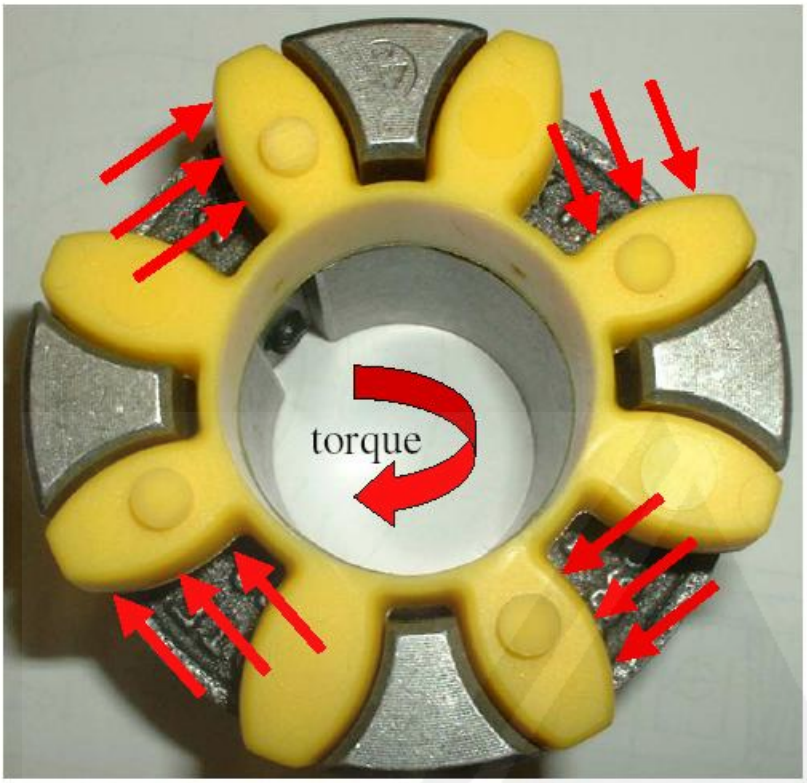
Stress on the coupling
LA TENSIÓN EN EL ACOPLAMIENTO



Every second tooth is under stress

The spider must be replaced completely. Do not take it out and twist one tooth!!!!!!

- Cada segundo está bajo fuerza
- La estrella debe ser reemplazada completamente.
- No la saques y tuerzas un diente.

Stress on keyway
TENSIÓN EN EL CHAVETERO

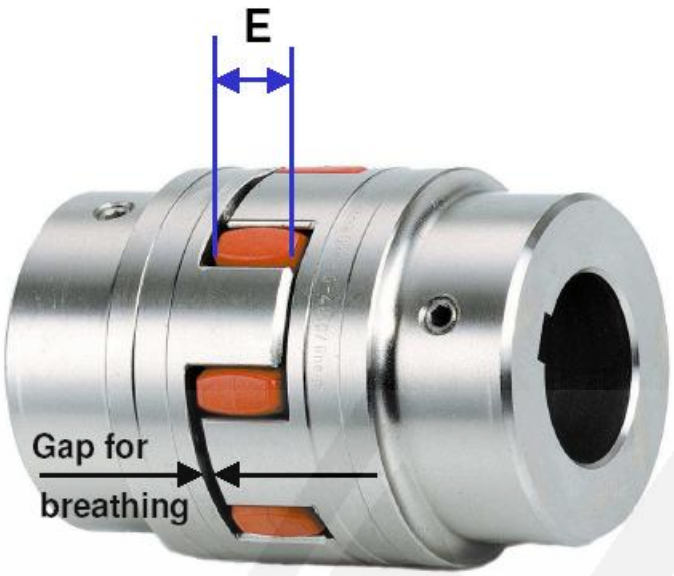
In general the keyway is the „soft spot“ in the coupling. Therefore the hub material plays an important role.

Stress on Al-D hubs has to be calculated, especially on smaller bore diameters.

En general, el chavetero es el punto blando del acoplamiento, por lo que el material del acoplamiento juega un papel importante.

La fuerza en los cubos AL-D tiene que ser calculada especialmente en los diámetros interiores más pequeños

E-dimension



Dejar un poco de espacio

ESTRELLA CURVADA

Curved spider

This curve allows the spider to handle the angular misalignment

Esta curva permite a la estrella manejar una desalineación angular

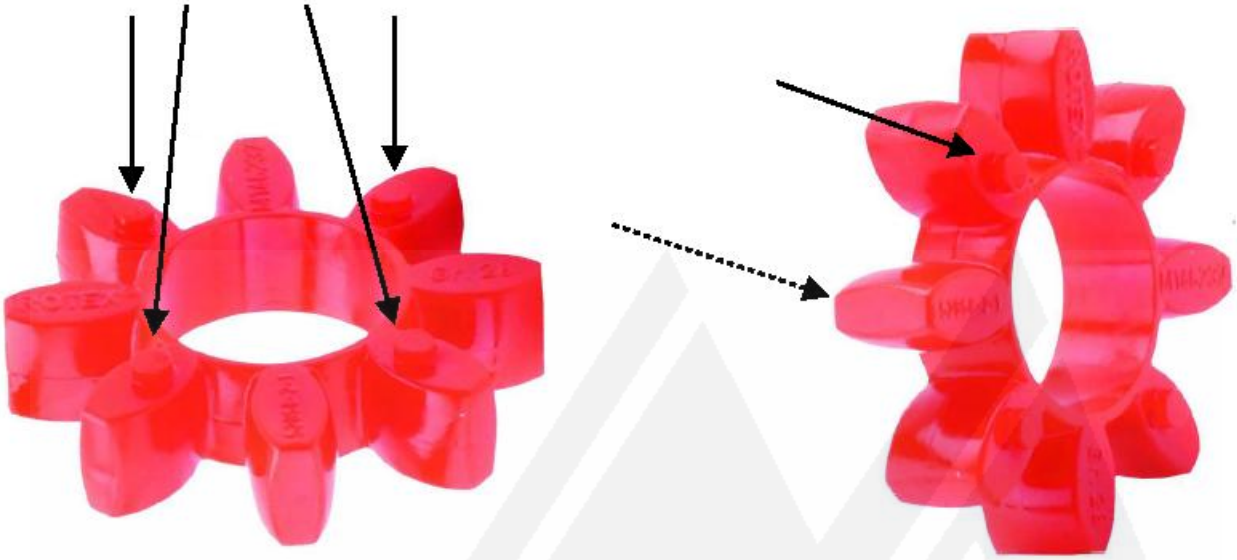
The spider can move freely between the hubs.
It is under no Compression (incontrast to ROTEX GS)

De esta forma.
La estrella puede moverse libremente entre los centros.
Está bajo NO compresión

BOTÓN ESPACIADOR

Spacer buttons

Every 2nd spider tooth has a spacer button on one side in order to ensure that the coupling is axially free and does not transmit any axial forces or only little axial forces.
THIS IS NO SUPPORT FOR ASSEMBLIES !!!!



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Cada diente de cada cara tiene un botón espaciador en un lado para asegurar que el acoplamiento sea libre axialmente y no transmita ninguna fuerza axial o sólo pequeñas fuerzas axiales.
ESTO NO ES UN APOYO PARA LOS CUBOS

Set screw

TORNILLO DE FIJACIÓN

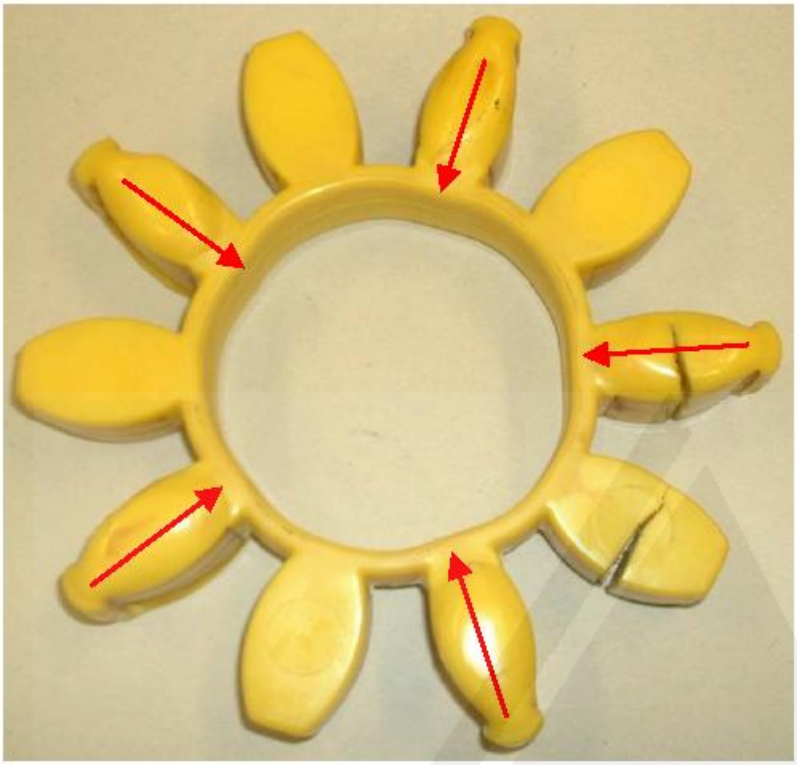
In Al-D hubs the set screw is located opposite the keyway, because the thread needs more engagement in aluminium than in steel or cast iron.

Our set screws have changed:

new old

Sobrecarga 1

Overload 1

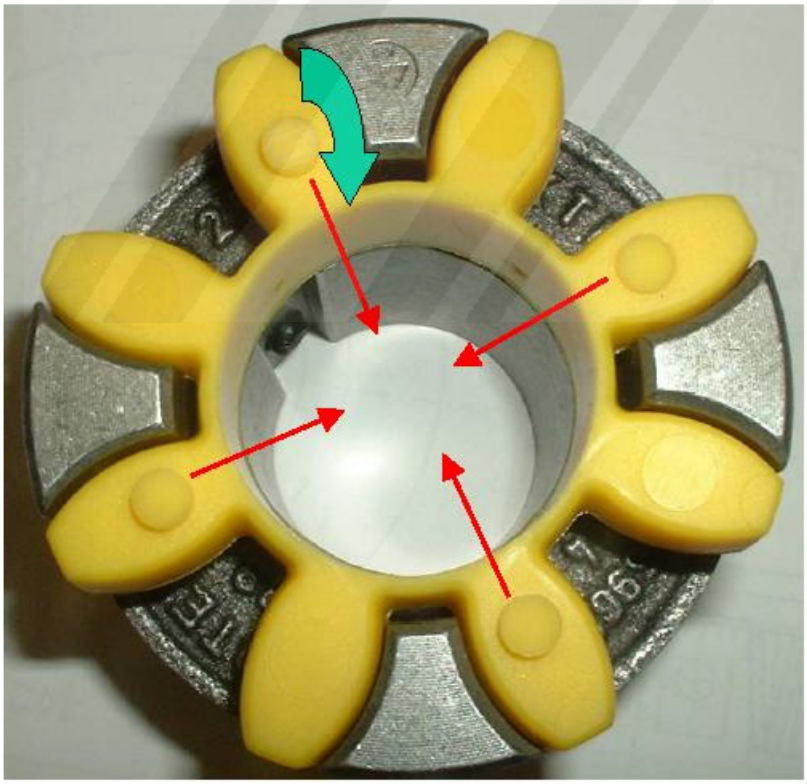


You can easily see that the spider tooth that is under stress tries to move to the Inside/center of the coupling. Therefore the inner ring of the spider is no longer round.

Puedes ver fácilmente que el diente de la estrella que está bajo tensión trata de moverse al interior/centro del acoplamiento. Por lo tanto el anillo interior de la estrella ya no es redondo.

Sobrecarga 2

Overload 2



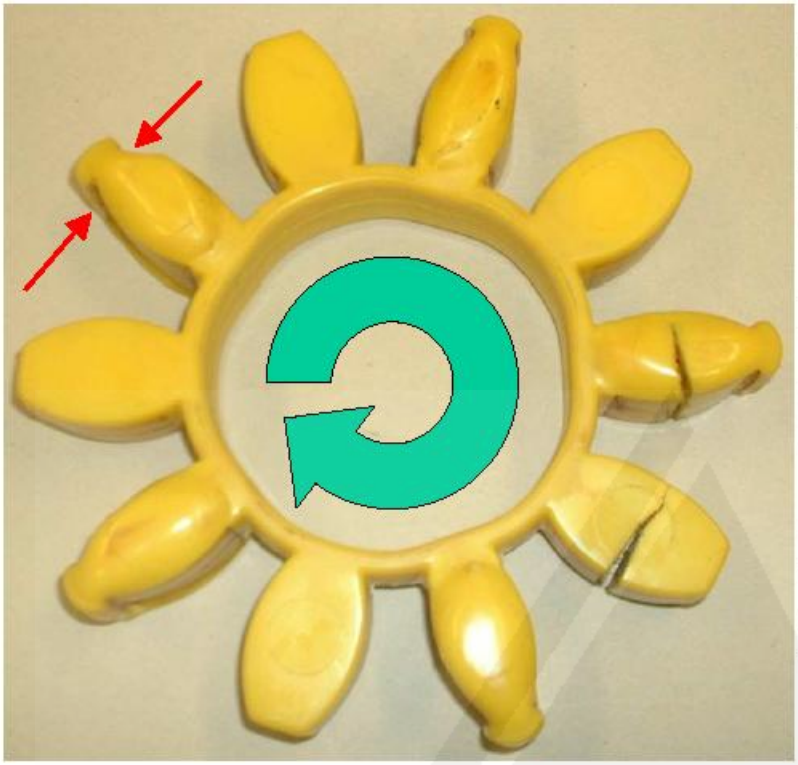
The spider tooth tries to slide to the inside along the jaw of the hub.

This creates a rectangular shape of the 4 teeth spider

El diente de estrella intenta deslizarse hacia el interior a lo largo del agujero central.
Esto crea una forma rectangular sobre 4 dientes de la estrella.

Shock load

Golpes de ariete



Shock loads appear and disappear very quickly. there is no time to slide to the inside. The center remains round.

The head of the spider tooth looks like it gets cut off. the jaw top try to cut it of like a knife.

Often you can not see any wear or plastic deformation on the spider tooth at all!!!

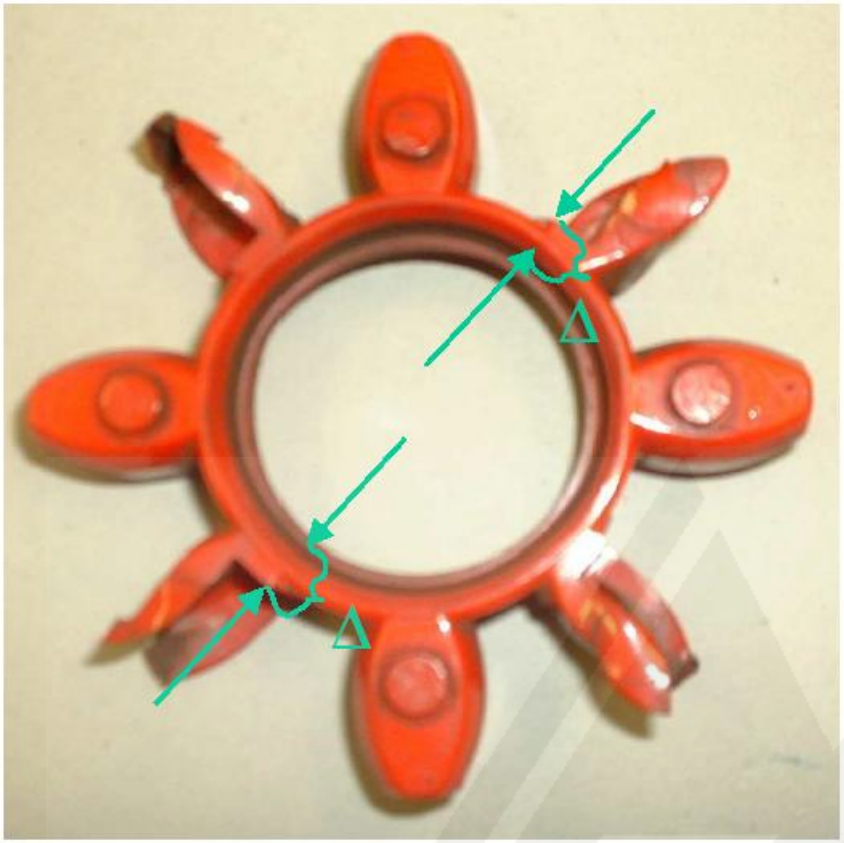
Vibracion 1

Vibrations 1

Vibrations can make The spider tooth melt From the inside. This melting process creates internal pressure inside the spider tooth. The head of the spider pops open and the liquid PUR material gets out. The material wraps around the coupling and „freezes“. It looks like Spaghetti.

Desalineación/Desplazamiento

Misalignment / Offset



If you want to find out reason for early wear of a spider, you have to measure also the material that is left.
This has to be compared with the other spider teeth. Then you have the misalignment of the coupling that made the spider fail.

Si quieres averiguar la razón del desgaste prematuro de la estrella, tienes que medir también el material que queda.
Esto tiene que ser comparado con los otros dientes de la estrella.
Entonces tienes la desalineación del acoplamiento que hizo que la estrella se estropeara.

Axial Misalignment

desalineación axial

As you know the E-dimension is important for ROTEX®

When you see a lot of material left of the spider tooth, you can be assured that there was a too big gap between the two hubs

We refer to our mounting instructions that can be taken from our homepage.