

# ENGINEERING DATA AND SPECIFICATIONS

## TYPICAL SPEEDS AND PULLS FOR SERIES IJ INTERLOCK SKAGIT YARDERS

Following are line pulls in pounds and speed in feet per minute for the IJ-90 Interlock Yarder with drums half full of cable based on General Motors Model 12V-71N with TC-3F3R three-speed forward and reverse transmission and single stage torque converter with a sprocket ratio of 94 to 21; see Note below.

| Converter<br>Range    | Ratio to<br>Transmission | M A I N   D R U M |              | H A U L B A C K   D R U M |              |               |  |
|-----------------------|--------------------------|-------------------|--------------|---------------------------|--------------|---------------|--|
|                       |                          | High              | Low          | Ratio to<br>Transmission  | High         | Low           |  |
| Maximum<br>Efficiency | 4.09 to 1                | 39,100 @ 259      | 67,200 @ 156 | 4.09 to 1                 | 32,600 @ 323 | 62,000 @ 170  |  |
|                       | 2.00 to 1                | 19,150 @ 550      | 33,000 @ 320 | 1.38 to 1                 | 11,000 @ 956 | 21,000 @ 504  |  |
|                       | 1.03 to 1                | 9,860 @ 1065      | 17,000 @ 620 | .685 to 1                 | 5,460 @ 1930 | 10,400 @ 1010 |  |
| Low<br>70 per cent    | 4.09 to 1                | 67,000 @ 115      | 115,000 @ 69 | 4.09 to 1                 | 55,600 @ 147 | 106,000 @ 75  |  |
|                       | 2.00 to 1                | 32,700 @ 244      | 56,400 @ 141 | 1.38 to 1                 | 18,800 @ 425 | 35,800 @ 223  |  |
|                       | 1.03 to 1                | 16,890 @ 515      | 29,000 @ 274 | .685 to 1                 | 9,350 @ 856  | 17,700 @ 450  |  |
| Stall                 | 4.09 to 1                | 101,000           | 174,000      | 4.09 to 1                 | 84,000       | 160,000       |  |
|                       | 2.00 to 1                | 49,400            | 85,200       | 1.38 to 1                 | 28,400       | 54,000        |  |
|                       | 1.03 to 1                | 25,500            | 44,000       | .685 to 1                 | 14,100       | 26,800        |  |

**NOTE:** Skagit Series IJ Yarders are designed for maximum utilization of available horsepower. Speeds and pulls will vary depending on the engine and sprocket ratios specified as optional equipment. Total performance of the IJ-80 is comparable to the IJ-90 with variations of the speed and pull ratios resulting from differences in drum sizes and cable diameter. Various suitable power units for the IJ-80 and IJ-90 are available. Consult your Skagit Representative or the Factory for Complete Information.

| SPECIFICATIONS       | IJ-80                            | IJ-90                            |
|----------------------|----------------------------------|----------------------------------|
| <b>MAIN DRUM</b>     |                                  |                                  |
| Flange Diameter      | 44"                              | 50"                              |
| Barrel Diameter      | 16"                              | 21"                              |
| Barrel Length        | 22"                              | 22"                              |
| Cable Capacities     | 1900' — 1 1/8"<br>1550' — 1 1/4" | 1900' — 1 1/4"<br>1560' — 1 3/8" |
| <b>HAULBACK DRUM</b> |                                  |                                  |
| Flange Diameter      | 44"                              | 50"                              |
| Barrel Diameter      | 16"                              | 21"                              |
| Barrel Length        | 22"                              | 22"                              |
| Cable Capacities     | 4300' — 3/4"<br>3160' — 7/8"     | 3900' — 7/8"<br>3000' — 1"       |
| <b>STRAW DRUM</b>    |                                  |                                  |
| Flange Diameter      | 41"                              | 41"                              |
| Barrel Diameter      | 10"                              | 10"                              |
| Barrel Length        | 8"                               | 8"                               |
| Cable Capacities     | 5880' — 3/8"<br>4330' — 7/16"    | 5880' — 3/8"<br>4330' — 7/16"    |

| SPECIFICATIONS                      | IJ-80  | IJ-90  |
|-------------------------------------|--|--|
| <b>HORSEPOWER RANGE</b>             |  |  |
| Up to                               | 500 HP   | 500 HP   |
| <b>TRANSMISSION:</b>                |  |  |
| TC-3F3R                             | Three speed forward and three speed reverse power shift transmission and single stage converter. | Three speed forward and three speed reverse power shift transmission and single stage converter. |
| <b>APPROXIMATE DIMENSIONS (MHS)</b> |  |  |
| Length                              | 14' 4"   | 14' 10"  |
| Width                               | 12' 3"   | 12' 3"   |
| Height (with cab)                   | 12' 6"   | 12' 6"   |
| Height (without cab)                | 9' 5"  | 9' 5"  |
| <b>APPROXIMATE WEIGHT (MHS)</b>     |  |  |
|                                     | 37,500 Pounds  | 40,000 Pounds  |

**SKAGIT CORPORATION IS** recognized as the World's Leader in the development, design and manufacture of Logging Equipment. The new series of Interlock Yarders is engineered and built to maintain this leadership. This is one Series in the Complete Line of Skagit Yarders, Loaders, Mobile Loggers, Pre-Rigged Steel Towers and Radio Controlled Skycars . . . all produced in closest cooperation with the Logging Industry and the product of more than 60 years serving the Logger. FOR DETAILED INFORMATION ON INTERLOCK YARDERS OR ANY OF SKAGIT'S COMPLETE LINE OF LOGGING EQUIPMENT, CONSULT YOUR AUTHORIZED DEALER OR THE FACTORY



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 and  
**SKAGIT OF CANADA, Ltd.**  
 VANCOUVER, B. C.