

Air Compressor 101



**Reciprocating Compressor
Pump**

The “Compressor Room”

Two Compressor System (allows for back-up)

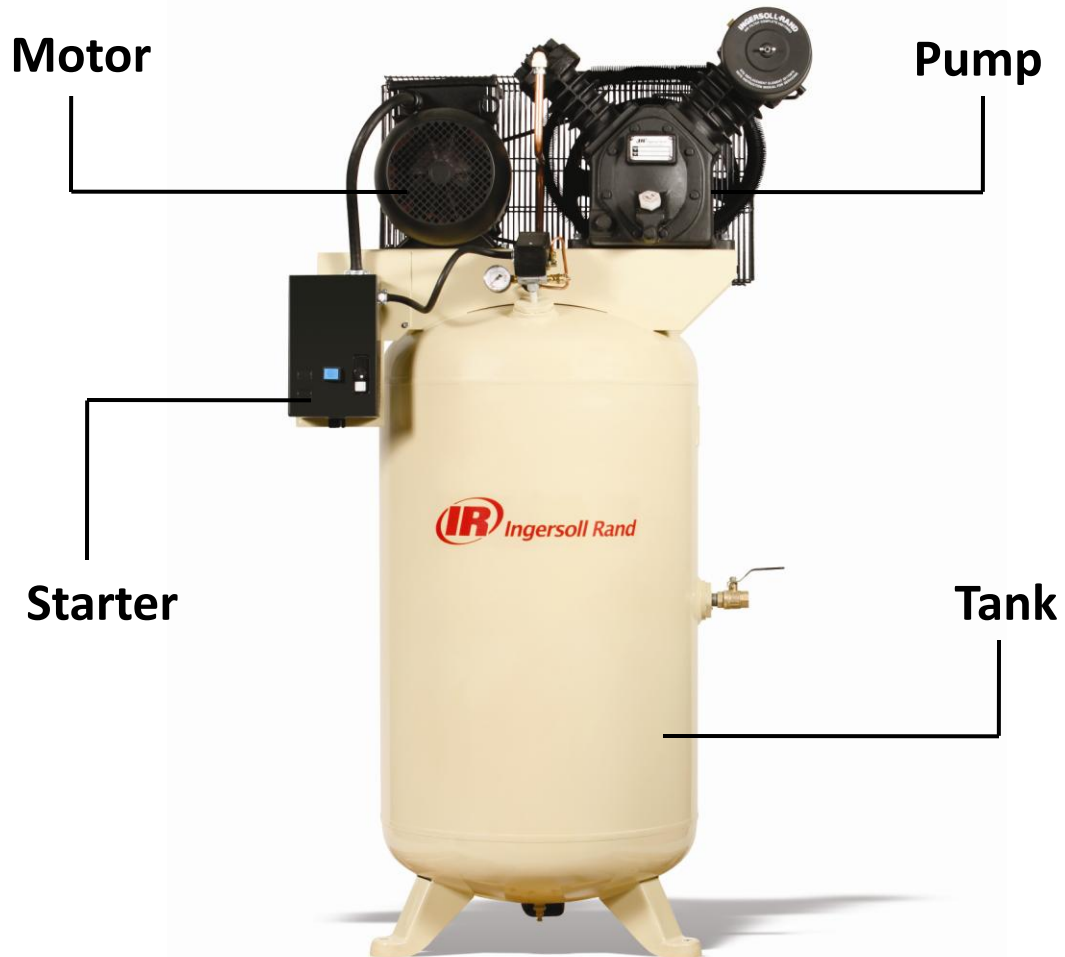


In-line Air Filter
(with by-pass valve)

Refrigerated Air Dryer
(with by-pass valve)



“Value” Package

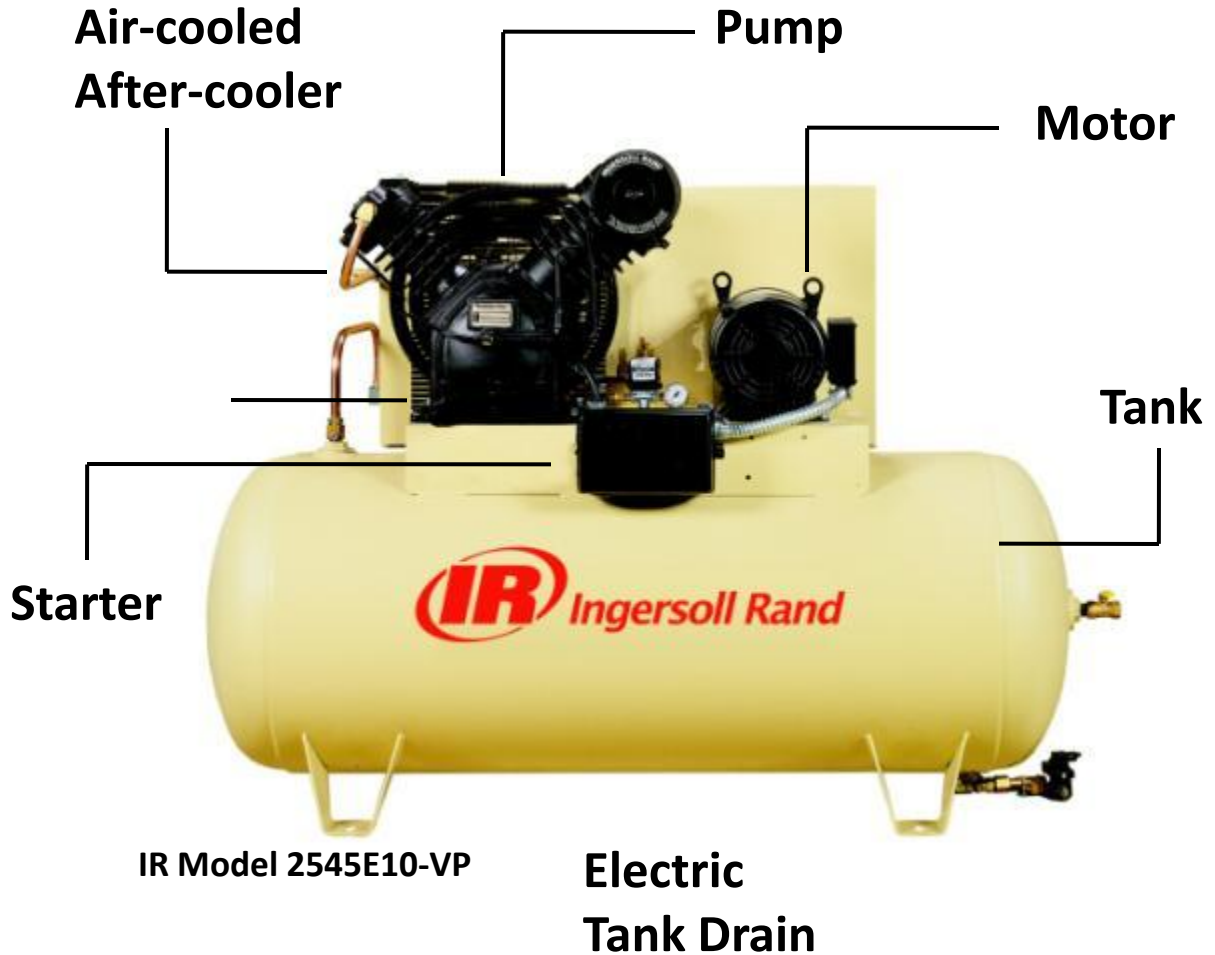


IR Model 2475N7.5-V

Includes:

1. **Pump** – 100% Cast-Iron for Durability
2. **Motor** – Industrial Grade, ODP style
3. **Starter** – Provides electrical connection & overload Protection
4. **Tank** – ASME storage tank

“Value Plus” Package



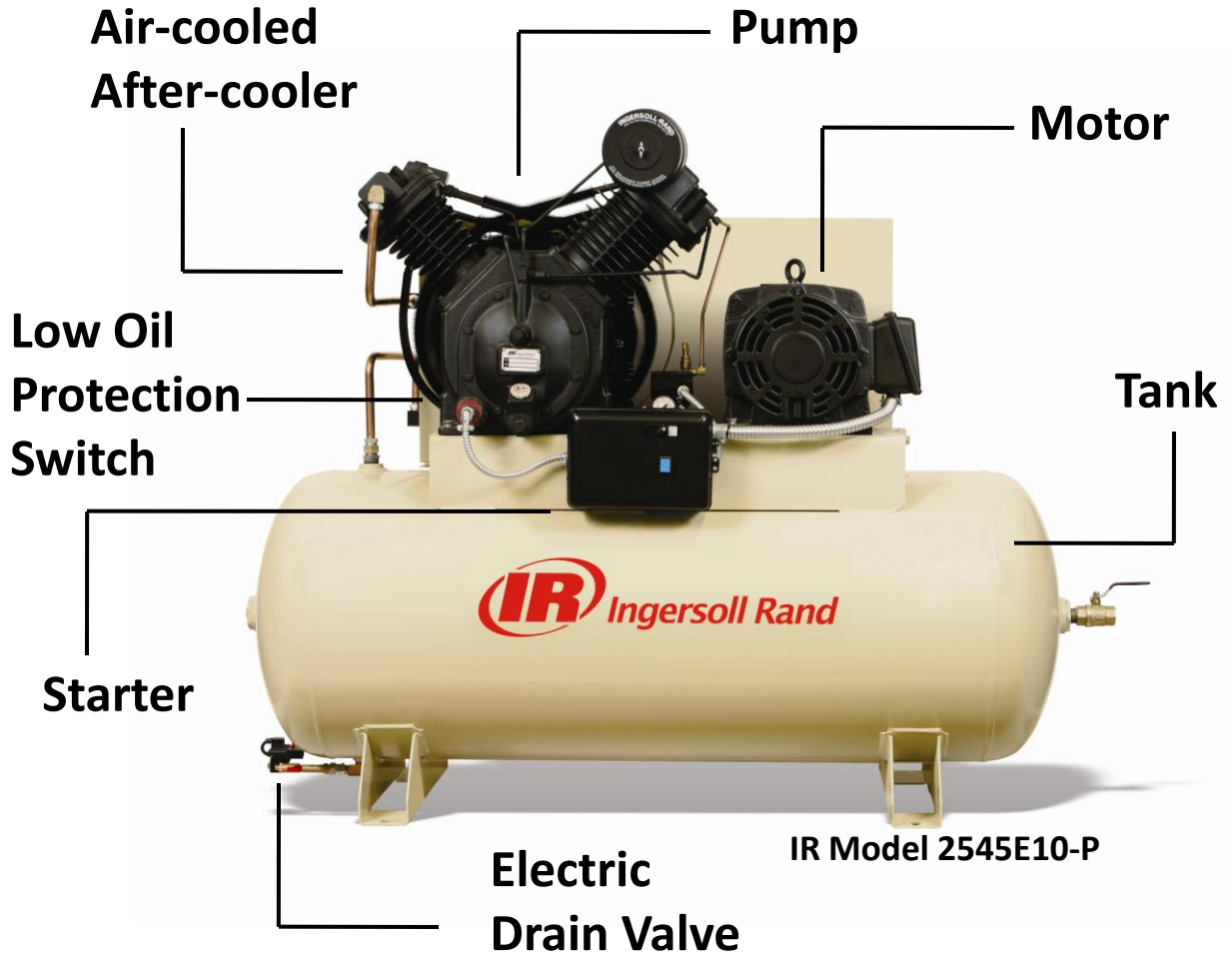
Also Includes:

1. **Air-cooled after-cooler**
removes 70% of moisture from the air
2. **Electric Drain Valve**
Automatically drains water from the tank



Air-cooled After-cooler

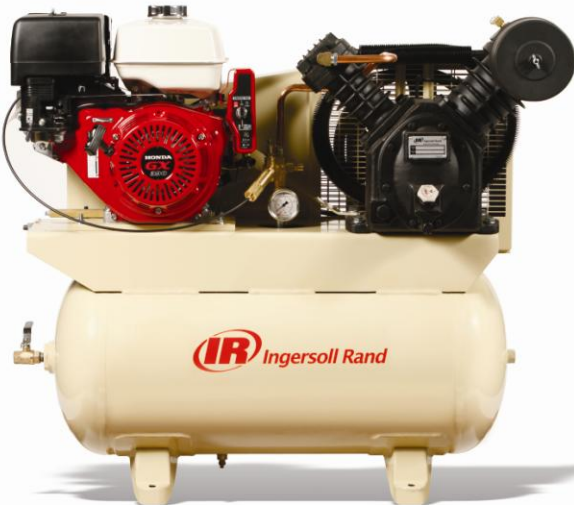
“Premium” Package



Also Includes:

1. **Air-cooled after-cooler** – removes 70% of moisture from the air
2. **Electric Drain Valve** – Automatically drains water from the tank
3. **Low Oil Protection Switch** – prevents pump from running in a low oil condition

Gas-Drive Packages



**IR Model 2475F13GH
13hp Honda engine**



**IR Model 2475F14G
14hp Kohler engine**

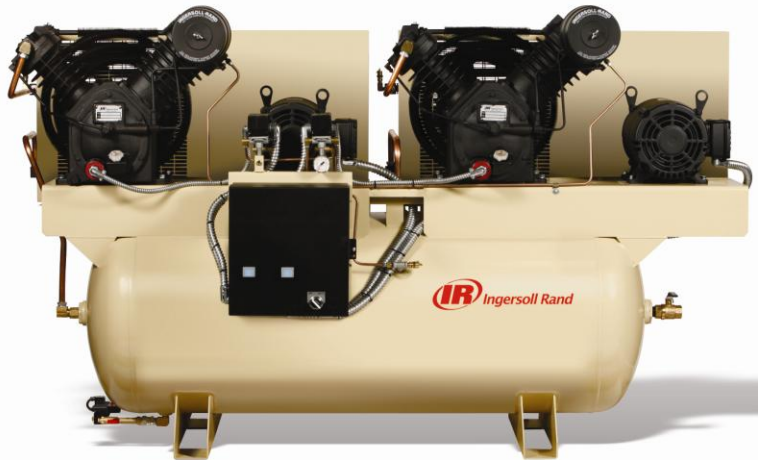
Features Includes:

1. Electric Start on engine
2. Pull Start on engine
3. Alternator
4. 30 gallon tank

Duplex Packages



**IR Model 2-2475E7.5-V
Value Package**



**IR Model 2545E10-P
Premium Package**

Includes:

1. (2) Pumps
2. (2) Motors
3. (1) Alternator Panel
4. (1) Tank

Start-Up Kits & Warranty



- Includes enough oil for first year of use
- Includes (2) replacement air filters for first year of use
- Synthetic oil (non-detergent) lasts 2,000 hours
- Increases warranty on **pump only** from (1) year to (2) years

**Standard Warranty for all T30 Reciprocating
Compressor Packages is One Year**

Refrigerated Air Dryers



Standard Series
For Compressors
with After-cooler



High Temp Series
For Compressors
without After-cooler

How to Size an Air Dryer

Choose an air dryer model with a CFM rating equal to greater than the total CFM of the air compressor(s)

Example – IR model 2475N7.5-P has a 24 CFM rating.
Choose IR dryer model D42IN which is rated for 25 cfm

Waterborne & Air Compressors

The mandated transition to waterborne paint has already begun for some shops, and for others it will be here shortly. Change can be stressful. Among painters who have a set routine that they have honed over the years to be productive, being asked to change can cause worry for some and outright anxiety for others. – *ABRN 2008*

The transition to waterborne is also forcing shops to re-think their equipment needs, especially when it comes to air compressor systems. This guide is designed to provide you with some simple information to assist your customers on meeting the compressed air requirements of this transition.

So as it relates to waterborne paint systems, the two most critical factors that need to be addressed for a shop's existing compressor system are **Air Quality & Air Quantity**.

Air Quality – Since air compressors use the ambient air directly from the shop environment, the removal of dirt, oil and water is essential to achieve optimal productivity/efficiency with waterborne paint.

For removal of dirt & oil, it is best to address this requirement right in the compressor room itself with the use of high-efficiency **in-line air filters** that can remove contaminants down to .01 microns.

Since air compressors can generate as much as (3) gallons of water on an average day, **refrigerated air dryers** will help eliminate water before it condenses in air lines downstream. For compressor systems that do not have an "air-cooled after-cooler", use a "high air temperature" style refrigerated dryer.

Air Quantity – Air quantity requirements for waterborne sprayers basically stay the same, but the drying process is requiring a significant increase in air flow to accelerate curing of the paint. This translates to a need for a greater quantity of or **CFM** of compressed air.

A Venturi-style drying gun is a popular and economical choice to accomplish this task. A single paint booth will typically require a minimum of (2) drying guns with a minimum requirement of 12 cfm per gun. At a total requirement of 24 CFM, the drying system alone could require a dedicated 7.5hp air compressor per booth.