#### USDA AUTOMATION UPDATE

# DEMONSTRATION VIDEO

#### CONVENTIONAL USDA INSTRUMENT CLASSIFICATION



- COUPLED
- BOTH CABINETS CABLED TOGETHER
- CONDITIONING
  - REQUIRES ENTIRE SAMPLE TO BE CONDITIONED
  - LARGE EQUIPMENT REQUIRED
  - 10 MINUTE CONDITIONING TIME
  - TRAY CONTAINS 10 15 SAMPLES
  - OPERATOR HANDLES 80 TRAYS PER DAY
  - FATIGUE
- MICRONAIRE DONE BY OPERATOR
  - NARROW WEIGHT RANGE
  - PLACING SAMPLE IN CHAMBER IS IMPORTANT

### CONDITIONING & CONVEYANCE SYSTEM CCS ABILENE, TEXAS



- COUPLED
- TRAY CONTAINS SINGLE SAMPLE
  - NO HANDLING TRAYS
  - REDUCES OPERATOR FATIGUE
  - PRODUCTION INCREASES
- CONDITIONING
  - ONLY SUB SAMPLES CONDITIONED
  - SMALLER EQUIPMENT
  - 2 MINUTE CONDITIONING TIME
- REQUIRES HVI 1000 AUTOMIC
  - MICRONAIRE SAMPLE PRE-WEIGHED
- OCTOBER 2015 ~ 1,000,000 SAMPLES
- 2016 ~ 1,600,000 SAMPLES
- 2017 ~ 1,800,000 SAMPLES

### CONDITIONING & CONVEYANCE SYSTEM CCS LUBBOCK, TEXAS



- COUPLED
- TRAY CONTAINS SINGLE SAMPLE
  - NO HANDLING TRAYS
  - REDUCES OPERATOR FATIGUE
  - PRODUCTION INCREASES
- CONDITIONING
  - ONLY SUB SAMPLES
     CONDITIONED
  - SMALLER EQUIPMENT
  - 2 MINUTE CONDITIONING TIME
- REQUIRES HVI 1000 AUTOMIC
  - MICRONAIRE SAMPLE PRE-WEIGHED
- INSTALLED OCTOBER 2015 ~ 1,000,000

## COTTON ACQUISITION & TRACKING MODULAR SYSTEM CMS



- DE-COUPLED
- HVI 1000 AUTOMIC REQUIRED
  - EACH CABINET IS INDEPENDENT WITH ITS OWN COMPUTER
  - SENDS DATA INDEPENDENTLY
    - COLOR / TRASH
    - LENGTH / STRENGTH
- NO TRAYS
- INDEXING CONVEYOR SYSTEM WITH RADIO FREQUENCY IDENTIFICATION TAGS FOR TRACKING
- MECHANICAL SUB-SAMPLING
- CONDITIONING
  - SMALLER EQUIPMENT
  - 2 MINUTE CONDITIONING TIME

### CONDITIONING & CONVEYANCE SYSTEM MEMPHIS, TENNESSEE



- DECOUPLED
- HVI 1000 AUTOMIC REQUIRED
  - EACH CABINET IS INDEPENDENT WITH ITS OWN COMPUTER
  - SENDS DATA INDEPENDENTLY
    - COLOR / TRASH
    - LENGTH / STRENGTH
- TRAYS
- ACCUMULATION CONVEYOR SYSTEM WITH RADIO FREQUENCY IDENTIFICATION TAGS FOR TRACKING
- HUMAN SUB-SAMPLING AND LOADING
- CONDITIONING
  - SMALLER CONDITIONING AREA
  - FASTER CONDITIONING TIME
- OCTOBER 2017 CLASSED 400,000