Feed Processing

Why Grind?

- Enhanced mixing
- Decreased segregation
- Increased nutrient digestibility
Particle Size & ADFI in Primiparous Sows

| Weight (kg) | ADFI
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>1,200</td>
<td>4.19</td>
</tr>
<tr>
<td>900</td>
<td>4.24</td>
</tr>
<tr>
<td>600</td>
<td>4.40</td>
</tr>
<tr>
<td>400</td>
<td>4.43</td>
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</tbody>
</table>

SD 0.46
Linear effect (P < 0.04)
Particle Size & Litter Wt Gain in Primiparous Sows

Particle Size & DM Digestibility in Primiparous Sows

Particle Size & DM Excretion in Primiparous Sows
Particle Size & GE Dig in Second Parity Sows

Linear effect (P < 0.001)

Particle Size & ME of Diets for Second Parity Sows

Linear effect (P < 0.001)
Particle Size of Corn and Sorghum & ADG in Broilers

Particle Size of Corn and Sorghum & G/F in Broilers
Particle Size of Corn and Sorghum & Cost of Gain in Broilers

Particle Size of Wheat & ADG in Finishing Pigs

No trt effect (P > 0.7)
Particle Size of Wheat & G/F in Finishing Pigs

Particle Size of Wheat & Viscosity of Ileal Digesta in Finishing Pigs

Particle Size of Wheat & DM Digestibility in Finishing Pigs
Particle Size and Milling of Corn

- **Electrical energy, kWh/t** vs. **Production rate, t/h**
- **Particle size, microns**

- Energy consumption
- Production rate

**Score = 0**

**Score = 3**
### Particle Size Recommendations

<table>
<thead>
<tr>
<th>Cereal</th>
<th>Sows</th>
<th>Gro-fin</th>
<th>Nursery</th>
<th>Layers</th>
<th>Broilers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>&lt; 600</td>
<td>&lt; 600</td>
<td>&lt; 600</td>
<td>&gt; 1,000</td>
<td>&lt; 600</td>
</tr>
<tr>
<td>Sorghum</td>
<td>???</td>
<td>&lt; 500</td>
<td>&lt; 500</td>
<td>800</td>
<td>&lt; 500</td>
</tr>
<tr>
<td>Wheat</td>
<td>???</td>
<td>&lt; 600</td>
<td>&lt; 600</td>
<td>???</td>
<td>???</td>
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