

Title Development of a dryer with airflow reversal and a pneumatic system for grain movement
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Abstract

The objectives of this work were elaboration, construction and evaluation of a new dryer model for coffee. For evaluation, three tests were conducted for each type of coffee. In tests with natural coffee, the drying times were 11.5, 10.3 and 9.6 h. The coffee with initial moisture content of $24.6 \pm 1.8\%$ w.b. was dried to storage moisture of $11.9 \pm 1.3\%$ w.b. For the parchment coffee, drying times were 14.0, 12.5 and 12.2 h. The coffee with initial moisture content of $33.9 \pm 2.1\%$ w.b. was dried to storage moisture of $12.0 \pm 1.5\%$ w.b. The drying time of natural coffee was less because the moisture content of natural coffee was less in comparison with that of parchment coffee. The coffee dried with the new drying system was considered as a coffee of high cup quality, and was classified as types 6 and 4 for natural and parchment coffee, respectively.