

## Key factors for installation

### 安装的关键因素

Following advises are however to be taken into consideration in order to obtain a good performance and prolonged service life of the expansion joint.

注意：为了获得良好的性能和延长伸缩缝的使用寿命，必须考虑以下建议。

## Fixed points

### 固定点

An expansion joint acts as a piston by the forces arising from the internal pressure. To prevent the pipes from damage they are to be properly anchored in order to take care of these reaction forces (Fr).

橡胶接头由内部压力产生的力作用于活塞，为了防止管道受到损坏，必须将管道固定起来，以处理这些反作用力（FR）。

The Reaction force of an expansion joint is calculated by the following formula:

橡胶接头的反力计算公式如下：

$$Fr = Q \times P \times 0.01$$

Fr = reaction force in kN.

Q = effective cross sectional area in cm<sup>2</sup>.

P = actual pressure in bar or kp/cm<sup>2</sup>

## Installation

### 安装

The turnable metal flanges make installation easier and eliminate twist.

可旋转的金属法兰，使安装更容易，消除扭曲。

The low inherent rigidity of Songkiang expansion joints make for easier accommodation of installation dimensions.

为方便调节安装尺寸使淞江橡胶接头固有的低刚度。

Check the permissible movements, temperature, pressure and proper rubber quality before installation!

安装前先检查管道的活动范围，温度，压力和对应的橡胶材质！

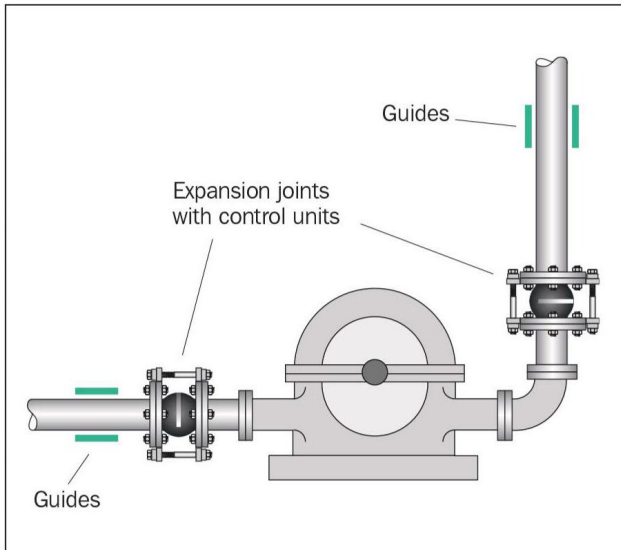


The expansion joints shall be easily accessible and open to regular supervision. It is recommended to let the expansion joints work in compression rather than stretching. Torsion is not permitted.

橡胶接头应很容易的定期检查。我建议橡胶接头的工作是压缩，而不是拉伸，更不允许扭转。

Maintenance instructions: observe whether the rubber joint is over stretched and keep the rubber joint in normal length every month.

保养须知：每月要观察橡胶接头是否超位移拉长，保持橡胶接头在正常长度内使用。



Pressure-restrained expansion joint on pump (with tie bar).

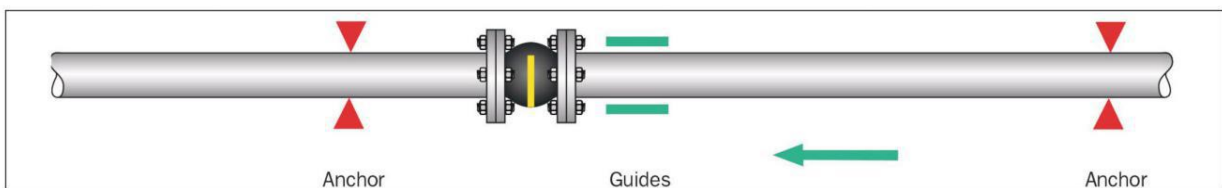
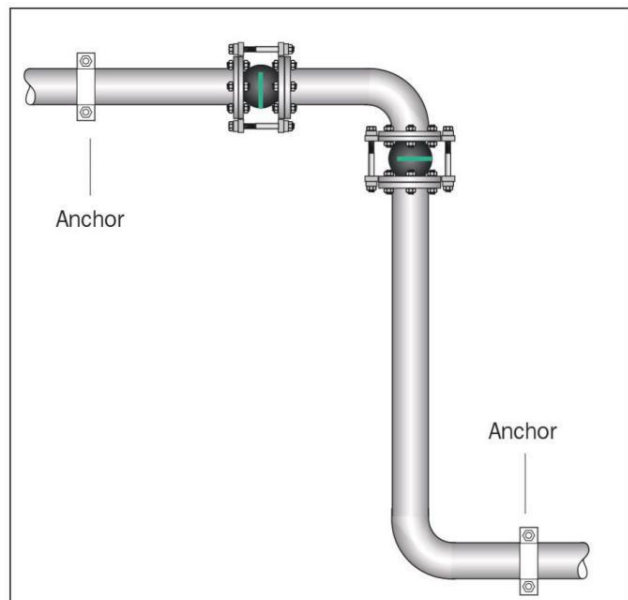
压力限制橡胶接头（带拉杆）。

Absorb vibrations and thus relieve pressure on the machine housing.

吸收振动，从而减轻对机房的噪音。

Arrangement with lateral expansion joints.

横向橡胶接头装置。



## Mounting

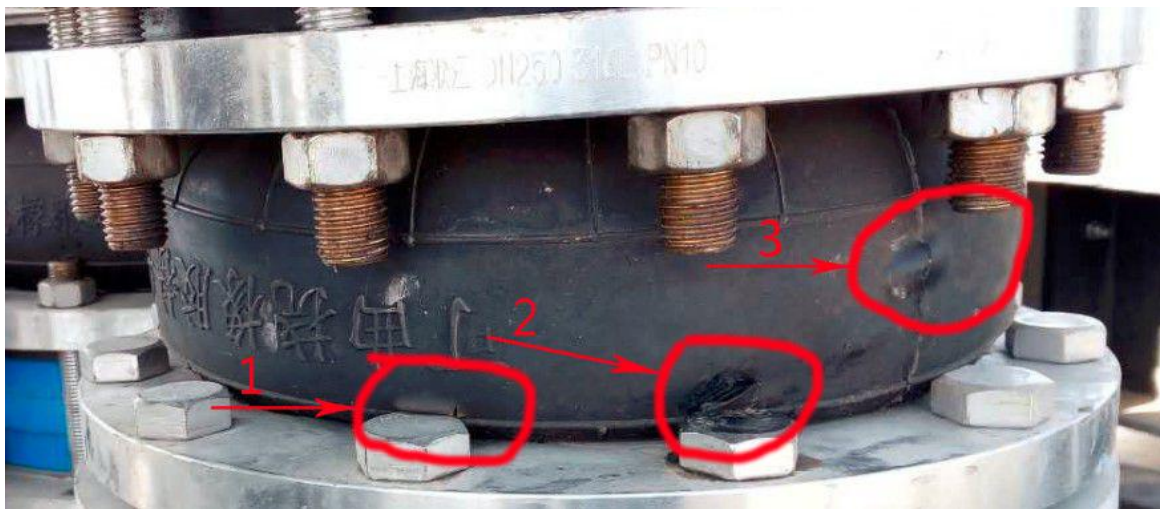
### 安装

In order to provide the movement capabilities indicated in the technical specifications, the assembly bolts should be mounted with bolts heads towards expansion joint body. (1)

If this is for any reason impossible, ensure that the threaded bolts project as little as possible (no more than 2 or 3mm) to avoid damage to the body.

为了保证伸缩能力，技术安装说明，装配螺栓应安装螺栓头朝橡胶管反方向。(1)

如果无法朝橡胶管反方向安装螺栓，那么就需要确保螺纹螺栓尽量少（不超过 2 毫米或 3mm），以避免损坏身体。



Tightening must be progressive and crosswise in diagonal sequence with bolting pressure evenly distributed.

在锚杆压力均匀分布的斜交序列中，必须采用渐进式和横向式。

The design of the expansion joints secures a sealing to the counter flange. That is why no sealing gasket is required.

橡胶接头的设计保证了对法兰的密封，这就是为什么不需要密封垫圈的原因。

**Note:** If the bolts and nuts are tightened too strongly, the sealing face might be crushed causing function!

注意：如果螺栓和螺母拧紧过大，密封面可能被压碎导致漏水！

## Counter flanges

### 反法兰

It is very important for the safe operating and life expectancy of the expansion joint to make a proper installation of the counter flanges (Fig. 2 to 5). The sealing face of the counter flange must be

machined smooth and cover most of the rubber sealing face(or at least 60%)to ensure a good sealing(Fig.2).

正确安装防侧法兰对橡胶接头的安全运行和寿命是非常重要的（图 2 至 5）。对法兰密封面要加工光滑，覆盖大部分的橡胶密封面（至少 80%）确保良好的密封（图 2）。



**Precaution**

预防措施

**Do not paint or lubricate rubber parts of expansion joints!**

不要涂或润滑橡胶接头的橡胶部件！

**When welding work is to take place the bellow has to be protected from welding heat and sparks!**

当焊接工作发生时，橡胶管体必须防止焊接发热和火花！

