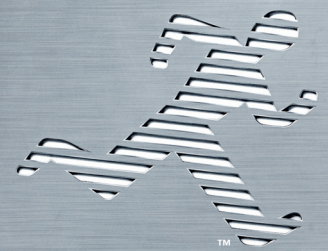


# AFTER SALES SERVICE

Rotary Atomizer F800



For the life  
of your plant



## Rotary Atomizer F800 for atomization of fluid feeds in spray drying

### Consistent performance

Designed and developed during 1982, Rotary Atomizer F800 was until recently the world's largest rotary atomizer for spray drying operations. The design is based on GEA Niro proven and recognized technology. Within flue gas desulphurization, the development of F800 enabled GEA Niro to design Spray Dryer Absorbers large enough to handle the flue gas from a coal fired power plant in a single absorber unit.



### Key features

- Epicyclic gear drive
- Wide range of atomizer wheels for abrasive feeds
- High reliability, availability and durability
- Heavy duty design
- High capacity, low maintenance
- Patented wear-resistant wheel design - WEARSERT™
- Proprietary feed distributor design - VOLUTE™

### The atomizer monitoring system comprises

- Low oil pressure alarm.
- High and low oil level alarm.
- High oil temperature alarm.
- Flooding alarm protecting against feed leakage
- Spindle vibration alarm protecting against excessive vibration conditions. (optional)
- Tachometer to register variable spindle speed when adjusted by control of a frequency converter. (optional)
- Monitoring equipment for atomizer load and operating time. (optional) and to protect the atomizer against over-speed by shutting down the atomizer

### The atomizer wheel

F800 atomizer operates with insert type wheels of diameter 320 mm or 350 mm. Selection depends upon the operating conditions and requirements. 320 mm and 350 mm diameter wheels are available with up to 24 inserts.

The main body of the atomizer wheel is made of corrosion resistant material, whereas the wear parts, such as the inserts and parts of the bottom plate and the upper plate are made of advanced ceramic material, or coated with special wear resistant material.

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## The atomizer drive

The atomizer drive consists of two parts. The upper part comprises the gear box, motor, and its support. The motor is a 2-pole, vertical flange type, and the power being transmitted from the motor to the vertical gear box input shaft through a toothed coupling.

The lower part of the atomizer comprises the support for the spindle bearings, feed pipe and cooling air assembly, and conical protective skirt.

The spindle is supported in special high speed, single row, and radial ball bearings. The drive is designed according to the flexible spindle concept so that irregularities in feed rate and other imbalance sources in the atomizer wheel are compensated without spindle and bearing damage.

## Specification

- Wheel speed range: 8800 – 11500 rpm
- Feed rate: 105000 kg/h max.
- Motor power: 800 kW max.
- Feed pipe: 2½" BSP (one) or quick coupling
- Cooling air pipe: 3" BSP or 4" BSP
- Weight (exclusive of motor): 1700 kg

Designed and manufactured according to relevant EU directives and harmonized standards

