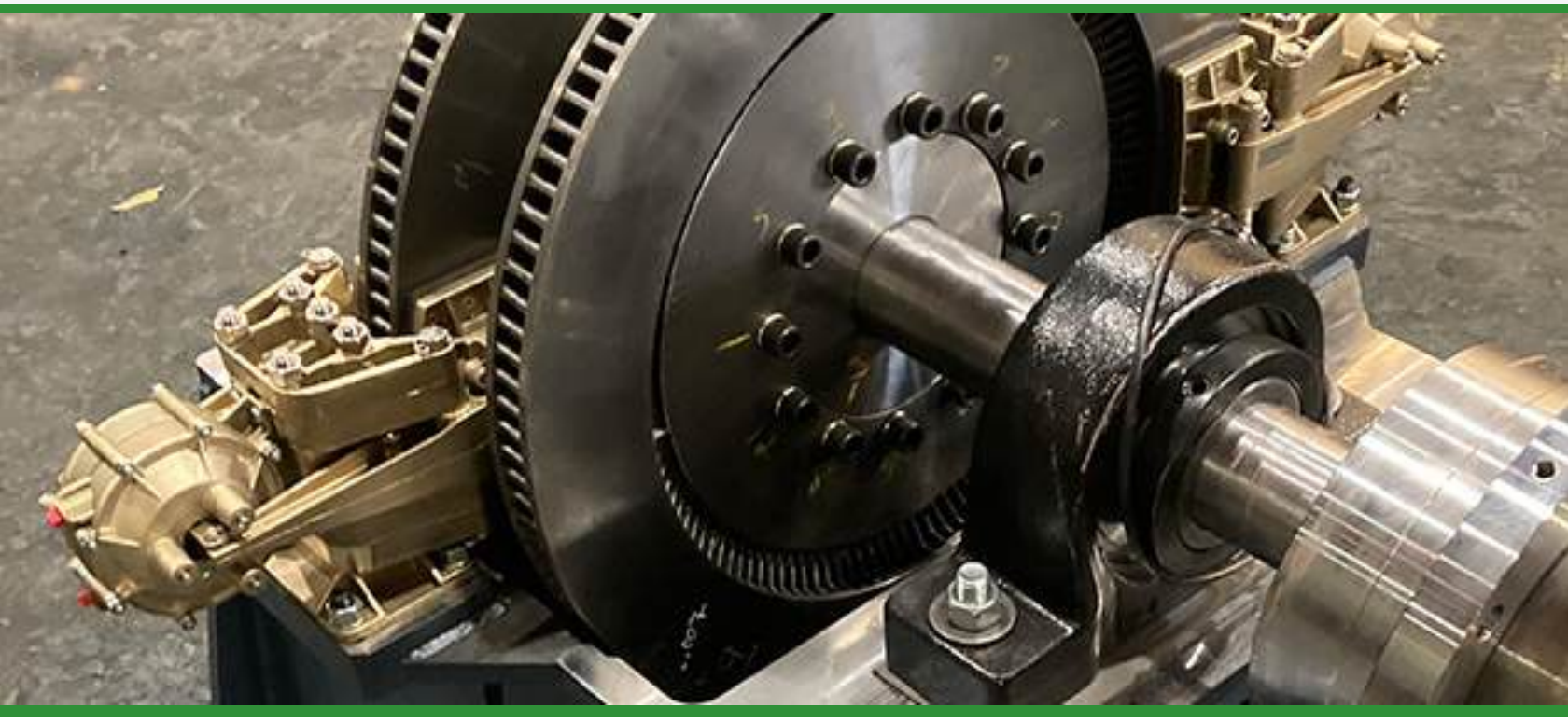
SafeTBrake



A safety-inspired product innovation designed by ProcessBarron experts in 2022.

The Fan **SafeT**Brake is a reliable solution that stops and locks a fan rotor, providing a safe and secure maintenance environment for personnel.

Integrated safety switch that ensures lock-on shaft with permissives for stop and start.

Prevents free-spinning and protects against fan component damage on start.

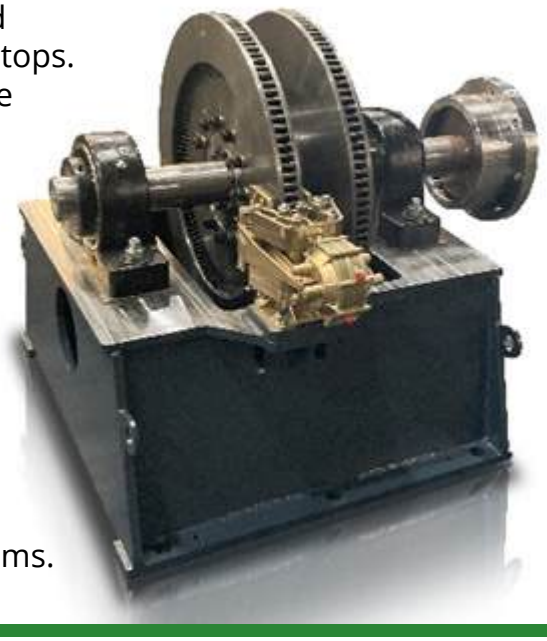
Stop time with 50 psi supply air pressure less than one minute.

ProcessBarron
Handle Everything Better

www.processbarron.com | 205-663-5330 | 2770 Welborn Street | Pelham, AL 35124

Design Considerations and Supply Scope

- **Torque & Safety:** Provides sufficient torque with a safety factor to safely stop and hold the fan rotor, accounting for large weight, inertia, and WR^2.
- **Power Dissipation & Temperature Control:** Manages acceptable power dissipation during dynamic stops while controlling operating temperature to avoid overheating.
- **Custom Engineering:** Fully customized system tailored to meet specific performance and safety needs.
- **Dual Disk Brake System:** Equipped with high-energy disks and air-applied calipers, ensuring reliable braking for high-inertia stops.
- **Mounting & Support Structure:** Includes a stub shaft for brake disk mounting, a mounted pedestal for bearings and caliper assemblies, and options for outboard concrete pier or structural support base with required stiffness.
- **Control & Safety Features:** Integrated control package with manual on/off push-button switch, safety interlock with motor in the control panel, and guarding for all rotating equipment.
- **Power & Compressed Air Requirements:** Operates with a 120V/1Ph/60Hz electrical supply and a compressed air source of at least 50 psi, including an accumulator tank.
- **Signal Integration:** Signal line from motor control center connected to relay for seamless integration with existing systems.



Plant Production = $1,487 / minute

Fan trips & starts rotating backwards:

	TIME	COST
Prior to STB	45 minutes	$66,916
With STB	5 minutes	$7,435

SCAN HERE

Phone:
888-663-2028

Emergency Repair:
800-226-3267

Mailing Address:
PO Box 1607
Pelham, AL 35124

www.processbarron.com