## **Duoblock Steam Atomiser**

## **TF-DDZG**



## **Advantages**

- Highest quality standard by latest state of production engineering, application of ISO 9001 quality management system
- European type approval (EN 267 / 676) , CE certification, international type acceptance
- · Lowest emissions far below the limit values admitted by law
- No external flue gas recirculation plant required, i.e. no additional flue gas fans, enlarged combustion air fans, piping, control and safety devices
- Since the burner may be adapted to the furnace geometry, optimum low-emission combustion is ensured
- Short installation and commissioning times as well as easy mounting and maintenance due to service-friendly burner construction

The SAACKEsteam atomising burneris an injection atomiser with a wide control range. The SAACKE TF burner (free-jet burner) is the result of the latest development of a low NOx combustion system designed for use at water tube boilers. These free-jet burners represent an advancement of the well proven SAACKE DDZ(G) series burners, and basic knowledge gained from the TEMINOX development have also been brought into the conception.

By using the ultra low NOx SAACKE TF burners, you may achieve NOx emission values <100 (gas operation) and &lt;140 mg/m3 (oil operation) over a wide control range without an external flue gas recirculation. The TF product line contains light fuel oil burners, gas burners and dual-fuel burners for light fuel oil and gas in duoblock construction, i.e. burner and fan are installed at different locations.

Capacity range Fuels 2.0 - 50.0 MW
Light fuel oil TF-DDZ
Gas TF-DDG
Light fuel oil / gas TF-DDZG

The most essential advantages of the internal flue gas recirculation compared to other NOx reduction technologies are relatively short flames (compared to staged fuel/air supply) and low investment and operation costs (compared to an external flue gas recirculation). The most distinctive feature of the TF free-jet burner is the combustion air guiding system. By means of its powerful drawing-in of flue gas into the combustion zone the emission values for fuel oil and gas certainly fall below the limits. TF stands for temperature peak elimination and free-jet re-suction of flue gases where the recirculation rate is about 50 per cent. To avoid temperature peaks and to achieve a homogeneous temperature field especially in the area near to the burner, a swirling flow is generated which ensures good mixing of the combustion gases. The results are lowest NOx emissions during the combustion of light fuel oil and gas.



| Brennstoff                         | Leistung                  | 2   | 1.66 | 3   | 2.5 | 4   | 3.33 | 5.2 |
|------------------------------------|---------------------------|-----|------|-----|-----|-----|------|-----|
| Fuel                               | Capacity                  | -   | -    | -   | -   | -   | -    | •   |
|                                    | ca. (MW)                  | 10  | 10   | 15  | 15  | 20  | 20   | 26  |
|                                    | Brennertyp<br>Burner type | 100 | 100  | 150 | 150 | 200 | 200  | 260 |
| Leichtöl<br>Light fuel oil         | TF-DDZ                    |     |      |     |     |     |      |     |
| Gas                                | TF-DDG                    |     |      |     |     |     |      |     |
| Leichtöl/Gas<br>Light fuel oil/gas | TF-DDZG                   |     |      |     |     |     |      |     |

| Brennstoff     | Leistung                  | 4.33 | 6.4 | 5.33 | 8   | 6.66 | 10  | 8.33 |
|----------------|---------------------------|------|-----|------|-----|------|-----|------|
| Fuel           | Capacity                  | -    | -   | -    | -   | -    | -   | -    |
|                | ca. (MW)                  | 26   | 32  | 32   | 40  | 40   | 50  | 50   |
|                | Brennertyp<br>Burner type | 260  | 320 | 320  | 400 | 400  | 500 | 500  |
|                |                           |      |     |      |     |      |     |      |
| Leichtöl       | TF-DDZ                    |      |     |      |     |      |     |      |
| Light fuel oil | II DDL                    |      |     |      |     |      |     |      |
| Gas            | TF-DDG                    |      |     |      |     |      |     |      |
| Leichtöl/Gas   |                           |      |     |      |     |      |     |      |
| Light fuel     | TF-DDZG                   |      |     |      |     |      |     |      |
| oil/gas        |                           |      |     |      |     |      |     |      |

Technische Details und Abmessungen auf AnfrageTechnical Details and dimensions on request

