke.**

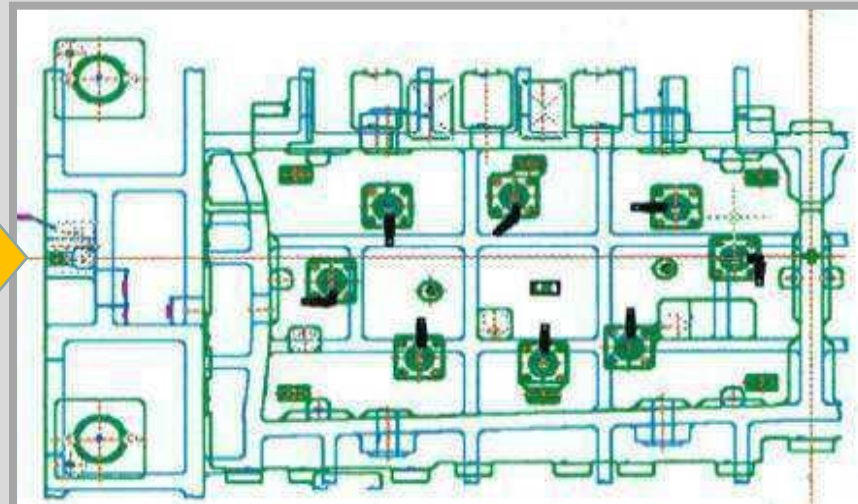
Gas Relief
valve



TU3000 SERIES Installation Example



N4000 SERIES Installation Example



- Space and cost saving.
- Only 4000 series 8 cylinders are enough to keep the 32ton!
but competitor 3000series needs more than 11 cylinders (same diameter, $\varnothing 95$)
- $4,000 \times 8 = 32\text{ton}$ **VS** $3,000 \times 11 = 33\text{ton}$ ➡ Save cost with Processing cost & Save Space
- Increase about 30% power efficiency compared to competitor's model
(Except for compact model)

More variety of models and offers 100% drop-in replacement (Bestec's Cross reference)

#3

Model Maker	ISO Standard (The Same Model)	Super Compact (The Same Model)	Super Compact (The Same Model)	Compact (Considerable)
BESTEC	NC	NT/BT	NTT/BTT	NK/BTK
KALLER	TU	X	XG	K
FIBRO	2480	2487	-	-
MISUMI	GSE	GSV	GST	
SPECIAL	SC	RV		S
HYSON	T2	T3	T3T	-
PASCAL	DNA	DNR	DNT	-
DADCO	90.1	U	-	-
TOSS	TSL	TSP	TST	TSM

Ensures for better longevity (100 million mm) #4

● Certificate of Small & Medium Business Administration

TEST REPORT

No. 3175

Applicant : KOREA PRECISION CO., LTD.
S. B. Kim (541126-1634913)
548-13, Osun-Dong, Gwangsan-Gu, Gwangju-City, Korea.

Article : Bestec Cylinder (Nitrogen Gas spring)

Test Duration : Nov. 29, 1999 - Dec. 22, 1999.

Strokes	Result	Working Temp. ℃	Initial Force(kgf) at 10mm	Final Force(kgf) at 40mm
0-250000		59	1070	1564
250001-500000		60	1030	1582
500001-750000		58	1010	1582
750001-1000000		59	1008	1578
1000001-1250000		60	1008	1576

Test Conditions 1. Model : N 50-50 (Stroke 50mm)
2. Working Temp. : Max. Rod Temp. (℃) after every 250000 strokes.
3. Initial / Final Force : Take an average from 5 times check after every 250000 strokes.
4. Tested at room temperature 20~25℃
5. Test Equipment : 110 Ton Crank type press machine (Seoul Press co.,Ltd)
6. Test Speed : 50 Stroke per minute
7. Initial Force / Final Force before Running Test : 944kgf / 1538kgf

The test result is based on the specimens which were provided by applicant and duly confirmed by ;
Y. J. Seo & C. S. Kim / Test & Research Support Team /Tel 82-62-360-9204(203)

It is the same test report to be issued at 22. Dec. 1999.

27. Feb. 2001.

Gwangju Chonnam Small & Medium Business Administration

● Ensures the longevity of 100,000,000mm working distance

- Stronger Rod surface hardness
- Patent for Finishing rod surface

Criteria of Life	Pressure Reduce % after Test	
	BESTEC	Competitors
After 100,000,000mm of Stroke Working	Under 10%	Loose more than 20%

Patent for piston rod finishing

ROD



BESTEC ROD FINISHING PROCESS

Patent : Manufacturing method of piston rod



특 허 중

특 허 제 0314598 호

출원 번호 제 1999-0008637 호
출원 일자 1999년 07월 15일
등록 일자 2001년 10월 31일

발명의명칭 가스 스프링의 피스톤 로드 제조방법

특허 권자 김성광 (541126-1634913)
광주 광산구 오선동 548-13번지 주 한국정밀

발명자 김성광 (541126-1634913)
광주 광산구 오선동 548-13번지 주 한국정밀

위의 발명은 특허법에 의하여 특허등록원부에
등록되었음을 증명합니다.

2001년 10월 31일

특 허 정



REGISTERED PATENT No.0314598 (Oct.2001)

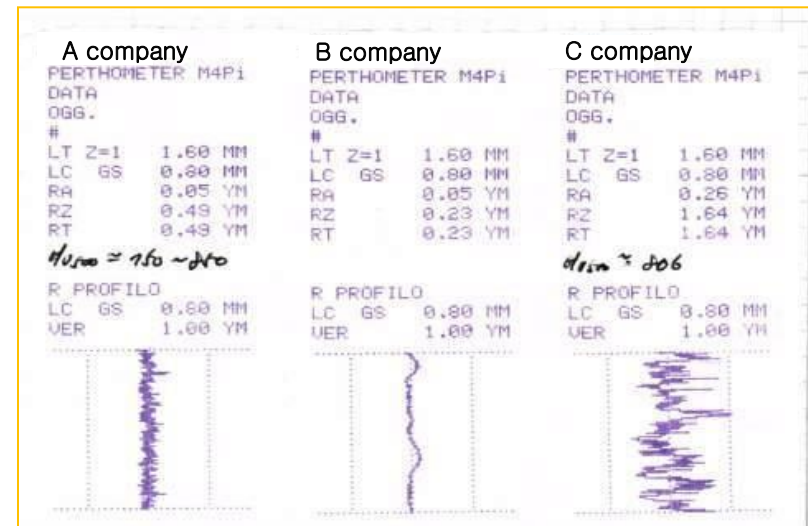
Better in Roughness (Roughness Test sheets)

#6

-BESTEC- <Roughness : Ra0.04>



-Competitor- <Roughness : Ra 0.05/0.26>



ARTICLES	GRIND PROCESS	SURFACE ROUGHNESS	REMARK
BESTEC	ULTRA FINE FINISHING	Under Ra 0.04 (Over 2times Competitors' Roughness)	Minimum Friction (Advantage for long life)
COMPETITORS	BUFFING	Ra 0.1~0.26	Faster seal wear (Shorter life time)

Better Hardness (HV900 or higher)

#7

Specially hardened surface over Hv 900 protects piston rod scratches from foreign particles.



Depth (mm)	Hardness (HV _{0.05})
0.01	1230
0.02	1168
0.05	1033
0.10	919
0.15	752
0.20	497
0.25	424
내부	393

ARTICLES	HARDENING PROCESS	HARDNESS
BESTEC CYLINDER	NITRIDING PROCESS	over Hv 900
COMPETITOR	HARD CHROMIUM PLATING	Hv 750~850



The integral gas spring is..

1. No risk of the Rod bouncing off even during slant working.
2. Utilizing full length of spring rod (Others recommend only 90%)
3. Screw assembly ensures stronger structure.

New upgrade model : Cartridge type with Relief Valve for safety.



New model upgraded by lock ring type

< Relief valve for prevention of accident >

Gas relief valve will prevent from the damage caused by the over stroke

Charging Booster (BCB-300)

-BCB300-

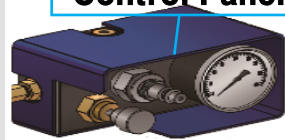


Dimension : 180 x 220 x 440 (mm)
Weight : 18Kg

- With Bestec Booster, N2 Gas will be charged relatively easier.
- Bestec charger offers better mobility and shorter charging time.
- Can be used to both of single gas spring and hose connection system.

When connecting
hose piping

BCP-315
Control Panel



When single gas
charging



BCB
Adaptor

Gas Spring

Model	Pressure Ratio	Minimum Pressure	Maximum Pressure
BCB-300	1:40	40Bar	250Bar

Compressor Air Pressure	Maximum Possible Charging Pressure to N2
6 Bar	250 Bar
4 Bar	130 Bar

Patent No.101066258 [2011.9]





Thank you For Your time

