

## Resistance of Wood Pellets and Chips to Airflow for Bulk Drying and Cooling

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As the use of biomass is limited in some cases due to the wood pellets moisture content and so on, aeration or drying is one of the best ways to control wood pellets moisture content. The pressure drop vs. air flow was measured for different kinds of wood pellets and wood chips. The air flow range was up to 120 m<sup>3</sup>/min and pressure drop range was up to 750 Pa. A relation was developed to express pressure drop versus airflow. Parameters “a” and “b” were calculated for wood pellets and wood chips.

$$\Delta P = \frac{aQ^2}{\ln(1 + bQ)}$$

For the low airflow, pressure drop for bulk wood chips was lower of that for wood pellets.