AT A GLANCE:

- Rated Capacity — 17,000
- Vertical Reach — 26' 0"
- Horizontal Reach — 20' 2"
- Continuous rotation
- 14' 9" turning radius
- Large Carry Deck
- Hyd. outriggers
- Built tough to work tough in industrial applications where a sure touch is needed on loads up to 8½ tons.
**General:**
- Weight: 13,700 lbs
- Travel Speeds (calculated):
  - Gear Forward Reverse
    - First 5.4 4.9
    - Second 11 10
    - Third 20 18.2
- Drawer Pull:
  - Gear Pounds
    - First 6.7 14
    - Second 3.1 30
    - Third 1.7 45
- Turning radius:
  - (Center of outside steering wheel) 14' 9"
  - Aisle width for 50' turn 10' 3"
  - *Wheels will spin on dry concrete at 3,800 lbs.

**Engine:**
- Make: Continental
- Model: TM27
- Type: Gas
- Number of cylinders: 4
- Displacement: 165 cubic inches
- HP at governed RPM: 65

**Engine (optional):**
- Make: Perkins
- Model: D4 203
- Type: Diesel
- Number of cylinders: 4
- Displacement: 203 cubic inches
- HP at governed RPM: 65

**Engine (optional):**
- Make: Continental
- Model: TMD27
- Type: Diesel
- Number of cylinders: 4
- Displacement: 165 cubic inches
- HP at governed RPM: 58

**Electrical:**
- 12 volt system
- Lighting group:
  - One pair headlights with Hi and Low beams, integral tail, brake and turn signals and front turn signals
- Instrument group:
  - Fuel, ammeter, oil pressure, water temperature, converter oil temperature gauges and hour meter

**Transmission:**
- Make: Borg Warner
- Model: 72T/118
- Gear ratio:
  - Forward: 6.324:1
  - Reverse: 6.956:1
  - Second: 3.921:1
  - Third: 3.401:1
- Torque Converter: Stall ratio of 2.15:1

**Brakes:**
- Service: 4-Wheel drum type brakes
- Parking: Band type mounted on transmission

**Tires:**
- Standard: 9.60 x 15, 12-ply rating, Highway tread
- Optional: 10.00 x 15, 12-ply rating, Highway tread
- Optional: Grizzly Supersoft X5250x15 solid rubber

**Fuel Tank:**
- 20 gallon capacity

**Outriggers:**
- Four hydraulic outriggers of box beam construction with direct connected holding valves.
- Independent controls for left and right hand outriggers.
- Outrigger pad dimension 9' x 12'

**Cargo Deck:**
- 60 square feet
- 12,000 lbs. maximum capacity
- Steps located on front corners

**Hydraulic System:**
- Tandem pump, direct-driven by engine crankshaft, rated at 15 and 32.5 gpm at rated rpm
- Hydraulic oil tank capacity of 17 gallons

**Steering:**
- Full hydraulic orbitrol unit with two double acting
- 2 inch cylinders attached to rear axle

**Crane:**
- Boom Movement:
  - Rotation: Continuous
  - Elevation: 0° to 70°
  - Extension: 8' 2" to 20' 2" (12')

**Boom Speeds:**
- Rotation: 1.7 rpm
- Elevation: 15 seconds
- Extension: 28 seconds

**Boom Assembly:**
- Three section boom assembly equipped with bearing pad, double-acting hydraulic cylinders equipped with direct-connected holding valves and boom angle indicator on each side of boom.

**Boom Rotation:**
- Heavy-duty ball rotation gear with external teeth support boom. Rotation is powered by hydraulic motor and worm gear drive.

**Boom Winch:**
- Turret-mounted
- Hydraulic powered
- Bare drum line pull of 10,000 lbs
- Winch line speed of 110 fpm
- 90 feet of 5/8" wire rope, downhaul weight and swivel hook, standard

**Axles:**
- Drive Axle:
  - Make: Rockwell
  - Gear ratio: 7.2:1
  - Location: Front
- Steering Axle (non-driving):
  - Make: Rockwell
  - Location: Box
Options:

Anti-Two Blocking Device
Prevents damage to hoist rope and/or crane components from pulling load hook against boom tip.

10 foot Boom Extension
Boom stowable. Fiberglass bucket(s) or work platform can be attached to boom extension tip.

Fiberglass Bucket(s)
24” x 24” x 42” deep Personnel bucket with maximum capacity of 300 pounds.

Work Platform
69” x 30 3/4” x 42” deep, constructed of steel tubing with expanded metal floor. Maximum capacity of 500 pounds.

Bucket/Platform Brake
Friction brake for holding bucket(s) or Work Platform in a fixed position.

Overload Alert System
Designed to prevent excessive overloads on crane structures.

Back-Up Alarm
Provides pulsating sound when transmission is in reverse.

Auxiliary Winch
Mounted behind front bumper, hydraulically driven with control in operators console.

LP Gas Fuel System Kit
Contains all necessary components for LPG operation.

Dual Fuel System Kit
Contains all necessary components to burn LPG or gasoline.

No-Spin Differential
Differential equipped with “no-spin” feature.

Operators Guard
Tubular steel weldment with heavy expanded steel mesh top section.

Pintle Hook
Holland T-50-A pintle hook mounted on rear frame. 6 ton capacity.

Sheave Block
Required for maximum capacity lifts.

All Weather Cab
Rigid-mounted canopy section and removable hinged doors. Includes heater, 12 volt electric windshield wiper, two sliding windows, one in the door and one in the right-hand side.

Defroster
Variable speed electric defroster fan inside cab.
AT A GLANCE:

- Rated Capacity — 17,000 pounds
- Vertical Reach — 20'
- Horizontal Reach — 20'
- Continuous Rotation
- 10' 2" Turning Radius with Optional Four Wheel Steer
- Carry Deck
- Hydraulic Outriggers
ALL CAPACITIES FOR 360° ROTATION

<table>
<thead>
<tr>
<th>LOAD RADIUS</th>
<th>3-SECTION BOOM</th>
<th>10' BOOM EXTENSION INSTALLED</th>
</tr>
</thead>
<tbody>
<tr>
<td>RADIUS</td>
<td>ON RUBBER</td>
<td>ON O/R</td>
</tr>
<tr>
<td>5 feet</td>
<td>9500</td>
<td>17000</td>
</tr>
<tr>
<td>6 feet</td>
<td>8600</td>
<td>14600</td>
</tr>
<tr>
<td>8 feet</td>
<td>5675</td>
<td>10250</td>
</tr>
<tr>
<td>10 feet</td>
<td>4400</td>
<td>7700</td>
</tr>
<tr>
<td>12 feet</td>
<td>3100</td>
<td>6550</td>
</tr>
<tr>
<td>14 feet</td>
<td>2525</td>
<td>6660</td>
</tr>
<tr>
<td>16 feet</td>
<td>2050</td>
<td>4450</td>
</tr>
<tr>
<td>18 feet</td>
<td>1675</td>
<td>3660</td>
</tr>
<tr>
<td>20 feet</td>
<td>1400</td>
<td>3550</td>
</tr>
<tr>
<td>22 feet</td>
<td>1325</td>
<td>3250</td>
</tr>
<tr>
<td>24 feet</td>
<td>1200</td>
<td>2250</td>
</tr>
<tr>
<td>26 feet</td>
<td>1075</td>
<td>2250</td>
</tr>
<tr>
<td>28 feet</td>
<td>826</td>
<td>2185</td>
</tr>
<tr>
<td>30 feet</td>
<td>675</td>
<td>1825</td>
</tr>
</tbody>
</table>

* Outriggers: Capacities on outriggers are 85% of tipping loads. Capacities on rubber are 75% of tipping loads. Capacities below bold line are limited by tipping. Other capacities are limited by structural or hydraulic capability.
General:

<table>
<thead>
<tr>
<th>Standard Drive Axle</th>
<th>Optional Drive Axle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight: 13,900 lbs.</td>
<td>14,200 lbs.</td>
</tr>
</tbody>
</table>

Travel Speeds (Calculated):

<table>
<thead>
<tr>
<th>Gear</th>
<th>Standard</th>
<th>Optional</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>5.4</td>
<td>3.0</td>
</tr>
<tr>
<td>Second</td>
<td>11.0</td>
<td>6.5</td>
</tr>
<tr>
<td>Third</td>
<td>20.0</td>
<td>12.0</td>
</tr>
<tr>
<td>Fourth</td>
<td>N/A</td>
<td>20.0</td>
</tr>
</tbody>
</table>

Gradeability:

<table>
<thead>
<tr>
<th>Drawbar Pull:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gear</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>First</td>
</tr>
<tr>
<td>Second</td>
</tr>
<tr>
<td>Third</td>
</tr>
<tr>
<td>Fourth</td>
</tr>
</tbody>
</table>

Turning Radius:

<table>
<thead>
<tr>
<th>C/L of Outside Steering Wheel:</th>
<th>14'8&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aslge Width for 90° Turn:</td>
<td>11'9&quot;</td>
</tr>
</tbody>
</table>

Fuel Tank:
20 Gallon Capacity

Outriggers:
Four Hydraulic Outriggers of Box Beam Construction with Direct-Connected Holding Valves. Independent Controls for Left and Right-Hand Outriggers. Outrigger Pad Dimension 9'x12'.

Cargo Deck:
62 Square Feet
12,000 pounds Capacity
Steps Located on Front Corners

Hydraulic System:
Tandem Pump, Direct-Driven by Engine Crankshaft, Rated at 16 and 32.5 GPM at Rated RPM. Hydraulic Oil Tank Capacity of 16 Gallons.

Steering:

<table>
<thead>
<tr>
<th>Standard</th>
<th>Optional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Hydraulic Orbital Unit with Two Double-Acting Hydraulic Cylinders Attached to Rear Axle.</td>
<td>Full Hydraulic Orbital Unit with Two Double-Acting Hydraulic Cylinders Attached to Both Front and Rear Axles.</td>
</tr>
</tbody>
</table>

Steering Modes Include:
Front Steer | Round Steer | Crab Steer |

Crane:

<table>
<thead>
<tr>
<th>Boom Movement:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotation</td>
</tr>
<tr>
<td>Elevation</td>
</tr>
<tr>
<td>Extension</td>
</tr>
</tbody>
</table>

Boom Speeds:
Rotation 1.5 RPM
Elevation 10.0 Seconds
Extension 28.0 Seconds

Boom Assembly:
Three-Section Boom Assembly Equipped with Bearing Pads, Double-Acting Hydraulic Cylinders with Direct-Connected Holding Valves and Boom Angle Indicator on Each Side of Boom.

Boom Rotation:
Heavy-Duty Ball Bearing Rotation Gear with External Teeth. Rotation is Powered by Hydraulic Motor and Worm Gear Drive.

Boom Winch:
Turret-Mounted
Hydraulic Powered
Bare Drum Line Pull of 10,000 Pounds
Winch Line Speed of 110 RPM
90 Feet of 9/16" Wire Rope, Downhaul Weight and Swivel Hook.

Anti-Two-Block Device:
An Audible and Visual Warning System to Alert the Operator if the Load Hook or Hook Block Pulls Too Close to Boom Tip.
Options:

Engine:
LP Gas Fuel System Kit (2).
Contains all necessary components for LP Gas Operation.

Dual Fuel System Kit (3).
Contains all necessary components to burn LPG or Gasoline.

Diesel Engine (4).
Perkins Model D4.203 Diesel Engine.

Spark-Arrestor Muffler (5).
Installed in addition to standard muffler.

Engine Shutdown Gauges (6).
Shuts engine off when high water temperature or low engine oil pressure occurs.

Front Axle:
No-Spin Differential (Standard Axle) (7).
Differential equipped with "No-Spin" feature.

Four-Wheel Steering (8).
Hurst Drive/Steer axle for four-wheel steering.
Differential equipped with "No-Spin" feature.

Tires:
10:00x15, 12-Fly Rating (9)
10:00x15, 14-Fly Rating, Mining and Industrial Tires (10).
Solid Rubber Tires (11).
Foam Filled Tires (12,13).

Fume Filling of Either 9:00 or 10:00x15 Tires.

Spare Tires and Wheels
(14,15,16).
Spare tires and wheels are available for all pneumatic tires on the IC-80.

Chassis Options:
Accessory Storage Box (17).
Storage box is 14" deep x 10" long x 27" wide.
Located in front carry deck.

Auxiliary Winch (18).
Mounted behind front bumper.
Hydraulically driven with control in operator's console.

Pintle Hook (19).
Pintle hook mounted on rear frame. 5 ton capacity.

Headlight and Taillight Grilles (20).
Welded steel protective grilles for headlights and taillights.

Lifting Rings (21).
Lifting ring at each corner of carry deck so slings can be attached for lifting crane.

Operators Compartment:
Operator Guard (22).
Tubular steel weldment with heavy expanded steel mesh top section.

All-Weather Cab (23).
High-mounted canopy section and removable hinged door.
Includes heater, electric windshield wiper, one sliding glass window in the door and one fold-out window in rear to provide flow-through ventilation. Defrost fan included.

Windsheild Washer (24).
Includes reservoir pump and nozzle.

Floor mat (25).
Vinyl mat with foam backing.

Operator Suspension Seat (26).
Provides additional operator comfort.

Electrical:
Back-Up Alarm (27).
Provides pulsating sound when transmission is in reverse.

Strobe Lights (28).
Yellow strobe light mounted on each side of turret weight box.

Lighted Instrument Guages (29).
Instrument guages equipped with lights for night operations.

Amber Rotating Beacons (30).
Amber rotator beacon mounted on each side of turret weight box.

Boom Work Lights (31).
One work light mounted to boom to light boom tip and one work light mounted to turret to light ground under boom tip.

Boom Attachments:
Anti-Two-Blocking Device (32).
Prevents damage to hoist rope and/or crane components from pulling load hook against boom tip. This system uses a weight suspended from a switch.

Anti-Two-Blocking Device (33).
Same as above except a trip arm is used instead of a weight.

10 Foot Boom Extension (34).
Boom stowable. Fiberglass bucket(s) or work platform can be attached to boom extension tip.

Fiberglass Bucket(s) (35,36).
24" x 24" x 42" deep personnel bucket with maximum capacity of 300 pounds.

Work Platform (37).
69" x 32" x 42" deep. Constructed of steel tubing with expanded metal floor. Maximum capacity of 600 pounds.

Bucket/Platform Brake (38).
Friction brake for holding bucket(s) or work platform in a fixed position.

Sheave Block (39).
Required for maximum capacity lifts.

Searcher Hook (40).
3,000 pound capacity, mounts to boom tip.
IC-80-1D
8' 2'-20' 2' Boom

<table>
<thead>
<tr>
<th>LOAD RADIUS FEET</th>
<th>3-SECTION BOOM</th>
<th>10' BOOM EXTENSION INSTALLED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ON RUBBER</td>
<td>ON O/R</td>
</tr>
<tr>
<td>5</td>
<td>17000</td>
<td>9500</td>
</tr>
<tr>
<td>6</td>
<td>14500</td>
<td>8500</td>
</tr>
<tr>
<td>8</td>
<td>10250</td>
<td>6000</td>
</tr>
<tr>
<td>10</td>
<td>7700</td>
<td>4150</td>
</tr>
<tr>
<td>12</td>
<td>6550</td>
<td>3100</td>
</tr>
<tr>
<td>14</td>
<td>5550</td>
<td>2425</td>
</tr>
<tr>
<td>16</td>
<td>4450</td>
<td>1975</td>
</tr>
<tr>
<td>18</td>
<td>3950</td>
<td>1625</td>
</tr>
<tr>
<td>20</td>
<td>3550</td>
<td>1400</td>
</tr>
<tr>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Capacities on outriggers are 85% of tipping loads. Capacities on rubber 75% of tipping loads.
2. Deduct 120 lbs. with boom extension in stowed position.
IC-80-2D
9'6"-24'0" Boom

<table>
<thead>
<tr>
<th>LOAD RADIUS FEET</th>
<th>3-SECTION BOOM</th>
<th>10' BOOM EXTENSION INSTALLED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ON O.R.</td>
<td>ON RUBBER</td>
</tr>
<tr>
<td>5</td>
<td>17000</td>
<td>9500</td>
</tr>
<tr>
<td>6</td>
<td>14500</td>
<td>8500</td>
</tr>
<tr>
<td>8</td>
<td>10250</td>
<td>6000</td>
</tr>
<tr>
<td>10</td>
<td>7700</td>
<td>4150</td>
</tr>
<tr>
<td>12</td>
<td>6550</td>
<td>3025</td>
</tr>
<tr>
<td>14</td>
<td>5550</td>
<td>2350</td>
</tr>
<tr>
<td>16</td>
<td>4450</td>
<td>1850</td>
</tr>
<tr>
<td>18</td>
<td>3950</td>
<td>1550</td>
</tr>
<tr>
<td>20</td>
<td>3250</td>
<td>1300</td>
</tr>
<tr>
<td>22</td>
<td>2975</td>
<td>1100</td>
</tr>
<tr>
<td>24</td>
<td>2475</td>
<td>925</td>
</tr>
<tr>
<td>26</td>
<td>2250</td>
<td>850</td>
</tr>
<tr>
<td>28</td>
<td>2000</td>
<td>700</td>
</tr>
<tr>
<td>30</td>
<td>1775</td>
<td>600</td>
</tr>
<tr>
<td>32</td>
<td>1625</td>
<td>525</td>
</tr>
<tr>
<td>34</td>
<td>1400</td>
<td>450</td>
</tr>
</tbody>
</table>

1. Capacities on outriggers are 85% of tipping loads. Capacities on rubber 75% of tipping loads.

2. Deduct 120 lbs. with Boom Extension in stowed position.

Diagram with instructions and measurements.
General:

<table>
<thead>
<tr>
<th>Type</th>
<th>Standard Drive Axle</th>
<th>Optional Drive Steer Axle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight: IC-80-1D</td>
<td>14,230 lbs.</td>
<td>14,530 lbs.</td>
</tr>
<tr>
<td>IC-80-2D</td>
<td>14,530 lbs.</td>
<td>14,830 lbs.</td>
</tr>
<tr>
<td>Speed (Calculated)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gear: First</td>
<td>5.4</td>
<td>3.0</td>
</tr>
<tr>
<td>Second</td>
<td>11.0</td>
<td>6.5</td>
</tr>
<tr>
<td>Third</td>
<td>20.0</td>
<td>12.0</td>
</tr>
<tr>
<td>Fourth</td>
<td>N/A</td>
<td>20.0</td>
</tr>
<tr>
<td>Gradeability:</td>
<td>43%</td>
<td>71%</td>
</tr>
<tr>
<td>Drawbar Pull:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gear: First</td>
<td>7,050&quot;</td>
<td>11,900&quot;</td>
</tr>
<tr>
<td>Second</td>
<td>3,450&quot;</td>
<td>5,820&quot;</td>
</tr>
<tr>
<td>Third</td>
<td>1,880&quot;</td>
<td>3,170&quot;</td>
</tr>
<tr>
<td>Fourth</td>
<td>N/A</td>
<td>1,880&quot;</td>
</tr>
<tr>
<td>Turning Radius:</td>
<td>(C/L of Outside Steering Wheel): 14'8&quot;</td>
<td>10'2&quot;</td>
</tr>
<tr>
<td></td>
<td>(Aisle Width for 90° Turn): 11'9&quot;</td>
<td>9'9&quot;</td>
</tr>
</tbody>
</table>

Engine:

<table>
<thead>
<tr>
<th>Make</th>
<th>Standard</th>
<th>Optional</th>
<th>Optional</th>
<th>Optional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continental</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>John Deere</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perkins</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cummins</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model</td>
<td>TM27</td>
<td>D4.239</td>
<td>4B39</td>
<td></td>
</tr>
<tr>
<td>No. of Cyl.</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Displacement</td>
<td>165 C.I.D</td>
<td>239 C.I.D</td>
<td>203 C.I.D</td>
<td>239 C.I.D</td>
</tr>
<tr>
<td>Horsepower</td>
<td>64</td>
<td>80</td>
<td>63</td>
<td>76</td>
</tr>
</tbody>
</table>

Electrical:

12 Volt System

Lighting Package:
One Pair Headlights with Hi and Low Beams, Back-up Lights, Integral Tail, Brake and Turn Signals and Front turn Signals

Instrument Package:
Fuel, Ammeter, Oil Pressure, Water Temperature, Convertor Oil Temperature Gauges and Hourmeter

Back-Up Alarm:
Provides pulsating sound when transmission is in reverse.

Transmission:

Make: Borg Warner
Model: 72T/718
Type: Reversing Gearbox and Manual Shift Three Speed Gearbox, Equipped with Torque Converter and Transmission Oil Cooler

<table>
<thead>
<tr>
<th>Gear Ratio:</th>
<th>Forward</th>
<th>Reverse</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>6.324:1</td>
<td>6.956:1</td>
</tr>
<tr>
<td>Second</td>
<td>3.092:1</td>
<td>3.401:1</td>
</tr>
<tr>
<td>Third</td>
<td>1.666:1</td>
<td>1.855:1</td>
</tr>
<tr>
<td>Fourth</td>
<td>1:1</td>
<td>1:1</td>
</tr>
</tbody>
</table>

Torque Converter Has Stall Ratio of 2:1:1

Axles:

<table>
<thead>
<tr>
<th>Drive Axle:</th>
<th>Standard</th>
<th>Optional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make</td>
<td>Rockwell</td>
<td>Hurtle</td>
</tr>
<tr>
<td>Model</td>
<td>F-146</td>
<td>272A</td>
</tr>
<tr>
<td>Gear Ratio</td>
<td>7.2:1</td>
<td>11.98:1</td>
</tr>
<tr>
<td>Location</td>
<td>Front</td>
<td>Front</td>
</tr>
</tbody>
</table>

Steering Axle (Non-Driving):

<table>
<thead>
<tr>
<th>Make</th>
<th>Rockwell</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>FF-931</td>
</tr>
<tr>
<td>Location</td>
<td>Rear</td>
</tr>
</tbody>
</table>

Brakes:
Service - 4-Wheel Drum Type Brakes
Parking - Band Type Mounted on Transmission

Tires:
Standard - 9'0"x15, 12-Ply Rating, Highway Tread
Optional - 10'0"x15, 12-Ply Rating, Highway Tread
Optional - 10'0"x15, 14-Ply Rating, Mining & Industrial Tread
Optional - Grizzley Supersoft X5250x15 Solid Rubber
Optional - Foam Filling for the Above Pneumatic Tires

Fuel Tank:
20 Gallon Capacity

Outriggers:
Four Hydraulic Outriggers of Box Beam Construction with Direct-Connected Holding Valves. Independent Controls for Left and Right-Hand Outriggers Outrigger Pad Dimension 9'x12''

Cargo Deck:
62 Square Feet
12,000 pounds Capacity
Steps Located on Front Corners

Hydraulic System:
Tandem Pump, Direct-Driven by Engine Crankshaft, Rated at 16 and 32.5 GPM at Rated RPM. Hydraulic Oil Tank Capacity of 16 Gallons.

Steering:
Standard:
Full Hydraulic Orbitrol Unit with Two Double-Acting Hydraulic Cylinders Attached to Rear Axle.
Optional:
Full Hydraulic Orbitrol Unit with Two Double-Acting Hydraulic Cylinders Attached to Both Front and Rear Axles. Steering Modes Include: Rear Wheel Steer; Round Steer

Crane:

<table>
<thead>
<tr>
<th>Boom Movement:</th>
<th>IC-80-1D</th>
<th>IC-80-2D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotation</td>
<td>Continuous</td>
<td>Continuous</td>
</tr>
<tr>
<td>Elevation</td>
<td>0° to 70°</td>
<td>0° to 70°</td>
</tr>
<tr>
<td>Extension</td>
<td>8'2&quot; to 20'2&quot; (12')</td>
<td>9'6&quot; to 24'</td>
</tr>
</tbody>
</table>

Boom Speeds:
Rotation: 1.7 RPM
Elevation: 10.0 Seconds
Extension: 28.0 Seconds

Boom Assembly:
Three Section Boom Assembly Equipped with Bearing Pads, Double-Acting Hydraulic Cylinders with Direct-Connected Holding Valves and Boom Angle Indicator on Each Side of Boom.

Boom Rotation:
Heavy-Duty Ball Bearing Rotation Gear with External Teeth. Rotation is Powered by Hydraulic Motor and Worm Gear Drive.

Boom Winch:
Turret-Mounted
Hydraulic Powered
Bare Drum Line Pull of 10,000 Pounds
Winch Line Speed of 110 FPM
IC-80-1D—90 feet of 9/8" Wire Rope
IC-80-2D—105 feet of 9/8" Wire Rope
Downhaul Weight and Swivel Hook

Anti-Two Block Device:
Prevents damage to hoist rope and/or crane components from pulling load hook against tip.

2-Part-Line Sheave Block:
Single sheave block for two-part line requirements.
Listed below are brief descriptions of each option available for the IC-80-D Industrial Crane. Consult the IC-80-D Engineering Spec for additional information on each option.

1. IC-80-1D Industrial Crane with 8'2"-30'2" Boom
2. IC-80-2D Industrial Crane with 9'6"-24' Boom

ENGINE OPTIONS:
3. LP Gas Fuel System
   Contains all necessary components for LP gas operations
4. Dual Fuel System
   Contains all necessary components to burn LP gas and gasoline.

Diesel Engines:
5. John Deere
   4-cylinder, Model 4200D
6. Perkins
   4-cylinder, Model D4203
7. Cummins
   4-cylinder, Model 4B3.9
8. Spark Arrestor Muffler
   Installed in addition to standard muffler.
9. Catalytic Converter
   Reduces engine emissions, Cummins Diesel only.

10. Engine Heater
    Engine coolant heater installed to circulate warm water through engine, plug into 120 volt Ac.
11. Ether Injection System
    Ether starting aid controlled by switch in operator compartment and injects ether directly into intake manifold, Cummins Diesel only.
12. Engine Shut Down Gauges
    Shuts engine off when high water temperature or low engine oil pressure occurs.

FRONT AXLE OPTIONS:
13. No-Spin Differential
    The differential equipped with "No-Spin" feature.
14. Four-Wheel Steering
    Hurth drive/steer axle for four-wheel steering, differential equipped with "No-Spin" feature.

TIRE OPTIONS:
15. 10.00 x 15, 12-Ply Rating
16. Gulfill Rubber Tires
17. 10.00 x 15, 14-Ply Rating, Mining & Industrial Tires

FOAM FILLING OF TIRES:
18. 9.00 x 15 Tires
19. 10.00 x 15 Tires

SPARE TIRE AND WHEELS:
20. 9.00 x 15
21. 10.00 x 15
22. 10.00 x 15 Mining & Industrial

CHASSIS OPTIONS:
23. Accessory Storage Box
    Storage box is 14" deep x 10-1/2" long and 27" wide, located in front carry deck.
24. Auxiliary Winch
    Mounted behind front bumper, hydraulically driven with control in operator's console.
25. Pintle Hook
    Pintle hook mounted on rear frame, 5-ton capacity.
26. Headlight and Taillight Grilles
    Welded steel protective grilles for headlight and taillights.
27. Rearview Mirrors
    One mounted on right-hand deck stake and one mounted on left-hand deck stake.
28. Lifting Rings
    Lifting rings at each corner of carry deck so sling can be attached for lifting crane.

OPERATOR COMPARTMENT OPTIONS:
29. Operator Guard
    Tubular steel weldment with heavy expanded steel mesh top section.
30. All-Weather Cab
    Rigid-mounted canopy section and removable hinged door. Includes heater, electric windshield wiper, one sliding glass window in the door and one fold-out window in rear to provide flow-through ventilation. Defroster fan included.
31. Sliding Right-Hand Window
    Window on right-hand side of cab slides open for additional ventilation.
32. Windshield Washer
    Includes reservoir pump and nozzle.
33. Floor Mat
    Vinyl mat with foam backing.
34. Operator Suspension Seat
    Provides additional operator comfort.
35. Noise Reduction Kit
    Includes floor mat, control valve and side panels of foam backed vinyl for noise reduction.

ELECTRICAL OPTIONS:
36. Outrigger Warning System
    Two-tone alarm is activated when "outrigger down" controls are operated.
37. Strobe Lights
    Yellow strobe light mounted on each side of turntable weight box.
38. Lighted Instrument Gauges
    Instrument gauges equipped with lights for night operations.
39. Amber Rotating Beacons
    Amber rotating beacon mounted on each side of turntable weight box.
40. Boom Work Lights
    One work light mounted to boom to light boom tip and one work light mounted to turntable light ground under boom tip.
41. Boom Work Lights and Beacons
    Boom work lights and amber rotating beacons installed.
42. Boom Work Lights and Strobe Room work lights and strobe lights installed.
43. Dome Light
    Interior light installed for units equipped with an all weather cab.

HYDRAULIC OPTIONS:
44. Boom Structural Protection System
    Important to understand fully the description of the Boom Structural Protection System described in the IC-80 Engineering Spec. This option is not intended to and will not replace an LMI.
45. Outrigger Control - Individual Electric switch used in conjunction with existing two outrigger valve section to select for individual operation of each outrigger.

BOOM ATTACHMENTS:
46. Anti-Two Block - Chain & Weight
    Prevents damage to hoist rope and/or crane components from pulling load hook against boom tip. This system uses a suspended weight on the boom tip instead of a trip arm.
47. Boom Extension, 10 Foot
    Boom Slowable, fiberglass bucket(s) or work platform can be attached to the boom extension tip.
48. Boom Extension, 10 Foot, Offsettable
    Same as item 47, except the boom extension is offsettable to 3 different positions: 0 degree (inline), 15 degree and 30 degree offset.
49. Searcher Hook - "H" Shape
    Swivel hook with spring latch hangs from link under boom tip, 5,000 pound capacity.
50. Searcher Hook - Large
    Swivel hook with spring latch hangs from support structure projecting outward from boom tip, 5,000 pound capacity.
51. Load Moment Indicator - Krueger
    Warns operator of impending overload with audible and visual signals. Prevents overload by stopping boom functions that cause overloads.
52. Load Indicator - Krueger
    Includes 3-sheave load sensor on top of boom and readout box on top of instrument panel.
53. Load Moment Indicator - PAT
    Same as item 51, except manufactured by PAT.
54. Load Indicator - PAT
    Same as item 52, except manufactured by PAT.
**IC-80-1E**

**IC-80-2E**

* USE 0° FOR STRAIGHT BOOM EXTENSION  
† USE 0°, 15° OR 30° FOR OFFSET BOOM EXTENSION  
BOOM EXT. LOADS MUST NOT EXCEED MAIN BOOM CAPACITY.

Capacities on outriggers are 85% of tipping loads. Capacities on rubber are 75% of tipping loads. Capacities below BOLD line are limited by tipping. Other capacities are limited by structural or hydraulic capabilities. Deduct 120 pounds with Boom Extension in stowed position.
CABILITIES APPLY TO OPERATION ON FIRM LEVEL SURFACE

<table>
<thead>
<tr>
<th>LOAD RADIUS</th>
<th>MAIN BOOM OR EXTENSION CAPACITIES IN POUNDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 feet</td>
<td>9500 on Rubber 17000 on Outriggers 11700 on Rubber 10250 on Outriggers</td>
</tr>
<tr>
<td>6 feet</td>
<td>9000 on Rubber 14500 on Outriggers 10000 on Rubber 13000 on Outriggers</td>
</tr>
<tr>
<td>8 feet</td>
<td>5750 on Rubber 10250 on Outriggers 8400 on Rubber 10250 on Outriggers</td>
</tr>
<tr>
<td>10 feet</td>
<td>4150 on Rubber 8000 on Outriggers 6300 on Rubber 7700 on Outriggers</td>
</tr>
<tr>
<td>12 feet</td>
<td>3100 on Rubber 6500 on Outriggers 4850 on Rubber 6500 on Outriggers</td>
</tr>
<tr>
<td>14 feet</td>
<td>2425 on Rubber 5500 on Outriggers 3650 on Rubber 5500 on Outriggers</td>
</tr>
<tr>
<td>16 feet</td>
<td>1975 on Rubber 4600 on Outriggers 3000 on Rubber 4600 on Outriggers</td>
</tr>
<tr>
<td>18 feet</td>
<td>1625 on Rubber 3950 on Outriggers 2500 on Rubber 4150 on Outriggers</td>
</tr>
<tr>
<td>20 feet</td>
<td>1400 on Rubber 3550 on Outriggers 2150 on Rubber 3800 on Outriggers</td>
</tr>
</tbody>
</table>

* USE 0° FOR STRAIGHT BOOM EXTENSION
* USE 0°, 15° OR 30° FOR OFFSET BOOM EXTENSION
**BOOM EXT. LOADS MUST NOT EXCEED MAIN BOOM CAPACITY.**

Capacities on outriggers are 85% of tipping loads. Capacities on rubber are 75% of tipping loads. Capacities below BOLD line are limited by tipping. Other capacities are limited by structural or hydraulic capabilities. Deduct 120 pounds with Boom Extension in stowed position.

---

CAPACITIES APPLY TO OPERATION ON FIRM LEVEL SURFACE

<table>
<thead>
<tr>
<th>LOAD RADIUS</th>
<th>MAIN BOOM OR EXTENSION CAPACITIES IN POUNDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 feet</td>
<td>9500 on Rubber 17000 on Outriggers 11700 on Rubber 10250 on Outriggers</td>
</tr>
<tr>
<td>6 feet</td>
<td>9000 on Rubber 14500 on Outriggers 10000 on Rubber 13000 on Outriggers</td>
</tr>
<tr>
<td>8 feet</td>
<td>5750 on Rubber 10250 on Outriggers 8400 on Rubber 10250 on Outriggers</td>
</tr>
<tr>
<td>10 feet</td>
<td>4150 on Rubber 8000 on Outriggers 6300 on Rubber 7700 on Outriggers</td>
</tr>
<tr>
<td>12 feet</td>
<td>3100 on Rubber 6500 on Outriggers 4850 on Rubber 6500 on Outriggers</td>
</tr>
<tr>
<td>14 feet</td>
<td>2425 on Rubber 5500 on Outriggers 3650 on Rubber 5500 on Outriggers</td>
</tr>
<tr>
<td>16 feet</td>
<td>1975 on Rubber 4600 on Outriggers 3000 on Rubber 4600 on Outriggers</td>
</tr>
<tr>
<td>18 feet</td>
<td>1625 on Rubber 3950 on Outriggers 2500 on Rubber 4150 on Outriggers</td>
</tr>
<tr>
<td>20 feet</td>
<td>1400 on Rubber 3550 on Outriggers 2150 on Rubber 3800 on Outriggers</td>
</tr>
</tbody>
</table>

* USE 0° FOR STRAIGHT BOOM EXTENSION
* USE 0°, 15° OR 30° FOR OFFSET BOOM EXTENSION
**BOOM EXT. LOADS MUST NOT EXCEED MAIN BOOM CAPACITY.**

Capacities on outriggers are 85% of tipping loads. Capacities on rubber are 75% of tipping loads. Capacities below BOLD line are limited by tipping. Other capacities are limited by structural or hydraulic capabilities. Deduct 120 pounds with Boom Extension in stowed position.
### Capacities Apply to Operation on Firm Level Surface

<table>
<thead>
<tr>
<th>IC-80-3E 360° Rotation</th>
<th>Over Front</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radius (feet)</td>
<td>Main Boom</td>
</tr>
<tr>
<td>5</td>
<td>9400</td>
</tr>
<tr>
<td>6</td>
<td>7550</td>
</tr>
<tr>
<td>8</td>
<td>5250</td>
</tr>
<tr>
<td>10</td>
<td>3600</td>
</tr>
<tr>
<td>12</td>
<td>2650</td>
</tr>
<tr>
<td>14</td>
<td>2050</td>
</tr>
<tr>
<td>16</td>
<td>1600</td>
</tr>
<tr>
<td>18</td>
<td>1250</td>
</tr>
<tr>
<td>20</td>
<td>1050</td>
</tr>
<tr>
<td>22</td>
<td>850</td>
</tr>
<tr>
<td>24</td>
<td>750</td>
</tr>
<tr>
<td>26</td>
<td>650</td>
</tr>
<tr>
<td>28</td>
<td>550</td>
</tr>
<tr>
<td>30</td>
<td>450</td>
</tr>
<tr>
<td>32</td>
<td>350</td>
</tr>
<tr>
<td>34</td>
<td>250</td>
</tr>
<tr>
<td>35</td>
<td>200</td>
</tr>
<tr>
<td>36</td>
<td>150</td>
</tr>
<tr>
<td>38</td>
<td>100</td>
</tr>
</tbody>
</table>

* Use 0° for straight boom extension

† Use 0°, 15° or 30° for offset boom extension

Boom ext. loads must not exceed main boom capacity.

Capacities on outriggers are 85% of tipping loads. Capacities on rubber are 75% of tipping loads. Capacities below BOLD line are limited by tipping. Other capacities are limited by structural or hydraulic capabilities. Deduct 120 pounds with boom extension in stowed position.
Listed below are brief descriptions of each option available for the IC-80-E Industrial Cranes.

Consult the IC-80-E Engineering Spec for additional information on each option.

**MODELS:**
1. IC-80-1E Industrial Crane with 8'2"-20'2" Boom
2. IC-80-2E Industrial Crane with 9'6"-24' Boom
3. IC-80-3E Industrial Crane with 11'6"-30' Boom

**ENGINE:**
5. LP Gas Fuel System
   Contains all necessary components for LP gas operations.
6. Dual Fuel System
   Contains all necessary components to burn LP gas and gasoline.

**Diesel Engines:**
7. Cummins
   4-cylinder, Model 4B3.9 7.
8. Perkins
   4-cylinder, Model D4.236
9. John Deere
   4-cylinder, Model 4239D
10. Spark Arrester Muffler
    Installed in addition to std. muffler.

**CHASSIS OPTIONS:**
11. Catalytic Converter
    Reduces engine emissions, Diesel only.
12. Engine Heater
    Engine coolant heater installed to circulate warm water through engine, plugs into 120 volt AC.
13. Ether Injection System
    Ether starting aid controlled by switch in operator compartment and injects ether directly into intake manifold.
14. Engine Shut Down Gauges
    Shuts engine off when high water temperature or low engine oil pressure occurs.

**FRONT AXLE OPTIONS:**
15. Four-Wheel Steering
    Hurth drive/steer axle for four-wheel steering, differential equipped with Limited Slip Differential.

**TIRE OPTIONS:**
16. Solid Rubber Tires:
    18. 8.25 x 15
    20. 10.00 x 15, 14-Ply Rating, Mining & Industrial Tires
    21. 10.00 x 15 Tires, Foam Filled
    22. SPARE TIRE AND WHEELS:
        10.00 x 15, 14-ply, Highway Tread
        10.00 x 15 Mining & industrial

**CHASSIS OPTIONS:**
17. Outrigger Control - Selector
    Provide electric selector valves with existing two controls for individual operation.

**CHASSIS OPTIONS: Cont’d**
26. Outrigger Control - Individual
    Provides four controls for individual outrigger operations.
27. Auxiliary Winch
    Mounted behind front bumper, hydraulically driven with control in operator's console.
28. Pintle Hook:
    29. Pintle Hook, Rear
    30. Pintle Hook, Front
31. Rearview Mirrors
    One mounted on right-hand deck stake and 1 mounted on left-hand deck stake.
32. Lifting Rings
    Lifting rings at each corner of carry deck so sling can be attached for lifting crane.

**OPERATOR COMPARTMENT OPTIONS:**
33. Operator Guard
    Tubular steel weldment with heavy expanded steel mesh top section.
34. Operator Guard Cover
    Clear vinyl cover to go over Operator Guard, for inclement weather operations.
35. Operator Guard Door
    Hinged door covers operator compartment side opening.
36. All-Weather Cab
    Rigid-mounted canopy section and removable hinged door. Includes heater, electric windshield wiper, one sliding glass window in the door & one on the light side of canopy. Defroster fan included.
37. Cab Heater
    Heater with two-speed fan for units without All Weather Cab.
38. Windshield Washer
    Includes reservoir pump and nozzle.
39. Floor Mat
    Vinyl mat with foam backing.
40. Operator Suspension Seat
    Provides additional operator comfort.
41. Noise Reduction Kit
    Includes floor mat, control valve and side panels of foam backed vinyl for noise reduction.

**ELECTRICAL OPTIONS:**
42. Outrigger Warning System
    Two-tone alarm is activated when "outrigger down" controls are operated.
43. Strobe Lights
    Yellow strobe light mounted on each side of turret weight box.
44. Lighted Instrument Gauges
    Instrument gauges equipped with lights for night operations.
45. Amber Rotating Beacons
    Amber rotating beacon mounted on each side of turret weight box.
46. Boom Work Lights
    One work light mounted to boom to light boom tip and one work light mounted to turret to light ground under boom tip.
47. Boom Work Lights and Beacons
    Boom work lights and amber rotating beacons installed.
48. Boom Work Lights and Strobe
    Boom work lights and strobe lights installed.
49. Dome Light
    Interior light installed for units equipped with an All Weather Cab.
50. Work Lights - Rear
    Two rectangular work lights in the rear panel of the chassis.

**HYDRAULIC OPTIONS:**
51. Boom Structural Protection System
    Important to understand fully the description of the Boom Structural Protection System described in the IC-80 Engineering Spec. This option is not intended to and will not replace an LMI.

**BOOM ATTACHMENTS:**
52. Boom Extension, 10 Foot
    Boom stowable.
53. Boom Extension, 10 Foot, Offsettable
    Same as item 53, except the boom extension is offsettable to 3 different positions: 0 degree (inline), 15 degree and 30 degree offset.
54. Link Under Boom
55. Nose Mount
56. Searcher Hook
57. Load Moment Indicator-Krueger or PAT
    Warns operator of impending overload with audible and visual signals. Prevents overload by stopping boom functions that cause overloads. Readouts for load, boom angle, boom length, and load radius.
58. Load Indicator - Krueger or PAT
    Includes 3-sheave load sensor on top of boom and readout box on top of instrument panel.

Should you, as an end user, require an option or special equipment on your IC-80-E that is not listed on our sales literature, please contact your dealer's salesperson or the factory to receive a special quoted price.
**GENERAL:**

<table>
<thead>
<tr>
<th>Weight: Drive Axle</th>
<th>Standard</th>
<th>14,600 lbs.</th>
<th>Optional</th>
<th>14,800 lbs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC-80-1E</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IC-80-2E</td>
<td>14,800 lbs.</td>
<td></td>
<td>15,000 lbs.</td>
<td></td>
</tr>
<tr>
<td>IC-80-3E</td>
<td>15,100 lbs.</td>
<td></td>
<td>15,300 lbs.</td>
<td></td>
</tr>
</tbody>
</table>

| Gradeability: | 71% | 71% |

<table>
<thead>
<tr>
<th>Turning Radius:</th>
<th>(C/L of Outside Steering Wheel)</th>
<th>15' 0&quot;</th>
<th>10' 6&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axle Width for 90° Turn:</td>
<td>11' 0&quot;</td>
<td>9' 9&quot;</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Boom Movement:</th>
<th>IC-80-1E</th>
<th>IC-80-2E</th>
<th>IC-80-3E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotation</td>
<td>Continuous</td>
<td>Continuous</td>
<td>Continuous</td>
</tr>
<tr>
<td>Elevation</td>
<td>0° to 70°</td>
<td>0° to 70°</td>
<td>0° to 70°</td>
</tr>
<tr>
<td>Extension</td>
<td>12&quot;</td>
<td>14' 6&quot;</td>
<td>18' 6&quot;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Boom Speeds:</th>
<th>Rotation</th>
<th>1.7 RPM</th>
<th>Elevation</th>
<th>10.0 sec.</th>
<th>Extension</th>
<th>28.0 sec.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ENGINE:**

<table>
<thead>
<tr>
<th>Standard</th>
<th>Optional</th>
<th>Optional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make: Continental Cummins</td>
<td>Perkins</td>
<td>John Deere</td>
</tr>
<tr>
<td>Model: TM27</td>
<td>4B3.9</td>
<td>D4.236</td>
</tr>
<tr>
<td>Type: Gas</td>
<td>Diesel</td>
<td>Diesel</td>
</tr>
<tr>
<td>No. Cyl: 4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Displacement: 165 CID</td>
<td>239 CID</td>
<td>236 CID</td>
</tr>
<tr>
<td>HP @ Gov:</td>
<td>64</td>
<td>80</td>
</tr>
<tr>
<td>Speed</td>
<td>80</td>
<td>80</td>
</tr>
</tbody>
</table>

| Fuel Tank Capacity: | 20 Gallons |

**TRANSMISSION:**

<table>
<thead>
<tr>
<th>Make: Borg Warner</th>
<th>Model: 727/718</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type: Reversing gearbox and manual shift 4-speed gearbox. Equipped with torque converter and transmission oil cooler. Torque converter has stall ratio of 2.15:1.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gear Ratio:</th>
<th>Forward</th>
<th>Reverse</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>6.324:1</td>
<td>6.956:1</td>
</tr>
<tr>
<td>Second</td>
<td>3.092:1</td>
<td>3.401:1</td>
</tr>
<tr>
<td>Third</td>
<td>1.686:1</td>
<td>1.855:1</td>
</tr>
<tr>
<td>Fourth</td>
<td>1.000:1</td>
<td>1.000:1</td>
</tr>
</tbody>
</table>

**AXLES:**

<table>
<thead>
<tr>
<th>Drive Axle:</th>
<th>Standard</th>
<th>Optional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make: Hurth</td>
<td>Hurth</td>
<td>Hurth</td>
</tr>
<tr>
<td>Model: 172</td>
<td>272A</td>
<td></td>
</tr>
<tr>
<td>Gear Ratio:</td>
<td>11.98:1</td>
<td>11.98:1</td>
</tr>
<tr>
<td>Location: Front</td>
<td>Front</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gear</th>
<th>Travel Speed</th>
<th>Drawbar Pull*</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>3 MPH</td>
<td>11,900**</td>
</tr>
<tr>
<td>Second</td>
<td>7 MPH</td>
<td>5,620**</td>
</tr>
<tr>
<td>Third</td>
<td>12 MPH</td>
<td>3,170</td>
</tr>
<tr>
<td>Fourth</td>
<td>21 MPH</td>
<td>1,880</td>
</tr>
</tbody>
</table>

*Drawbar pull is calculated, based on Continental TM27 engine.
**Wheels will spin before these values are reached.

**STEERING:**

| Standard: Full hydraulic orbitrol unit with two double-acting hydraulic cylinders attached to rear axle. |
| Optional: Full hydraulic orbitrol unit with two double-acting hydraulic cylinders attached to both front and rear axles. Steering modes include: Rear wheel steer & round steer. |

**BRAKES:**

<table>
<thead>
<tr>
<th>Service:</th>
<th>Front</th>
<th>Internal wet disc brakes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rear</td>
<td>Drum type brakes</td>
<td></td>
</tr>
<tr>
<td>Parking</td>
<td>Band type mounted on transmission</td>
<td></td>
</tr>
</tbody>
</table>

**TIRES:**

| Standard | 10.00 x 15, 14-Ply, Highway Tread |
| Optional | Grizzly Supersoft XS250 x 15 Solid Rubber |
| Optional | Foam filling of the above pneumatic tires |

**CHASSIS:**

<table>
<thead>
<tr>
<th>CARGO DECK:</th>
<th>62 square feet of deck area</th>
<th>14,000 lbs. capacity on deck when load is centered over or between axles</th>
</tr>
</thead>
<tbody>
<tr>
<td>A storage box is located in front carry deck. Steps located on front corners.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**OUTRIGGERS:**

Four hydraulic outriggers of box beam construction with direct-connected holding valves. Independent controls for left and right-hand outriggers. Outrigger pad dimensions of 9" x 12".

**ACCESSORY STORAGE BOX:**

Storage box is 14" deep x 10-1/2" long x 27" wide, located in front carry deck.

**ELECTRICAL:**

<table>
<thead>
<tr>
<th>12 Volt System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lighting Package:</td>
</tr>
<tr>
<td>Instrument Package:</td>
</tr>
<tr>
<td>Back-Up Alarm:</td>
</tr>
</tbody>
</table>

**HYDRAULIC SYSTEM:**

Tandem pump, direct-driven by engine crankshaft, rated at 16 and 32.5 GPM at rated RPM. Hydraulic oil tank capacity of 16 gallons.

**BOOM ASSEMBLY:**

Three-section boom assembly equipped with bearing pads, double acting hydraulic cylinders with direct-connected holding valves and boom angle indicator on each side of boom.

**Boom Rotation:**

Heavy-duty ball bearing rotation gear with external teeth. Rotation is powered by hydraulic motor and worm gear drive.

**Boom Hoist:**

Turret mounted planetary gear hoist hydraulically powered with a bare drum line pull of 10,000 lbs. at a line speed of 110 FPM. Includes downhaul weight, swivel hook and sheave block for 2-part line and 125 ft. of 9/16" hoist rope.

**Anti-Two Block Device:**

Prevents damage to hoist rope and/or crane components from pulling load hook against tip.
IC-80-F

2-WHEEL DRIVE

* Capacity on outriggers...18,000 lbs.
* Pick and carry capacity up to...11,700 lbs.
* Height...7’ 3”
* Width...6’ 6”
* Sheave height...up to 46’
* Horizontal Reach...up to 40’
* Tight turning radius
* 2-Wheel drive standard
* 4-Wheel steer optional
* 4-Wheel drive optional
* Powershift transmission
* Fully hydraulic controls for smooth precise operations
* Independent outrigger controls
4-Wheel Drive
4-Wheel Steer

* Capacity on outriggers...18,000 lbs.
* Pick and carry capacity up to...11,700 lbs.
* Height...7’ 3”
* Width...6’ 6”
* Sheave height...up to 46’
* Horizontal Reach...up to 40’
* Tight turning radius...11’ 8”
* 4-Speed synchromesh transmission
* Independent outrigger controls
* 4-Wheel hydraulic internal wet disc brakes
* Independent outrigger controls
IC-80-1F 8'-2" - 20'-2" BOOM

CAPACITIES APPLY TO OPERATION ON FIRM LEVEL SURFACE

<table>
<thead>
<tr>
<th>LOAD RADIUS</th>
<th>MAIN BOOM OR EXTENSION CAPACITIES IN POUNDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEET</td>
<td>360° &quot;ROTATION&quot;</td>
</tr>
<tr>
<td></td>
<td>ON RUBBER</td>
</tr>
<tr>
<td>5</td>
<td>9600</td>
</tr>
<tr>
<td>6</td>
<td>7900</td>
</tr>
<tr>
<td>8</td>
<td>5750</td>
</tr>
<tr>
<td>10</td>
<td>4150</td>
</tr>
<tr>
<td>12</td>
<td>3100</td>
</tr>
<tr>
<td>14</td>
<td>2425</td>
</tr>
<tr>
<td>16</td>
<td>1975</td>
</tr>
<tr>
<td>18</td>
<td>1625</td>
</tr>
<tr>
<td>20</td>
<td>1400</td>
</tr>
<tr>
<td>22</td>
<td>1275</td>
</tr>
<tr>
<td>24</td>
<td>1075</td>
</tr>
<tr>
<td>26</td>
<td>925</td>
</tr>
<tr>
<td>28</td>
<td>775</td>
</tr>
<tr>
<td>30</td>
<td>675</td>
</tr>
</tbody>
</table>

10'-FOOT BOOM EXTENSION - STRAIGHT OR OFFSET

<table>
<thead>
<tr>
<th>MAIN BOOM ANGLE</th>
<th>0°</th>
<th>30°</th>
<th>45°</th>
<th>60°</th>
<th>70°</th>
</tr>
</thead>
<tbody>
<tr>
<td>10°</td>
<td>2250</td>
<td>2600</td>
<td>3200</td>
<td>5000</td>
<td>7000</td>
</tr>
<tr>
<td>115°</td>
<td>2400</td>
<td>2700</td>
<td>3500</td>
<td>4200</td>
<td></td>
</tr>
<tr>
<td>130°</td>
<td>2550</td>
<td>2800</td>
<td>3000</td>
<td>3300</td>
<td></td>
</tr>
</tbody>
</table>

* USE 0° FOR STRAIGHT BOOM EXTENSION.

* USE 0°, 15° OR 30° FOR OFFSET BOOM EXTENSION.

BOOM EXTENSION LOADS MUST NOT EXCEED MAIN BOOM CAPACITY.
### IC-80-2F 9'-6" - 24'-0" BOOM

#### MAIN BOOM CAPACITIES

<table>
<thead>
<tr>
<th>LOAD RADIUS FEET</th>
<th>ON RUBBER</th>
<th>ON OUTRIGGERS</th>
<th>ON RUBBER</th>
<th>ON OUTRIGGERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>9500</td>
<td>17000</td>
<td>11600</td>
<td>18000</td>
</tr>
<tr>
<td>6</td>
<td>7800</td>
<td>14500</td>
<td>10200</td>
<td>14500</td>
</tr>
<tr>
<td>8</td>
<td>5500</td>
<td>10250</td>
<td>8250</td>
<td>10250</td>
</tr>
<tr>
<td>10</td>
<td>3900</td>
<td>7700</td>
<td>6200</td>
<td>7700</td>
</tr>
<tr>
<td>12</td>
<td>2900</td>
<td>6550</td>
<td>4550</td>
<td>6550</td>
</tr>
<tr>
<td>14</td>
<td>2300</td>
<td>5550</td>
<td>3550</td>
<td>5550</td>
</tr>
<tr>
<td>16</td>
<td>1850</td>
<td>4550</td>
<td>2850</td>
<td>4550</td>
</tr>
<tr>
<td>18</td>
<td>1550</td>
<td>3950</td>
<td>2400</td>
<td>4050</td>
</tr>
<tr>
<td>20</td>
<td>1300</td>
<td>3250</td>
<td>2050</td>
<td>3650</td>
</tr>
<tr>
<td>22</td>
<td>1100</td>
<td>2875</td>
<td>1750</td>
<td>3300</td>
</tr>
<tr>
<td>24</td>
<td>925</td>
<td>2475</td>
<td>1550</td>
<td>3100</td>
</tr>
<tr>
<td>26</td>
<td>850</td>
<td>2250</td>
<td>1350</td>
<td>2750</td>
</tr>
<tr>
<td>28</td>
<td>700</td>
<td>2000</td>
<td>1175</td>
<td>2500</td>
</tr>
<tr>
<td>30</td>
<td>600</td>
<td>1775</td>
<td>1025</td>
<td>2300</td>
</tr>
<tr>
<td>32</td>
<td>500</td>
<td>1625</td>
<td>900</td>
<td>2100</td>
</tr>
<tr>
<td>34</td>
<td>425</td>
<td>1400</td>
<td>800</td>
<td>1950</td>
</tr>
</tbody>
</table>

#### 10-FOOT BOOM EXTENSION CAPACITIES

<table>
<thead>
<tr>
<th>MAIN BOOM ANGLE</th>
<th>°</th>
<th>30°</th>
<th>45°</th>
<th>60°</th>
<th>70°</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>0°</em></td>
<td>2250</td>
<td>2600</td>
<td>3200</td>
<td>5000</td>
<td>7000</td>
</tr>
<tr>
<td>15°</td>
<td>2400</td>
<td>2700</td>
<td>3500</td>
<td>4200</td>
<td></td>
</tr>
<tr>
<td>30°</td>
<td>2250</td>
<td>2500</td>
<td>3000</td>
<td>3300</td>
<td></td>
</tr>
</tbody>
</table>

* Use 0° for straight boom extension.

** Use 0°, 15° or 30° for offset boom extension. Boom extension loads must not exceed main boom capacity.

---

** Use Single Part Load Line for Loads to 9000 Lbs. (WT. 90LBS.)

** Use Two Part Load Line for Loads to 18000 Lbs. (WT. 124LBS.)

---

### 70° 60° 45° 30° 15°

**Main Boom Angle**

**Radius in Feet from C Rotation to Load**

---

**Use Two Part Load Line for Loads to 18000 Lbs. (WT. 124LBS.)**

---

**Use Single Part Load Line for Loads to 9000 Lbs. (WT. 90LBS.)**

---

**Radius in Feet from C Rotation to Load**

---

**Load**

**Rotation**
IC-80-3F 11'-6" - 30'-0" BOOM

ICAPACITIES APPLY TO OPERATION ON FIRM LEVEL SURFACE

LOAD RADIUS
MAIN BOOM OR EXTENSION CAPACITIES IN POUNDS
TABLE 360' ROTATION OVER FRONT
FEET ON RUBBER ON OUTRIGGERS ON RUBBER ON OUTRIGGERS

<table>
<thead>
<tr>
<th>LOAD</th>
<th>5</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>12</th>
<th>14</th>
<th>16</th>
<th>18</th>
<th>20</th>
<th>22</th>
<th>24</th>
<th>26</th>
<th>28</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>9400</td>
<td>17000</td>
<td>11400</td>
<td>16000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>2550</td>
<td>14000</td>
<td>10000</td>
<td>14000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>5250</td>
<td>10000</td>
<td>8100</td>
<td>10000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>3600</td>
<td>7700</td>
<td>6100</td>
<td>7700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>2650</td>
<td>6100</td>
<td>4450</td>
<td>6100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>2050</td>
<td>5200</td>
<td>3400</td>
<td>5200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>1600</td>
<td>4400</td>
<td>2700</td>
<td>4400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>1250</td>
<td>3650</td>
<td>2200</td>
<td>3900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>1050</td>
<td>3050</td>
<td>1800</td>
<td>3400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>850</td>
<td>2650</td>
<td>1550</td>
<td>3050</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>750</td>
<td>2300</td>
<td>1350</td>
<td>2800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>650</td>
<td>2050</td>
<td>1150</td>
<td>2550</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>550</td>
<td>1850</td>
<td>1000</td>
<td>2350</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>450</td>
<td>1650</td>
<td>900</td>
<td>2150</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>350</td>
<td>1550</td>
<td>750</td>
<td>1950</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>250</td>
<td>1400</td>
<td>650</td>
<td>1800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>200</td>
<td>1250</td>
<td>550</td>
<td>1650</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>150</td>
<td>1100</td>
<td>450</td>
<td>1500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>100</td>
<td>1000</td>
<td>400</td>
<td>1400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

LOADS TO 18000 LBS. (WT. 124LBS.) USE TWO PART LOADLINE FOR LOADS TO 18000 LBS. (WT. 124LBS.)

LOADS TO 9000 LBS. (WT. 90LBS.) USE SINGLE PART LOAD LINE FOR LOADS TO 9000 LBS.

* USE 0° FOR STRAIGHT BOOM EXTENSION.
* USE 0°, 15° OR 30° FOR OFFSET BOOM EXTENSION.

BOOM EXTENSION LOADS MUST NOT EXCEED MAIN BOOM CAPACITY.

LOAD 10-FOOT BOOM EXTENSION - STRAIGHT OR OFFSET

MAIN BOOM ANGLE

<table>
<thead>
<tr>
<th>ANGLE</th>
<th>0°</th>
<th>15°</th>
<th>30°</th>
<th>45°</th>
<th>60°</th>
<th>70°</th>
</tr>
</thead>
<tbody>
<tr>
<td>10°</td>
<td>2250</td>
<td>2600</td>
<td>3200</td>
<td>5000</td>
<td>7000</td>
<td></td>
</tr>
<tr>
<td>115°</td>
<td>2250</td>
<td>2400</td>
<td>2700</td>
<td>3500</td>
<td>4200</td>
<td></td>
</tr>
<tr>
<td>130°</td>
<td>2250</td>
<td>---</td>
<td>2500</td>
<td>3000</td>
<td>3300</td>
<td></td>
</tr>
</tbody>
</table>

* USE 0°, 15° OR 30° FOR OFFSET BOOM EXTENSION.
* USE 0° FOR STRAIGHT BOOM EXTENSION.

BOOM EXTENSION LOADS MUST NOT EXCEED MAIN BOOM CAPACITY.
GENERAL:
Weight:
- 2-Wheel Steer: IC-80-1F 15,400 lbs., IC-80-2F 15,600 lbs., IC-80-3F 16,000 lbs.
- 4-Wheel Steer: IC-80-1F 15,600 lbs., IC-80-2F 15,800 lbs., IC-80-3F 16,200 lbs.
- 4-Wheel Drive: IC-80-1F 16,200 lbs., IC-80-2F 16,600 lbs., IC-80-3F 16,900 lbs.

Boom Movement:
- Rotation: Continuous
- Elevation: 0° to 70°
- Extension: 12 ft., 14 ft. 6 in., 18 ft. 6 in.

Boom Speeds:
- Rotation: 2.0 RPM, 2.0 RPM, 2.0 RPM
- Elevation: 10.0 sec., 10.0 sec., 10.0 sec.
- Extension: 17.0 sec., 21.0 sec., 27.0 sec.

Turning Radius:
- 2-Wheel Steer: Standard 15 ft. 4 in., Optional 10 ft. 9 in.
- 4-Wheel Steer: Optional 11 ft. 8 in.

Aisle Width for 90° Turn:
- 2-Wheel Steer: 11 ft. 0 in., 9 ft. 7 in., 9 ft. 9 in.
- 4-Wheel Steer: 9 ft. 7 in., 9 ft. 9 in.

ENGINE:
Make: Continental, Cummins
Model: TM27, 4B3.9
Type: Gas, Diesel
No. Cyl.: 4, 4
Displacement: 165 CID, 239 CID
HP @ Gov. Speed: 66, 80
Fuel Tank Capacity: 20 Gallons

TRANSMISSION: (Cont’d)
4-Wheel Drive:
Remote mounted synchromesh 4-speed. Forward, neutral and reverse control mounted on steering column. 4-speed control has side lever & push button knob for electric declutching. Can be shifted while in motion. Equipped with oil cooler and filter. Torque converter has stall ratio of 2.2:1.

Gradeability 72 percent.

Forward/Reverse Gear Ratios | Travel Speed | Drawbar Pull |
---|---|---|
First | 4.29:1 | 5 MPH | 11,500 lbs. |
Second | 2.66:1 | 8 MPH | 7,070 lbs. |
Third | 1.41:1 | 15 MPH | 3,670 lbs. |
Fourth | 0.77:1 | 27 MPH | 1,930 lbs. |

AXLES:
Front:

4-Wheel Steer:

Rear:
- 2-Wheel Drive: Axle with 1-1/2 degree oscillation in either direction.

4-Wheel Drive:

STEERING:
2-Wheel Steer:
Hydraulic steering unit with two cylinders attached to rear axle.

4-Wheel Steer:
Hydraulic steering unit with two cylinders attached to each axle. Rear axle is the primary steer. An electric switch in the operator’s compartment is used to select rear-wheel steering or four-wheel round steering.
## BRAKES:

<table>
<thead>
<tr>
<th></th>
<th>2-Wheel Drive</th>
<th>4-Wheel Drive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front</td>
<td>Internal wet disc brakes</td>
<td>Internal wet disc brakes</td>
</tr>
<tr>
<td>Rear</td>
<td>Drum type</td>
<td>Internal wet disc brakes</td>
</tr>
<tr>
<td>Parking</td>
<td>Disc type</td>
<td>Disc type</td>
</tr>
</tbody>
</table>

## TIRES:

<table>
<thead>
<tr>
<th></th>
<th>2-Wheel Drive</th>
<th>4-Wheel Drive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10.00 x 15, load range J radial, highway type tread.</td>
<td>10.00 X 15, mining &amp; industrial, 16 ply rating.</td>
</tr>
</tbody>
</table>

## CHASSIS:

- Cargo Deck:
  - 64 square feet of deck area.* 14,000 lbs. capacity on deck when load is centered over or between axles.**
  - A storage box is located in front cargo deck. Steps located on front corners.
  - *54 Square feet with Cummins engine.
  - **14,000 pounds allowed at creep speed of 200 feet in 30 minutes.

## Fire Extinguisher:

- 1A:10B:C, 2-1/2 pound dry chemical. Mounted on dashboard.

## Outriggers:

- Four hydraulic outriggers of box beam construction with direct-connected holding valves. Independent controls for each outrigger. Each cylinder equipped with direct-connected holding valves. Outrigger pad dimension 9” x 12”.

## Accessory Storage Box:

- Storage box located in front cargo deck.

## OPERATOR COMPARTMENT:

- Operator’s control station provides one-position access to all operating functions. Includes adjustable operator’s seat & retracting seat belt.

## ELECTRICAL:

- **12 Volt System**

## Instrument Package:

- Fuel, ammeter, oil pressure, water temperature, transmission oil temperature gauges & hourmeter.
- Also included are warning lights for low transmission pressure, turn signal, high beams, hazard lights, parking brake & 4-wheel drive.

## ELECTRICAL: (Cont’d)

- **Lighting Package:**
  - One pair headlights with Hi and Low beams, back-up lights, integral tail, brake, front and rear turn signals & emergency flasher switch at operator’s station. 12V horn actuated by button on shifting control.

- **Back-Up Alarm:**
  - Provides pulsating sound from 97 dB alarm when transmission is in reverse. Conforms to SAE J994b.

## HYDRAULIC SYSTEM:

- Tandem pump, direct-driven by engine crankshaft, rated at 17 & 32 GPM at rated RPM. Hydraulic oil tank capacity of 22 gallons.

## BOOM ASSEMBLY:

- Three-section boom assembly equipped with bearing pads, double-acting hydraulic cylinders with direct-connected holding valves & boom angle indicator on each side of boom.

- **Boom Rotation:**
  - Heavy-duty ball bearing rotation gear with external teeth. Rotation is powered by hydraulic motor and worm gear drive.

- **Boom Hoist:**
  - Turret mounted planetary gear hoist hydraulically powered with a bare drum line pull of 10,000 lbs. at a line speed of 110 FPM. Includes downhaul weight, swivel hook & sheave block for 2-part line and 125 ft. of 9/16” hoist rope.

- **Anti-Two-Block Device:**
  - Prevents damage to hoist rope and/or crane components from pulling load hook against tip.
Listed below are brief descriptions of each option available for the IC-80-F Industrial Cranes. Consult the IC-80-F Engineering Spec for additional information on each option.

MODELS:
- IC-80-1F Industrial Crane with 8'2"-20'2" Boom
- IC-80-2F Industrial Crane with 9'6"-24' Boom
- IC-80-3F Industrial Crane with 11'6"-30' Boom

ENGINE:
- LP Gas Fuel System
  Contains all necessary components for LP gas operations.
- Dual Fuel System
  Contains all necessary components to burn LP gas and gasoline.
- GM 3.0 L EFI Gasoline Engine
  with dual fuel
- Diesel Engine
  Cummins - 4B3.9
- Spark Arrester Muffler
  Installed in addition to std. muffler.
- Catalytic Converter
  Reduces engine emissions.
- Engine Heater
  Engine coolant heater installed to circulate warm water through engine. Plugs into 120 volt AC.
- Ether Injection System
  Ether starting aid controlled by switch in operator compartment and injects ether directly into intake manifold.
- Engine Shut Down Gauges
  Shuts engine off when high water temperature or low engine oil pressure occurs.

AXLE & STEERING OPTIONS:
- 2-Wheel Steer & 2-Wheel Drive
- 4-Wheel Steer & 2-Wheel Drive
- 4-Wheel Steer & 4-Wheel Drive

TIRE OPTIONS:
- Solid Rubber Tires:
  - 8.25 x 15
  - 8.25 x 15 Non-Marking
- Mining & Industrial Tires
  - 10.00 x 15, 16-Ply Rating
- Foam Filling of Tires
- Spare Tire & Wheel
  - Highway Tread, 10.00 x 15
  - Mining & Industrial, 10.00 x 15

CHASSIS OPTIONS: (Cont'd)
- Auxiliary Winch Plumbing
  Quick-connect fittings at front of chassis for front auxiliary winch previously listed.
- Pintle Hook:
  - Pintle Hook, Rear
  - Pintle Hook, Front
- Headlight and Taillight Grilles
  Welded steel protective grilles for headlights and taillights.
- Rear Work Light Grilles
  Protective grilles for worklights.
- Rearview Mirrors
  One mounted on right-hand deck stake & one mounted on left-hand deck stake.
- Lifting Rings
  Lifting rings at each corner of cargo deck so sling can be attached for lifting crane.

OPERATOR COMPARTMENT OPTIONS:
- Operator Guard
  Tubular steel weldment with heavy expanded steel mesh top section.
- Operator Guard Cover
  Clear vinyl cover which goes over Operator Guard, for inclement weather operations.
- Operator Guard Door
  Hinged door covers operator compartment side opening.
- All-Weather Cab
  Rigid-mounted canopy section & removable hinged door. Includes heater, electric windshield wiper, one sliding glass window in the door & one in the right side of canopy. Defroster fan & dome light included.
- Cab Heater
  Heater with two-speed fan for units without All Weather Cab.
- Windshield Washer
  Includes reservoir pump and nozzle.
- Floor Mat
  Vinyl mat with foam backing.
- Operator Suspension Seat
  Provides additional operator comfort.
- Noise Reduction Kit
  Includes floor mat, control valve and side panels of foam backed vinyl for noise reduction.
- Air Conditioning
  Air Conditioner with R134 coolant.

CHASSIS OPTIONS: (Cont'd)
- Strobe Lights
  Yellow strobe light mounted on each side of turret weight box.
- Amber Rotating Beacons
  Amber rotating beacon mounted on each side of turret weight box.
- Boom Work Lights
  One work light mounted to boom to light boom tip and one work light mounted to turret to light ground under boom tip.
- Boom Work Lights and Beacons
  Boom work lights and amber rotating beacons installed.
- Boom Work Lights and Strobes
  Boom work lights and strobe lights installed.
- Work Lights
  Two work lights recessed in rear bumper.

Boom Structural Protection System:
Important to understand fully the description of the Boom Structural Protection System described in the IC-80 Engineering Spec. This option is not intended to and will not replace an LMI.

BOOM ATTACHMENTS:
- Boom Extension, 10 Foot
  Boom stowable.
- Boom Extension, 10 Foot, Offsettable
  Same as above item, except the boom extension is offsettable to 3 different positions; 0 degrees (inline), 15 degrees and 30 degrees offset.
- Searcher Hook: (Two Types)
  - Link Under Tip
  - Nose Mount
- Load Moment Indicator
  Warns operator of impending overload with audible and visual signals. Prevents overload by stopping boom functions that cause overloads.
- Load Indicator
  Includes 3-sheave load sensor on top of boom and readout box on top of instrument panel.

Should you, as an end user, require an option or special equipment on your IC-80-F that is not listed on our sales literature, please contact your dealer salesperson or the factory to receive a special quoted price.