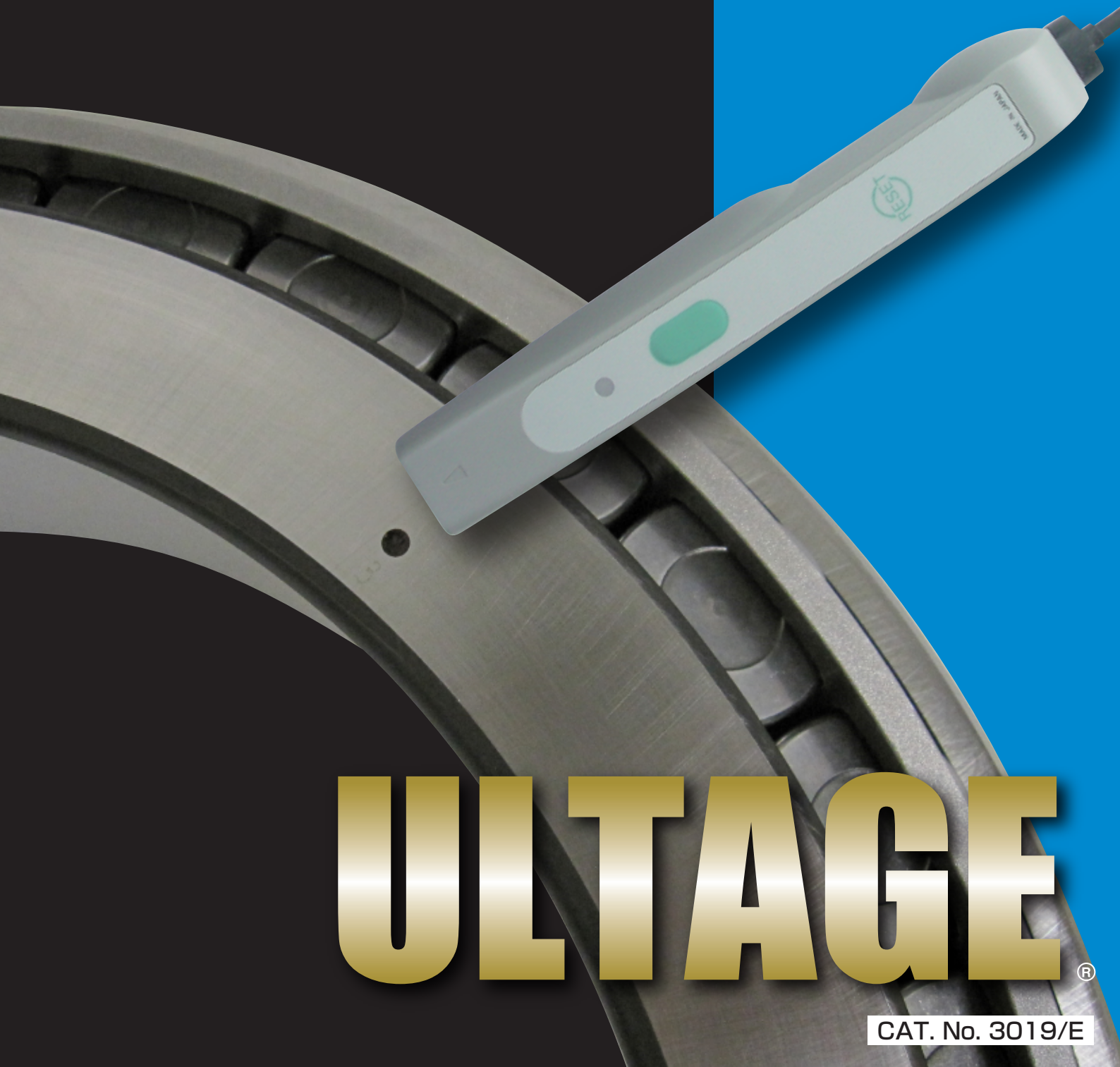


# NTN®

IC Tag  
Integrated Bearing

**ULTAGE**



# ULTAGE®

CAT. No. 3019/E

## Features

**First in the industry**

### Record electronic data within the bearing itself.

112 English one byte characters can be read and written into  $\Phi$ 4.5mm IC Tag.

**Compact**

### The data can be read and written with dedicated Reader/Writer.

Compact and light weight Reader/Writer (PDA) will not choose the place for recording the data. (When applied out of Japan, the warranty of legality to Local Radio Law has to be confirmed.) Personal Computers can be used with specialized software.

**Format**

### Exclusive format is prepared.

Exclusive format for information is prepared, but it can be adjustable to customers' request.

## Applications

1. It can be possible to compare the information at maintenance to the original information.
2. It is possible to confirm previous maintenance date, operating hours and others by writing the latest information at the maintenance.
3. The historical data can be saved into PC and it enables to control bearing information of whole machines. (Pen type Reader/Writer is required for PC.)

## Dedicated format

### Standard format

Ex.: Input screen of bearing information

#### 1. Bearing information

Recorded by NTN at shipment time

Ex.: Input screen of bearing management information

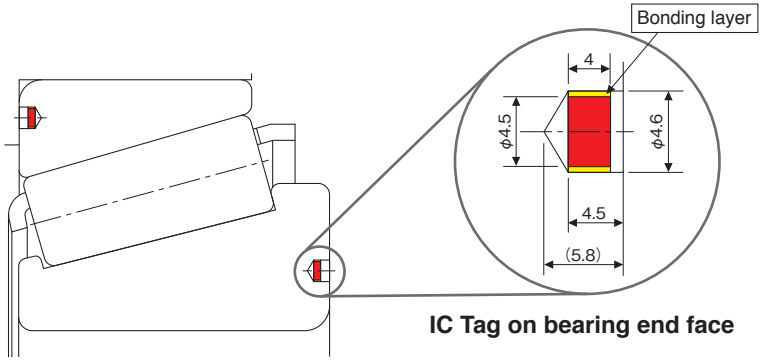
#### 2. Bearing management information

Recorded by the user for maintenance record

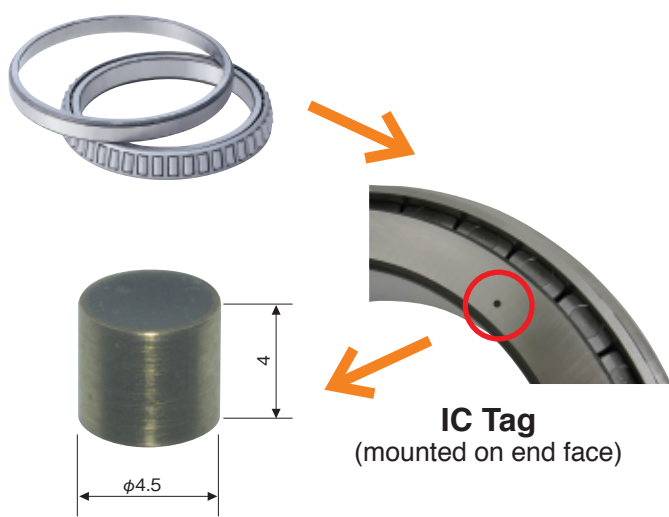
# ULTAGE Series “IC Tag Integrated Bearing” allows electronic data such as maintenance record, information for replacement, quality records of the bearing saved directly within the bearing itself which can be used for every application.

## Applicable bearing

1. Applicable to bearings which have enough space to attach IC Tag. ( $\Phi 4.5 \times 4$ )  
 A small hole will be formed on the end face of the bearing.  
 In case of small size bearings and thin section bearings, IC Tag could not be attached.
2. IC Tag is good for oil and heat, but if the bearings would be used under special environment, please contact NTN Engineering.



## Specifications of IC Tag

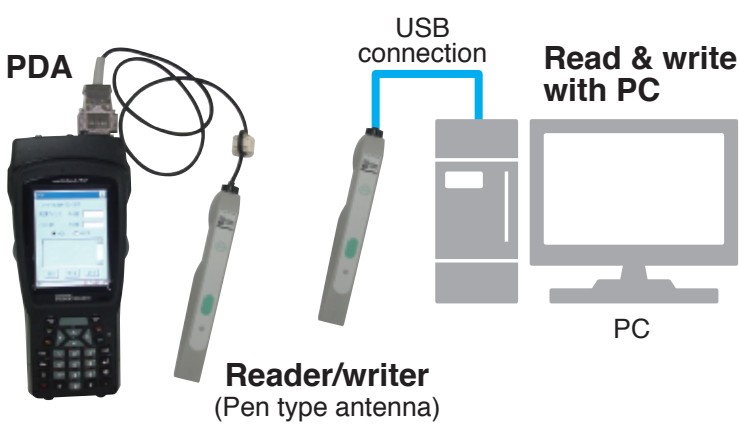


### ■ Specification of IC Tag

Item	Specification
Memory Capacity Including Quality information	112byte
Data retention period	10 years
Data rewritable time	over 100,000 times
Carrier frequency	13.56MHz
Compliance standards	ISO 15693
Communication distance	~2mm
Ambient operating temperature	~120°C
Dimension	$\Phi 4.5\text{mm} \times 4\text{mm}$

Data retention period, data rewritable time and communication distance are reference values.

## Specifications of reader/writer



### ■ Specification of reader/writer (PDA)

Item	Specificaion
Carrier frequency	13.56 MHz
Compliance standards	ISO 15693
Ambient operating temperature	-10°C~50°C
Dimension	79mm×164mm×25mm (3.5 inch)
Weight	320g
Charging power	AC100V~250V(50~60Hz)

In case of inability of communication, apply dedicated Antenna Adapter on tip of pen type antenna.

## Status of compliance of reader/writer to Local Radio Law

Certified in Japan, Europe, USA, Canada, Mexico, Thailand, Vietnam, Singapore, Malaysia, Indonesia, Philippines, China, Hong Kong, Taiwan, and Korea. Under adjustment in Australia.

## HEADQUARTERS

### NTN Corporation URL <http://www.ntn.co.jp>

1-3-17, Kyomachibori, Nishi-ku, Osaka-shi, Osaka 550-0003 Japan  
Phone: +81-6-6443-5001

### NTN USA Corporation URL <http://www.ntnamerica.com>

1600 E. Bishop Court, P.O. Box 7604, Mount Prospect, IL 60056-7604, U.S.A.  
Phone: +1-847-298-7500 Fax: +1-847-294-1209

## SALES NETWORK

### NTN Bearing Corp. of America

Head Office / 1600 E. Bishop Court, P.O. Box 7604, Mount Prospect, IL 60056-7604, U.S.A.  
Phone: +1-847-298-7500 Fax: +1-847-699-9744  
Central Sales Office / 2413 North Main Street, East Peoria, Illinois 61611  
Phone: +1-309-699-8600 Fax: +1-309-699-8670  
NTN Automotive Center / 39255 W. 12 Mile Road, Farmington Hills, MI 48331-2975, U.S.A.  
Phone: +1-248-324-4700 Fax: +1-248-324-1103

### NTN Bearing Corp. of Canada Ltd. URL <http://www.ntn.ca>

Head Office / 305 Courtneypark Drive West, Mississauga, Ontario, L5W 1Y2, Canada  
Phone: +1-905-564-2700 Fax: +1-905-564-7749  
Vancouver Branch / 106B - 3680 Bonneville Place Burnaby, B.C. V3N 4T6, Canada  
Phone: +1-604-444-2007 Fax: +1-604-444-2665  
Edmonton Branch / 4608-97th Street, Edmonton, Alberta T6E 5N9, Canada  
Phone: +1-780-435-6200 Fax: +1-780-435-3600  
Toronto Branch / 305 Courtneypark Drive West, Mississauga, Ontario L5W 1Y4, Canada  
Phone: +1-905-564-9600 Fax: +1-905-564-9609  
Montreal Branch / 4973 Levy Street, Ville, St-Laurent, Quebec, H4R 2N9, Canada  
Phone: +1-514-333-8054 Fax: +1-514-333-1078

### NTN Wälzlager (Europa) GmbH. URL <http://www.ntn-snr.com>

Head Office / Max-Planck-Str. 23, 40699 Erkrath, F.R.Germany  
Phone: +49-211-2508-0 Fax: +49-211-2508-400  
Stuttgart Branch / Plieninger Str. 63B, 70794 Filderstadt F.R.Germany  
Phone: +49-711-123901-0 Fax: +49-711-123901-660  
München Branch / Parking 4, 85748 Garching (München), F.R.Germany  
Phone: +49-211-2508-0 Fax: +49-211-2508-555  
Hamburg Branch / Barkhausenweg 7, 22339 Hamburg, F.R.Germany  
Phone: +49-211-2508-0 Fax: +49-211-2508-415  
Italy Branch / Via Maestri del Lavoro, 3/A, 40138 Bologna, Italy  
Phone: +39-051-535174 Fax: +39-051-538492

### NTN Bearings (UK) Ltd. URL <http://www.ntn-snr.com>

Wellington Crescent, Fradley Park, Lichfield, Staffordshire, WS13 8RZ, U.K.  
Phone: +44-1543-445000 Fax: +44-1543-445035

### NTN-SNR ROULEMENTS. URL <http://www.ntn-snr.com>

Head Office / 1, rue des Usines B.P. 2017 74010 Annecy Cedex, France  
Phone: +33-4-50-65-30-00 Fax: +33-4-50-65-32-91  
Lyon Branch / Le Florentin, 71, Chemin du Moulin Carron, BP8-69570 DARDILLY, France  
Phone: +33-4-78-66-68-00 Fax: +33-4-78-66-68-20  
Paris Branch / 6, rue Auguste Comte, BP49, 92174 Vanves Cedex, France  
Phone: +33-1-40-93-66-00 Fax: +33-1-40-93-66-10  
Cran Gevrier Branch / 6 route de la Salle, 74960, Cran Gevrier, France  
Phone: +33-4-50-65-93-00 Fax: +33-4-50-65-93-46

### SNR Wälzlager GmbH.

Duesseldorf Branch / Max-Planck-Str. 23, 40699 Erkrath, F.R.Germany  
Phone: +49-211-2508-0 Fax: +49-211-2508-400  
Bielefeld Branch / Friedrich-Hagemann-Straße 66, 33719 Bielefeld, F.R.Germany  
Phone: +49-521-9-24-00-0 Fax: +49-521-9-24-00-90  
Stuttgart Branch / Plieninger Str. 63B, 70794 Filderstadt F.R.Germany  
Phone: +49-711-123901-0 Fax: +49-711-123901-660

SNR Italia / Via Riccardo Lombardi, 19/4, 20153 Milan, Italy  
Phone: +39-02-47-99-86-00 Fax: +39-02-33-50-06-56

NTN-SNR Rodamientos Ibérica / Calle Barberán n°6, 28035 Madrid, Spain  
Phone: +34-916-71-89-13 Fax: +34-916-73-65-48

NTN-SNR Rulmenti / Zona Industrial-Vest, 6 Strada Salzburg, 24 00 SIBIU, Romania  
Phone: +40-269-20-35-00 Fax: +40-269-20-35-25

NTN-SNR Marocco / 73, boulevard Moulay Slimane, Ain Sebaâ Casablanca, BP 15873 Casa-Principal, Marocco  
Phone: +212-522-66-76-80 Fax: +212-522-66-5166

### NTN Bearing-Singapore (Pte) Ltd. URL <http://www.ntn.com.sg>

Head Office / No.9 Clementi Loop Singapore 129812  
Phone: + 65-64698066 Fax: +65-64695400  
Philippine Representative Office / Unit 1002 Philippine Axa Life Centre Condominium Corporation Sen. Gil Puyat Ave Corner Tindalo Street Makati City, Philippines  
Phone: +63-2-759-4407 Fax: +63-2-759-4409  
Indonesia Representative Office / Summitmas 1., 18th Floor, Jl. Jend. Sudirman Kav. 61-62, Jakarta 12190, Indonesia  
Phone: +62-21-252-2081 Fax: +62-21-252-2082  
Vietnam Representative Office / 303, 3rd of Thanh Dong Building 132 - 138 Kim Ma Str., Ba Dinh Dist., Ha Noi, Viet Nam  
Phone: +84-4-37347661 Fax: +84-4-37347662

### NTN Bearing India PVT. Ltd.

Head Office / SPIC Annexe Building, 2nd Floor No.86, Mount Road, Guindy Chennai 600032, India  
Phone: +91-0-44-33707700 Fax: +91-0-44-33707701  
Delhi Branch / 715-716, International Trade Tower, Nehru Place, New Delhi - 1100019, India  
Phone: +91-0-11-40520406 Fax: +91-0-11-40520407

### NTN (China) Investment Corp. URL <http://www.ntn.com.cn>

Shanghai Head Office / No.6 building No.1666 Nanle Road, Songjiang Industrial Zone, Songjiang, Shanghai 201611, China  
Phone: +86-21-5774-5500 Fax: +86-21-5778-2898  
Beijing Branch / Unit 3018, South Tower, Beijing Kerry Centre, 1 Guanghai Road, Chaoyang District, Beijing 100020, China  
Phone: +86-10-6568-3069 Fax: +86-10-6568-2278  
Guangzhou Branch / Room 3606, Onelink Center, No.230-232 Tianhe Road, Tianhe District, Guangzhou 510620, China  
Phone: +86-20-3877-2943 Fax: +86-20-3877-2942  
Nanjing Branch / Room 18A, Nanjing IFC, No.1 Hanzhong Rd, Baixia District, Nanjing 210029, China  
Phone: +86-25-8477-5355 Fax: +86-25-8477-5360  
Chongqing Branch / Room 15-6, Carnival mansion, No.9 Guanyingqiao Street, Jiangbei District, Chongqing 400020, China  
Phone: +86-23-6796-0812 Fax: +86-23-6796-0878  
Shenyang Branch / Room 2606, China Resources Building, No.286 Qingnian Street, Heping District, Shenyang 110004, China  
Phone: +86-24-3137-9186 Fax: +86-24-3137-9185

### NTN China Ltd. URL <http://www.ntnchina.com>

Hong Kong Office / Room 1914-15, Park-In Commercial Centre, 56 Dundas Street, Mongkok, Kowloon, Hong Kong  
Phone: +852-2385-5097 (4 lines) Fax: +852-2385-2138

### NTN Bearing-Thailand Co., Ltd.

Head Office / 12th Floor, Panjathani Tower, 127/15 Nonsee Road, Chongnonsee Yannawa, Bangkok 10120, Thailand  
Phone: +66-2-681-0401 Fax: +66-2-681-0408  
Khon Kaen Branch / 189-191 Ruen Rom Road Tambon Nai-Muang, Amphur Muang, Kohn Kaen, 40000, Thailand  
Phone: +66-43-223679 Fax: +66-43-223061  
Haad Yai Branch / 198-198/1 Nipat U-Thid 2 Road, Amphur Haad Yai, Songkhla, 90110, Thailand  
Phone: +66-74-236568 Fax: +66-74-231520  
Bangna Branch / 35/35 Bangna-Trad Road, KM11 Bangplee, Samutprakarn, 10540, Thailand  
Phone: +66-2-7501732 Fax: +66-2-7501731  
Chiangmai Branch / 46/8-10 Thy wang Rd. Changmoi sub.district, Munag district, Chiangmai province, 50300 Thailand  
Phone: +66-53-874328 Fax: +66-53-874330

### NTN Bearing-Malaysia Sdn. Bhd.

Head Office / No.2, Jalan Arkitek U 1/22, Hicom Glenmarie Industrial Park, 40150 Shah Alam, Selangor, Malaysia  
Phone: +60-3-55696088 Fax: +60-3-55690200  
Butterworth Branch / 4700, Jalan Permatang Pau, 13400 Butterworth, Malaysia  
Phone: +60-4-3328312 Fax: +60-4-3324407  
Ipoh Branch Office / 65, Medan Kidd, Kinta Mansion, 30200 Ipoh, Malaysia  
Phone: +60-5-2547743 Fax: +60-5-2538077  
Kuantan Branch / B-72, Ground Floor, Jalan Beserah 25300 Kuantan, Malaysia  
Phone: +60-9-5141132 Fax: +60-9-5141164  
Johor Bahru Branch / 51 Jalan, Sri Bahagia 5, Taman Sri Bahagia, Tampoi, 81200 Johor Bahru, Malaysia  
Phone: +60-7-2364929 Fax: +60-7-2370897

### PT. NTN Bearing Indonesia

C-21, 22 MM2100 Industrial Town, Cikarang Barat, BEKASI 17520 West Jave Indonesia  
Phone: +62-21-252-2081 Fax: +62-21-252-2082

### NTN-CBC (Australia) Pty. Ltd.

3, The Crescent, Kingsgrove, NSW 2008, Australia  
Phone: +61-2-99479200 Fax: +61-2-95543311

### NTN de Mexico, S.A. URL <http://www.ntnmexico.com.mx>

Mexico Head Office / Emilio Cárdenas No.158 Apdo.124, C.P.54030, Tlalhepantla, Edo.deMéxico, Mexico  
Phone: +52-55-5390-1133 Fax: +52-55-5565-8545  
Guadalajara Branch / Calle 22 No.2465, Zona Industrial, C.P.44940, Guadalajara, Jalisco, Mexico  
Phone: +52-33-3145-1448 Fax: +52-33-3145-1594  
Monterrey Branch / Av. Ruiz Cortines No.1336 Ote. Col. La Purisima, C.P.67120, Cd. Guadalupe, Nuevo Leon, Mexico  
Phone: +52-818-334-9931 Fax: +52-818-334-9932  
Mexicali Branch / Blvd. Benito Juárez No.3293 Esq. Ayuntamiento, C.P.21360, Mexicali, BCN, Mexico  
Phone: +52-686-563-3632 Fax: +52-686-582-2057  
Veracruz Branch / María Auxiliadora No.687 Esq. J.F.Molina, C.P.91870, Col. Los Pinos, Veracruz, Mexico  
Phone: 52-229-934-4757 Fax: +52-229-938-0457

### NTN Sudamericana, S.A. URL <http://www.ntsudamericana.com>

World Trade Center Panama  
Calle 53 Este, Urbanización Marbella Piso NO.16, Oficina 1601  
Apartado Postal 832-0487, Panamá, Rep.de Panamá  
Phone: +507-269-4777 Fax: +507-264-5592

### NTN do Brasil Ltda. URL <http://www.ntn.com.br>

Av. Moema, 94-9° Andar-conj. 92a94 CEP 04077-020-Indianópolis-São Paulo-SP, -Brasil  
Phone: +55-11-5051-0600 Fax: +55-11-5051-2807

### NTN Korea Co., Ltd.

Head Office / 10th Floor, Press Center, 25, Taepyong-Ro 1-GA, Jung-Gu, Seoul 100-745, Korea  
Phone: +82-2-720-3665 Fax: +82-2-720-3669  
Busan Branch / Rm.707, 7th Floor, Daerim Bldg., 341-5 Bujeon 1-Dong, Busanjin-Gu, Busan, Korea, 614-843  
Phone: +82-51-811-1351 Fax: +82-51-811-1353

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