The multidirectional TS sliding bearing consists of a top steel plate under which is welded a polished stainless steel sheet. The top face can be flat or bevelled. The bottom component consists of a steel plate with the top surface faced with a PTFE disc recessed approximately half its thickness into the steel.

The addition of a guiding system turns the above sliding bearing into a unidirectional TSG bearing. The guiding system consists of two (2) steel bars welded to the top plate. To the vertical inside face of each bar is welded a polished stainless steel strip. The longitudinal edges of the bottom plate are faced with a PTFE strip recessed approximately half its thickness into the steel.

The TSGU model is an UPLIFT RESTRAINT bearing where the above guiding system is modified to an "L" shape system. When uplift forces occur the unit can still slide easily due to the contact between the stainless steel and PTFE.

**FEATURES**
- No vertical deflection under load
- Very low sliding friction
- Unlimited movement capacity
- Seizure-free movement
- No rotation
- Low cost maintenance
- Simple to install
- No moving parts
- Corrosion protection

**APPLICATION**
Pipeline, short steel span, machinery, etc.

**MATERIAL**

**Steel Components:** All steel plates conform to CSA G40.21-260W (ASTM A-36), -300W or -350A (ASTM A-588). Other steel grades can also be supplied depending on specific requirements or availability.

**Stainless Steel:** To ASTM A-167, type 304. The surface finish in contact with the PTFE, when measured in accordance with CSA standard B95, shall not be greater than 0.25 μm arithmetic average.

**PTFE (Polytetrafluoroethylene):** The PTFE discs are fabricated from pure unfilled sheets and the PTFE used for the guide bars from 15% glassfilled strips. All PTFE material is chemically etched on one face for bonding.

**Anchor System:** Fusion welded studs conform to ASTM A-108. Steel pins conform to ASTM A-36, A-588 or CSA G40.21-300W. Connecting bolts conform to ASTM A-325.

**Steel Finish:** Exposed steel surfaces are zinc metallized according to CSA G-189 (AWSC 2.2-67), minimum thickness 175 microns. The use a primer and polyurethane sealer system over the zinc metallizing is recommended. Epoxy or vinyl coating systems can also be used.
The TG guide unit is designed to restrain the horizontal movement of a structure. It carries no vertical load and will allow a certain vertical movement within the limits of the designed clearance.

The top component consists of a top steel plate under which is welded a steel rectangular guide bar. The two vertical edges of the guide bar are faced with a PTFE strip recessed approximately half its thickness into the steel. The bottom component consists of a steel plate on top of which is welded two (2) steel guide bars. To each inside vertical face of the guide bars is welded a polished stainless steel strip. If required, the two (2) bottom guide bars can be reinforced with the addition of vertical stiffener plates.

The transformation of the above rectangular guide bars to an “L” and “T” shape type turns the TG unit into the TGU thus permitting UPLIFT RESTRAINT. The top component consists of a steel plate under which is welded a reversed “T” guide bar faced with PTFE on its lower vertical and top horizontal face. The bottom component consists of a steel plate onto which is welded a reversed “L” shape steel guide on each side of the reversed “T”. To each inside vertical and underside horizontal face of the guides is welded a polished stainless steel strip.

**FEATURES**

- Very low sliding friction
- Unlimited movement capacity
- Seizure-free movement
- Low cost maintenance
- No rotation
- Simple to install
- No moving parts
- Corrosion protection

**APPLICATION**

Bridges, overpasses, stadium and/or arena roof connections, etc.

**MATERIAL**

**Steel Components:** All steel plates conform to CSA G40.21-260W (ASTM A-36), -300W or -350A (ASTM A-588). Other steel grades can also be supplied depending on specific requirements or availability.

**Stainless Steel:** To ASTM A-167, type 304. The surface finish in contact with the PTFE, when measured in accordance with CSA standard B95, shall not be greater than 0.25 μm arithmetic average.

**PTFE (Polytetrafluoroethylene):** The PTFE discs are fabricated from pure unfilled sheets and the PTFE used for the guide bars from 15% glassfilled strips. All PTFE material is chemically etched on one face for bonding.

**Anchor System:** Fusion welded studs conform to ASTM A-108. Steel pins conform to ASTM A-36, A-588 or CSA G40.21-300W. Connecting bolts conform to ASTM A-325.

**Steel Finish:** Exposed steel surfaces are zinc metallized according to CSA G-189 (AWSC 2.2-67), minimum thickness 175 microns. The use a primer and polyurethane sealer system over the zinc metallizing is recommended. Epoxy or vinyl coating systems can also be used.