



AtlasDrive[®] & MixLock[®]

Tarmac Innovation Challenge 21st February 2018

This is a short presentation introducing the AtlasDrive[®] and MixLock[®] interlocking safety device and the benefits to Tarmac in using these products



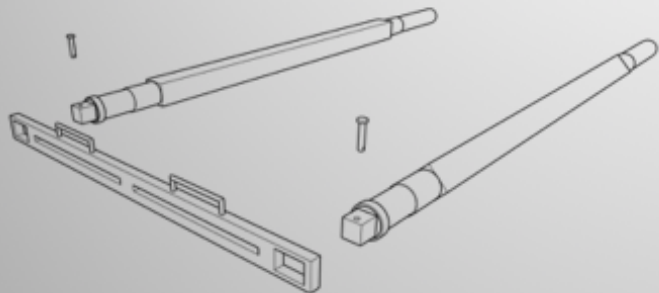
AtlasDrive®

Safe & efficient drive upgrade for asphalt mixers



MixLock®

Mechanical paddle shaft lockout system



Existing Drive



AtlasDrive® MixLock®



Existing Drive

- Existing Drive (ED) arrangement inefficient, circa 75% efficiency
- ED Service Factor ?
- ED high maintenance circa £20K PA cost for 2t mixer
- ED area space required greater than AD

AtlasDrive[®] MixLock[®]

- Atlas Drive (AD) >95% efficient
- AD 2SF
- AD maintenance is greasing weekly basis and oil change yearly
- AD is paddle shaft located. Frees up area space, creating a safer working environment

Existing Drive

- ED more drive components involved and greater likelihood of component failure, resulting in lost production
- ED uses Fluid Coupling. Relies upon a solder within a plug to melt under temp build up of oil within a coupling and then releases the hot oil to disengage drive. Hot oil moving through the environment is a danger
- ED requires significant guarding, increasing the responsibilities for the management to ensure guarding is adequate

AtlasDrive® MixLock®

- AD is a direct drive. Eliminates multiple drive components and therefore minimises likelihood of a component failure due to there being less components to fail
- AD does not use Fluid Coupling. It uses an inverter to control any overload, which is an improvement in safety
- AD guarding requirement is significantly less

Existing Drive

- ED does not have a fixed maintenance plan
- ED high DB noise level
- ED max tonnage per batch mix is limited

AtlasDrive[®] MixLock[®]

- AD is supplied with a maintenance plan which is simple, low cost and effective
- AD significantly reduces DB level
- AD has higher power and efficiencies enabling larger batch sizes

Existing Drive

ED DOES NOT HAVE A LOCKING MECHANISM FOR PADDLE REPLACEMENT/INGRESS FOR PERSONNEL INTO MIXING CHAMBER. THIS IS CURRENTLY DONE ON AN IMPROVISED BASIS.

THERE IS NO INDUSTRY SPECIFIED MECHANICAL LOCKING OUT PROCEDURE

AtlasDrive® MixLock®

MIXLOCK® PROVIDES A MECHANICAL LOCKOUT OF THE MIXER SHAFTS ALLOWING SAFE PERSONNEL ENTRY INTO THE MIXING CHAMBER. MIXLOCK® ENABLES THE INDUSTRY TO SET A MANDATORY SAFETY STANDARD. MIXLOCK® IS SUPPLIED WITH EVERY ATLAS DRIVE.

Driveline Engineering 'a commitment to excellence'.