Auto Sort Systems

Iowa Pork Producer Meetings
February 21-25, 2005

Auto Sort Systems

- Our objective is to share industry info and producer comments
- Many different systems with advantages for your individual situation
- Advantages for the industry in terms of animal welfare??
- Advantages for people too!!

Improving Animal Welfare

- Pigs can move around!!
- Pigs load better at market time because they are used to moving around more.
- Smaller pigs can “get lost in the crowd”.
- Pigs have more room to pick their comfort zone.

PorkWorks System

- We presently have 100,000-125,000 spaces in auto sort systems
- We sell pigs to many different types/sizes of producers
- Presently Four Different Scales
- Numerous barn designs
- Both Remodeled and New Construction
Types of Auto Sort Systems

- Food Court
- Water Court
- Alley Design

Food Court Design
1,000-Head/Sort-to-Feed Position

Copyright 2003 by Farmweld

Water Court Design

FAST II Alley™ Design/Sort to Feed Position
Important Issues

- Size of food court - 15 foot??
- Adequate feeder space - at least as many feeders as in a conventional barn. Make sure gates can be arranged for load out so feeder space is still adequate.
- Pig flow for load out and vaccination
- Have 2 ft. by 2 ft. area by scale that is gated

Auto Sort Scales used in PorkWorks

- Osborne
- K&L Technical Services LTD
- Farmweld
- Sortall by Schick Enterprises
2 way sorting
3 way sorting
Software designed to fit your needs
Insert to weigh weanling pigs
Data Logger
2 stainless steel corrosion proof load cells
Super Sorter Scale Program

- Reports and graphs to track rate of gain and help predict shipping times.
- Remote indicator program that can control every action of up to 10 sorters from a remote location.
- Can be used with electronic ID’s.

Farmweld Controller

- Daily Group Histogram
  - Tells when to sell.
  - Tells where to set sort weight.
**FAST II**

- One computer controls multiple scales
- Software can be customized
- Improved weight accuracy
- Analyzing Data
  - Average daily gain
  - Feed efficiency
  - Market projections
  - Group comparisons

**Patented Pig Flow**

**Farm IQ Software**
- Apply Sort Modes
- Analyze Statistics
- Run Diagnostics
• Control Multiple Scales with FarmIQ Software

Styles of One Way Gates
- Solid Sided Tunnels with one gate
- Open sided Tunnels with one or two gates
- In line with individual fingers

Solid Sided One way
Open Sided One way

In Line with Individual Fingers

Typical Food Court

Loafing Area
Sort off area

Cost of Auto Sort System

- A typical remodel will cost $10-$20/pig space. Variables include labor, # of scales, additional feeders in load-out, waterers in loafing area.
- An auto sort system in new construction will add $5.00-$7.00/pig space.
- An alley design (re-model) will run around $10-$13/pig space.

Benefits

- Much tighter sort
- Off feed, easier loading
- Less Labor, less people injury
- Animal welfare/large groups/happier pigs
- Less deads on trucks and at plant
- Ability to feed multiple diets
- More profitable-barn utilization

Manual Sort Distribution

Distribution in ALL Weight Ranges
### Auto Sort Distribution

**Distribution in ALL Weight Ranges**

### Advantages Comparing Previous 2 Slides
- Px on sort barn was .2% higher ($.30/pig)
- 3 Lbs heavier carcass overall with sort barn ($1.20/hd)
- Maximizing value of each individual animal.
- Value for taking pigs off feed??
- Not selling any pig before it’s time???
- Remember, these values are only for these 2 shipments. Your results may vary.

### Disadvantages
- Treating individual pigs
- Getting pigs to sick pens
- Starting pigs, may have more wet area?
- Need barn warmer as you start a group vs. conventional (74 degrees?)
- 1 scale harder to manage/1000 hd than 2 scales but can be done

### Producers Experiences
- Learning Curve - settings on scale
- Broken air line/maintenance of compressor
- Pigs caught in the scale
- Calibration off due to build up under the scale - 10 to 15# off due to build-up, pigs weighed lighter than actual
- Light pigs sorted off for market - pigs doubling up on scale, not having eye cleaned
General Observations

- Pigs appear Happier
- Improved Animal handling/Welfare
- Target packers “sweet spot”
- The scale is only as good as the operator

The End Result

Questions

- How has the scale made you a better producer?
- Do your animals handle differently?
- How has it changed time/labor required to load?
- Has the amount of time spent in the barn changed?
- How do you compensate for shrink from your farm to the plant?
- Is the scale another useful tool in detecting the onset of health problems?