

Grass Seed Drying

Grass seed can be harvested at a moisture content as high as 45% and should be dried down to 13-14% for safe storage or even lower where very long period storage (over one year) is required.

The density of grass seed varies considerably with the variety.

Three examples:

Cocksfoot	4.07m ³ /ton
Perennial Ryegrass	3.45m ³ /t
Italian Ryegrass	4.07m ³ /t

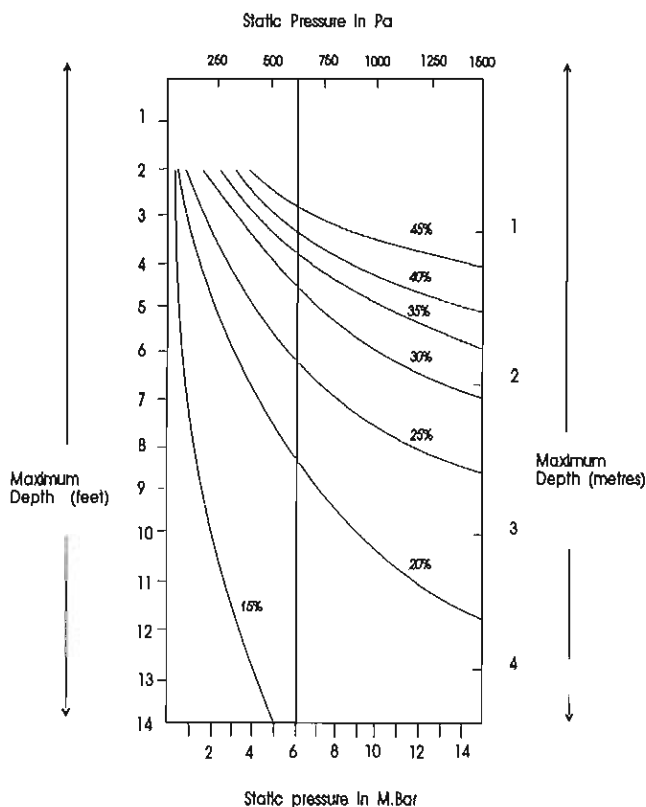
Since at this stage no details are known of the specific requirements, the best way to advise on fan selection is to recommend an airflow of 0.28m³/s.tonne of grass seed to be dried. The fan selected would have to be capable of delivering the total volume against

a back pressure of 750Pa. Of this, 125Pa would be the system resistance and the remaining 625Pa would be the resistance of the grass seed.

At the recommended airflow rate of 0.28m³/s.tonne grass seed at the moisture content of 35% could be loaded to a depth of 1.2m. At a lower moisture content the grass seed can be loaded to the depth shown on the table below against the 625Pa line. Likewise at higher moisture contents than 35% lower loading depths than 1.2m would be necessary.

Use of this airflow rate and observation of the loading depth/moisture content relationship should enable the seed to be dried in 7-12 days. While in season as in 1975 and especially in 1976 there would be no need for artificial heating, our normal climate conditions would call for the provision of sufficient heat to impart 5°C lift to the drying air, to be used during the final stages of drying.

For successful drying, the grass seed should be loaded level without any consolidation - avoid walking on the grass seed as foot prints on wet grass seed will cause local points of consolidation which do not dry. A hessian screen may be necessary, over the top of the grass seed, at the end of drying to prevent very light grass seed from blowing about.



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