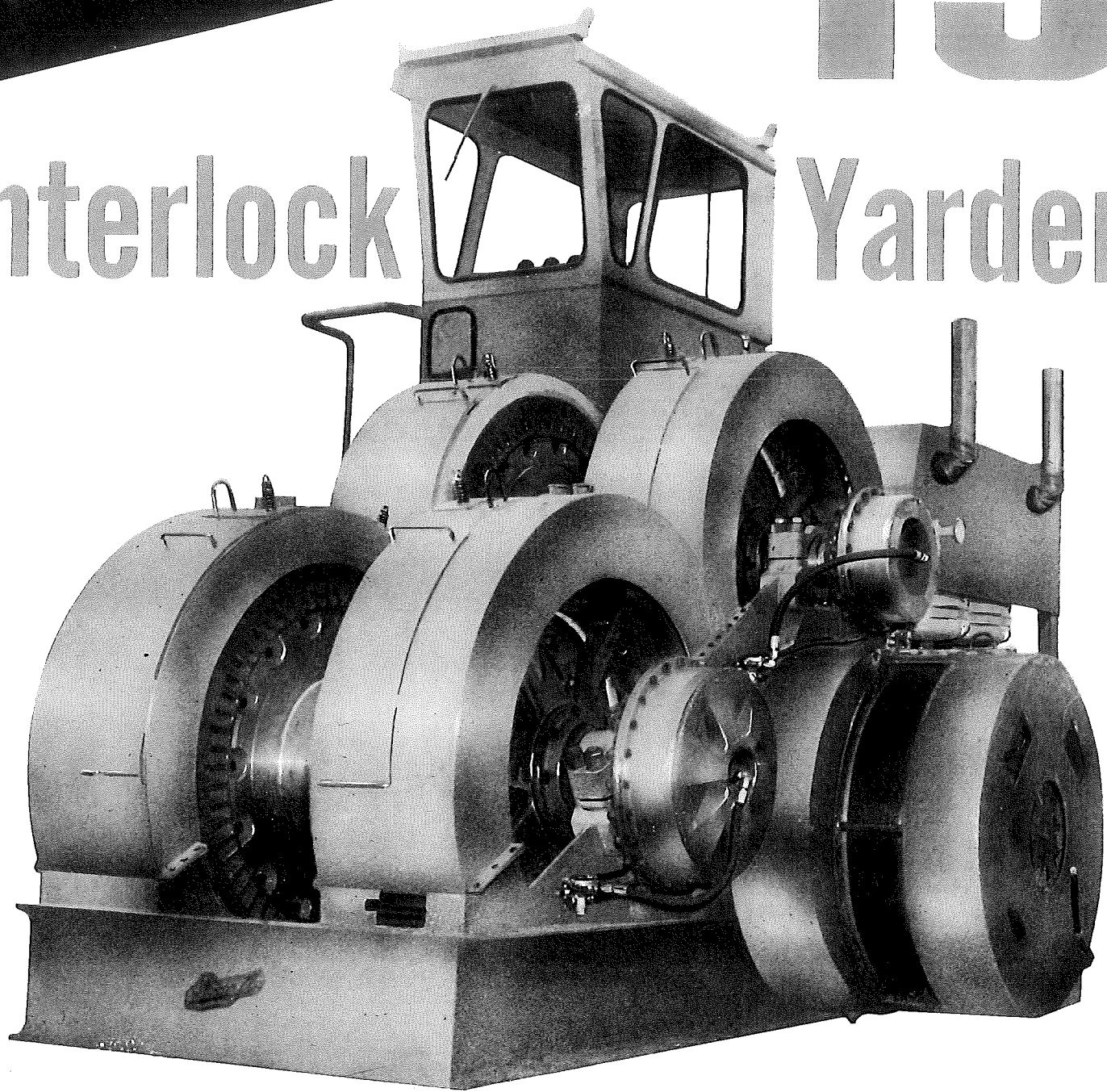


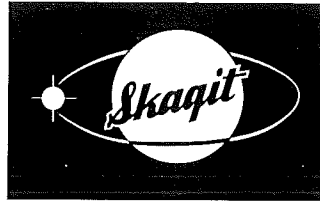
Skagit

SERIES
1 J

Interlock Yarders



The Greatest Yarders ever built



Designed and manufactured by
Logging Equipment Division of

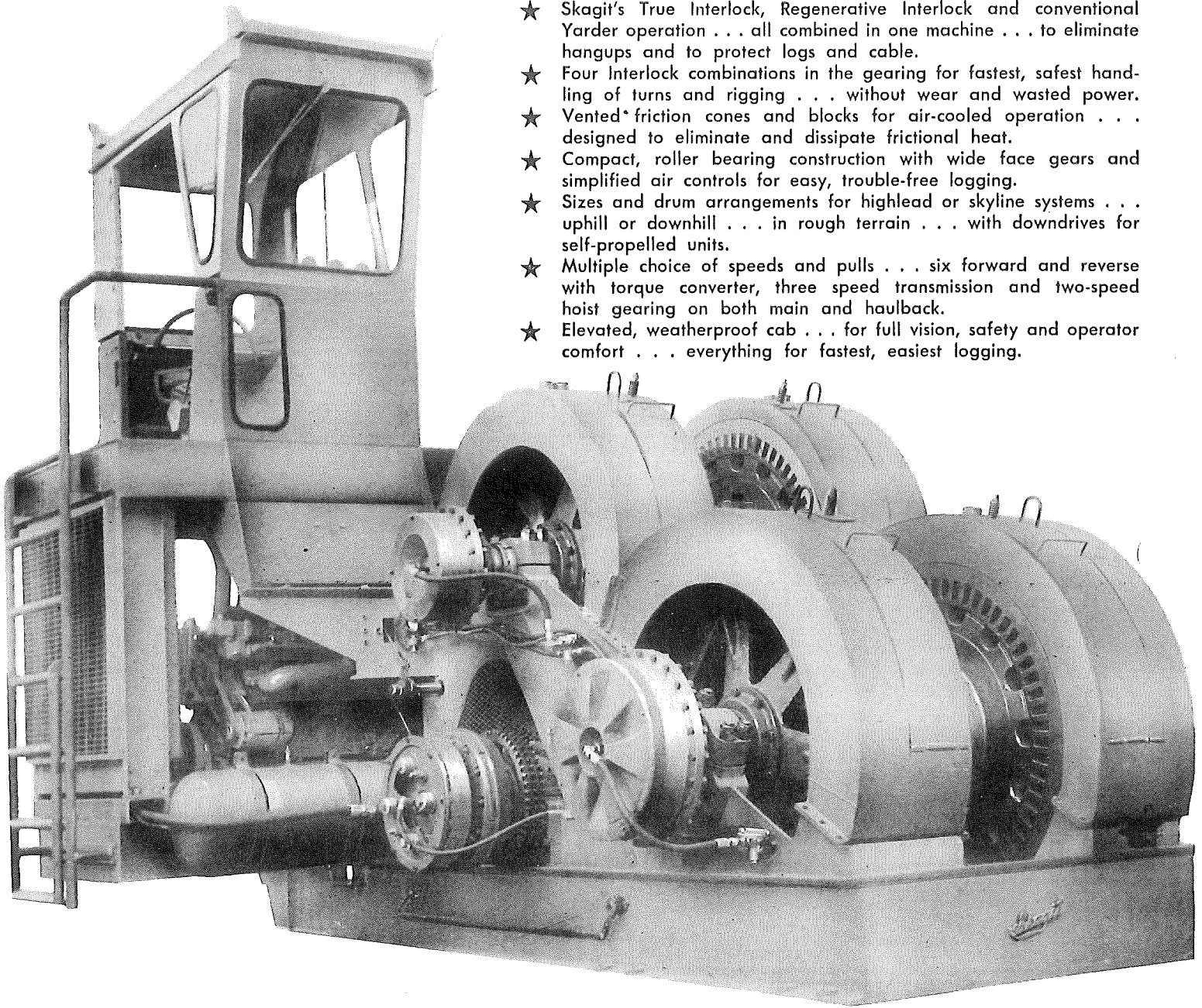
SKAGIT CORPORATION

Sedro-Woolley, Washington

SKAGIT **IJ** Interlock Yarders

FEATURING

- ★ Skagit's True Interlock, Regenerative Interlock and conventional Yarder operation . . . all combined in one machine . . . to eliminate hangups and to protect logs and cable.
- ★ Four Interlock combinations in the gearing for fastest, safest handling of turns and rigging . . . without wear and wasted power.
- ★ Vented* friction cones and blocks for air-cooled operation . . . designed to eliminate and dissipate frictional heat.
- ★ Compact, roller bearing construction with wide face gears and simplified air controls for easy, trouble-free logging.
- ★ Sizes and drum arrangements for highlead or skyline systems . . . uphill or downhill . . . in rough terrain . . . with downdrives for self-propelled units.
- ★ Multiple choice of speeds and pulls . . . six forward and reverse with torque converter, three speed transmission and two-speed hoist gearing on both main and haulback.
- ★ Elevated, weatherproof cab . . . for full vision, safety and operator comfort . . . everything for fastest, easiest logging.



SKAGIT SERIES IJ INTERLOCK YARDERS are described as the "greatest yarders ever built."

They are available in graduated sizes with power and cable capacities for high production operation. Highlead and slackline types are included. Downdrives are provided as optional equipment for self-propelled, rubber-tired units or tank mounts for Skagit pre-rigged steel towers.

Multiple choices of speeds and pulls are available to the operator through a double gear train and interlock gearing arrangement plus a single stage torque converter and three-speed forward and reverse transmission.

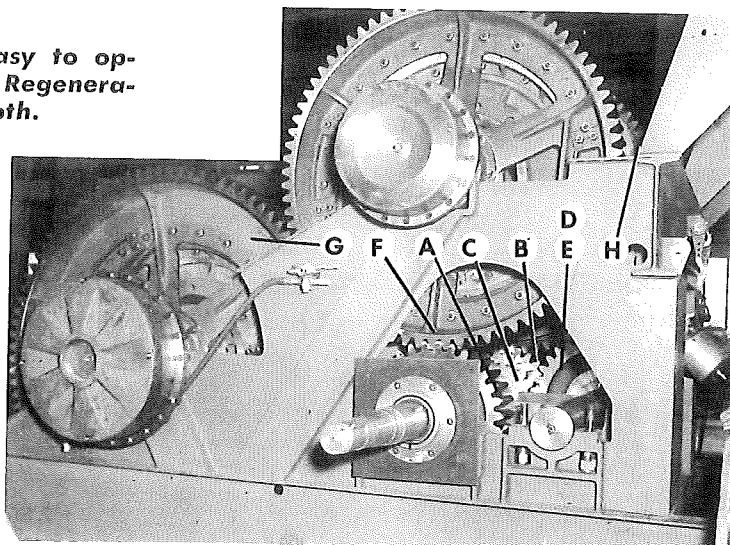
The system provides for paying out line under power . . . with a controlled drag . . . or by free wheeling . . . giving the operator absolute control of the turn and butt rigging.

Skagit's Series IJ Interlock Yarders are easy to operate with either the Positive Interlock or Regenerative Interlock . . . or a combination of both.

The drive consists of a torque converter with a three-speed forward and reverse transmission and two speed interlocking gearing in the drum set. Line is payed out under power. Frictions are controlled with variable pressure valves.

By simple manipulation of these two air valves, the operator can:

1. Operate with a true interlock throughout the entire logging cycle and handle his turn or butt rigging in a smooth, wave-like pattern by shifting back and forth between high and low on either or both drums . . . to take full advantage of four interlocking combinations throughout the cycle.
2. Operate the Interlock as a regenerative system by using the interlock frictions as a drag with controlled pressure on the interlock. Vented friction cones and blocks are air-cooled for maximum heat dissipation.
3. Maintain absolute interlock control by combining the positive and regenerative operating features . . . all with the same two valves.
4. Operate the yarder as a conventional donkey by applying no pressure on the interlock frictions.

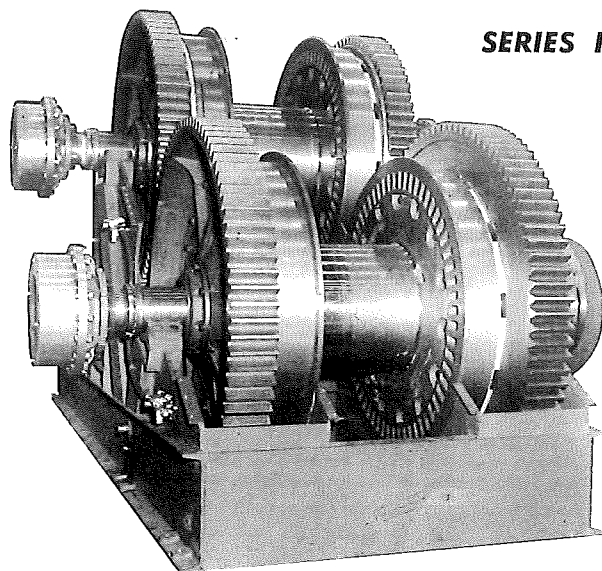


HIGH SPEED GEAR TRAIN

The high speed gear train is direct from drive pinion (A) to the haulback gear (F) which also meshes with the main drum bull gear (G). Air operated frictions engage the drums.

LOW SPEED GEAR TRAIN

The low speed gear train goes from the drive shaft through drive pinion (C) to the idler shaft floating reduction gear (D) which is attached to reduction pinion (E) on a common hub and thence back to floating pinion (B) on the drive shaft. This meshes with the low speed haulback gear (H). The haulback gear then drives the main drum low speed gear to complete the train.



SERIES IJ CONSTRUCTION FEATURES

Vented friction cones and friction blocks.
Wide, double brakes.

Four positive Interlock combinations and 2-speed regenerative system.

Wide face, machine cut, deep mesh gears and pinions . . . heat treated.

Optional large capacity front mounted skyline drum and optional extra strawline drum arrangements.

Fast-acting, positive air controls with easy-to-operate variable pressure valves with fingertip control for smoothest operation.

One-piece cast steel drums . . . machined for balance and even spooling.

Rigid steel frame and pedestal construction for maximum strength and long, hard use.

High weatherproof cab designed for operator visibility, safety, comfort and ease of operation.

Optional downdrive for self-propelled and tank mounted steel towers . . . all drive from the yarder . . . optional hydraulic drive assembly for steel tower erection.

Interchangeable sprockets to meet specific speed-pull requirements.

Graduated sizes with Main, Haulback and Straw Drums.

Three-speed, power shift transmission with choice of engines.

Two-speed drum set gearing . . . six speeds on Main and Haulback drums.

Roller bearing construction throughout with drums and gears on fixed shafts.

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.


MAIN DRUM				HAULBACK DRUM			
Converter Range	Ratio to Transmission	High	Low	Ratio to Transmission	High	Low	
Maximum	4.09 to 1	39,100 @ 259	67,200 @ 156	4.09 to 1	32,600 @ 323	62,000 @ 170	
Efficiency	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	4.09 to 1	67,000 @ 115	115,000 @ 69	4.09 to 1	55,600 @ 147	106,000 @ 75	
70 per cent	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
MAIN DRUM		
Flange Diameter	44"	50"
Barrel Diameter	16"	21"
Barrel Length	22"	22"
Cable Capacities	1900' — 1 1/8" 1550' — 1 1/4"	1900' — 1 1/4" 1560' — 1 3/8"
HAULBACK DRUM		
Flange Diameter	44"	50"
Barrel Diameter	16"	21"
Barrel Length	22"	22"
Cable Capacities	4300' — 3/4" 3160' — 7/8"	3900' — 7/8" 3000' — 1"
STRAW DRUM		
Flange Diameter	41"	41"
Barrel Diameter	10"	10"
Barrel Length	8"	8"
Cable Capacities	5880' — 3/8" 4330' — 7/16"	5880' — 3/8" 4330' — 7/16"

SPECIFICATIONS	IJ-80	IJ-90
HORSEPOWER RANGE		
Up to	500 HP	500 HP
TRANSMISSION:		
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.
APPROXIMATE DIMENSIONS (MHS)		
Length	14' 4"	14' 10"
Width	12' 3"	12' 3"
Height (with cab)	12' 6"	12' 6"
Height (without cab)	9' 5"	9' 5"
APPROXIMATE WEIGHT (MHS)		
	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



Designed and Manufactured by—

SKAGIT CORPORATION

SEDRO-WOOLLEY, WASHINGTON

and

SKAGIT OF CANADA, Ltd.

VANCOUVER, B. C.