WHY ARE WE ALL HERE?

• Network
• Learn

• Astec goal for every meeting like this:
  • Pick up 2 or 3 good ideas…
  • AND DO SOMETHING
  • And…offer up ideas to others
  • IDEA EXCHANGE IMPROVES OUR INDUSTRY
Asphalt Plant Owners QUICK TIP

• GREAT ROI IDEA...BUY FROM YOURSELF
Mission Statement & Core Values

MISSION STATEMENT

To grow and prosper by designing, manufacturing and selling the most innovative, productive, reliable and safe equipment for the industries we serve, coupled with unparalleled customer service.

OUR CORE VALUES

Continuous devotion to meeting the needs of our customers
Honesty and integrity in all aspects of business
Respect for all individuals
Preserving entrepreneurial spirit and innovation
Safety, quality and productivity as means to ensure success
Innovating for customers since 1972
22 manufacturing facilities in seven countries
Over 260 products that are designed to improve customers’ profitability and productivity
Safety results 2X better than the industry average

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1 Ex-pellets
Engineer advanced and innovative asphalt mixing and related products to help customers maximize performance and safety

DESIGN | MANUFACTURE | INSTALL

A COMPLETE LINE OF
Portable, relocatable and stationary asphalt mixing facilities and related components and a variety of pavers, paver screeds, milling machines, material transfer vehicles and soil stabilizers

FOR
Asphalt mixing, Asphalt recycling, Soil remediation, Materials transfer, Aggregates processing and Commercial paving
Aggregate & Mining

Provide innovative solutions for the material handling, mining, quarry, recycling, construction and demolition industries

**DESIGN | MANUFACTURE | MARKET**

A COMPLETE LINE OF

Rocker breaker systems, rock crushers, feeders, vibrating screens, conveyors, washing and classifying equipment

FOR

Quarry operations, Bulk materials handling systems, Recycle processing, Open-mine, Underground mining

5 COUNTRIES IN WHICH WE OPERATE

49 PRODUCT CATEGORIES

160+ COUNTRIES WITH GROUP EQUIPMENT
Committed to honesty and integrity, with devoted commitment to supporting customers, new and old, in a manner which ensures long-term loyalty to our products

**DESIGN | MANUFACTURE | MARKET**

**A COMPLETE LINE OF**

Heaters, gas, oil and combination gas/oil burners, combustion control systems, drilling rigs, concrete plants, wood chippers and grinders, pump trailers, commercial and industrial burners, combustion control systems, storage equipment and related parts

**FOR**

Asphalt storage, Heating and Blending, Oil and Gas, Construction, Lumber, Food and Beverage and Water Well industries
ASTEC’S INNOVATIVE HISTORY

• Hot Mix Asphalt Silos – First storage silos
• Double Barrel Drum Mixers
• TC2000 Controls – First PLC Controls
• Shuttle Buggy – First MTV
• Double Barrel Green System – First Foam System
• High Frequency Screening of RAP
ASTEC’S INNOVATIVE HISTORY

• Six Pack Portable HMA Plants

• Stealth Paver

• Carlson EZ screeds (and the lunch boxes)

• Many others….some more successful than others

• And today we have our engineering departments working on R&D as a part of our culture because…
INSTEAD OF RISKING ANYTHING NEW, LET'S PLAY IT SAFE BY CONTINUING OUR SLOW DECLINE INTO OBSOLESCEENCE.
• Innovation is a part of our culture…

• OK to make mistakes…don’t repeat them

• Con Expo 2017…33 new products company wide

• A few new things coming for BAUMA 2019

• Here are some other things we are working on today…. 
INNOVATIONS IN THE ASPHALT INDUSTRY

• Astec Industries’ Infrastructure Group
  • Astec
  • Heatec
  • Roadtec
  • Carlson
Asphalt Mix Processing Facilities (AMPF)

• Today’s AMPF Categories

  • Hot Mix Asphalt Plants (includes Warm Mix)
    • All virgin material plants (No RAP)
    • Up to 25% RAP Plants
    • Up to 50% RAP Plants
    • Up to 75% RAP Plants
    • 100% RAP Plants
    • All the above plus alternative materials
      • Roofing Shingles
      • Glass
      • Plastics
Asphalt Mix Processing Facilities (AMPF)
Asphalt Mix Processing Facilities (AMPF)
Asphalt Mix Processing Facilities (AMPF)

- Additional Category
  - Cold Central Plant Recycling
    - In lieu of Cold in Place process
    - Control RAP gradation and AC content
    - Up to 300 TPH
Asphalt Mix Processing Facilities (AMPF)
Updated SILOBOT
SILOBOT Team
SILOBOT Package

• SAFETY
• QUALITY
• PRODUCTIVITY
Asphalt Mix Processing Facilities (AMPF)

• New and developing technologies
  • V-Pac…the Shuttle Buggy of AMPF
  • DASH + RECON
  • Intelli-PAC
  • MixRFID
Asphalt Mix Processing Facilities (AMPF)

- V-Pac
  - V Flights plus…
    - Drum speed
    - Burner and Baghouse fan speeds

V-Flights produce a uniform veil of aggregates
Asphalt Mix Processing Facilities (AMPF)

V-Pac

Lowers Stack Temperature on:
- High RAP Mixes
- Open Graded Mixes
- SMA

Raises Stack Temperature on:
- Virgin Mixes
- Low RAP Mixes

Allows running SMA and high RAP mixes back-to-back with virgin mixes without flight adjustments

*U.S. Patent No. 8,863,404 B1
• **DASH + RECON: Software Solutions**

• **DASH**
  • In re-visioning process today with IoT and smart sensors
    • Predictive Maintenance – “Maintain-Aid”

• **RECON**
  • Cellular, Alarms, Temperatures, Tank Levels, Ability to view anywhere, emails issues to you
• Intelli-PAC: Technology + Software Solution
  • Read Moisture on Belt
  • Read AC content in RAP on belt
  • Visual indications on when to adjust on screen
    • NOT AUTOMATIC
  • ON a plant…in testing now
Satellite Silo System – Late ‘80s and ‘90’s
Satellite Silo System - Today
The Opportunity
Material build-up in asphalt tanks
The Effect
Physically clean asphalt tanks
The Solution

Build a tank that reduces material to build-up
The Finished Product

A design that reduces/eliminates tank cleanings
The Proof

No build-up
Asphalt Mix Processing Facilities (AMPF)

• **MixRFID**
  
  • To give Contractors and DOT ability to track “lots” of mix on the road
  
  • Uses RFID technology in the pavement
  
  • In testing at NCAT on 17 test sections
RFID: Radio Frequency Identification

Lot track, truck tracking and paperless ticketing get all relevant data to the Paving Site.

With all the data at the paving site, let’s put a physical marker to tie it all to its exact GPS location.
DogBone style tags: Largest antenna for greatest cross section. Durable, reliable. Custom Number series for Astec, Unique numerical ID per tag
Bumper Mount Antennae

Reader, WiFi, Power

Tablet with Application

RF App Interface
Asphalt Mix Processing Facilities (AMPF)

• Astec at NCAT
  • Serve on the Board of Directors
  • Active in Track construction projects
    • East Alabama Asphalt
    • NCAT
    • Astec + Roadtec + Carlson
  • Over six figures per year on average invested at NCAT for industry advancement
Mobile Equipment

- Today’s Mobile Asphalt Equipment
  - Material Transfer Vehicles
  - Paving Machines
  - Rollers
  - Milling Machines
  - Brooms
Guardian

Two-way communication
Factory support
Engine Data
Hydraulic pressures
Reprogram automatics
Calibrate sensors
SB-2500e Shuttle Buggy Material Transfer Vehicle
Spray Paver Technology

2100 gallons max capacity
Fully Recirculated
Returns to bottom of tank
4” of insulation around entire tank – no need to offload emulsion overnight
» Roadtec is currently testing with a patented design for canopies with built-in fans.

» This brings operator comfort to a new level

» Better operator comfort can help extend employee retention
Rear Object Detection
WHAT YOU CAN DO FOR YOUR FUTURE…

• Current Federal Highway Bill expires at the end of FY 2020

• Opportunity for a new bill next year

• Time to get active with letters now
  • Nov. 28 was first Senate hearing on highway bill since election…Trump working on something too

• You can make a difference

• Company, vendors, friends, enemies…good for all
DON’T LET AMERICA DEAD END

• How we innovatively approached getting more letters out in 2015

• Over 500,000 contacts each way
THANK YOU!

QUESTIONS?

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