



# OSBORNE<sup>®</sup>

## FIRE<sup>®</sup> Performance Testing System



*The Gold Standard in  
Animal Performance Testing . . .*



The Osborne FIRE® System automates the measurement of individual daily feed intake and other performance characteristics of growing animals for genetic, feed and pharmaceutical testing.

# FIRE® Performance Testing

## FIRE® Testing Accurately Simulates Commercial Production

The Osborne FIRE System is the acknowledged standard for performance testing at commercial facilities and universities worldwide. 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 and electronic identification, sheep, goats, and other livestock can be efficiently tested in commercially realistic groups.

## Automated and Feasible Group Testing

The FIRE System makes individual performance testing of animals kept in groups feasible and cost effective. Older, manual methods of testing animals in artificial, isolated environments may yield results that are not accurate for real-world conditions. But testing in a group environment with FIRE faithfully simulates actual commercial production practice. Studies by our professional staff and independent analysts have shown that FIRE results accurately reflect the performance found in commercial feeding.

## Accurate Results

Special algorithms and a unique auto-calibration method ensure that data is always accurate when properly maintained. Independent testing and user experience confirm the accuracy of the FIRE System.



Osborne's FIRE System is the worldwide industry standard for performance testing of livestock. ***FIRE is the Original Performance Testing System.***

## Identify Factors that Affect the Performance of Growing Animals

The FIRE System can be used by producers and researchers to aid in identifying the influence of environmental factors on the performance of growing animals including:

- Genetics
- Nutrition and diets
- Non-traditional feedstuffs
- Vaccination regimes
- Management regimes



When an animal enters the FIRE station, the RFID ear tag allows FIRE to assign all measurements to records for each animal.



RFID technology is the heart of the Osborne FIRE System. Each animal is uniquely identified with an RFID tag.



**Integrated Function Controller**  
automatically operates each unit, collects and stores data.

# FIRE<sup>®</sup> System Components

Each FIRE single-space feeder serves about 12 to 15 animals without measurable feed restriction. They have free access to the trough at all times. Refilling and feed weighing never interrupt eating as with other testing systems. The FIRE feed trough, made of durable Osborne RTM-Glas<sup>™</sup> fiberglass, is suspended on a sensitive load cell that weighs the trough and feed. The feed hopper holds approximately 108 lbs. (49 kg)\* of feed, and with the optional hopper extension kit, feed capacity is increased by approximately 75 lbs. (34 kg)\*. The all new feed saver front panel is made of impact- and corrosion-resistant plastic and features reversed inside angles to minimize wasted feed accumulating under the suspended feed trough.

The trough mount and load cell are protected by an isolation mechanism and a sturdy enclosure that houses a highly accurate feed dispensing system. FIRE automatically stores the time and duration of each visit, along with the weight of feed consumed. This information is transferred in real-time to your computer and used to generate management reports or studied in relation to environmental, genetic, and nutritional variables.



Mark IV FIRE Feeder  
Catalog #: FR-000FD5

## Choose the Type of Protective Race

While the FIRE Feeder can be used as a stand-alone feeder, we offer optional protective races to eliminate the chance dominant animals might produce atypical results. These races help FIRE Feeders simulate commercial multi-opening feeders more accurately. Race width is adjustable to match the size of your animals.



The **Shoulder Race** permits moderate competition by shielding the head and shoulders.

**Catalog #:** FR-000RC3



The **Full-Body Race** limits competition further by shielding the animal's entire body.

**Catalog #:** FR-000RC2



The **ACCU-ARM<sup>®</sup> Weigh Race** is a full-body race with an integrated animal scale. Daily median animal weights, weight gain, and feed-to-gain efficiencies can be measured daily or averaged over time.

**Catalog #:** FS-000FS5 (All galvanized)

**Catalog #:** FS-000FS8 (SS floor, sides and links)



# ALL NEW WinFIRE RT™ Software

With FIRE you get full and accurate performance information to make sound management and financial decisions. The FIRE System provides unparalleled accuracy by eliminating data collection errors and operator bias. You will have added confidence in the information you gather because of the much larger number of animals you can test with little or no increase in cost.

## Evaluation And Management Made Easy

Each FIRE Feeder is a stand-alone unit that includes a sophisticated Integrated Function Controller (IFC) with its own microprocessor and memory. Data is continually transferred to your PC where it can be viewed and studied in real time with the all new WinFIRE software application. These data files are easily exported to popular data management, spreadsheet, and graphing programs.

FIRE data is presented in many useful reports. All of the measurements are available in the Event Log, but individual reports provide user-controlled data filters that let you screen and summarize the data your way.



**Animal Performance Screen** summarizes key data for each animal - its daily feed, median weight, number of meals, and total feeder occupancy time.

## FIRE Performance Data Collected

- Daily Feed Intake & Total Feed Consumption
- Time & Duration of Each Meal
- Total Meal Events
- Body Weight & Daily Change *(when equipped with weigh race)*
- Feed Conversion

## Indicates

- Changes in health status
- Changes in growth

**The Event Log** records every feed station visit, producing a wealth of information.

**Minimum PC requirements for WinFIRE include:** MS Windows® 7, 8, or 10 - 32 & 64 bit operating system; 1 GB free hard drive space; 1 RS-232 serial port or 1 USB port; CD-ROM or DVD drive



## Osborne FIRE® Feeder Options

Catalog Number	Description	Finish	Dimensions in (cm)
FR-000FD5	Mark IV FIRE Feeder <i>(Install on solid, level concrete surface)</i>	Galvanized	27 x 26 x 54-3/8 (68.6 x 66 x 138)
FR-000RC3	Shoulder Race	Galvanized	Adjustable Side Panels 5-1/4 to 20-1/4 x 18-1/2 x 30-3/8 (13.3 to 51.4 x 47 x 77)
FR-000RC2	Full-Body Race	Galvanized	Adjustable Side Panels 5-1/4 to 20-1/4 x 41 x 32-1/2 (13.3 to 51.4 x 104 x 82.6)
FS-000FS5	ACCU-ARM® Weigh Race	Galvanized	Adjustable Side Panels 40 x 26 x 58 (101.6 x 66 x 147.3)
FS-000FS8	ACCU-ARM® Weigh Race	Galvanized with 304 Stainless Steel floor, sides and links	Adjustable Side Panels 40 x 26 x 58 (101.6 x 66 x 147.3)

## Osborne FIRE® Feeder Accessories

Catalog Number	Description	Specifications
KR-FFD414	FIRE Feeder Lift Kit	<b>Required</b> if using Feeder with Weigh Race. Raises Feeder off ground away from debris for more accurate weighing.
KR-HP1100	Feed Hopper Extension Kit	Polyethylene construction with clear window for visual confirmation of available feed. Adds approximately 75 lbs. (34 kg) of feed to the hopper. (Optional lid RMX-1041)
KR-CTE120	UPS Power Conditioner	700 VA, 110 V, 24-station maximum
REW-3600	Electrical Cable	18-4 Shielded
KR-PS1000	Power Supply	24 V, 8-station maximum, includes KI-001110 Comms Module
KR-PS1001	Power Supply - International	24 V, 8-station maximum, International Connector, includes KI-001110 Comms Module <i>Contact Osborne for international country-specific power supplies</i>
KI-001100	Interface - RS485	Includes (1) KI-001400 USB to RS232 Converter Cable

### All New Hopper Extension Kit



Hold an additional 75 lbs. (34 kg) of quality feed in the feed hopper with the new Hopper Extension Kit.

- Clear window for visual confirmation of available feed
- Strong polyethylene construction
- Optional, removable lid

### Additional FIRE System Specifications

- Number of animals per feed station:  
12 - 15 head
- WinFIRE Software License:  
One (1) software license allows collection from 128 FIRE Feeders



# OSBORNE<sup>®</sup>

**WORLD  
HEADQUARTERS**

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