STRADDLE FORK

RAPID *Harvesting of Crops*
Handling of Field Bins
Transport to Processor

STRADDLE FORK

The Modern Way to Move Crops

Straddle Fork introduces a new harvesting and transporting system to tree and row crop operations. Crops move from the orchard or field faster with a minimum of manual labor. Empty bins are mechanically distributed in an orderly manner to conveniently serve pickers. Removal of full bins and loading of highway vehicles is also fully mechanized. Crops arrive at the packing or processing plant much fresher and at a lower cost. Manual carrying of field boxes is eliminated. Pickers spend more of their time and efforts picking. The equipment and manpower needed to serve pickers is reduced to a minimum and is utilized at high efficiency. Trees, roots and drainage systems are protected. These advantages can be summarized as:

- **Faster Harvesting**
- **Lower Cost**
- **Lower Investment**
- **Fresher Crop**
- **Less Effort**
- **Healthier Orchards**

How the System Works

These harvesting advantages result from a combination of features that make up the new system.

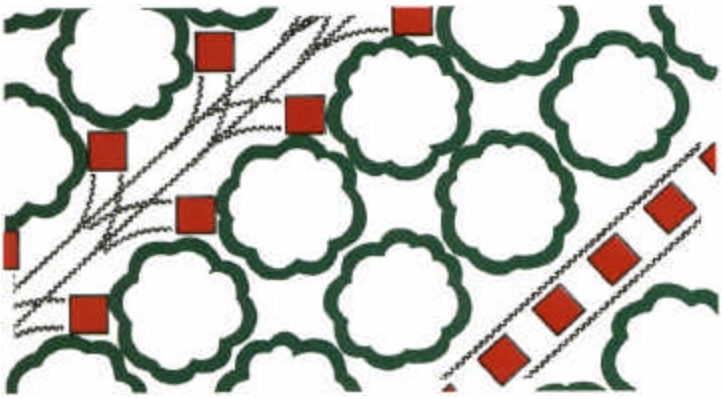
The standard bulk bins, that measure 47 inches square, 32 inches high, with 17 times the capacity of conventional field boxes, have a capacity of 935 lbs. of fruit or produce. Straddle Fork picks-up, stacks and secures 4 such full bins within its frame and delivers them to the roadside for automatic pick-up by Strad-O-Lift trailers. It is also capable of stacking and carrying 8 empty bins. All loads are moved in a raised position permitting Straddle Fork to straddle other bins or crops up to 38 inches high x 59 inches wide. Straddle Fork places empty bins in a row at spots convenient to the picker. It then backs up over the row to pick-up full bins for a return trip to the roadside where the 4 high stacks are placed in a 32 bin row for pick-up by a Strad-O-Lift trailer. The Straddle Fork, with extended forks, then picks-up 8 more empty bins for delivery to the field, repeating a cycle which enables 1 Straddle Fork to serve up to 45 pickers.

This efficient linear handling system operates within a tree clearance of only 8 feet. It eliminates damage to trees, roots, drip irrigation systems and drainage furrows.

(Top & Middle) Straddling over partially filled bins, the Straddle Fork begins to stack full bins enroute to loading area.

(Bottom) Straddle Fork stacks bins 4 high in a 32 bin row for pick-up by a Strad-O-Lift trailer. The Straddle Fork then picks-up 8 empty bins for delivery to the field.

Moving crops from field to truck in half the time at half the cost.



Linear Handling Protects the Orchard

The top row of this diagram illustrates a typical forklift driving pattern as it travels in and out to deposit bins between trees. Soil is heavily compacted. Irrigation furrows are destroyed. Tree damage is obvious and picker productivity is reduced. The bottom diagram shows the single track made by the Straddle Fork. Straddling bins centered in a single row eliminates the problem caused by forklifts.

Less Energy and Maintenance Expense

The Straddle Fork engine is capable of continuous, demanding operation. The normal, average fuel consumption is less than one gallon per hour on which it can match the output of 45 pickers. Grower and operator owners say Straddle Fork has less breakdown, less maintenance, and is less expensive to operate than any other machine.

Replacement parts are stocked at the Hamilton, Ohio plant and at the Camarillo, California service center. Many of the standard components are also available in tractor, forklift and truck service centers throughout the U.S.

Exceptional Mobility

Four-wheel, posi-traction drive with rear-wheel steering allows the Straddle fork to handle crops in a wide range of conditions. It maneuvers extremely well on soft soil, sand, rough terrain, steep grades and rocky mountainsides with curving, narrow rows. Wide, high-floatation tires keep soil compaction to a minimum, even with payloads of up to 4500 lbs.

Important Features

Versatile

With unmatched ability to pick-up, stack and unstack bins, the Straddle Fork can be used as a standard forklift. Its open-ended front allows the entire mast section to be extended so that the forks are positioned just beyond the front wheels for loading of flatbed trucks. Controls for lifting, tilting and side shifting let it do everything a standard forklift can do.

Controls

The hydrostatic drive system allows the driver to control forward, reverse and braking with one simple foot operated rocker pedal. The machine stops immediately when the pedal is released. Straddle Fork also features four-wheel drive or front or rear two-wheel drive. Full power steering is standard, and rear wheel control provides short turn radius.

Towable

Optional quick-connect tow bar with its own master cylinder, recoil springs and shock absorbers means the Straddle Fork can be towed when this is preferred to driving.

Parts Availability

Standard, off-the-shelf components are used in construction of Straddle Fork. They are easily available in almost every town where facilities for servicing of tractors, forklifts and trucks are located.

Straddle Fork owners say...

"The biggest advantage of the Straddle Fork is being able to traverse over partially filled or empty bins in the field without disturbing them or damaging trees. Most of our growers, after they saw the Straddle Fork working, wanted us to use it instead of the other equipment. We were one of the first to use the Straddle Fork and we're going to continue with it. We don't see anything better."

Wes Grunden, General Manager, Fresh Fruit Division
Ventura coastal Corporation, Ventura, CA.

"For moving bins from tree to roadside the Straddle Fork is the best overall method we know of. We also use field forklifts and 'cherry pickers,' but we prefer the Straddle Fork method over anything else. There is no question, in my opinion, that the Straddle Fork is as fast and efficient as they claim it is."

Paul Leavens, Owner-Partner
Leavens Ranches, Ventura, CA

Part of a Proven System

The efficiency and economy of Straddle Fork has been demonstrated over 30 years of actual in-field use under demanding conditions. It does the job faster, with less energy and maintenance than any other method and when teamed with the Strad-O-Lift trailer, it is the most modern system for hand-picked crop harvesting.

Strad-O-Lift

The 32 bins, which Straddle Fork so neatly stacked along the roadside, can now be simultaneously picked-up, clamped and driven away by the Strad-o-Lift trailer.

The entire operation is performed by the driver in less than two minutes. He delivers the 30,000 lb. payload as a unit to the processing or packing plant and returns with a load of 32 empty bins. These are dropped in less than a minute at the orchard or field where Straddle Fork picks-up 8 bins at a time for distribution in the picking rows.

The Straddle Fork and the Strad-O-Lift operations are both performed by the drivers alone, without waiting and without assistance. Drivers need not leave their cabs and can be in motion continuously, resulting in extraordinary productivity.

(Top) Strad-O-Lift trailer backs up and straddles a 32 bin stack for rapid pick-up or discharge of the entire load.
(Bottom) After straddling the bins, they are raised, clamped and secured to transport at highway speeds.

Owners say continued...

"The Straddle Fork is the greatest thing that's happened for us since cartons were developed for packing nearly 60 years ago. We know of no other bulk bin handling method that even comes close to its performance. Yes, We're expanding our fleet of Straddle Fork machines."

Rex A. Berg, General Manager
Venture Pacific Company

"We own only one Straddle Fork because we found it to be more efficient than any other bin handling method we looked at on a daily basis, our foreman operates and maintains our Straddle Fork, stays ahead of 20 pickers, and still has time to do his quality inspection and paper work. Maintenance cost is lower than other engine driven machines we've got on the ranch. Straddle Fork has helped us cut and hold down operating cost."

Robert A Dearmore, General Manager
Oro Del Norte Ranch

"We have 21 Straddle Forks right now, and use one per picking crew. It is capable of handling the output of 40 to 45 pickers easily a day. We're expanding our operation to do the contract hauling for another 200 growers soon and we'll add another 16 Straddle Forks to the operation."

Manuel Oritz, President, and Frank Oritz, Vice President
Oritz Brothers Trucking, Saticoy, CA

Kornylak Corporation

Management

In keeping with its innovative and pace setting line of equipment, Kornylak's management is predominately technical. Officers have degrees in Chemical and Mechanical Engineering, Physics and M.B.A. All are intimately involved in daily operations with frequent involvement in details of design, production and testing.

Facilities

High, wide bays, served by cranes up to 50 ton capacity and two interior rail sidings permit efficient production and thorough testing of complete assemblies. The Technical Service group demonstrate and produce customer products before shipment of a finished line.

Products

Kornylak offers a broad range of productivity enhancing equipment in the categories of: Mechanized Vehicles, Live Storage Systems, Conveyors, Components for Automation and Systems, and Insulated Panel Production Lines. Only a few examples are illustrated below and we invite you to request detailed literature. If you contemplate improvements in any of these fields, be sure to invite Kornylak's innovative input. Without obligation, you may learn new and highly effective approaches to your goals.

RELATED EQUIPMENT catalogues on request

Conveyors

Horizontal, vertical, overhead, heavy-duty and light compact conveyors. Chainless metal belt, chain, rotating cable, gravity and powered wheel. Complete systems include transfers, loaders, accumulation and controls.

Armorbelt II
with central control

Transwheel
powered and free turning

Components

Add quality and technology to your system. A full line of multi-directional wheels, speed controlling wheels, retarders, snap-in wheels, all plastic anti-friction skate wheels and a variety of conveyor elements.

Live Storage

Handles standard slatted pallets, skids, slip sheets and drums. No need for slave pallets or runners. Complete systems with stackers, conveyors and mezzanines. Thousands of proven successful installations by the inventors of pallet live storage.

Palletflo
high bay with stacker

Foamboarder
manufacture building panels

Insulation Panels

High speed production lines to produce metal, plastic and paper skinned wall and roofing panels. Complete facilities for production line testing before shipping.

Key

OAL	- Over All Length	120 In.
WB	- Wheel Base	82 In.
TW	- Track Width	81 In.
FS	- Fork Adjusting Width	14-37 In.
A	- Overall Width	93 In.
B	- Body Width	65 In.
C	- Max. Height + Guard Cage	104 In.
C_1	- Max. Height + Bin Clamps	140 In.
D	- Body Height	69 In.
E	- Straddle Height or Clearance	38 In.
F	- Fork Extension Travel	48 In.
G	- Maximum Fork Height	64 In.
H	- Inside Clearance	59 In.
R_1	- Front Turing Radius	110 In.
R_2	- Overall Turning Radius	178 In.

Specifications

1. Weight-with hydraulic reservoir and gas tank full 6,960 lbs.
   - Front wheel section (no load) 2,680 lbs.
   - Rear wheel section (no load) 4,280 lbs.
   - Normal load capacity 4,500 lbs.
   - Front axle (forks extended) 3,630 lbs.
   - Rear axle (forks extended) 3,330 lbs.
   - Gross Vehicle Weight (with 4,500 lbs. payload) 11,460 lbs.

2. Operational
   - Straddle clearance-height 38 In.
   - Straddle clearance-width 59 In.
   - Fork elevation 64 In.
   - Fork blade adjustment spacing 14-37 In.
   - Fork length 47 1/4 In.
   - Fork forward motion (hydraulic) 48 In.
   - Fork lift angle (hydraulic) 10 deg.
   - Fork side shuttle 6 In.
   - Turning radius 8 1/2 ft.
   - Travel speed (Forward or Reverse) 4 wheel drive 6 mph.
   - Travel speed (Forward or Reverse) 2 wheel drive 12 mph.
   - Max. Torque-wheel drive motors 2,000 lb. Ft.
   - Braking-Hydrostatic 4 wheel
   - Braking-Parking-Towing 2 wheel
   - Steering-rear wheel (hydraulic) 2 cylinders
   - Tires-high flotation 12-16-5-8 ply 4 tires

3. Engine
   - (Diesel Optional)
   - Volkswagen-air cooled upright 1600 cc
   - Fuel gasoline
   - No. cylinders 4 cylinders
   - Bore and stroke 3.37 x 2.71 in.
   - Compression ratio 7.7 x 1
   - Power output Appr. 60 SAE BHP
   - Fuel consumption (8 hr. op.) Appr. 6 gal.
   - Rated RPM (governed) 3,400 RPM

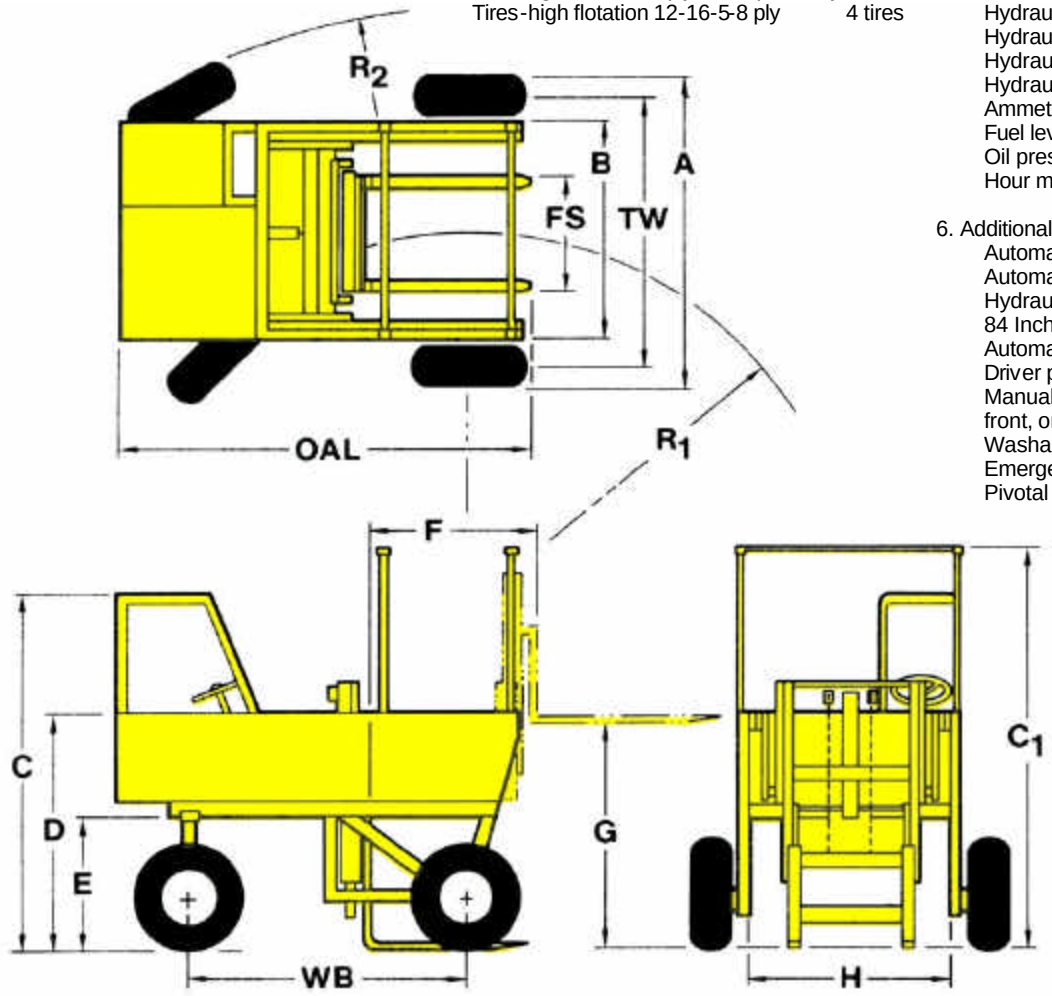
   Fuel system
   - Carburetor (auto choke) Solex
   - Tank capacity 20 gal.

   Electrical system
   - Ignition Alternator 12V - 38 Amp.

4. Hydraulic
   - Positive displacement, variable volume pump Wheel drive
   - Gear Pump Lift, tilt, shuttle, extend
   - Gear Pump Power steering
   - Gear Pump Stacking cylinder
   - Wheel motors (4) Piston-type

5. Instrumentation
   - Hydraulic oil level
   - Hydraulic oil temperature
   - Hydraulic inlet filter gauge
   - Hydraulic outlet filter gauge
   - Ammeter
   - Fuel level gauge
   - Oil pressure gauge
   - Hour meter

6. Additional features
   - Automatic engine cut out excess oil temp.
   - Automatic oil cooling system
   - Hydraulically actuated bin stacker mechanism
   - 84 Inch fork extenders
   - Automatic bin hold down clamps
   - Driver protector cage
   - Manual drive selection of 4 wheel, 2 wheel front, or 2 wheel rear
   - Washable engine air cleaner with dust clamp
   - Emergency pump for dynamic break
   - Pivotal or swing axle



All operations, controls and items listed and described are standard equipment.

Manufactured by

KORNYLAK CORPORATION

400 HEATION ST • HAMILTON, OHIO 45011 • 513-863-1277

www.kornylak.com • www.omniwheel.com • www.palletflo.com

Email: kornylak@kornylak.com