



# AIR FLOAT CUT-OFF SERIES II CUT-OFF MACHINE WITH AIR FLOAT TABLE





# **FOX®** Air Float Cut-Off

# Cut-Off Machine with Air Float Table

The Fox® Air Float Cut-Off machine is ideal for gate and riser removal on small to medium size castings, or castings on runner bars or trees. This system excels at cutting castings produced in small to medium runs, because fixtures are easy to change. The machine is also well suited for processing castings that are too heavy for operators to handle, as the air float feature makes moving large weights almost

effortless.

The Air Float Cut-Off incorporates a hydraulic down-pressure system and an air floatation table with the appropriate hydraulics and controls. Compressed air is used to "lift" the gondola to allow the operator to "float" it around the table and into the proper cutting position. Once in position, a vacuum is used to securely hold the gondola in place during cutting. The casting gondola is designed to accommodate interchangeable fixturing to secure the casting, increasing the flexibility of the system as a whole. A low power laser is mounted to the machine to display a vivid red line showing the cut path of the wheel, aiding in the alignment process.



Hydraulic down force provides for quicker, cooler cuts with less blade wear. In all cases, the casting needs to be securely fixtured when using hydraulic down force. When using hydraulics we offer "On Demand" operation. This is where the saw is balanced and can be easily pulled down to make a scoring cut before hydraulic down force is applied.

Fox® grinding and cutting equipment has proven reliability, and is designed to work effectively in rugged, dirty foundry environments. Designed for maximum up time with the highest quality components, Fox® equipment is assembled and arranged for easy service. Precise cutting and efficient processing is only part of the design, to truly enhance this system Vulcan has added several advanced safety features.

Model No.	Wheel Size	Wheel Speed	Motor	Wheel Type	Table Size
4PMC-AF	24 in x 3/16 in x 1 ¾ in (600 mm x 5 mm x 45 mm)	14,200 SFPM at 24 in (72 m/s at 600 mm)	40 HP (30 kW)	Straight or Depressed	6 ft x 5 ft (1.8 m x 1.5 m)
6PMC-AF	20 in x 3/16 in x 1 in (500 mm x 5 mm x 25 mm)	14,200 SFPM at 20 in (72 m/s at 500 mm)	40 HP (30 kW)	Straight or Depressed	6 ft x 5 ft (1.8m x 1.5 m)

\*Features and options subject to change without notice









#### **Machine Features**



Casting Gondola: Stabilized with 3 floatation pads. Foot operated pedal for floatation to keep hands free for positioning gondola. Gondola secured to the table with vacuum during cutting. Optional fixturing can be provided.



**Pneumatic/Vacuum System:** Foot operated electric control pedal for floatation to keep hands free for gondola movement. Pneumatics allow the gondola to float for easy movements; the vacuum system secures the gondola to the table during cutting.



**Backbone:** heavy-duty structural weldment, balance for ease of use, can be manually or hydraulically operated.



Air Float Table: Table is heavy-duty construction and Blanchard ground. The table can be turned over if worn or damaged, or completely replaced.



**Laser Alignment System:** A Low-power laser mounted to machine for quick, easy alignment of the cut-off wheel.



**Hydraulic Unit:** for hydraulic down force with "On Demand" operation.

#### Safety Features



**Rotating Wheel Guard:** This allows the operator to move, re-align, and change castings safely without having to turn off the motor each time. The wheel guard technology includes sensors that are connected to a safety circuit. When pulling the handle down to start cutting the guard opens, allowing the operator to perform a cut.



Operator Safety Door: The operator safety door has a Lexan window with an easily replaceable Plexiglas splatter shield. This allows the operator to be protected from debris while still being able to see the material being cut. The safety door is interlocked with the safety circuit allowing the saw to only be operated when the door is closed.



**Safety Shutoff Valves:** Both the Pneumatic and the Hydraulic systems incorporate the use of redundant safety shutoff valves with monitoring.



**Operator Console with Safety** 

Lockout Key: When the operator has to change the cutting wheel, the system must be shut down. To ensure all operations are powered off or de-energized, a safety key is incorporated into both the console and the outer wheel guard. The safety key must be inserted into the dead bolt lock on the wheel guard to allow the guard to be opened to change the wheel. Once the wheel is changed and the guard properly closed, the key can be removed and inserted into the control console

allowing the saw to operate again.



**E-Stop Functionality:** There are 3 different E-Stop switches that can be utilized in this system. There are two push-button stops, one on the operator console and the other located on the electrical panel. The third option is an emergency kick switch tied to the E-Stop system for quick, hands free use.

## **OPTIONS**

### Customization to suit your cutting needs.



#### **Enclosure**

Machine enclosures can be engineered to fit your needs depending on various applications. Right and left sides can have hinged steel doors for easy access to the cut-off machine, generally for maintenance. Top of enclosure will have a standard flanged round connection for dust extraction.

#### **Clamping System & Fixturing**

Manual clamping or hydraulically actuated clamping is available. Customer designed fixtures are used to securely nest castings. Where practical and available, replaceable stops/rests will be incorporated into the tooling design.



#### **Elevating Table**

Optional hydraulically operated elevating table. Sizes such as table area and minimum/maximum adjustable height vary depending on application.



Optional extensions to the heavy-duty, Blanchard ground table are available depending on application, size, and other system needs.





# **Horizontal Traveling Saw**

Vulcan also offers an Air Float Cut-Off machine with horizontal traveling axis. Scan the code to see the brochure, or visit our website for more information.



Visit our website for more information at www.vulcangroup.com