# HOPPER BIN AIR COMPARISONS

**Information provided by *PAMI and *AFMRC**

## WHY? And HOW? was THE STUDY WAS NECESSARY

**WHY?** Aeration is crucial to on farm storage as producers need to **safely store** their grain to insure their investment before they take it to market . The price variances mean that farmers have learned to **store efficiently** in order to maximize profits.

**HOW?** The study was conducted using a FLAT bottom bin equipped with FULL FLOOR AERATION as the test bin. The other bins were all HOPPER BINS equipped with the various styles of aeration in the chart above.

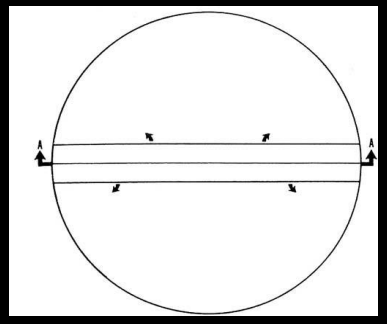
**DRYING TIME** Amount of time (days) it takes to **AVERAGE dry** with wheat as compared to the Test (Full Floor bin)
**THOROUGHT DRYING TIME** Amount of time (days) it takes to **THOROUGH dry** with wheat as compared to the Test (Full Floor bin)

*"Air takes the path of least resistance. The more open area the more air flow".*

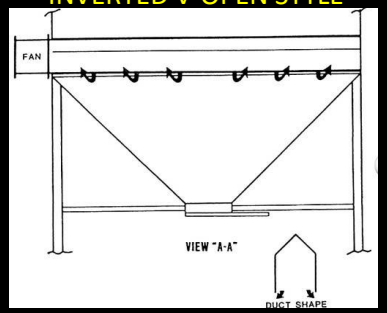
| STYLE | FULL FLOOR | INVERTED V | ROCKET | TUBE | CIRCULAR |
|---|---|---|---|---|---|
| *FOR STUDY | FULL FLOOR AIR | TAYLOR | GRAIN GUARD | NAICAM | KEHO CYCLONE |
| *DRYING TIMES | 14 days | 13 days | 11 days | 13 days | 13 days |
| *THOROUGH DRYING TIMES | 21 days | 17 days | 22 days | 23 days | 37 days |

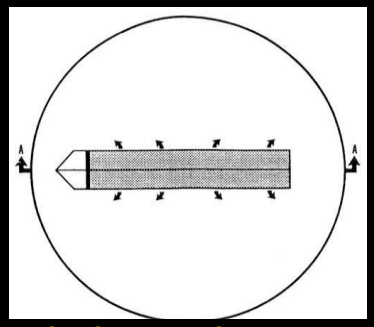
The INVERTED V"(Open air flow design") was the most effective at thorough drying

*PAMI = Prairie Agriculture Machinery Institutute *AFMRC= Alberta Farm Machinery Research Center

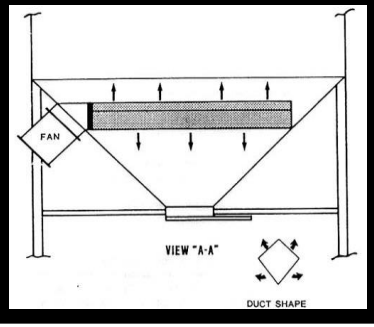


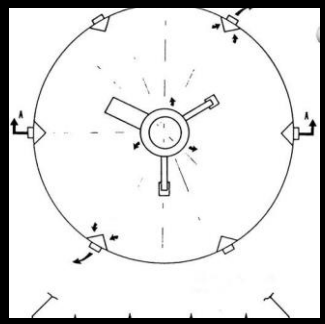
INVERTED V-OPEN STYLE



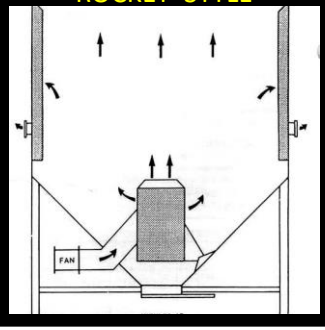



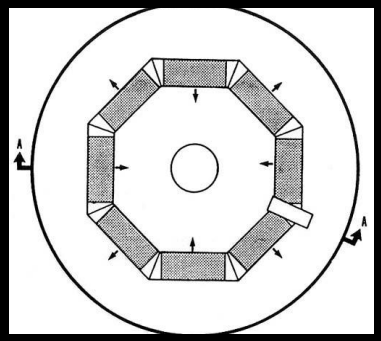
HORIZONTAL PERFORATED TUBE



ROCKET STYLE



CIRC. PERFORATED TUBE