



## Application description

Axial split case pumps are used in petrochemical installations, refineries etc., for pumping fluids like cooling water. During the overhaul of these pumps, all bolts must be loosened and tightened.

### Bolting process for this application:

After the overhaul was completed the 46MM bolts had to be tightened crosswise in three stages:

- Pass 1: 2.200 Nm
- Pass 2: 2.850 Nm
- Pass 3: 3.600 Nm

The old methods:

- Hydraulic torque wrenches: expensive and slow
- Impact wrenches: cheap and fast but inaccurate, noise, vibrations

### RAD solution and USP's:

Use a B-RAD torque wrench:

- Much faster and accurate
- Effortless and comfortable
- No noise and vibrations
- Very easy to use

### The conventional methods and drawbacks:

- Hydraulic torque wrenches: expensive and extremely slow
- Manual torque wrenches: very slow, hard work for the operator
- Impact wrenches: Very loud and inaccurate

### Specification of RAD tools and accessoires:

- B-RAD SELECT 4000 (PN: 28270), or B-RAD SELECT 7000 (PN: 28272)
- Sliding reaction arm (PN: 25987) for B-RAD SELECT 4000
- Special reaction arms
- Double safety button (PN: 25949)

### Examples of manufacturers:

Sulzer, Andritz, Neptuno, Ruhrpumpen, SPP, KSB, SAM, Flowserve, Grundfos.

### Target customers:

Petrochemical installations, refineries.



*An axial split case pump*



*How it used to be done: service with a pneumatic impact wrench.*



*How it should be done: B-RAD SELECT BL 4000 or 7000.*