

## Application description

Plate heat exchangers must be opened and closed for service or repair, see pictures.

### Bolting process for this application:

As the plates are compressed by nuts on long threaded rods, only open end wrenches can be used. For this we need to work with our HX series Offset gearbox which works excellent with an automatic 2-speed wrench.

The maximum torque can be 3.500Nm, but mostly the required torque is much lower. As the HX offset multiplies the torque (and reduces the speed) by 1,86 a smaller wrench can do the job (max 1.900Nm). Accuracy is not a factor in this process as the compression of the plates is measured by the closing distance.

Electric tools can be a problem to use as they can overheat more quickly. Only E-RADs can do this.

### RAD solution and USP's:

- Pneumatic 2-speed RAD and HX offset
- Low noise
- No vibrations
- Very fast and reliable
- Effortless and comfortable
- Saves enormous amounts of time

### Examples of manufacturers:

Alfa Laval, Onda, Hydac, Kelvion, Tranter, Danfoss, Sondex.

### The conventional methods and drawbacks:

- Hollow hydraulic cylinders:  
Heavy and very slow
- Manual wrench:  
Very tiresome

### Specification of RAD tools and accessories:

- RAD 14 GX-2 (PN: 19774) or RAD 20 DX-2 (PN: 19775)
- RAD HX offset gearbox (55 mm PN: 24404, 65 mm PN: 22541, 80 mm PN: 16550)
- Corresponding reaction arm included for 14 GX-2 (PN: 16920), insert  $\frac{3}{4}" < 1"$  included
- Corresponding reaction arm included for RAD 20 DX-2 (PN: 23120)
- Multiple magnetic reducer inserts to choose from (for example: hex 80 mm > hex 60 mm, PN: 200831)

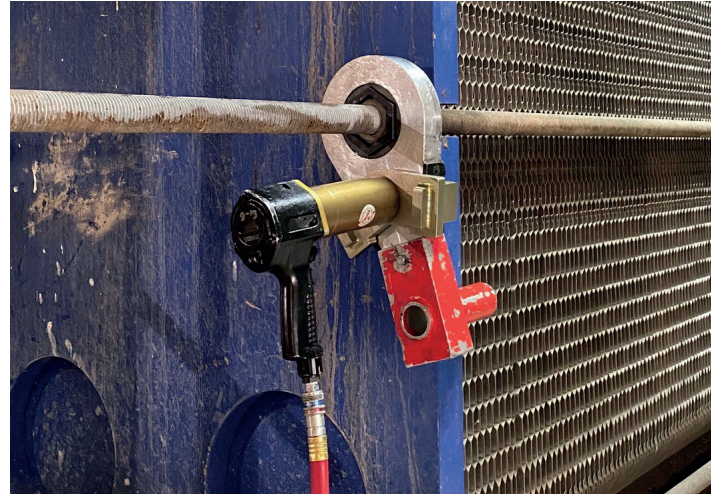
### Target customers:

Sugar manufacturing, dairy products manufacturing, refineries

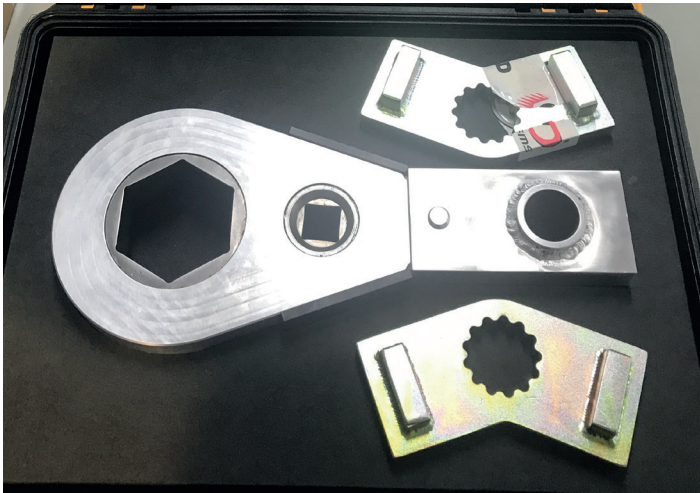




*Conventional system with hollow cylinders.*



*RAD 14 GX-2 with RAD HX, the red part is the included reaction pole.*



*RAD HX offset gearbox with adapter plates for RAD 14 GX-2 and RAD 20 DX-2 (one of these is included. For the 14 GX-2 also the  $\frac{3}{4}$ " < 1" insert is included). The reaction pole is not visible.*