LINK-BELT SPEEDER
LS-50

1/2 YD. CAPACITY

SHOVEL
DRAGLINE CLAMSHELL
PILE DRIVER
TRENCH HOE
CRANE
as a Dragline

Many diversified jobs are profitably performed with a Link-Belt Speeder equipped with a dragline bucket. Here is a pipe-line ditch being opened, an outstanding achievement for a dragline, on rough ground where traction diggers could not go.

Handling bulk material can often be satisfactorily done with a Link-Belt Speeder dragline. Ample power to swing a capacity load at the end of an extra-long boom is enabling this contractor to make good time on a batch plant operation.

The Owner of a LINK-BELT

Finds an outstanding RAPID—EASY— for many

This feature takes the Link-Belt Speeder machine out of the class of special-purpose equipment, multiplies its usefulness many-fold, and effectuates a continuing return on the investment. These pages

The Link-Belt Speeder is chosen here for an excavating job in usually heavy, sticky soil. Where ground is especially soft, double crawler tracks can be furnished to reduce ground pressure to the minimum.
Road work calls for grading as well as handling rock for filling and paving material. Link-Belt Speeders are favorites with western lumber operators, because of their ability to meet every working condition and deliver satisfactory results. The machine shown is loading rock into a portable crushing plant, for roads in the Douglas fir and Sitka spruce regions of the Pacific Northwest.

**as a Shovel**

**Speeder "Shovel-Crane" advantage in its CONVERTIBILITY different Jobs!**

will give an idea of the wide range of operations profitably performed by the standard LS-50 machine, equipped with interchangeable front-end attachments. This quick, easy convertibility is a feature of every size machine in the Link-Belt Speeder line.

Excavating, grading, loading are typical Link-Belt Speeder shovel jobs. Smooth operation, easy control and power for a full dipper and a quick swing add up to plenty of tons-per-day for the LS-50! Shovel boom and dipper sticks are all welded for strength, lightness and durability. Independent chain crowd is self-adjusting to all boom angles, gives maximum digging power under all conditions.
Eleven thousand feet of concrete culvert, ranging in size from 12 to 36 inches, was swung into position on this storm sewer project, with the help of this LS-50 equipped as a crane.

This Link-Belt Speeder is removing quicksand from pipe-line trench. With hook-block the same machine can be used to place pipe, steel, pull piling, and do many other construction jobs.

**THE LS-50 IS FAST, EASY TO HANDLE**

Advanced design and modern construction give the LS-50 the power and strength to meet the demands of continuous, full-capacity operation.

All welded steel construction eliminates castings. Two main drums are on separate shafts, with large external band clutches manually operated, giving the operator "feel" of the load. Clutches are instantly accessible for inspection, adjustment or relining.

Controls operated from within the cab permit steering in both directions, either grad-

Excavating for foundations, pipe trenches or many other purposes, is often done by the Link-Belt Speeder trench hoe, as seen in the two examples at
Industrial plants of every kind have lifting and handling work which can best be performed by a Link-Belt Speeder crane. Above, the machine is unloading, stacking and handling steel sheets, bars and rings. To the right, crated machinery is being loaded on freight cars by a Link-Belt Speeder LS-50 crane.

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Economical to Operate!

Trench hoe or sharp, regardless of position of cab on lower frame. POSITIVE TRACTION LOCK operated from the cab, engages in three positions, and prevents crawlers moving while working. NO BLOCKS OR CHECKS NEEDED.

Oversize bearings, provision for easy lubrication, heavy, heat-treated roller chains, cut steel gears, forged steel rollers, are typical details which add strength and long life, and keep operating costs and maintenance at a minimum.

To lay a new water main near Portland, Ore., twenty thousand feet of ditch, 4 feet deep, were dug by this LS-50 trench hoe at the rate of 1000 feet per day.

The left and at the right. The Link-Belt Speeder trench-hoe is of a special design developed by our own engineers and built by us.
Features of the LS-50 that make it a Profitable Machine

ION-CLOGGING, PERFECT GUIDING CRAWLER TREADS

RUGGED UPPER MACHINERY

The sturdy, rigid frame, composed of rolled steel members with welded cross-ties and pin-connected "A" frame revolves on conical rollers. Main power shaft is chrome-moly steel, in self-aligning roller bearings. Reverse and drum shafts have heavy bronze bearings. Alloy steel, machine-cut gears give smooth action, long wear.

ELECTRIC WELDED ROLLED STEEL MEMBER LOWER FRAME CONSTRUCTION FOR Longer Life

Turntable is alloy steel with machined roller path. Conical rollers are machined from drop-forged alloy steel. Single traction shaft, in four heavy bearings and fully enclosed bevel gears transmit power to crawlers through heavy heat-treated roller chains.
SAFETY TYPE INDEPENDENT RAPID BOOM HOIST

Boom hoist controlled by separate clutch and brake. Automatically engaged with power when lowering for precision operation and added safety. Ratchet and pawl, operated from cab, locks boom hoist when not in use.

FOR LOW GROUND PRESSURE CONDITIONS

The LS-50 can be furnished with patented, dual-crawler tracks, having a ground pressure of 2\textfrac{3}{4} pounds per square inch of tread area. Permits operation in swamplike regions or in soft soil conditions, with dragline bucket for drainage work.

Own and Run

INTERCHANGEABLE ATTACHMENTS

Full range of attachments now available for quick, easy conversion from one to another without changing the main unit. Thus the LS-50 can be kept in more constant use, shifting from one job to another without delay or needless expense.
**LINK-BELT SPEEDER LS-50½ YARD**

**WORKING RANGES, CLEARANCES AND CAPACITIES**

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**SHOVEL Working Ranges**

<table>
<thead>
<tr>
<th>Boom Angle</th>
<th>60°</th>
<th>55°</th>
<th>50°</th>
<th>45°</th>
<th>40°</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clearance Height of Boom</td>
<td>19'-0&quot;</td>
<td>18'-0&quot;</td>
<td>17'-1½&quot;</td>
<td>16'-2&quot;</td>
<td>14'-10&quot;</td>
</tr>
<tr>
<td>Maximum Dumping Height</td>
<td>17'-0&quot;</td>
<td>16'-0&quot;</td>
<td>15'-0&quot;</td>
<td>14'-0&quot;</td>
<td>12'-6&quot;</td>
</tr>
<tr>
<td>Maximum Dumping Radius</td>
<td>15'-8&quot;</td>
<td>15'-3&quot;</td>
<td>15'-0&quot;</td>
<td>14'-9&quot;</td>
<td>13'-0&quot;</td>
</tr>
<tr>
<td>Clearance Swing of Boom</td>
<td>10'-8&quot;</td>
<td>11'-8&quot;</td>
<td>12'-9&quot;</td>
<td>13'-0&quot;</td>
<td>14'-10&quot;</td>
</tr>
<tr>
<td>Digging Depth Below Treads</td>
<td>8'-0&quot;</td>
<td>9'-3&quot;</td>
<td>10'-6&quot;</td>
<td>12'-0&quot;</td>
<td>14'-0&quot;</td>
</tr>
<tr>
<td>Radius Cut at Tread Level</td>
<td>13'-0&quot;</td>
<td>13'-4&quot;</td>
<td>13'-8&quot;</td>
<td>14'-0&quot;</td>
<td>14'-3&quot;</td>
</tr>
<tr>
<td>Digging Radius 8' Elevated</td>
<td>18'-9&quot;</td>
<td>19'-6&quot;</td>
<td>20'-3&quot;</td>
<td>21'-0&quot;</td>
<td>21'-6&quot;</td>
</tr>
<tr>
<td>Maximum Height of Cut</td>
<td>22'-6&quot;</td>
<td>21'-6&quot;</td>
<td>20'-6&quot;</td>
<td>19'-2&quot;</td>
<td>18'-0&quot;</td>
</tr>
</tbody>
</table>

**DIMENSIONS**

| Rear Radius | E | 7'-0" |
| Overall Height | F | 9'-10" |
| Ground Clearance of Cab | G | 3'-6" |
| Overall Length of Crawlers | K | 9'-9" |
| Center to Center of Crawler Sprockets | L | 7'-3" |
| Width of Crawler Base with 16' treads | M | 7'-10" |
| Width of Crawler Base with 20' treads | M | 8'-2" |
| Width of Cab | N | 7'-9½" |
| Width of Tread Shoes Standard | P | 16" |
| Width of Tread Shoes Optional at extra cost | P | 20" |
| Minimum Ground Clearance | Q | 12" |
| Truck Frame Clearance | R | 18" |
| Radius of Boom Hinge | X | 1'-10" |
| Height of Boom Hinge | Y | 4'-2" |

**BRIEF SPECIFICATIONS**

**POWER UNIT**
Gasoline, 6 cylinder heavy duty industrial engine, rated 53 H.P. at 1400 R. P. M.
Electric starter is standard equipment.
Fuel tank capacity—30 gal.

**LINE PULLS AND SPEEDS**
9" dia. Draw—8,000 lbs. at 140 ft. per min.
11" dia. Draw—6,400 lbs. at 175 ft. per min.

**CRAWLERS**

| Travel Speed—Low | 0.9 miles per hour |
| Travel Speed—High | 2.4 miles per hour |
| 16' Crawlers, standard weight | 2928 sq. in. |
| 20' Crawlers add 350 lbs. | 3168 sq. in. |

**CRANE and DRAGLINE—30 Foot Boom**

<table>
<thead>
<tr>
<th>Angle of Boom</th>
<th>Radius of Load</th>
<th>LIFTING CAPACITY</th>
<th>CLEARANCES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>75° 10 Ft.</td>
<td>11,000 Lbs.</td>
<td>Crane W less T</td>
</tr>
<tr>
<td>70° 12 Ft.</td>
<td>8,250 Lbs.</td>
<td>30° 10&quot;</td>
<td>Drag W less U</td>
</tr>
<tr>
<td>64° 15 Ft.</td>
<td>6,000 Lbs.</td>
<td>29° 6&quot;</td>
<td>24&quot; 0&quot;</td>
</tr>
<tr>
<td>58° 20 Ft.</td>
<td>4,000 Lbs.</td>
<td>25° 10&quot;</td>
<td>20° 10&quot;</td>
</tr>
<tr>
<td>40° 25 Ft.</td>
<td>2,400 Lbs.</td>
<td>21° 0&quot;</td>
<td>16° 0&quot;</td>
</tr>
<tr>
<td>20° 30 Ft.</td>
<td>1,400 Lbs.</td>
<td>12° 0&quot;</td>
<td>14° 0&quot;</td>
</tr>
</tbody>
</table>

**SHEOVEL**
Boom—16 ft. Dipper Stick—12 ft. Chain Crowded.
Bucket—LINK-BELT SPEEDER Standard ½ Yd.
Hoist speed, single line | 175 ft. per min.
Crowd speed | 100 ft. per min.
Retract speed | 155 ft. per min.
Swing Speed | 5½ R.P.M.
Working weight, gasoline, 16' treads | 25,500 lbs.

**DRAGLINE**
Boom 30 ft. Bucket—LINK-BELT SPEEDER Standard ½ Yd.
Hoist speed, single line | 175 ft. per min.
Inhaul—standard speed | 146 ft. per min.
Swing Speed | 5½ R.P.M.
Working weight, gasoline, 16' treads, with bucket 25,000 lbs.
Ground pressure, gasoline, 16' treads | 8½ lbs. per sq. in.
Ground pressure, gasoline, 20' treads | 7 lbs. per sq. in.

**CRANE AND CLAMSHELL**
Boom—30 ft.
Hoisting speed, single line | 175 ft. per min.
Holding line speed | 175 ft. per min.
Swing Speed | 5½ R.P.M.
Working weight, gasoline, 16' treads, without bucket 23,300 lbs.

**TRENCH HOE**
Boom—14 ft. Dipper arm—70" Maximum reach—22' 9"
Inhaul speed, 2 part | 62 ft. per min.
Inhaul—optional speeds | 70 or 87 ft. per min.
Swing Speed | 5½ R.P.M.
Working weight, gasoline, 16' treads | 25,500 lbs.
Overall height (F) with gantry raised—12' 5½"