



Niigata Chiksan Swivel Joints

for Floating Roof Tanks



● Sole Distributor



TOKYO BOEKI MACHINERY LTD.

● Manufacturer



NIIGATA LOADING SYSTEMS, LTD.

Niigata Chiksan Swivel Joints

for Floating Roof Tank Drainage Systems

Niigata Chiksan Swivel Joints

High Reliability with Over 50 Years of Experience in the Field

Niigata Chiksan Swivel Joints are used worldwide mostly in Asia and Middle East for steel rainwater drain piping systems in floating roof tanks (FRTs). Our swivel joints hold a nearly 100% share in the Japanese market for FRTs, with our high reputation for products based on more than half-century of experience in the field.

Unlike flexible tubes and hoses, swivel joints have a unique structure that prevents major leakage of fluid (crude oil, gasoline, etc) in the event of a failure.

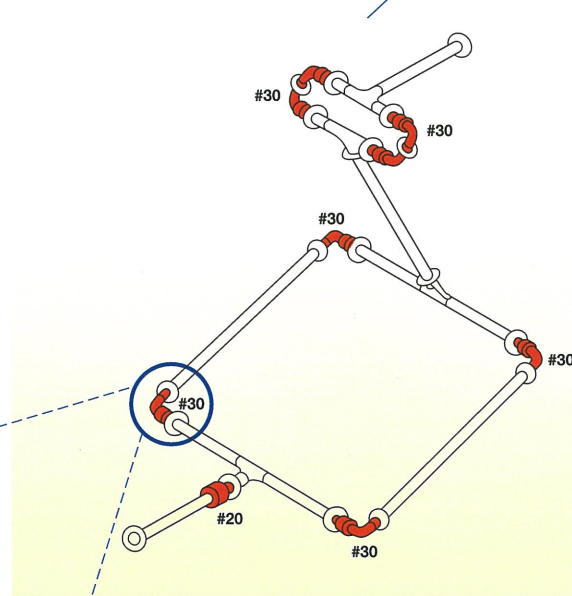
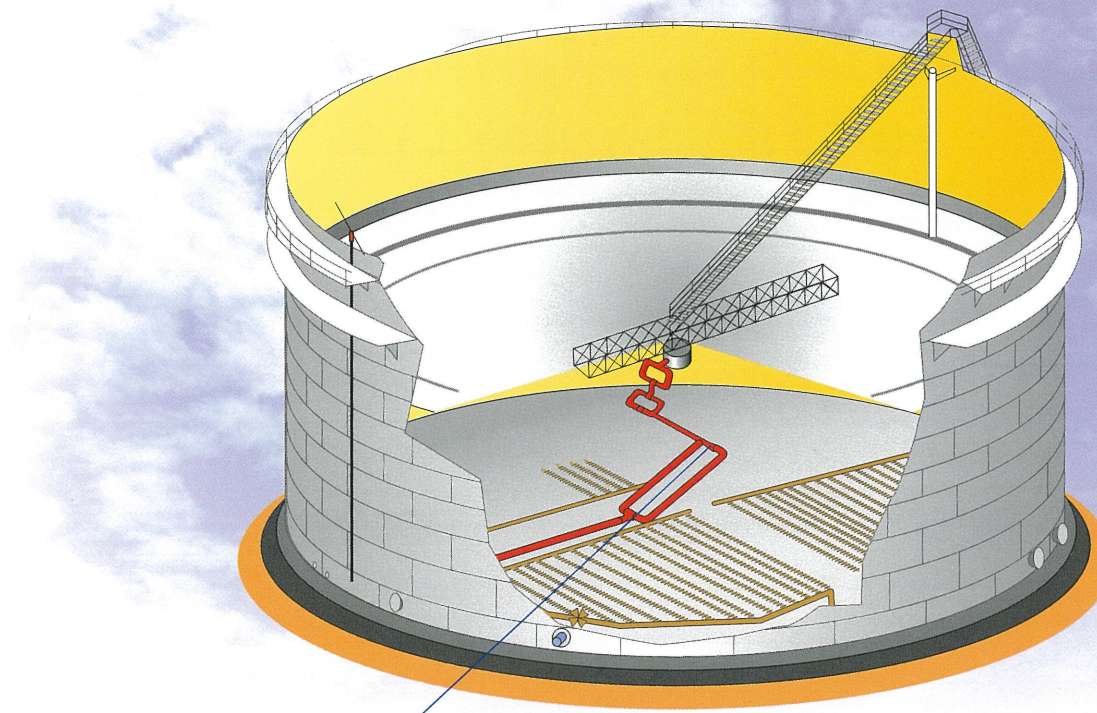
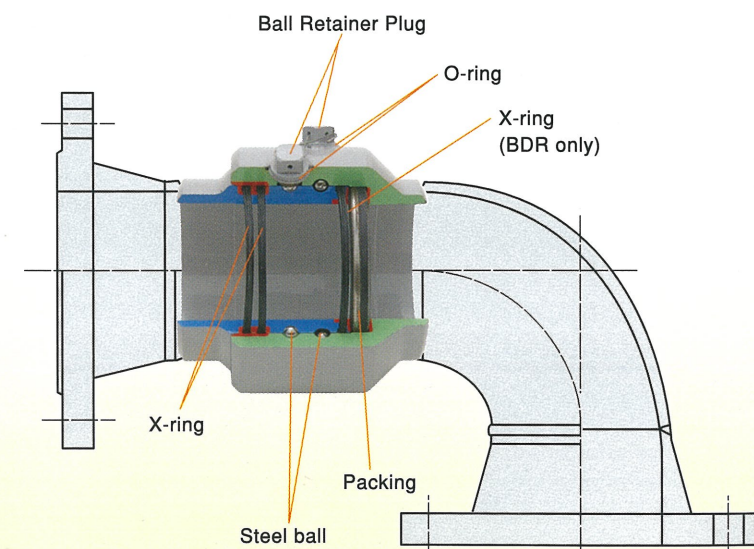
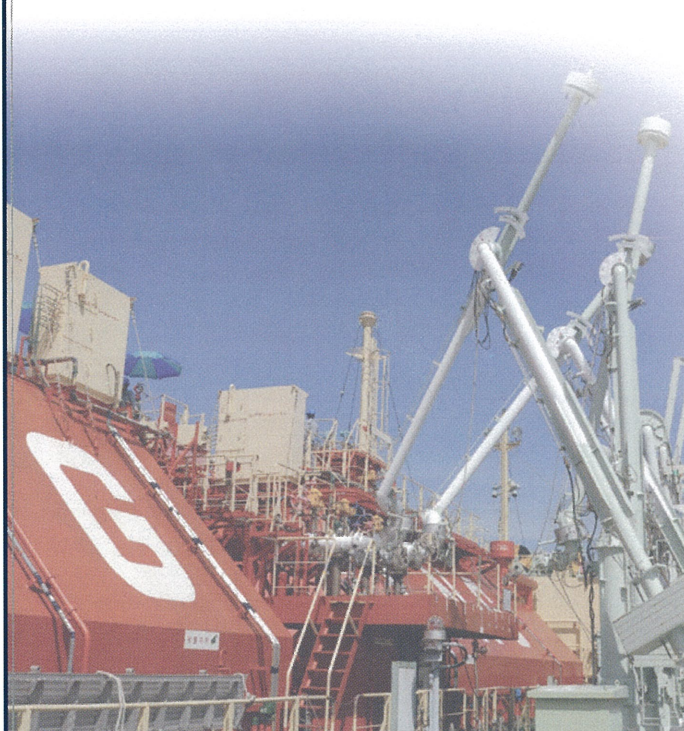
Our swivel joints are highly durable and reliable, and field use has shown them to be free from leakage even following major earthquakes and other natural disasters.

Structure:

- ① Universal 360-degree rotary pipe joint with double row ball bearings.
- ② Each rotating part has high mechanical strength against load (including thrust and distortion) during use.
- ③ BD type has been developed specifically for floating roof tanks. It has a special double-seal structure, which enable it to withstand external pressure with long service life. X-rings are adopted to ensure strong resistance to external pressure.

BDR type is an upgraded version of BD type with a prolonged lifetime through a triple-seal structure of X-rings, and extended stainless-steel cladding.

- ④ Stainless-steel cladding (see right figure below, with red color)
Sealing surfaces with stainless-steel cladding make them highly resistant to corrosion.



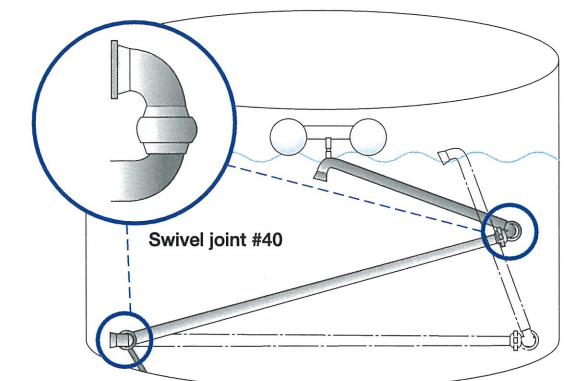
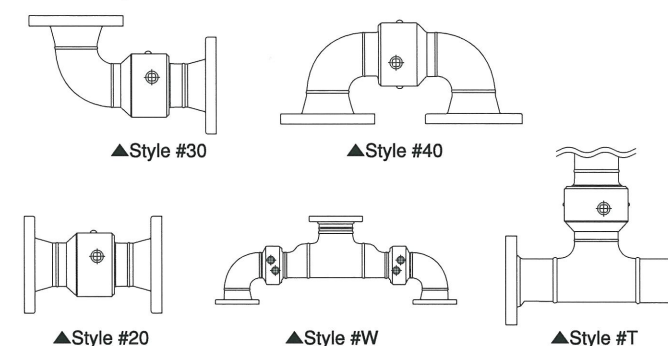
Characteristics:

- ① Easy to install
- ② Fire-resistant
- ③ High pressure durability
- ④ Stress-concentration avoiding structure
- ⑤ Allows partial replacement of pipe system
- ⑥ Not affected by flow and buoyancy when using mixing machines, etc.
- ⑦ Allows wider flexibility of installation due to fixed movement.

Our Swivel Joints are used in the following applications:

- Float suction (figure at right)
- Hose necks and other applications
- Loading arms (picture at left)

<Basic Styles>



●Sole Distributor



TOKYO BOEKI MACHINERY LTD.

Head Office	2-13-8 Hatchobori, Chuo-ku, Tokyo	104-8510	TEL: +81-3-3555-7391 FAX: +81-3-3555-7369
Nagoya Office	Sumitomo Seimei Nagoya Bldg. 24F, 2-14-19 Meiekininami, Nakamura-ku, Nagoya-shi, Aichi	450-0003	TEL: +81-52-582-9811 FAX: +81-52-565-1244
Osaka Office	Hankyu Terminal Bldg. 1-1-4 Shibata, Kita-ku, Osaka-shi, Osaka	530-0012	TEL: +81-6-6373-6751 FAX: +81-6-6373-1209
Hiroshima Office	NOF Bldg. 1-20 Tachimachi, Naka-ku, Hiroshima-shi, Hiroshima	730-0032	TEL: +81-82-246-1512 FAX: +81-82-247-4550
Fukuoka Office	EME Hakata-ekimae Bldg. 5F, 1-15-20, Hakata-ekimae, Hakata-ku, Fukuoka-shi, Fukuoka	812-0011	TEL: +81-92-471-6055 FAX: +81-92-474-2627
Sendai Office	Sendai Chuo Bldg. 4F, 2-8-18, Ichiban-cho, Aoba-ku, Sendai-shi, Miyagi	980-0811	TEL: +81-22-221-1431 FAX: +81-22-266-8263
Sapporo Office	Miyamura Bldg. 606, 3-2-10 Higashi, Kita 8-jo, Higashi-ku, Sapporo-shi, Hokkaido	060-0908	TEL: +81-11-751-6470 FAX: +81-11-751-6471
Tomakomai Office	3-16-13 Kasuga-cho, Tomakomai-shi, Hokkaido	053-0031	TEL: +81-144-38-3456 FAX: +81-144-38-3457
Nagaoka Office	2-5-1 Jo'oka, Nagaoka-shi, Niigata	940-0021	TEL: +81-258-24-4424 FAX: +81-258-24-0043

●Manufacturer



NIIGATA LOADING SYSTEMS, LTD.

Head Office	2-13-8 Hatchobori, Chuo-ku, Tokyo	104-8510	TEL: +81-3-3555-7601 FAX: +81-3-3555-7602
Chiba Service Center	Arai Daini Bldg, 1570-2 Goi, Ichihara-shi, Chiba	290-0056	TEL: +81-436-25-1216 FAX: +81-436-25-1208
Osaka Service Center	YS Bldg., 1-5-2 Sakaebashi-cho, Sakai-ku, Sakai-shi, Osaka	590-0971	TEL: +81-72-222-2101 FAX: +81-72-222-2102
Nagaoka Plant	2-5-1 Jo'oka, Nagaoka-shi, Niigata	940-0021	TEL: +81-258-24-1650 FAX: +81-258-24-0000

When placing an order, please provide us with the following information

- 1) Fluid in tank
- 2) Nominal Pipe size and diameter range
- 3) Operating working pressure and maximum pressure
- 4) Style No. and quantity
- 5) End connection(flange type, etc.)
- 6) Drawing of pipework assembly
- 7) Required documents
- 8) Other request

For more information on swivel joints:

Website (TBM) : <http://www.tokyo-boeki-kikai.co.jp/>
 Website (Manufacturer) : <http://www.niigata-ls.co.jp/>
 For inquiries: joint-bfv@tokyo-boeki.co.jp