The Mac Process Multi-Duty (MD) Airlock utilizes a hardened precision machined gray iron (Class 40) housing and endplates. The MD offers low maintenance due to the abrasion resistance of the Class 40 iron and the reliability of the TS4 Seals. This high quality seal continually provides superior sealing even in severe operating conditions.

The MD meters even highly abrasive products into conveying lines or storage areas. Its low mounting height is ideal in applications with space restrictions.

**Standard Specifications**

- Cast class 40 gray iron, housing and end plates
- TS4 Seal assembly
- Outboard sealed bearings
- Carbon steel rotor construction
- 8 vane open-end or closed-end rotor:
  - Fixed relieved 1/8” land rotor tips
  (MD 400 available with lo-vane closed end rotor only)
- Top and bottom flange drillings match (except where noted)
- Counter clockwise rotation from drive end
- End plates tapped with plug for cavity and shaft seal air purge
- Gasket material on flanges to be silicone caulk
- Temperature range: -45° F to 200° F
- Rated up to 15 PSI pressure differential

**Options:**

- Stainless steel housing and end plates
- Adjustable tips
- Abrasion resistant coatings
- Stainless steel rotor
- 10 vane rotor
- Variable speed drives
- High temperature for service to 450° F
- Mac Process white paint

**Mac Process Wear-Resistant MD Airlock**

Mac Process also offers a wear-resistant version of the MD. The Wear-Resistant Airlock includes all standard features plus a ceramic coating on the casting bore providing even more abrasion resistance. The shrouds and tips of the rotor are plasma sprayed with tungsten carbide providing an abrasion resistant rotor design.

Mac Process’s Wear-Resistant Airlocks are designed to be placed in highly abrasive environments where a standard gray iron/ carbon steel airlock would not suffice.

During field testing in highly abrasive conditions the Wear-Resistant Airlock has demonstrated a lifespan up to 8 times longer than non-treated airlocks.
**Dimensions (in.)**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>CF</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
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</tbody>
</table>

**Dimensions are for an MD without drive package, please consult your Mac Process Sales Representative for dimensions of MD airlocks with right angle or parallel shaft drives.**

Flange detail is for MD20 thru MD139. For details on MD260 and MD400 valves, please consult your Mac Process Sales Representative.

Capacities given are for open end rotors; for closed end rotors reduce the given capacity by 10%.

*The MD-400 is available with closed end rotor only.