

# B. W. SINCLAIR, INC.

BULK MATERIAL HANDLING  
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<b>SCREW CONVEYOR THEORETICAL CAPACITY TABLE</b>				
<b>Screw Dia.(")</b>	<b>Max RPM</b>	<b>CFH</b>	<b>PPH</b>	<b>STPH</b>
		<b>@ Max. RPM</b>	<b>@ 50 PCF</b>	
<b>6</b>	<b>60</b>	<b>90</b>	<b>4500</b>	<b>2.25</b>
<b>9</b>	<b>55</b>	<b>300</b>	<b>15000</b>	<b>7.5</b>
<b>10</b>	<b>55</b>	<b>425</b>	<b>21250</b>	<b>10.6</b>
<b>12</b>	<b>50</b>	<b>645</b>	<b>32250</b>	<b>16.1</b>
<b>14</b>	<b>50</b>	<b>1040</b>	<b>52000</b>	<b>26</b>
<b>16</b>	<b>45</b>	<b>1400</b>	<b>70000</b>	<b>35</b>
<b>18</b>	<b>45</b>	<b>2025</b>	<b>101250</b>	<b>50.6</b>
<b>20</b>	<b>40</b>	<b>2500</b>	<b>125000</b>	<b>62.5</b>
<b>24</b>	<b>40</b>	<b>4360</b>	<b>218000</b>	<b>109</b>

**Notes:**

1. Cross sectional load in housing assumed to be 30%.
2. Capacity can increase with higher percentage loading and denser material.
3. Some abrasive materials may require slower maximum speeds.
4. Material handling characteristics may require different design.
5. All figures are approximate; consult **SINCLAIR** with applications.

<b>SCREW FEEDER THEORETICAL CAPACITY TABLE</b>				
<b>Screw Dia.(")</b>	<b>Max RPM</b>	<b>CFH</b>	<b>PPH</b>	<b>STPH</b>
		<b>@ Max. RPM @ 1/2 pitch</b>	<b>@ 50 pcf</b>	
<b>6</b>	<b>60</b>	<b>140</b>	<b>7000</b>	<b>3.5</b>
<b>9</b>	<b>55</b>	<b>475</b>	<b>23750</b>	<b>11.9</b>
<b>10</b>	<b>55</b>	<b>645</b>	<b>32250</b>	<b>16.1</b>
<b>12</b>	<b>50</b>	<b>1050</b>	<b>52500</b>	<b>26.3</b>
<b>14</b>	<b>50</b>	<b>1660</b>	<b>83000</b>	<b>41.5</b>
<b>16</b>	<b>45</b>	<b>2240</b>	<b>112000</b>	<b>56</b>
<b>18</b>	<b>45</b>	<b>3230</b>	<b>161500</b>	<b>80.8</b>
<b>20</b>	<b>40</b>	<b>3960</b>	<b>198000</b>	<b>99</b>
<b>24</b>	<b>40</b>	<b>6895</b>	<b>344750</b>	<b>172.4</b>

**Notes:**

1. Flooded pitch is assumed to be 1/2 (pitch is 1/2 of screw diameter).
2. Capacity can increase with higher percentage loading and denser material.
3. Some abrasive materials may require slower maximum speeds.
4. Material handling characteristics may require different design.
5. All figures are approximate; consult **SINCLAIR** with applications.