

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

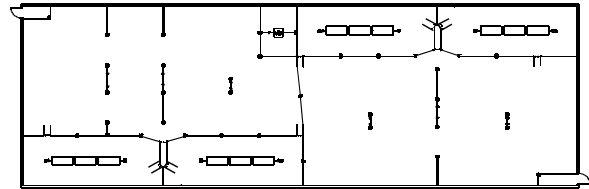
- ◆ We presently have 100,000-125,000 spaces in auto sort systems
- ◆ We sell pigs to many different types/sizes of producers
- ◆ Presently Four Different Scales
- ◆ Numerous barn designs
- ◆ Both Remodeled and New Construction

Types of Auto Sort Systems

- ◆ Food Court
- ◆ Water Court
- ◆ Alley Design



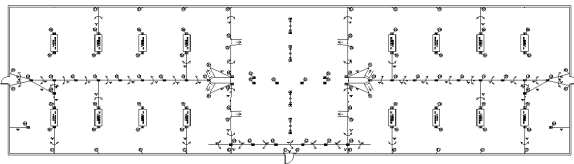
Food Court Design
1,000-Head/Sort-to-Feed Position



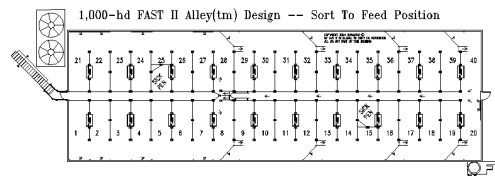
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Water Court Design



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

Osborne Scale



Osborne Entrance



Osborne Controller



Osborne Exit



K&L Technical Services Scale



Superior Product Design

- ◆ 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.

FASTⁱⁱ



FARMWELD

Farmweld Controller



FASTⁱⁱ



Daily Group Histogram

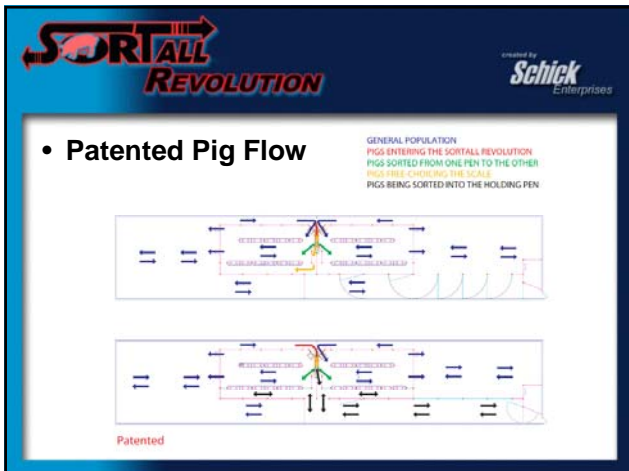
- Tells when to sell.
- Tells where to set sort weight.



SORTALL REVOLUTION

created by **Schick Enterprises**

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



SORTALL REVOLUTION

created by **Schick Enterprises**

- **FarmIQ Software**
 - Apply Sort Modes
 - Analyze Statistics
 - Run Diagnostics

FarmIQ

Schick Enterprises

SortAll Revolution powered by Schick Enterprises

- Control Multiple Scales with FarmIQ Software

North Scale ENABLED

Scale Type: SortAll Revolution
IP Address: 192.168.0.74

EDIT ADD DELETE

SortAll Revolution powered by Schick Enterprises

Dec 26, 2004 1:10 PM

Apply Modes Statistics Diagnostics System

BUILDING # 1 ENABLED

Current Mode: Prime Check - Right

Mode history: 11/26/04 11:35 AM Sort Right to Holding

Weight Distribution Graph

Sort Right to Holding

Weight Range

Weight Range	Readings	Sorted	Planned
0-100	0	0	0
100-150	11	0	0
150-200	81	0	0
200-250	170	0	0
250-300	206	0	0
300-350	276	0	0
350-400	422	0	0
400-450	489	0	0
450-500	511	0	0
500-550	27	0	0
550-600	0	0	0
600-650	0	0	0
650-700	0	0	0
700-750	0	0	0
750-800	0	0	0
800-850	0	0	0
850-900	0	0	0
900-950	0	0	0
950-1000	0	0	0
TOTAL	1088	1001	0

Statistics features available in Version 2 (currently in development)

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

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Open Sided One way



In Line with Individual Fingers



Typical Food Court



Loafing Area



Sort off area



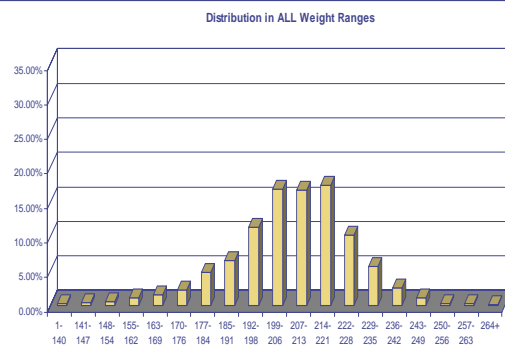
Cost of Auto Sort System

- ◆ 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
- ◆ In alley design(re-model) will run around \$10-\$13/pig space

Benefits

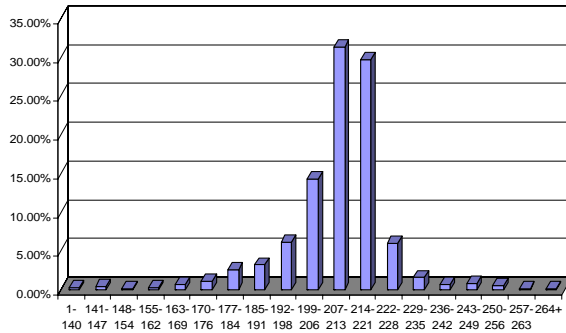
- ◆ Much tighter sort
- ◆ Off feed, easier loading
- ◆ Less Labor, less people injury
- ◆ Animal welfare/large groups/happier pigs
- ◆ Less deads on trucks and at plant
- ◆ Ability to feed multiple diets
- ◆ More profitable-barn utilization

Manual Sort Distribution



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

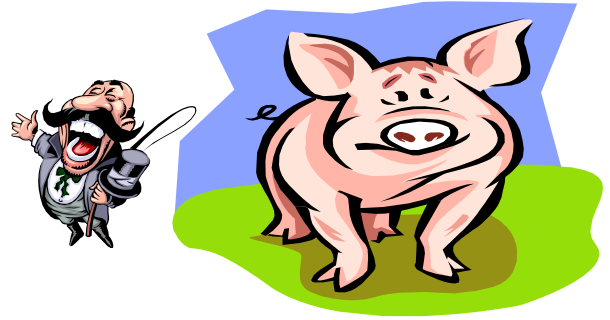
Producers Experiences

- ◆ 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?