

“WHEN DESIGN ENGINEERING MEETS FEED TECHNOLOGY”



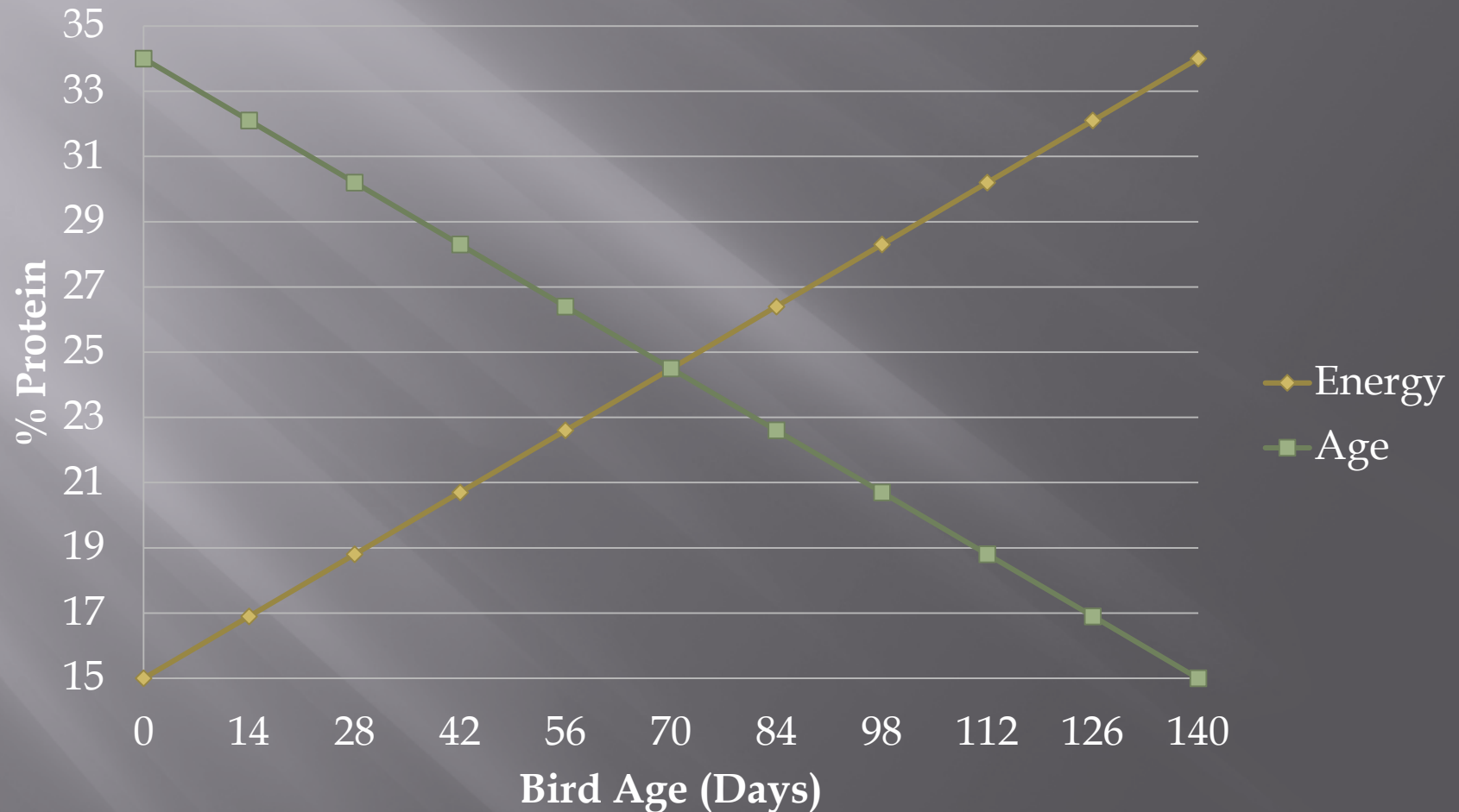
GENERAL ENGINEERING CONTRACTORS
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MILLWRIGHTS

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Integrity is our true metal...



“Phase Feeding”



Formula Requirements

- Three (3) Starter Diets
- Four (4) “Basal” Diets or “Base” Formulas
- Eight (8) Blended formulas consisting of different ratios of basal formulas to meet the optimum nutritional needs of the birds at their given age.
- Fifteen (15) Formulas total.



New Truck Loadout Goals...

- Ability to accomplish phase feeding principle in a cost effective way.
- Keep total number of formulas produced to a minimum.
- Increase truck loading time.
- Build in features to promote operational efficiency, personnel and feed safety.
- User friendly system.



The Project Begins...

- Four (4) 250 ton capacity hopper bottom bins for “Basal” diets.
- Eight (8) 80 ton capacity bins for individual diets.
- High and Low Level Sensors on bins.
- Bin Vibrators to promote product flow.
- Variable Frequency drives (VFD's) on basal bins for accurate feeding & weighing.
- Inline Mixer for blending basal diets.
- En Masse collection drag conveyors and loadout conveyors.
- Automatic Samplers
- Spacious interior design with plenty of room to work.
- Interior designed to promote easy housekeeping.







Basal Feed Bins and Hoppers

- Each 250 ton capacity “Basal” bin fitted with a 24” variable pitch screw feeder controlled by a VFD.
- Two bins convey product simultaneously at different rates into and inline ribbon blender to create a formula tailor made for the birds age and nutritional needs.
- Following blending, finished feed is conveyed via en masse drags to feed delivery trucks.







Truck Loading Process

- Zero weight is captured prior to the truck pulling onto the scale
- Driver pulls truck into loadout, enters truck and trailer number and selects load to be hauled.
- Loadout system is controlled by a Repete Duratec Touch Screen Panel.
- System is started automatically and truck is loaded with a predetermined amount placed in each compartment on the trailer.
- Near the end of the loading process, bins close and system is allowed to cleanout based on product freefall.
- When loading is complete, all gates open simultaneously for a final cleanout of the system.
- 25 ton loads of feed are loaded in 6 minutes.



Product Sampling

- Samples are taken automatically every 45 seconds during loading to create a representative sample of the entire load.
- Samples from each load of finished feed are retained on site.



Benefits of the New System:

- Fewer formulas = Larger runs of feed
- Eliminates starting and stopping of equipment resulting in a higher quality, more durable pellet.
- Ability to implement the phase feeding principle to optimize nutrition to the flocks being fed.
- Consistent breast meat yields at the processing plant resulting in an additional \$1.15 million dollars in annual revenue.



Project Recap

- 10,366 total man hours from start to finish without a recordable or lost time accident.
- Two Year Project Timeline from Start to Finish.
- Total Project Cost:
\$ 4,073,670.00



2020 GFIC GOLDEN BUCKET ENTRY



REMEMBER TO CAST YOUR VOTE!