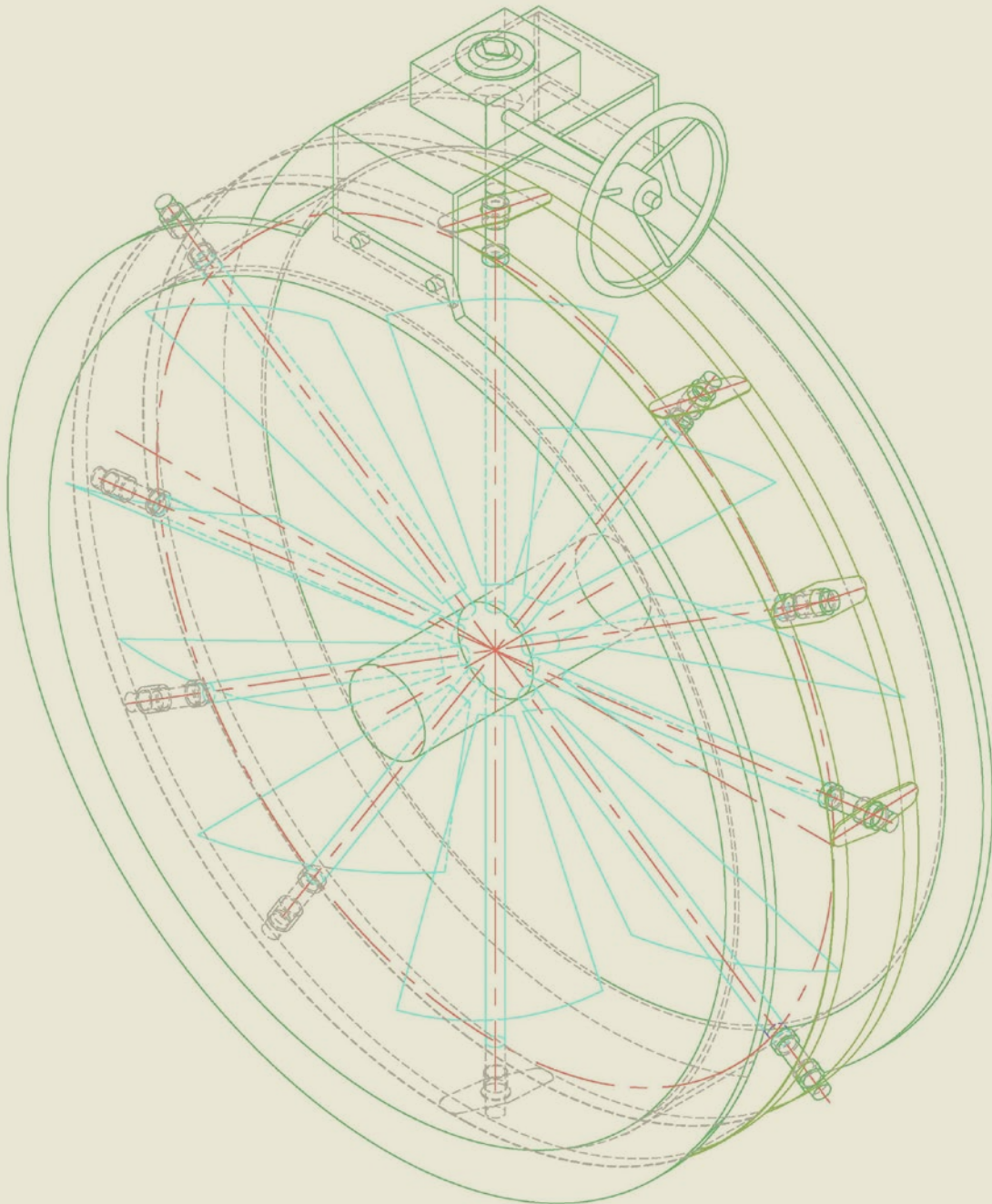


DAMPERS



Engineered Composite Systems has over 20 years of experience in the design and manufacture of corrosion resistant dampers. While the general design and performance of our dampers is standard, all units are manufactured to meet each individual application. These options include, but are not limited to the following:

- Various resin systems
- Internal liner thickness and make-up
- Flange configuration
- Body length
- Shape (round, oval, rectangular)
- Variations in metallic parts (stainless, hastelloy, titanium)
- Seal material
- Operators (electric, pneumatic, worm gear)
- Access options (extended shafts, chain-wheels)

ECS X-line Composite Butterfly Dampers



Models

X01: Inexpensive Volume Control

- No internal seals or stops
- Used to regulate volume at fans or intake points

X02: Ultra-low Leakage Isolation

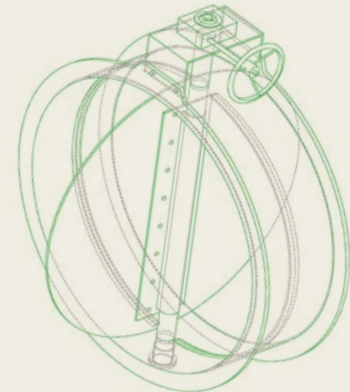
- AMCA tested for pressure drop and leakage
- Internal blade stop and seals limit leakage
- High velocity and pressure capabilities
- Low pressure drop

X03 – Bubble tight (Zero Leak)

- PTFE inner seal
- AMCA bubble-tight testing

Features and options of the X-line

- Custom configurations
- Various operator options
- Full corrosion barriers on all internal surfaces
- Double O-ring FRP packing gland shaft seals



ECS MB-01

Multi-Blade damper for shut-off balancing

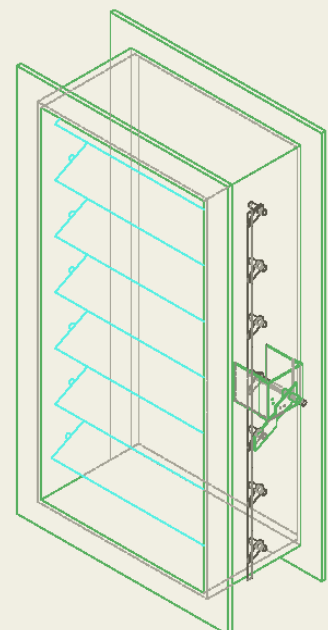


Advantages of the ECS MB-01

- Minimal outside space requirement
- Low Maintenance cost
- Tight, vibration free linkage
- Excellent corrosion resistance against most all major gas streams
- High quality composite construction
- Custom configurations / shapes
- Double O-ring shaft seals

Applications

- Fan Inlet Boxes
- Intake points
- Fan outlet



ECS IV-01 Variable Inlet Vane Dampers

Radial vane dampers exploit the properties of fans by pre-spinning air, affecting rotation of the air to reduce fan pressure without degrading speed. The ECS IV-01 allows for precise volume control where standard butterfly dampers do not.

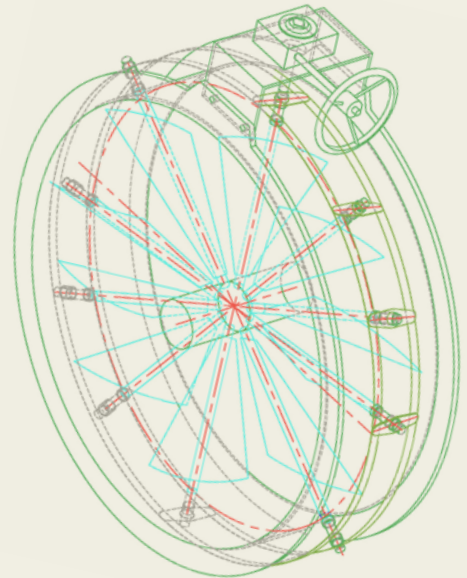


Advantages of the ECS IV-01

- Very good for modulation and flow control
- Fast operating speeds
- Minimal outside space requirement
- Low maintenance cost
- Tight, vibration-free linkage
- Low torque operation through the entire range of open / close
- Excellent corrosion resistance against most all major gas streams
- High quality composite construction
- Custom configurations / shapes
- Double O-ring shaft seals

Applications

- Precise volume control
- Increasing fan efficiency
- Reduced intake turbulence



ECS BD-01 Back-Draft Dampers

Back-draft dampers allow immediate isolation of an air stream or air space upon loss of pressure.

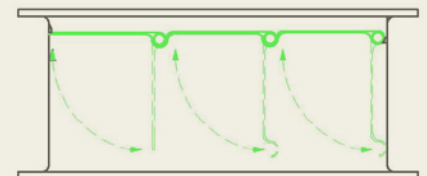
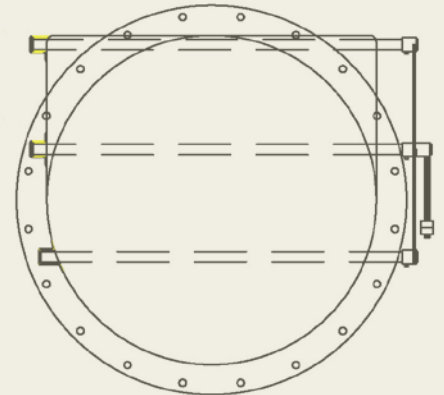


Advantages of the ECS BD-01

- Double O-ring shaft seals
- Optional blade seals for low-leak applications
- High-quality composite construction
- Custom configurations / shapes
- Immediate reaction
- Adjustable external counter-weight allows for pressure control

Applications

- **Gooseneck Intakes:** Opens to allow fresh air into a contained area where foul air is being drawn and shuts when air flow is neutralized
- **Fan Outlets/Inlets:** Prevent backflow through the fan or ductwork system. Also used to isolate a fan and keep it from spinning backwards without complicated automation.
- **Exhaust Stacks:** Prevent backflow of fresh air into an odor control vessel when it is not operational



In addition to in-house testing, ECS dampers are tested in an independent AMCA certified laboratory to confirm performance. Engineered Composite Systems is pleased to offer a *complete* line of fiberglass dampers to complement our fiberglass ductwork systems.

ECS Dampers are made with Quality and Value in mind specifically for your application



Large Quantity Orders with Quick Turn-Around



Innovative Inlet Vane Damper Design



ECS Dampers Are Shipped Ready for Field Installation



Custom configurations Allow For Maximum Flexibility In Design



Designed to maximize efficiency with the same innovative approach that ECS is know for.



AMCA Certified



ECS Dampers: Durable, Efficient and Economical

