The PETKUS Fluidized Bed Dryer unites drying effectiveness with quality results. Optimized product flow combined with cleverly designed airflow allows for a compact design and high drying efficiency.

The new PETKUS Fluidized Bed Dryer is a performance boost for high value seed. Gentle and efficient drying ensures that quality seed remains quality seed.

**Applications:**
- Coated & pelleted seed
- Untreated seed
- Fine seed
- Small grain lots/ single grain unit
- Pellets, granules etc.

**Fluidized Bed Dryer DF**

*Gentle drying with a compact design*
The PETKUS Fluidized Bed Dryer was developed to gently and flexibly dry seed after chemical treatment. During the coating process large amounts of liquid are sometimes sprayed leading to moisture pick-ups of up to 5%. Fluctuating weather conditions or high humidity also influence moisture content thus making grain or seed drying an inevitable step to preserve germination capacity and improve sowability / flowability. The PETKUS Fluidized Bed Dryer ensures that desired optimal residual moisture levels can be realized. Drying occurs based on the vibrating fluidized bed principle whereby warm air flows through the fluidized product and absorbs moisture as water evaporates from the surface of the kernels. The moist air then flows onward through the air outlet.

Perpendicular Air flow

Warm air is blown in through two separate and adjustable flaps by a fan located at the side of the dryer and flows through the product in an upward motion. The specially designed air channels redirect the air flow at a 90 degree angle, ensuring constant and homogeneous air flow over the two screens. The temperature on each screen level can be individually controlled. Four temperature sensors allow for optimal monitoring and control of the drying process thus preventing product from overheating and preserving germination capacity / vigor.

Product flow “Z-Form”

At the start of the process a broad and evenly distributed product flow is initiated by the vibration and controlled air flow. The product then flows over the zig-zagged screen levels which have been specially designed to save space and increase efficiency. The two counterbalance motors (one on each side) create a consistent and uniform vibration. Product flow speed can be varied and a final sieve removes any clumps that may have built up.

Characteristics

- Preserves germination capacity & improves flowability
- Flexible, efficient & gentle drying
- Compact design and small footprint due to z-shape drying loop
- Continuous, batch or semi-batch loading possible
- Separate temperature controls for screen levels possible
- Counterbalance motors for homogenous infeed
- Variable product flow speed
- Temperature sensors for continuous monitoring and control
- Reduced abrasion and improved Heubach values
- Available with screens or Conidur® sheets

### Technical Data

<table>
<thead>
<tr>
<th></th>
<th>DF 090</th>
<th>DF 120</th>
<th>DF 150</th>
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<tbody>
<tr>
<td>Capacity</td>
<td>t/h</td>
<td>up to 10</td>
<td>up to 15</td>
</tr>
<tr>
<td>Working area</td>
<td>m²</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Height</td>
<td>mm</td>
<td>1900 - 2500</td>
<td>4</td>
</tr>
<tr>
<td>Width</td>
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<td>1260</td>
<td>1560</td>
</tr>
<tr>
<td>Length</td>
<td>mm</td>
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<tr>
<td>Screen</td>
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<td>850 x 220</td>
<td>1150 x 220</td>
</tr>
<tr>
<td>Weight</td>
<td>kg</td>
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<tr>
<td>Water removal</td>
<td>kg/h</td>
<td>100</td>
<td>150</td>
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1 Based on Maize, treating solution 1000 ml  
2 Subject to frame  
3 Based on air Temperature 50° C