

FINANCIAL BENEFITS FROM HATCHCARE

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**HatchTech Breakfast Meeting
IPPE Feb. 13th 2019**

ADOPTION OF HATCHCARE

- | <u>Years</u> | <u>Installations</u> | <u>Chicks/week*</u> |
|--------------|----------------------|---------------------|
| 2014-2016 | 5 | 4.2 m. |
| 2017-2018 | 9 | 10.2 m. |
| Ordered | +20 | +20.0 m. |
- *Range 0.4m to 2.5 m chicks/week.

REVIEW OF TRILLIUM HATCHERY, ONTARIO



VISCOM MODULE ADDING FEED TO BASKETS



HATCHER BAY



RACKS AT PULL



CHICK BASKET BEFORE HATCH COMMENCES



CHICKS EMERGE OVER A 24+ HOUR WINDOW



HATCH RESIDUE IN TRAY



CHICKS IN HATCHCARE BASKET. NO RESIDUE



CHICKS DRINK WITHIN MINUTES AFTER DRYING



CHICKS EAT WITHIN MINUTES AFTER DRYING



FINAL INSPECTION



HATCHTRAVELLER TRANSPORT SYSTEM



JUSTIFICATION FOR HATCHCARE

- Irrespective of length of hatch window HatchCare:-
- Allows individual chicks to drink soon after drying to avoid dehydration.
- Allows individual chicks to eat soon after drying to expedite absorption and metabolism of yolk and to promote intestinal development

HATCHCARE LOWERS STRESS ON CHICKS

- Constant light intensity at 25 foot candles from LED arrays.
- Low noise level in hatcher
- CO₂ <1,500 ppm; Humidity <55%
- Chicks have no contact with hatch residue.
- Adequate space (7.5" per chick) in basket, 40% more than conventional
- Chicks are vaccinated, counted and delivered in the same basket

IMPROVED BIOLOGICAL CHICK PARAMETERS

- From Hatch to pull:-

- Parameter Conventional HatchCare

• Chick weight	-6.0%	+4.0%
• Yolk absorption	+3.8%	+ 4.3%
• Intestinal mass	+0.9%	+1.4%

HATCHCARE ADVANTAGE IN EU COMPARISONS

- EU Standard vs. HatchCare: 2.5 million broilers
- Hatchability: +5.3% to 87%
- Chick mass: +12% to 52g
- 7-day mass; +9.5% to 190g.
- 42-day livability; +1.6 to 95.6%
- 42-day mass: +4.9% to 5.08 lb.
- FCR: -2% to 1.51
- EPF: +7.9 to 352 Valued at 26 U.S. cents per bird

IMPROVEMENT FROM HATCHCARE: CANADA*

- Comparison 2015 to 2016
- Hatchability 85% to 90%
- 7-day weight 170g to 190g
- 7-day mortality: 2.1% to 1.3%
- 2015: 5.01 lb. 40 days, 1.68 FCR
- 2016: 5.57 lb. 41 days, 1.66 FCR
- *Synergy Hatchery Nova Scotia,

U.S. SIMULATION USING HATCHCARE: VALUES

<u>Current</u>	<u>Improvement</u>	<u>HatchTech</u>
6.51 lbs. lbs.	+5%	6.83
1.82 FCR	-3%	1.77 FCR

U.S. SIMULATION USING HATCHCARE; \$ BENEFITS

- Reduced feed cost: 0.6c/Lb.live
- Reduced chick cost: 0.3c/Lb. live
- Reduced live cost: 0.9c/Lb. live

At 1 million/week reduced cost = \$61,200

For calculation of Net Benefit assume
\$50,000/week or \$2,600,000 /*annum*

PROJECTION OF PRESENT VALUE OF BENEFITS

- YEAR 1, 2, -----10.
- Discount Factor @ 5%: 0.95, 0.91 ---- 0.61
- Annual benefit, \$million: \$2.47, \$2.37---\$1.59

Assuming a conservative \$50,000/week saving in cost, the Present Value of annual benefits from HatchCare represents \$10.9 million over 10 years with a 5% discount factor

BENEFIT RATIO FOR INVESTMENT IN HATCHCARE

- Assume incremental capital cost for HatchCare over conventional incubation amounts to \$1,4 million for a capacity of 1 million chicks per week.
- Net present value of benefits is \$10.9 million
- Ratio of discounted benefits to incremental capital cost is:-
 - $\$10.9\text{million}/\$1.4 \text{ million} = 7.8$

- **THANK YOU**

- **QUESTIONS**

- **COMMENTS**