At the Heart of Integrated Design

Without an efficient, durable airend, a unique compressor design means nothing. That’s why Gardner Denver designs and manufactures this critical component in house to exacting standards. Tens of thousands of Enduro airends are in operation worldwide, proving that the heart of the Integra series can stand the test of time.

1. **Integral Housing**
   Fewer parts result in less opportunity for leaks to develop

2. **Advanced Rotor Profile**
   Shortened sealing line and minimal air “slippage” yield maximum compressor efficiency

3. **O-Ring Seal**
   Highest quality positive sealing for leak free operation

4. **Dedicated Thrust Bearings**
   Provide total support of gas loads to ensure optimum running clearances at every operating condition

5. **Multi-Lip Shaft Seal**
   Keeps the lubricant in and the dirt out for maximum seal performance and life

6. **Heavy Duty Inlet Bearings**
   Oversized to achieve maximum bearing life and rotor stability

7. **Minimized Blow Hole**
   High efficiency profile minimizes internal losses associated with blowback
1. Air is drawn through an inlet air filter
2. into the air end, and oil is injected between the rotors.
3. The air end is rotated with belts driven by an electric motor. Motors come with a standard 5 year warranty!
4. The adjustment of belt tension through a motor mounting plate is quick and easy.
5. From the air end, the air-oil mixture flows into the unit, where three-stage separation takes place. The first stage is carried out by a baffle in the oil sump directly after the air end.
6. The second is the intelligent cyclone stage
7. and the final is carried out by the separation elements.
8. Separated oil remains on the bottom of the module unit, where the thermostat valve
9. passes it through the oil-cooler
10. or directly to the oil filter, depending on the temperature. The oil then returns to the air end.
11. Clean compressed air flows into the after cooler, where water is separated through condensation.
12. The condensate is automatically removed in the water separator.

Integra compressors are fully automatic and deliver air on demand. When air consumption ceases, the compressor switches to no-load. If there is no demand for compressed air, the compressor stops automatically until air is needed again. This maximizes compressor efficiency and reduces operating costs.

Gardner Denver’s exclusive integrated air end design delivers both small footprint and serviceability in one!