# **Compressor Package Quick Quote Reference Sheet**

This sheet is meant only as a guide. Site visits and evaluations are still recommended to ensure the proper compressor package is quoted for the application.

#### **Step 1 Count Tools**

Count the total number of tools in use at one time and we'll calculate the cfm required to operate

| Tools  | CFM      | Tools  | CFM | Tools   | CFM |
|--|----------|--|-----|---|-----|
| x 3% Impact Wrench(s) =                                    |          | x 6 inch Orbital Sander(s) =                 |     | Sandblasting Nozzles                          |     |
| x <sup>1</sup> ⁄ <sub>2</sub> Impact Wrench(s) =           |          | x 8 inch Orbital Sander(s) =                 |     | x <sup>3</sup> / <sub>32</sub> inch @ 90PSI = |     |
| x <sup>3</sup> / <sub>4</sub> Impact Wrench(s) =           |          | x 7 inch Air Sander(s) =                     |     | x ¼ inch @ 90PSI =                            |     |
| x 1 Impact Wrench(s) =                                     |          | x 6 inch DA Sander(s) =                      |     | x <sup>5</sup> / <sub>32</sub> inch @ 90PSI = |     |
| x <sup>1</sup> / <sub>4</sub> Air Ratchet(s) =             |          | x 7 inch DA Sander(s) =                      |     | x <sup>3</sup> ⁄16 inch @ 90PSI =             |     |
| x <sup>3</sup> / <sub>8</sub> Air Ratchet(s) =             |          | x Nail Gun(s) =                              |     | x ¼ inch @ 90PSI =                            |     |
| x <sup>1</sup> ⁄ <sub>2</sub> Air Ratchet(s) =             |          | x Staple Gun(s) =                            |     | x 5/16 inch @ 90PSI =                         |     |
| x <sup>1</sup> / <sub>4</sub> Die Grinder(s) =             |          | x ¼ Inch Nozzle                              |     | x ¾ inch @ 90PSI =                            |     |
| x High Speed Grinder(s) =                                  |          | Blow Gun(s) =                                |     | x <sup>7</sup> ⁄16 inch @ 90PSI =             |     |
| x 3 inch Cut Off tool(s) =                                 |          | x <sup>1</sup> ⁄ <sub>4</sub> Air Drill(s) = |     | x ½ inch @ 90PSI =                            |     |
| x HVLP Paint Spray Gun(s) =                                |          | x 3/8 Air Drill(s) =                         |     |   |     |
| x 5 inch Orbital Sander(s) =                               |          | x <sup>1</sup> ⁄ <sub>2</sub> Air Drill(s) = |     | Total tool CFM Demand =                       |     |
| <b>Other Equipment</b><br>Count ALL other equipment that u | ses air. | Other Equipment CFM =                        |     | Total CFM Demand of<br>Equipment and Tools =  |     |

## Or Use the Technician Count Method

When using the technician only method it is critical to make sure and count **ALL** technicians that may be using tools at any one time to get a proper CFM total.

| Type of tools used                                 | Num | nber of Techs | CFM |
|--|-----|---------------|-----|
| Impact Wrenches, Air ratchets,<br>Staple/Nail Guns | х   | =             |     |
| Grinding/Sanding/Coating<br>Applications           | x   | =             |     |
| Total Technician CFM usage                         | х   | =             |     |

Total Air Demand for Application

### **Step 2 Choose Your Equipment**

| Reciprocating Compressor   |                   | Oil free Reciprocating Compressor   |                   |  | Rotary Screw Compressor |                   |                   |                   |
|--|-------------------|---|-------------------|--|-------------------------|-------------------|-------------------|-------------------|
| The maximum operating duty cycle on a reciprocating compressor is 70% optimal is 50% |                   | The maximum operating duty cycle on a oil free reciprocating compressor is 50% optimal is 30% |                   | The maximum operating duty cycle on a rotary<br>screw compressor is 100%, optimal is 70% |                         |                   |                   |                   |
| 50% Duty<br>Cycle  | 60% Duty<br>Cycle | 70% Duty<br>Cycle   | 30% Duty<br>Cycle | 40% Duty<br>Cycle  | 50% Duty<br>Cycle       | 60% Duty<br>Cycle | 70% Duty<br>Cycle | 80% Duty<br>Cycle |
|  |                   |   |                   |  |                         |                   |                   |                   |

| Average Compressor CFM Production per horse power |            |              |            |            |  |  |  |
|---|------------|--------------|------------|------------|--|--|--|
| Reciprocating                                     | CFM@175PSI | Rotary Screw | CFM@150PSI | CFM@125PSI |  |  |  |
| 5HP   | 18         | 5HP          | 16         | 18         |  |  |  |
| 7.5HP   | 24         | 7.5HP        | 26         | 28         |  |  |  |
| 10HP  | 35         | 10HP         | 38         | 40         |  |  |  |
| 15HP  | 50         | 15HP         | 54         | 60         |  |  |  |
| 20HP  | 80         | 20HP         | 78         | 85         |  |  |  |
| 25HP  | 95         | 25HP         | 102        | 108        |  |  |  |
|   |            | 30HP         | 125        | 130        |  |  |  |
|   |            | 40HP         | 155        | 160        |  |  |  |
|   |            | 50HP         | 185        | 200        |  |  |  |
|   |            | 60HP         | 210        | 235        |  |  |  |

# Quick Metric ConversionsAmountCFMLiters per minute to CFM=Cubic meters per minute to CFM=AmountPSIBar to PSI=



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