



YASKAWA

## Case Study

### Mobile Bay - Bankhead Tunnel

#### Highlights:

- Two 400hp Drives
- 460V, NEMA 12
- Application: 14 foot exhaust fans running 24/7 using demand control strategy
- Estimated Payback: < 6 months.

**Site Brief:** Originally, a two-speed 25/50hp motor/chain drive started the double shaft fan. When the 50hp winding reached full speed, the 400hp, 600rpm motor kicked in on the other fan shaft. All of this was necessary to get the high inertia fan up to speed without destroying the 400hp motor.

The two-speed motor and oil bath chain drive were eliminated and replaced with one 400hp Yaskawa variable frequency drive. Finally, both of the 400hp motors were rewound to complete the retrofit project. An analog input from carbon monoxide monitors in the tunnel determines drive speed.

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