

## Rotary Atomizer Type F35

*for atomization  
of fluid feeds in  
spray drying*

- Worm gear drive
- Belt driven
- For abrasive and non-abrasive feeds
- Sanitary execution available
- Patented atomizer wheels



## Rotary Atomizer, Type F35

### The Atomizer Drive

The atomizer drive consists of two parts. The upper part comprises the gear box with lubrication system, which can include either a built-in or externally mounted oil pump system. The lower part of the atomizer comprises the support for the spindle bearings, feed pipe assembly, and conical protective skirt. The spindle runs in special high speed single row, radial ball bearings. The drive is designed after the flexible spindle concept, so that irregularities in feed rate and other minor imbalances in the atomizer wheel can be compensated without spindle and bearing damage.

The atomizer is powered by a 4-pole foot mounted motor. The power is transferred from the motor to the gear box input shaft via a V-belt drive with belt guard. Atomizer speed can be altered by exchange of the motor V-belt pulley or by motor frequency control.

The atomizer monitoring system comprises:

- Low oil flow alarm.
- High oil level alarm.
- Flooding alarm as protection against feed leakage on to the supporting plate.
- Ammeter and running hour meter placed in the

spray dryer control panel to indicate operating performance.

- Spindle vibration alarm as protection against excessive vibration conditions (optional extra for heavy duty applications).
- Tachometer to register spindle speed if speed is adjusted by control of a frequency converter (optional extra).

The atomizer can be supplied to comply with the American 3A and similar national hygienic operational standards.

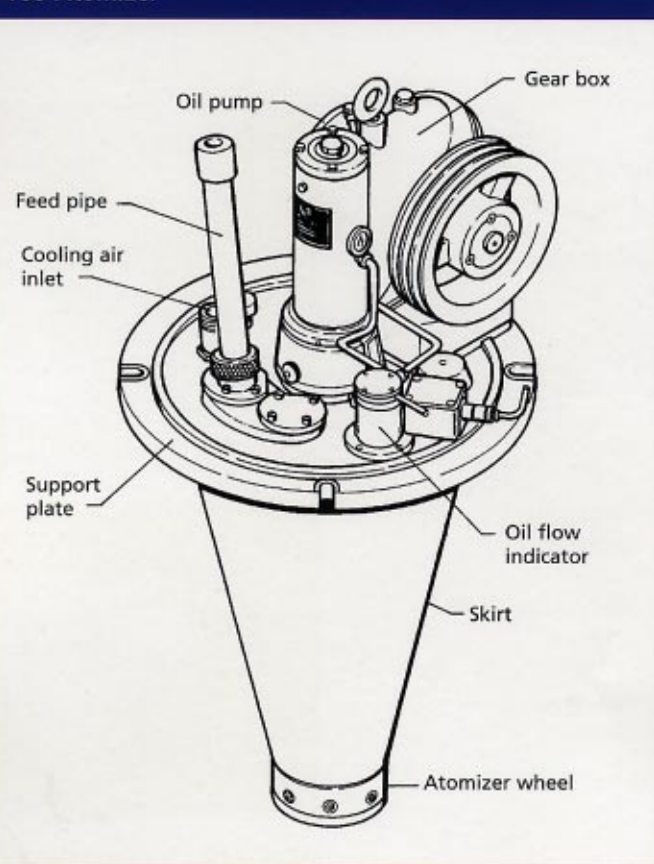
### The Atomizer Wheel

The F35 can operate with either a vane or bushing atomizer wheel of 210 mm diameter.

The vane wheel can have either 24 low or 36 high straight radial vanes, or 16 low or high curved vanes. The curved vanes are used where the highest powder bulk densities are to be obtained. Both are used with non-abrasive feeds.

The bushing wheel is for abrasive feeds. It is a 210 mm diameter patented design, where parts exposed to feed are abrasion-resistant and easily replaceable. The wheel is made from stainless steel, but has 8 conical inserts and a bottom plate of alumina or advanced ceramic material.

F35 Atomizer



### Specification

Wheel speed range:	7,500 - 15,000 rpm
Feed rate:	max. 10 t/h
Feed pipe:	3/4" BSP
Cooling air pipe:	1 1/2" BSP
Weight:	410 kg
Nominal power consumption:	max. 24 kW
Gear box:	worm, worm wheel

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