

PRESERVE YOUR PROFITS!

Grain Temperature Monitoring - An Effective Management Tool

CONTROL ENERGY COSTS: 1 HP = 1 KW KW x (KW per hour) x KW per hour cost

Example: 10 HP motor run for 14 days (14 days x 24 hours) @ 10¢/KW = \$336.00

Your Operation: $\frac{\text{HP}}{\text{HP}} \times \frac{\text{KW/hour}}{\text{KW/hour}} \times \frac{\text{KW/hour cost}}{\text{KW/hour cost}} = \text{_____}$

The following table can be used as a rule of thumb for warning signals:

When grain is reading	>	40°	a rise of	>	3°	is a warning
	>	50°		>	5°	
	>	60°		>	7°	
	>	70°		>	9°	
	>	80°		>	10°	
	>	90°		>	11°	
	>	100°		>	13°	



IMPORTANT: *Any rapid rise of temperature in a given location in the grain mass - no matter how small - is an indication that trouble is developing. The greater the rise within a given time, the greater the immediate danger.*

AERATION

- ◆ Aeration is essential for dry grain storage.
- ◆ An aeration system moves air through grain to control grain temperature and reduce biological activity.
- ◆ An aeration cycle is the time it takes to change the temperature of all the grain.
- ◆ Fall Aeration - cool grain to recommended temperature for your geographic location.
- ◆ Record Grain Temperature - grain temperature should be within 10 – 15° of the average outside air temperature, if not, start aeration cycle **immediately**. Operate aeration fans long enough to cool **all** grain or spoilage may occur.

- ◆ **To Be Sure of Complete Cooling or Warming Cycle, You Must Monitor the Change in Grain Temperature, noting trends up or down.**
- ◆ **Check Stored Grain Weekly**
- ◆ **Check with your local extension office for your area's recommendations.**

TEMPERATURE CABLES WILL TAKE THE GUESSWORK OUT OF THE AERATION PROCESS AND HELP YOU CONTROL YOUR ENERGY COSTS.