

# NFPA 1901 RATING CHART

## Qpak SERIES PUMP

**RATED FROM 500 GPM @150PSI TO 1000 GPM @150 PSI**

**SINGLE STAGE PUMP- 10.0" IMPELLER**

MAXIMUM ELEVATION AT WHICH THE PUMP WILL PERFORM THE RATING WITH STANDARD TEST CONDITIONS OF 10 FT. LIFT, 20 FT. OF SUCTION HOSE & STRAINER

|        |                 |             |         |             |             |
|--------|-----------------|-------------|---------|-------------|-------------|
| Qpak50 | 4-1/2 IN. HOSE, | 12,500 FEET | Qpak75  | 5 IN. HOSE, | 7,000 FEET  |
| Qpak50 | 5 IN. HOSE,     | 14,500 FEET | Qpak75  | 6 IN. HOSE, | 10,000 FEET |
| Qpak50 | 6 IN. HOSE,     | 15,500 FEET | Qpak100 | 5 IN. HOSE, | 2,000 FEET  |
| Qpak75 | 4-1/2 IN. HOSE, | 4,000 FEET  | Qpak100 | 6 IN. HOSE, | 5,300 FEET  |

- \* ENGINE SPEED MUST NOT EXCEED MFR'S MAXIMUM NO-LOAD GOVERNED SPEED.
- \*\* THE PUMP IS CAPABLE OF THE HIGH PRESSURE PERFORMANCE SHOWN. ACTUAL OBTAINABLE PRESSURE SHOULD BE CHECKED IN ADVANCE, AND IS GOVERNED BY ENGINE SPEED, AVAILABLE HORSEPOWER AND PUMP RATIO.
- \*\*\* GAUGE PRESSURE DOES NOT INCLUDE LIFT OR SUCTION LOSSES.

THIS CHART IS TO BE USED TO SELECT THE PROPER PUMP GEARBOX RATIO. THE INPUT SPEED AND HORSEPOWER REQUIREMENTS SHOWN ARE NOMINAL ±5% FIGURES. WHEN USING THIS CHART, IT IS IMPORTANT TO OBTAIN THE NET HORSEPOWER OUTPUT OF THE ENGINE. THE ENGINE MANUFACTURER'S PUBLISHED CURVE MAY NOT REPRESENT A TRUE NET HORSEPOWER WHEN TOTALING ALL THE POWER DEDUCTIONS THAT MAY BE ENCOUNTERED FOR THE NFPA 1901 TEST. THE DEDUCTIONS COULD BE ENGINE AND VEHICLE ACCESSORIES, ELEVATION, TEMPERATURE, BAROMETER, ETC. CHECK WITH THE ENGINE MANUFACTURER FOR THEIR RECOMMENDATION AND APPROVAL OF THE NET HORSEPOWER CURVE.

FOR ROAD OPERATION, ENGINE TORQUE ON THE PUMP DRIVE LINE SHOULD BE CHECKED PER HAILE FORM F-72.

**E-1159B**

| RATED CAPACITY (US GPM) | CAPACITY (US GPM) | PRESSURE (PSIG) *** | HORSEPOWER REQUIRED | "L" GEARBOX INPUT DRIVE SHAFT (RPM)* |             |             |             |             | "X" GEARBOX INPUT DRIVE SHAFT (RPM)* |            |       |       |             | HAILE PRODUCTIONS, INC.<br>A Unit of IDEX Corporation<br>Conshohocken, PA 19428 USA | SCALE: NONE |             |             |   |             |
|-------------------------|-------------------|---------------------|---------------------|--------------------------------------|-------------|-------------|-------------|-------------|--------------------------------------|------------|-------|-------|-------------|---|-------------|-------------|-------------|---|-------------|
|                         |                   |                     |                     | RATIO                                | RATIO       | RATIO       | RATIO       | RATIO       | RATIO                                | RATIO      | RATIO | RATIO | RATIO       |   |             |             |             |   |             |
|                         |                   |                     |                     | 2.28                                 | 2.05        | 1.86        | 1.71        | 1.58        | 2.83                                 | 2.55       | 2.32  | 2.13  | 1.96        |   |             |             |             |   |             |
| 500                     | PUMP MODEL        |                     |                     | Qpak50-23L                           | Qpak50-21L  | Qpak50-19L  | Qpak50-17L  | Qpak50-15L  | 500                                  | PUMP MODEL |       |       | Qpak50-28X  | Qpak50-25X  | Qpak50-23X  | Qpak50-21X  | Qpak50-19X  | HAILE PRODUCTIONS, INC.<br>A Unit of IDEX Corporation<br>Conshohocken, PA 19428 USA | SCALE: NONE |
|                         | 500               | 150                 | 76                  | 1500                                 | 1670        | 1840        | 2000        | 2160        |                                      | 500        | 150   | 76    | 1210        | 1340  | 1470        | 1610        | 1740        |   |             |
|                         | 500               | 165                 | 84                  | 1570                                 | 1740        | 1920        | 2090        | 2260        |                                      | 500        | 165   | 84    | 1260        | 1400  | 1540        | 1680        | 1820        |   |             |
|                         | 350               | 200                 | 92                  | 1710                                 | 1900        | 2100        | 2280        | 2470        |                                      | 350        | 200   | 92    | 1380        | 1530  | 1680        | 1830        | 1990        |   |             |
|                         | 250               | 250                 | 114                 | 1900                                 | 2110        | 2320        | 2530        | 2730        |                                      | 250        | 250   | 114   | 1530        | 1700  | 1860        | 2030        | 2200        |   |             |
| 750                     | PUMP MODEL        |                     |                     | Qpak75-23L                           | Qpak75-21L  | Qpak75-19L  | Qpak75-17L  | Qpak75-15L  | 750                                  | PUMP MODEL |       |       | Qpak75-28X  | Qpak75-25X  | Qpak75-23X  | Qpak75-21X  | Qpak75-19X  | HAILE PRODUCTIONS, INC.<br>A Unit of IDEX Corporation<br>Conshohocken, PA 19428 USA | SCALE: NONE |
|                         | 750               | 150                 | 101                 | 1550                                 | 1730        | 1900        | 2070        | 2240        |                                      | 750        | 150   | 101   | 1250        | 1390  | 1530        | 1660        | 1810        |   |             |
|                         | 750               | 165                 | 112                 | 1610                                 | 1800        | 1980        | 2150        | 2330        |                                      | 750        | 165   | 112   | 1300        | 1440  | 1590        | 1730        | 1880        |   |             |
|                         | 525               | 200                 | 110                 | 1720                                 | 1910        | 2110        | 2290        | 2480        |                                      | 525        | 200   | 110   | 1390        | 1540  | 1690        | 1840        | 2000        |   |             |
|                         | 375               | 250                 | 126                 | 1900                                 | 2110        | 2330        | 2530        | 2740        |                                      | 375        | 250   | 126   | 1530        | 1700  | 1870        | 2030        | 2210        |   |             |
| 1000                    | PUMP MODEL        |                     |                     | Qpak100-23L                          | Qpak100-21L | Qpak100-19L | Qpak100-17L | Qpak100-15L | 1000                                 | PUMP MODEL |       |       | Qpak100-28X | Qpak100-25X   | Qpak100-23X | Qpak100-21X | Qpak100-19X | HAILE PRODUCTIONS, INC.<br>A Unit of IDEX Corporation<br>Conshohocken, PA 19428 USA | SCALE: NONE |
|                         | 1000              | 150                 | 132                 | 1640                                 | 1820        | 2000        | 2180        | 2360        |                                      | 1000       | 150   | 132   | 1320        | 1460  | 1610        | 1750        | 1900        |   |             |
|                         | 1000              | 165                 | 143                 | 1710                                 | 1900        | 2090        | 2270        | 2460        |                                      | 1000       | 165   | 143   | 1380        | 1530  | 1680        | 1830        | 1980        |   |             |
|                         | 700               | 200                 | 128                 | 1740                                 | 1940        | 2130        | 2320        | 2510        |                                      | 700        | 200   | 128   | 1400        | 1560  | 1710        | 1860        | 2030        |   |             |
|                         | 500               | 250                 | 138                 | 1900                                 | 2120        | 2330        | 2540        | 2750        |                                      | 500        | 250   | 138   | 1540        | 1700  | 1870        | 2040        | 2210        |   |             |
| ** HIGH PRESSURE        | 200               | 300                 | 141                 | 2070                                 | 2300        | 2530        | 2750        | 2980        | ** HIGH PRESSURE                     | 200        | 300   | 141   | 1670        | 1850  | 2030        | 2210        | 2400        |   |             |



|              |                       |                      |
|--------------|-----------------------|----------------------|
| AP/D         | DATE                  | 7/1/00               |
| BY           | DLM                   | 3/22/01              |
| CHANGED FROM | RELEASE TO PRODUCTION | Updated HP's & RPM's |
| ECC NO.      | REV                   |                      |
| 00-387       | A                     |                      |
| 01-147       | B                     |                      |

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