

FREQUENTLY ASKED QUESTIONS

FIRE® Performance Testing System



The Osborne FIRE System is the gold standard in performance testing currently in use at commercial facilities and universities around the world. FIRE automates the measurement of individual daily feed intake and other performance characteristics of growing animals for genetic, feed, and pharmaceutical testing. Because FIRE uses modern electronics, including electronic identification, pigs, sheep and other livestock can be successfully tested in commercially realistic groups.

◆ HOW MANY ANIMALS CAN USE EACH STATION? IS THERE A WEIGHT RESTRICTION?

The FIRE Feeder will accept up to 12 animals per station if meal feed is used. The station will accept up to 15 animals if pelleted feed is being used. Feeding more animals on the station than what is recommended can put additional feeding pressure on the animals, which will influence and bias the results to a particular behavior type. It is recommended that pigs be between approximately 60 lbs. (30 kg) and 300 lbs. (140 kg).

◆ WILL DUST, DIRT, OR MANURE CAUSE THE SYSTEM PROBLEMS?

The FIRE Feeder is designed to operate in a livestock environment. Exposure to dust, dirt, high humidity, corrosive gasses, and manure is expected, and the equipment is designed for this, with sealed electronic and electrical components, and plastic and galvanized steel structural components. Periodic cleaning is required to remove built-up manure and debris from around and under the FIRE station and FIRE weigh scale to prevent interference with the weighing mechanisms.

◆ ARE THERE CONCERNS ABOUT A PIG IN THE RACE BEING “BULLIED” OUT OF THE RACE BY AN AGGRESSIVE PIG?

We offer several options for an animal race to provide different degrees of protection to an animal visiting the station. Using no race on the FIRE station allows animals unhindered access to the feeder, but exposes the animal from both sides and the rear to other animals in the group. Using a shoulder race on the FIRE station provides a visiting animal with protection from their shoulders forward, but exposes the animal on its rear half. The long race or scale race provides a visiting animal with protection from all sides, except the rear. These two options provide the greatest degree of protection to a visiting animal without influencing the results by confining each animal to prevent competition. The greatest factor affecting the “bullying” behavior with a FIRE station is the number of animals placed in a FIRE station pen. Staying within the recommendations of 12 to 15 animals per station typically eliminates the bullying behavior problems by allowing plenty of time for all animals to visit the FIRE Feeder and eat.

◆ ARE PIGS RECEIVING FEED AD-LIBITUM OR A SET AMOUNT?

FIRE is an ad-libitum feeding system. A small amount of feed is always maintained in the feed trough. The trough is constantly weighed so that any disappearance of feed can be recorded as a meal. If the weight of the trough falls below a set value, an additional portion of feed is dispensed into the trough. The accuracy of feed consumption while dispensing feed during a meal is maintained through the use of our proprietary Dynamic Portion Calibration (DPC) calculations.

◆ IF A PIG DOES NOT CONSUME ALL OF THE FEED, WILL THE NEXT PIG RECEIVE THE PREVIOUS MEAL? IF SO, ARE THERE CONCERNS ABOUT ACCURATE FEED DISAPPEARANCE PER PIG?

A small amount of feed is always maintained in the trough. Feed consumption, or feed disappearance, is recorded for each animal visit. In the case where one animal displaces another which is currently eating, a trough weight is captured between the end of the first visit and the beginning of the second visit, allowing the system to accurately record each animal's meal.



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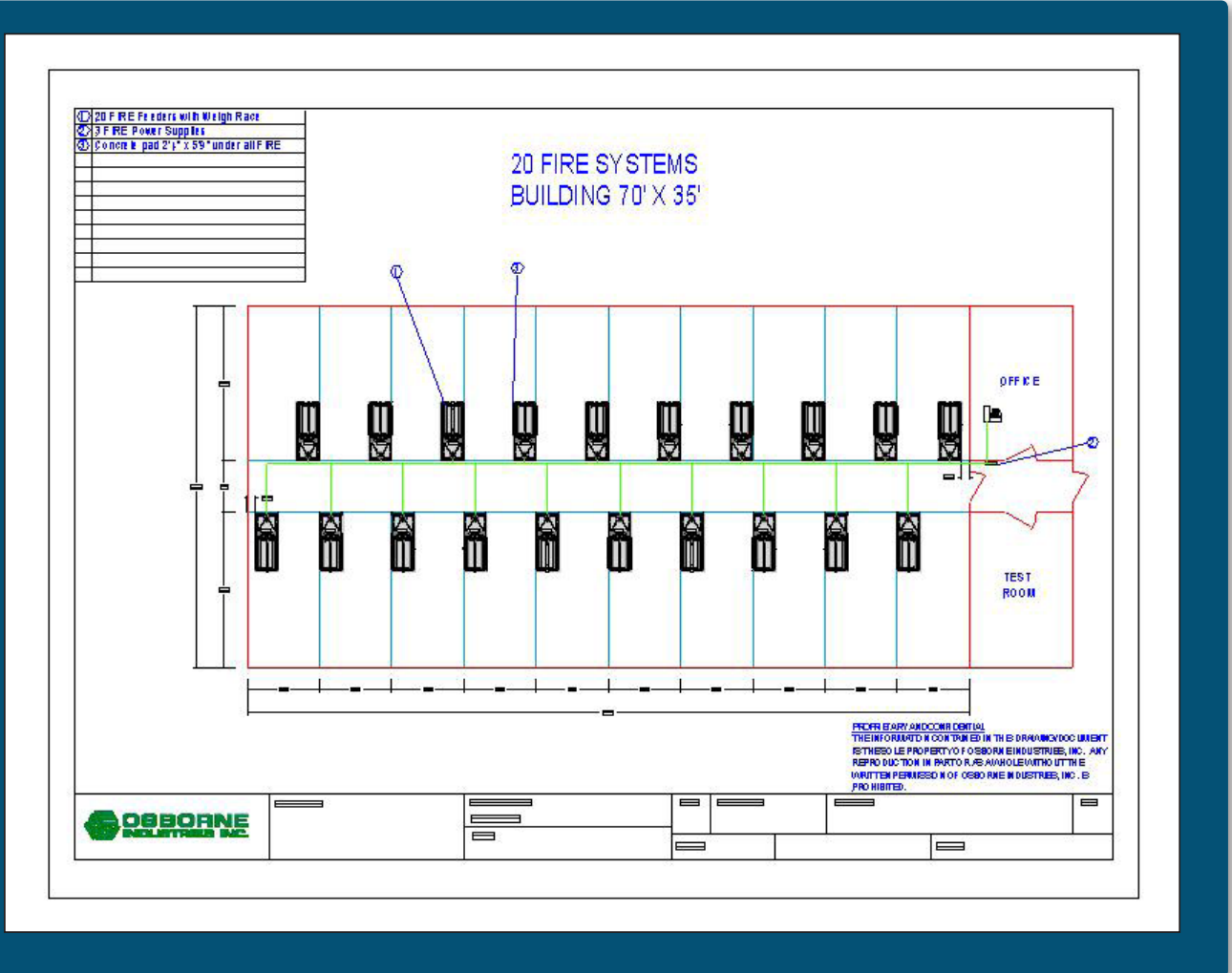
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◆ HOW DOES A FIRE SYSTEM LAYOUT LOOK?

A proper layout of FIRE Feeders will help the system management by providing easy access to feeders for routine maintenance and servicing, and will encourage proper animal behavior. Because FIRE is run with electricity, proper grounding and electrical wiring is extremely important. Osborne's experienced Technical Service Specialists assist in designing the layout of each FIRE system.



Each customized layout is based upon the configuration of the building FIRE will be installed in. It is important for each FIRE feeder to be positioned for easy access, for instance, along the edge of pens, so that routine maintenance and proper cleaning can be performed.



GRADY GODSEY
Technical Service Specialist

“Our experienced staff in sales, customer service, and technical service work together to design the best layouts for complete FIRE systems. A specialist, such as myself, will install the system at your location and provide recommendations and tips so that you get the best results with your FIRE system.”