

SKF Supergrip

# Alignment tools



SKF Supergrip alignment tool

## Creates a perfect fit between the bolt holes

Funny thing! Here you come to accept oil power-installed expansion bolts for your turbine flange coupling as the standard for ultimate holding power, for predictable, time-saving installation or disassembly.

And here your work crews still use old-time alignment bolts, just as if we were still living at the dawn of the industrial revolution. And this way, when things don't work out right the first time, the alignment task can consume a fair slice of eternity.

Welcome to the state-of-the-art in shaft coupling alignment.

### What it is

Like our high-tech interference-fit couplings, like Supergrip coupling bolts, (proved in literally thousands of applications), the Supergrip alignment tool uses oil power to get the job done – in this case, to correct *angular misalignment of the flange faces* along the shafts. Easily, predictably, quickly, repeatably.

Composed of only a few essential elements, the Supergrip alignment tool set is simply sophisticated, and amazingly powerful on the job.

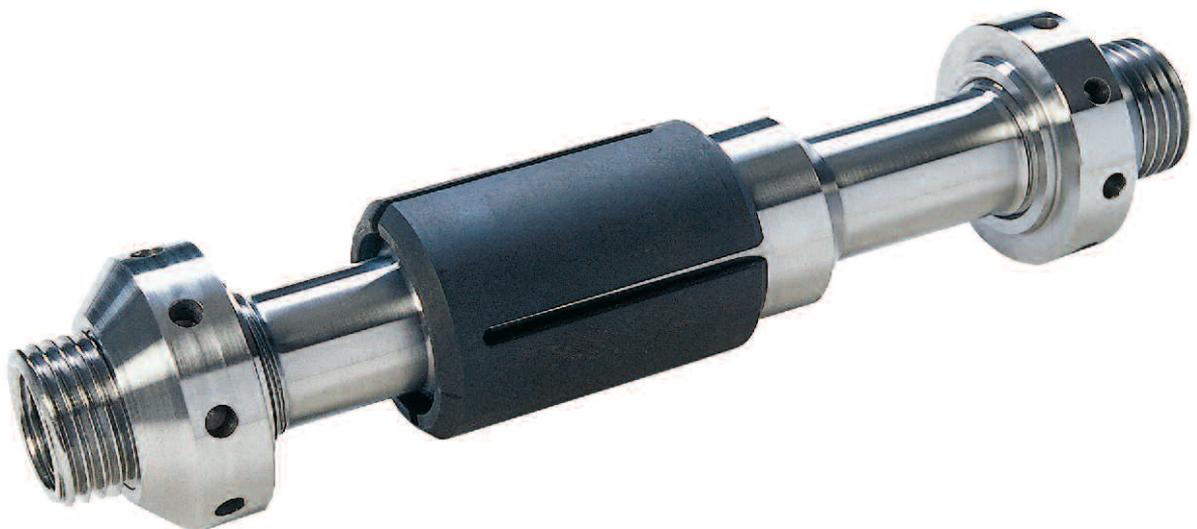
### What it does

The Supergrip alignment system takes all uncertainty out of the task of achieving a perfect radial fit between the bolt holes and acts a big time-saver in the bargain.

It provides the elegant solution to perfect alignment. No brute force is ever necessary. Sleeves and alignment bolts are inserted (and withdrawn) by hand. But the powerful expansion of the alignment sleeves through hydraulic power acting on the expansion bolt creates an overwhelming force that compels ultraprecise radial alignment between the bolt holes of the coupling.

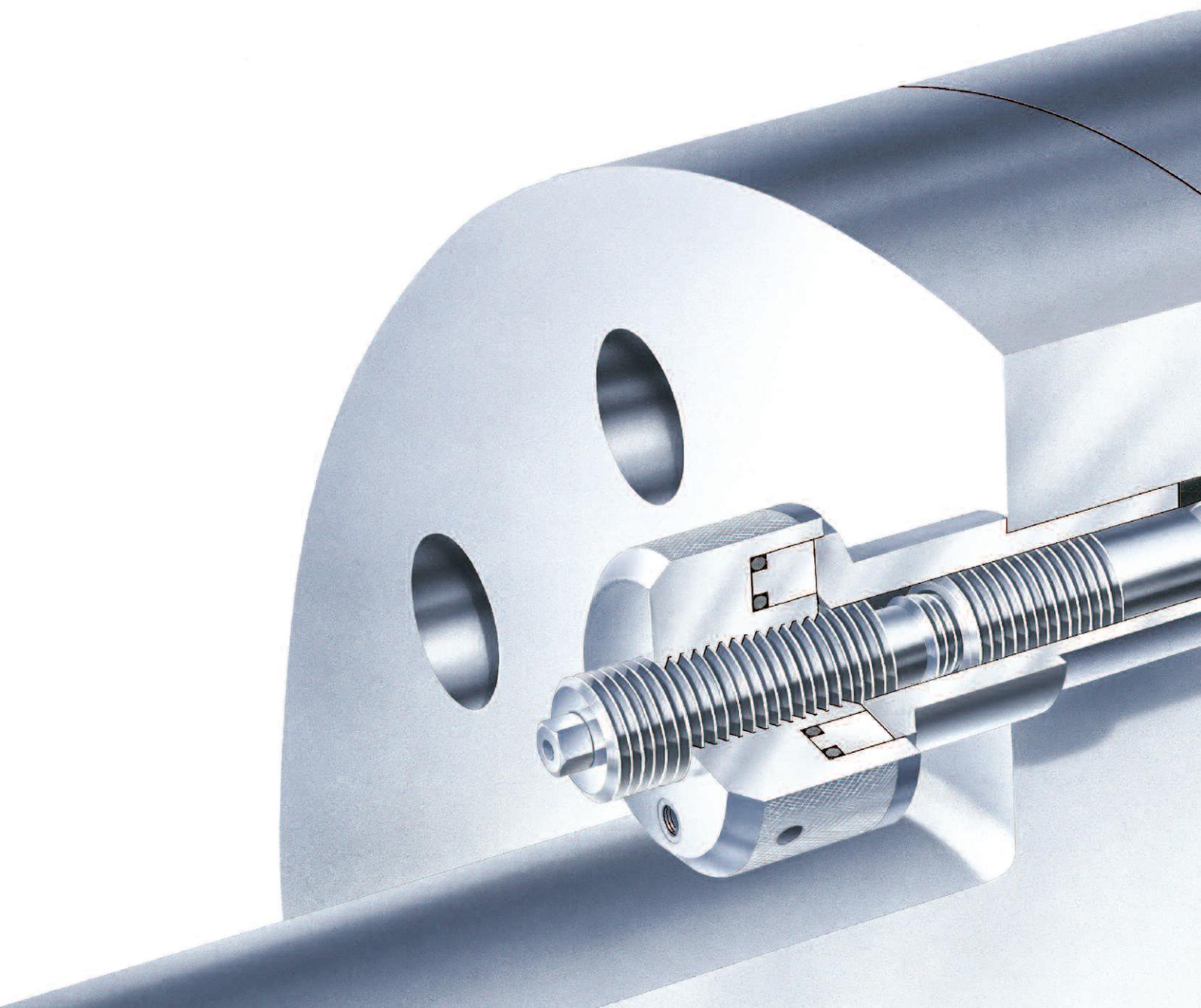
### How it gets the job done

After the traditional axial alignment steps have been taken, the Supergrip alignment tool achieves letter-perfect *angular* alignment of the two flanges. The process is simple, similar to the familiar one used with Supergrip expansion bolts.



### Here's how it works:

- The two flanges are brought together until their pilots meet.
- Coarse angular misalignment is corrected until the holes in the two flanges are no more than 0,4 mm (0,02") out of line.
- Two alignment bolts are inserted into two diametrically opposite holes.
- The two alignment bolts without sleeve are inserted into two diametrically opposite holes 90° apart from the alignment bolts.
- The tensioners are now screwed onto the threads of the tie bolts. With the tools furnished as part of the system, they are used to pull the coupling pilots together until the flange faces are in metallic contact with each other.
- The tensioners are then used on the alignment bolts (once more using the accompanying tools) to expand them, causing a powerful radial force in the holes to bring the two flanges into perfect alignment.
- All four bolts are now preloaded, and the nuts tightened to retain this preload; they clamp the coupling in the aligned position.
- The coupling is now ready for the installation of your Supergrip bolts, after which the alignment tools can be removed. The coupling now remains in perfect alignment until the next assembly.



### Here's what you get

These are the elements in your Supergrip alignment bolt system.

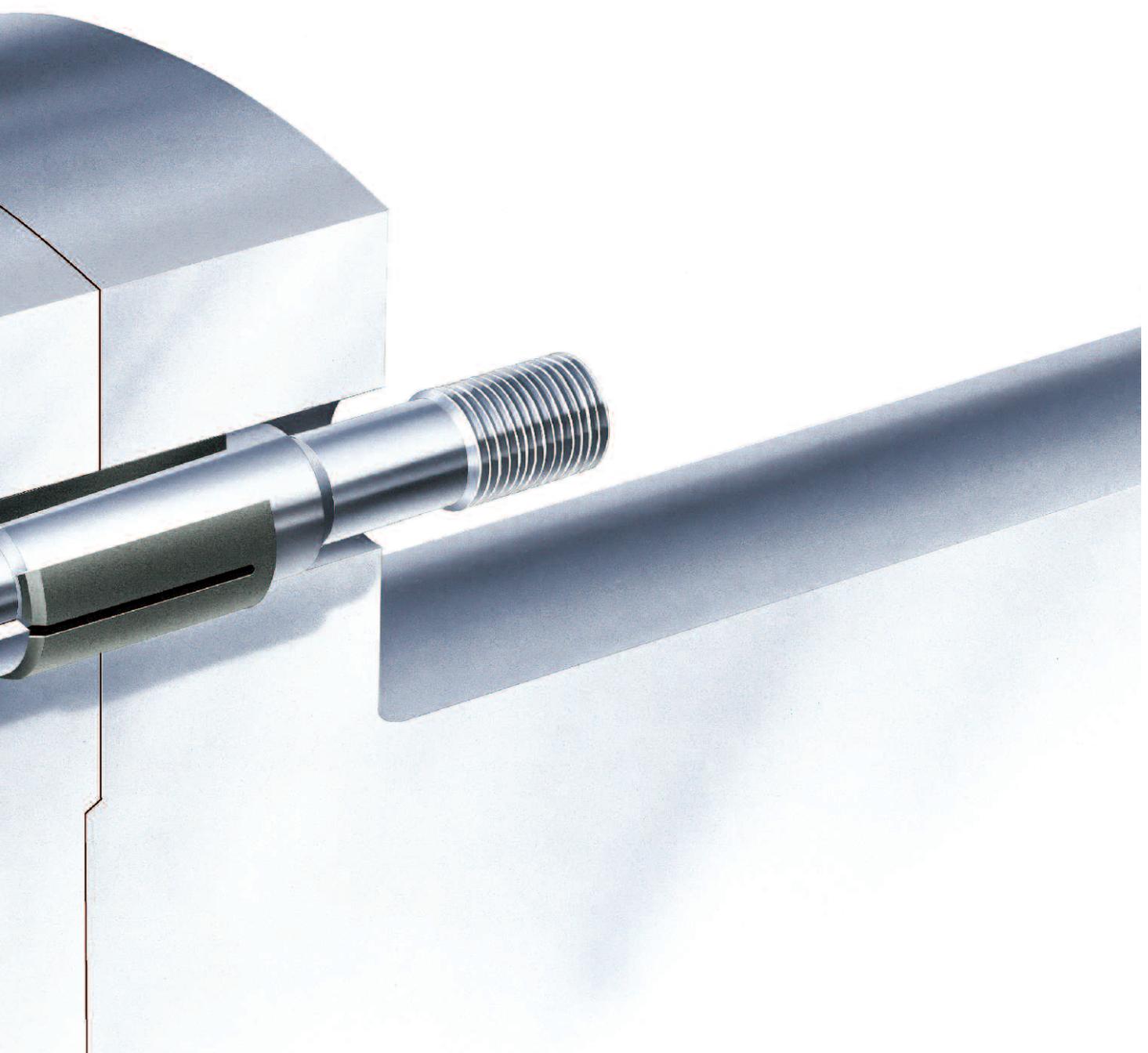
Quantity	Alignment tool set
4	Bolts
4	Expansion sleeves
8	Piloted nut
2	Distance collar
2	Mounting collar
2	Dismounting collar
1	Mandrel

### The Supergrip alignment tool comes from a good line

SKF innovated couplings using the oil power process and kept on perfecting the concept during the last fifty years, in thousands of applications. SKF Coupling Systems is a part of the SKF Group.

### Don't buy a bolt out of the blue – write or call!

SKF Coupling Systems developed the original oil power-installed expansion bolt and today's version is the fourth generation result. Supergrip bolt systems and Supergrip alignment tool sets not only share a common technology and experience, but a number of common elements. Newest developments, *in addition* to the alignment tools: dowel pins, bore plugs, blind hole plugs.

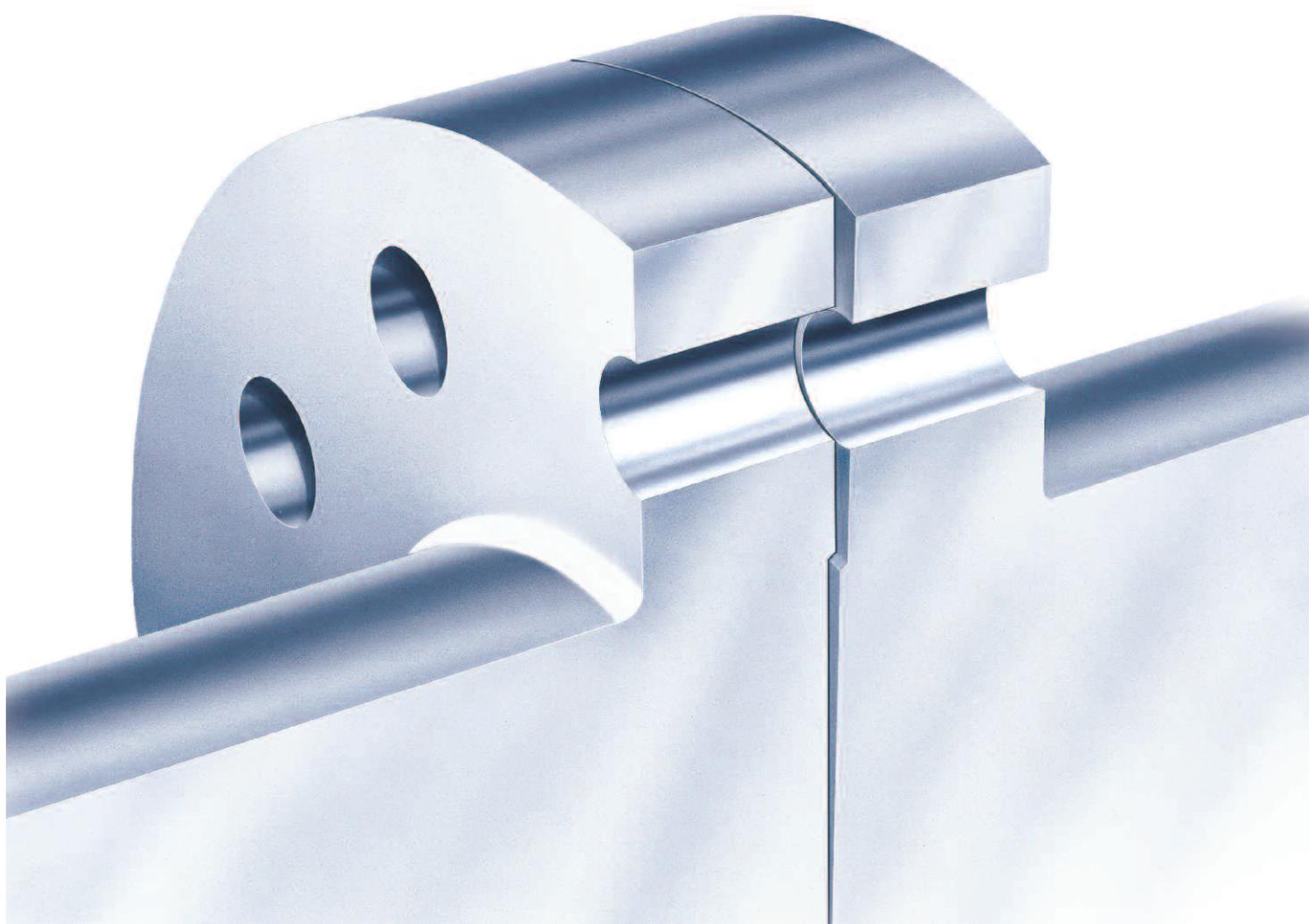


# Misalignment

– an eternal problem when mounting shafts.

Solve the problem easily with SKF Supergrip misalignment tool.

Turn page and see how it works.



SKF Coupling Systems AB was established in the early 1940s when SKF's Chief Designer, Erland Bratt, invented the SKF oil injection method. As the result of continuous development, SKF is currently a world leader in selected market niches.

Our business concept is to develop, produce and supply products based on the SKF oil injection method. These products significantly reduce downtime and lower maintenance costs of the capital-intensive equipment in which they are used.



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