



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Solicitation

NUMBER
GSD146422

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
GUY NISBET
304-558-2596

RFQ COPY
 TYPE NAME/ADDRESS HERE

Burns Industrial Equipment
 156 Mesa Drive
 St. Albans, WV 25177

VENDOR

DEPARTMENT OF ADMINISTRATION
 GENERAL SERVICES DIVISION
 JOBSITE
 SEE SPECIFICATIONS

304-558-2317

SHIP TO

DATE PRINTED
02/04/2014

BID OPENING DATE: 03/06/2014 BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	LS		560-75	\$25,010.00	\$25,010.00
FORKLIFT FOR BULLITT STREET WAREHOUSE REQUEST FOR QUOTATION (RFQ) THE WEST VIRGINIA PURCHASING DIVISION FOR THE AGENCY, WEST VIRGINIA DEPARTMENT OF ADMINISTRATION'S, GENERAL SERVICES DIVISION, IS SEEKING BIDS TO ESTABLISH A CONTRACT FOR THE "ONE-TIME" PURCHASE OF A ELECTRIC POWERED FORKLIFT, PER THE SPECIFICATIONS, AND TERMS AND CONDITIONS AS ATTACHED. ***** THIS IS THE END OF RFQ GSD146422 ***** TOTAL: <u>\$25,010.00</u>						

03/06/14 10:29:20AM
 West Virginia Purchasing Division

SIGNATURE <i>Christina Burns</i>	TELEPHONE 304-755-9333	DATE 3/5/14
TITLE President	FEIN 25-1232695	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

State of West Virginia
General Services Division
Attachment A: Pricing Page

Bullitt Street Warehouse
Warehouse Forklift
RFQ No. GSD 146422

GENERAL SERVICES DIVISION
Warehouse Forklift

Pricing Page

NAME OF BIDDER: **Burns Industrial Equipment**

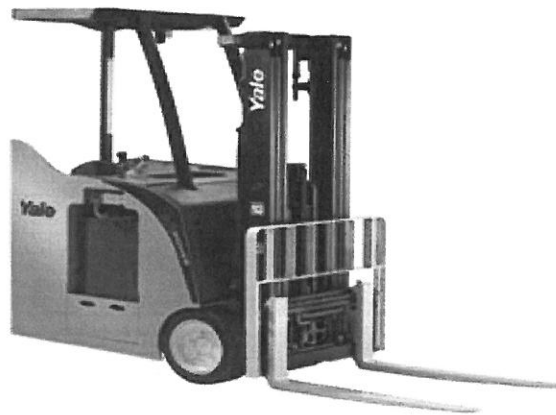
We, the BIDDER, having examined specifications, hereby propose to furnish equipment as described in the Bidding Documents.

Total Cost to provide equipment as stipulated in the Bidding Documents:

 Twenty Five Thousand, Ten Dollars (\$ **25,010.00**)
(Total to be written in figures and words.)

In the event that the written amount and the numerical amount differ, the written amount shall prevail.

The Bidder, if successful and awarded the contract, agrees that equipment is to be delivered within thirty (30) consecutive calendar days following issuance of the Purchase Order.



Model: ESC035AC

**Proposal To:
Mr. Guy Nesbet**

West Virginia Department of Admin

Investment Proposal

We propose to furnish the equipment described herein and in accordance with the specifications, terms, and conditions outlined hereinafter:

Customer:

West Virginia Department of Admin
1900 Kanawha Blvd E
Building 1, Room MB-68
Charleston, WV -25305
Ph No: 304-558-2317

SHIP TO:

West Virginia Department of Admin
1900 Kanawha Blvd E
Building 1, Room MB-68
Charleston, WV -25305


Quote To:

Mr. Guy Nesbet

Quote No: 88-36429888
Series: B883
Model: ESC035AC
Quantity: 1
Date: 05 Mar 2014
Expires: 16 Mar 2014

Highlights

ESC035AC 3,500 Pound Capacity 3 Wheel Stand-Up Counterbalanced AC Electric Lift Truck. Nominal 3,500 lb capacity at 24" load center. Standard Features Include: Yale iSi Technology™ Control System - Back-lit LCD Multi-Function Display with Bar Graphic Battery Discharge Indicator and Lift Interrupt, Hour Meter; Truck, Traction and Hoist Pump, 4 Operator Selectable Programmable Performance Modes. LED Operation and Diagnostic Status Indicators with graphic icons. User passwords and Operator logs with history. Steer Wheel Angle Graphic Indication, Truck Inspection Check List, Truck Speed Indication in MPH or KPH. - Dual AC Traction Motors and AC Transistor Hydraulic Control with 3 function valve. Dual Electric Brakes, Automatically applied foot released and fully sealed electric park brake, 18" Drive Wheels with Dual Steer Tires, Sealed IP 65 (dust and low pressure water protected) Rated Electrical Connections. - Precision Load Positioning on Incline provides operators best in class control of hydraulic functions, Cornering Speed Control provides proportional reduction of speed when turning automatically, Travel Speed up to 7.2 mph with variable acceleration and throttle control. - Side Stance Oriented Operator's Compartment with Low 7" Step Height, Anti-fatigue fully suspended Isolated Floor. Operator Back Pad with Lumbar Support, additional Arm, Elbow and Knee Pads. High Impact Resistant ABS Top cover includes cup holder, clip board and large storage areas. On Demand Hydrostatic Power Steering. - Multi-Function Controls with Simultaneous control of up to 2 Hydraulic Functions. Large button activating electronic horn. - 48" Load Backrest, 5 Forward / 5 Back Tilt, Drive-in Rack Overhead Guard with rear post operator protection. - Battery Compartment Corrosive Resistant Steel Rollers, Positive Mechanical Battery Disconnect, Battery Connector-350 Amp Gray - Hydraulic level site glass and drain plug for easy serviceability, 10 micron hydraulic oil filter, Operating Manual, Standard Construction, UL Classification E - Standard Warranty - 12 Months/Unlimited Hours Full Truck Warranty, 3 Years/ 6,000 Hours Powertrain Warranty, and Lifetime Frame Warranty

BATTERY COMPARTMENT: 38.6" (X) x 18.3" (Y) x 31.1" (Z) (980mm x 465mm x 790mm) Battery Weight Range 2,300 - 2,700 lbs

BATTERY TYPE: Flooded Cell - Discharge Profile is Factory Set for use with Flooded Cell Batteries

Highlights

VOLTAGE: 36 Volt Electrical System Includes 350 Amp Grey Battery Connector, Position B - 30" long

UL APPROVAL: Type "E" Construction with UL Label.

APPLICATION / ENVIRONMENTAL CONSTRUCTION: Standard Operating Temperature Range +32 to +120 F

OPERATOR PLATFORM: Shock Dampened Operator's Compartment Floor with Cushioned Floor mat. Easy Ingress / Egress with Low 7" Step Height.

MAST: 131"/ 84"/ 5" 2 Stage Limited Free-Lift Mast Assembly (3332mm/2130mm/140mm)

MAST TILT: 5 Degrees Forward / 5 Degrees Back

CARRIAGE: 2 Stage Limited Free Lift 38.5" (978mm) Wide Class II Hook Type

HYDRAULIC CONTROL: AC Transistor Controlled Hydraulics provide energy conserving, quiet and emission-free operation for smooth, jerk-free load handling.

HYDRAULIC CONTROL VALVE: 3-Function. Proportional Hoist, Single Speed Tilt and 1 Single Speed Auxiliary Function.

FORKS: 42" Long Class II Hook Type (1.5"x 4.0") Standard Taper, (1067mm x 38mm x 102mm).

LOAD BACKREST EXTENSION: 48" High x 38.5" Wide

DRIVE WHEEL & TIRE: 18" x 7" x 12.1" Rubber Smooth Black (67 Durometer)

STEER WHEEL: 10" x 5" x 6.5" Polyurethane Smooth Steer Tire (92 Durometer)

OVERHEAD GUARD: 88" Overall Height Drive-In-Rack (Grid Style) 24.7" Across Overhead Guard Legs (55" to 72.1" Above Floor).

START SWITCH: Key Switch

INSTRUMENTATION: Graphic LCD Multi-Function Display with Back Lighting, Bar Graphic Battery Discharge Indicator with Lift, Interrupt, Hour Meters; Truck, Traction and Hoist Pump Time, Performance Mode Selection and Indication, LED status indicators with symbols, 4 Operator Selectable, Programmable Performance Modes, User Passwords and Operator Logs with history, Steer wheel angle graphic indication, Truck Inspection Check List and Truck Speed Indication in MPH or KPH.

OPERATOR CONTROLS: Right - Left Travel Control (Multi-Function Control Handle Orientation)

LITERATURE PACKET & LABELS: ENGLISH

Battery - 36Volt - 18-125G-15 875 Amp Hour

Investment Proposal Price Information

	<u>Price Each</u>	<u>Extended</u>
Total Selling Price	\$25,010.00	\$25,010.00

Terms: Net 10 Days
F.O.B.: Delivered

Warranty

WARRANTY: 12 Months/Unlimited Hours Full Truck Warranty, 3 Years/ 6,000 Hours Powertrain Warranty, and Lifetime Frame Warranty

Statement of Quality

Yale Materials Handling Corporation is an ISO 9002 Certified Manufacturing Company. Additionally, all Yale products are rated by Underwriters Laboratories UL to guarantee our customers the highest quality material handling equipment manufactured in the world.

No Applicable Taxes Included. This quote is valid for 30 days.

Proposal By : Todd Lipford

Accepted By : Guy Nesbet

Todd Lipford / sap

Operations / Sales Manager _____

Customer Representative _____

Date _____

Date _____

State of West Virginia VENDOR PREFERENCE CERTIFICATE

Certification and application* is hereby made for Preference in accordance with **West Virginia Code**, §5A-3-37. (Does not apply to construction contracts). **West Virginia Code**, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the **West Virginia Code**. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Resident Vendor Preference, if applicable.

1. **Application is made for 2.5% resident vendor preference for the reason checked:**
 Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; **or**,
 Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; **or** 80% of the ownership interest of Bidder is held by another individual, partnership, association or corporation resident vendor who has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; **or**,
 Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; **or**,
2. **Application is made for 2.5% resident vendor preference for the reason checked:**
 Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or**,
3. **Application is made for 2.5% resident vendor preference for the reason checked:**
 Bidder is a nonresident vendor employing a minimum of one hundred state residents or is a nonresident vendor with an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia employing a minimum of one hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or Bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or**,
4. **Application is made for 5% resident vendor preference for the reason checked:**
 Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; **or**,
5. **Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:**
 Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; **or**,
6. **Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:**
 Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.
7. **Application is made for preference as a non-resident small, women- and minority-owned business, in accordance with West Virginia Code §5A-3-59 and West Virginia Code of State Rules.**
 Bidder has been or expects to be approved prior to contract award by the Purchasing Division as a certified small, women- and minority-owned business.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

Under penalty of law for false swearing (West Virginia Code, §61-5-3), Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: Burns Industrial Equipment

Signed: 

Date: 3/5/14

Title: President

RFQ No. GSD146422

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

MANDATE: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: Burns Industrial Equipment

Authorized Signature: *Christy Burns* Date: 3/5/14

State of Pennsylvania

County of Allegheny, to-wit:

Taken, subscribed, and sworn to before me this 5th day of March, 2014

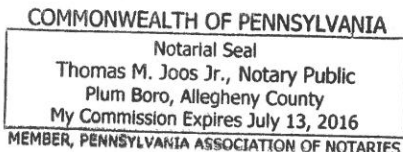
My Commission expires July 13, 2016

AFFIX SEAL HERE

NOTARY PUBLIC

Thomas M. Joos Jr.

Purchasing Affidavit (Revised 07/01/2012)



CERTIFICATION AND SIGNATURE PAGE

By signing below, I certify that I have reviewed this Solicitation in its entirety, understand the requirements, terms and conditions, and other information contained herein; that I am submitting this bid or proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

Burns Industrial Equipment

(Company)



(Authorized Signature)

Christopher Burns, President

(Representative Name, Title)

304-755-9333

(Phone Number)

304-755-9326

(Fax Number)

3/5/14

(Date)

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: GSD146422

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:

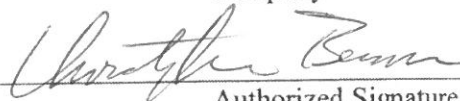
(Check the box next to each addendum received)

- | | | | |
|-------------------------------------|----------------|--------------------------|-----------------|
| <input checked="" type="checkbox"/> | Addendum No. 1 | <input type="checkbox"/> | Addendum No. 6 |
| <input type="checkbox"/> | Addendum No. 2 | <input type="checkbox"/> | Addendum No. 7 |
| <input type="checkbox"/> | Addendum No. 3 | <input type="checkbox"/> | Addendum No. 8 |
| <input type="checkbox"/> | Addendum No. 4 | <input type="checkbox"/> | Addendum No. 9 |
| <input type="checkbox"/> | Addendum No. 5 | <input type="checkbox"/> | Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Burns Industrial Equipment

Company



Authorized Signature

3/5/14

Date

NOTE: This addendum acknowledgment should be submitted with the bid to expedite document processing.

ESC-AC

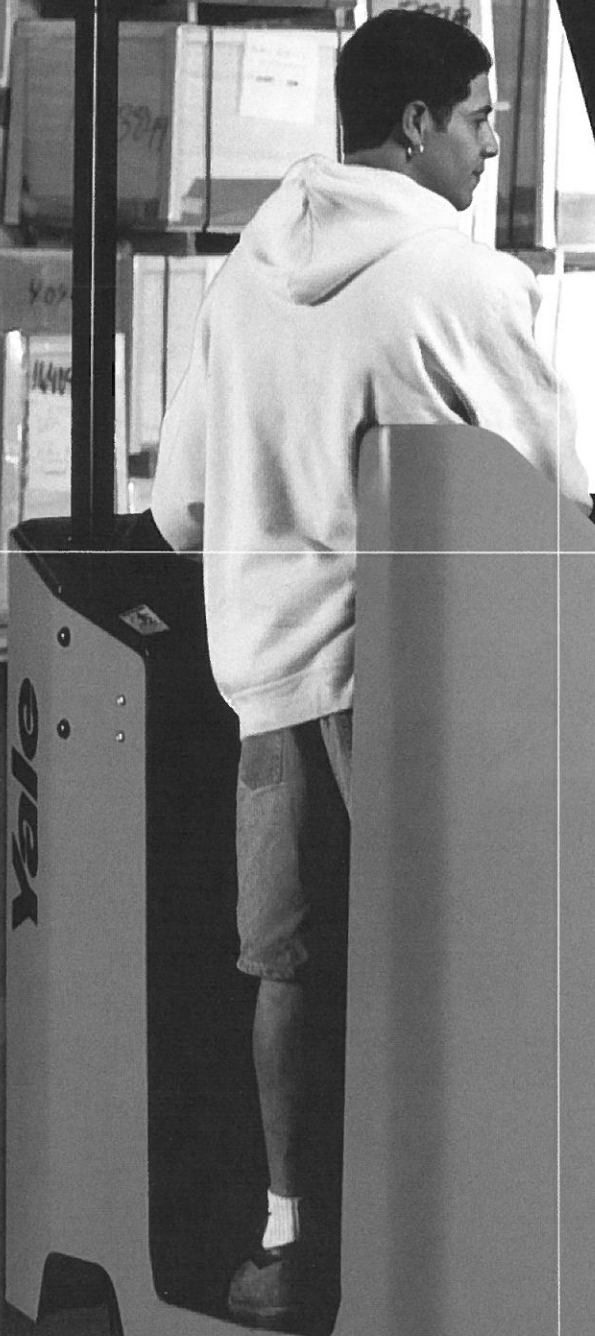
030-040



Three Wheel Stand-Up Rider 3,000-4,000 lbs.

Yale 
People. Products. Productivity.

Exceptionally



Yale

Yale

AG POWER

Trucks shown with optional equipment

hard working

When it comes to three wheel stand-up riders, you'll find Yale's AC Powered ESC-AC is versatile in performance and offers superb operator comfort. In fact, with top-of-the-line components, superior ergonomics and exceptional maneuverability, it is highly productive in dock and drive-in/drive-through rack applications. The ESC-AC excels in applications within retail distribution, food production and processing, general warehousing, manufacturing and freight transportation.

Because it's backed by a full range of Yale parts and services, you can count on this truck to deliver all the big advantages: ease of operation, productivity and peace of mind.

You can also rely on the ESC-AC for the biggest advantage of all: It's from Yale.

Yale

Ultimate performance

Performance and productivity are built right into every Yale truck. The ESC-AC is no exception. From its standard AC motors and controllers, multi-function control handle, on-demand power steering and transistor hydraulic control system, this truck delivers state-of-the-art technology that adds up to reliable performance.

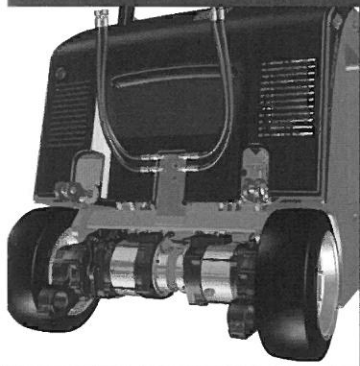
The exclusive precision load positioning on incline capability allows operators to more precisely control the truck's position while working on an incline, such as on a dock or in a trailer.

The ESC-AC takes on a variety of applications—with exceptional performance, durability and reliability.

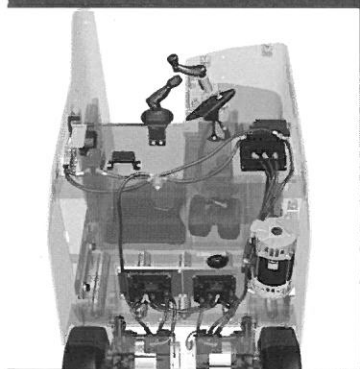
Ultimate



productivity



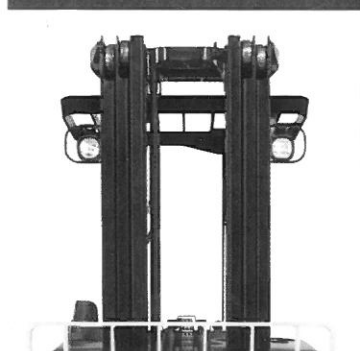
Standard, dual independent AC drive motors with separate drive controllers provide optimum maneuverability while turning. As the truck begins to turn, the inside motor initially slows, then stops and finally reverses to minimize turn radius.



A standard AC Transistor traction controller and master controller utilizing CANbus Communication provide excellent travel speed control through the entire speed range. The AC Transistor lift pump control matches pump speed with hydraulic flow requirements for increased efficiency, quieter operation and reduced maintenance.



Exclusive precision load positioning on incline capability minimizes the likelihood of product damage from unintended load contact. Dual steer tires, with hydraulic actuated rack and pinion steer axle, provide precise, reliable control for maximum performance.



The mast is engineered for durability and provides exceptional visibility to the operator.

Standard Performance Features

- 36 volt power
- Horizontally mounted dual AC motors
- AC Transistor controlled lift pump
- On-demand hydrostatic steering
- Hydraulic actuated rack and pinion steer axle
- Dual steer tires
- Dual electric brake
- Premium dash display with four traction performance modes
- Variable neutral braking
- Battery discharge indicator with lift interrupt
- 48" load backrest
- 5° forward and 5° back tilt
- Battery rollers allow removal from either side

Performance Options

- Up to three auxiliary hydraulic functions
- 4 function hydraulic control valve
- 10° forward and 5° back tilt
- Integral sideshifter
- Quad masts
- Cooler/Freezer Package—operating temperatures: 0° to +120° F
- SubZero Freezer Package—operating temperatures: -40° to +120° F
- Hydraulic attachment extension tubes
- Strobe light
- Self-adjusting audible alarm
- Operator compartment rear door
- Auxiliary power supply:
 - 25 amps / 300 watts @ 12 volts
- 83" Drive-in Rack Overhead Guard

Optimum operator comfort

Designed for side-stance operation, the ESC-AC provides operators the flexibility of an angled stance with expanded hip room. Yale's multi-function control handle with integral palm rest is comfortably operated with a gloved or bare hand.

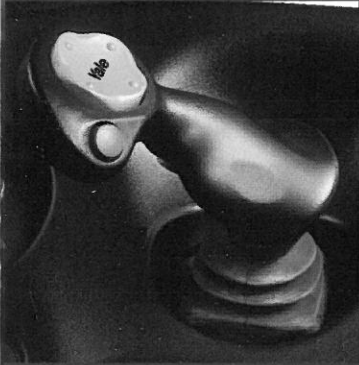
The Yale mast and overhead guard provide exceptional visibility. Large 18" drive tires help smooth out the ride over expansion joints and dock boards. Applying the best-in-class ergonomics, the Yale® ESC-AC helps you get the job done by reducing operator fatigue and improving productivity.

The spacious operator's compartment allows the driver the flexibility of operating the truck in either an angled or side-stance position.


Intelligent




Ergonomics




The multi-function control handle has been designed for low effort, single hand control of travel direction, speed control, hydraulic functions, and horn actuation. The built-in palm rest allows the hand to rest comfortably on the handle while providing support to the arm.



The dash covers include a cup holder, clip holder, and two large storage areas. These ergonomic features, together with fully padded armrests and backrest, combine to make the ESC-AC operator compartment a productive work environment. A standard premium dash display provides bar graphics for discharge indication; steer angle graphics; travel direction; traction throttle; and truck speed.



The spacious operator compartment has a fully padded floor with 3/4" thick rubber mat and shock absorbent "isolated" floor design that reduces operator fatigue. A low 7" step height provides easy entry and exit.



The overhead guard is a three post design to provide excellent visibility for maximum operator productivity.

Standard Ergonomic Features

- Multi-function control handle with palm rest
- Tiller steer handle with 5.5 turns stop-to-stop
- Intuitive controls
- Tiller handle comfortably positioned to minimize operator fatigue
- Storage trays on top console
- Padded operator backrest with lumbar support and padded armrest
- Ample operator headroom
- Shock dampened compartment floor
- 3/4" thick cushioned floor mats
- Low 7" step height
- High visibility mast
- Curved low profile front cowl providing optimum fork visibility
- Conveniently placed positive mechanical battery disconnect
- Right-Left travel control
- 18" Drive Tire

Ergonomic Options

- Dome light and 2-speed fan package
- LED or halogen work lights
- Low profile overhead guard
- Push-Pull travel control
- Amber Strobe Light



- Dual AC drive motors
- AC lift motor
- AC Transistor controlled lift pump
- Precision load positioning on incline
- Cornering speed control
- Fast lift/lower speeds
- Low effort multi-function control handle
- Premium dash display
- High visibility mast
- Low 7" step height
- Shock dampened, isolated operator's compartment floor
- Angled or side-stance operator compartment
- Low force parking brake pedal
- On-demand hydrostatic steering
- Electric parking brake
- CANbus technology
- Dual steer tires
- Easy to service

Model	ESC030AC	ESC035AC SWB	ESC035AC LWB	ESC040AC
<i>Performance Specifications:</i>				
Travel Speed Empty/Loaded (mph)	7.2 / 7.2	7.2 / 7.2	7.2 / 7.2	7.2 / 7.2
Lift Speed Empty/Loaded (fpm)	89 / 69	89 / 67	89 / 67	88 / 63
Lowering Speed Empty/Loaded (fpm)	55 / 100	55 / 106	55 / 106	55 / 106
<i>Dimensions & Weights:</i>				
Overhead Guard Height (inches)	88	88	88	88
Length to Face of Forks (inches)	66.7	66.7	69.2	69.2
Across Std. Drive Tire (inches)	35	35	35	35
Height Std. Mast Lowered (inches)	84	84	84	84
Height Std. Mast Ext. w/LBR (inches)	180	180	180	180
Ground Clearance: Lowest Point (inches)	4	4	4	4
Ground Clearance: No Load at Ctr of Wheelbase (inches)	4	4	4	4
Step Height (inches)	7	7	7	7
Aisle Width (inches)	67.6	67.6	70.1	70.1
Right Angle Stacking = Aisle Width plus Clearance plus Load Length				

Specifications listed above are with standard 2-stage mast.

See Yale truck specification sheets for additional data. For a complete listing of truck options, contact your local Authorized Yale Dealer.

Buy a truck, **get a company.**

As a leader in materials handling, Yale offers so much more than the most complete line of lift trucks.

All our **lift trucks**¹ come with the support of an entire company, our strategically located **dealer network**,² certified **service technicians**³ and everything it takes to help **finance**⁴ and **manage**⁵ your lift truck fleet. With every Yale truck you also get total service and our continuing commitment to improving your materials handling productivity.

Yale[®]

1 The most comprehensive line of trucks from 2,000 to 36,000 pounds, nine manufacturing plants and five development engineering centers.

2 More than 325 dealer locations in the Americas, Europe and Asia.

3 The industry's best service and support program, Yale Gold Service™, with 2,000 service vans and over 2,500 service technicians.

4 Showing customers the most cost-effective way to buy, lease

5 or rent the trucks they require.

Sales • Rentals • Financing • Fleet Management
Parts • Service • Operator Training



Manufactured in our own ISO 9001 and 14001 Registered Facilities



Yale Materials Handling Corporation

P.O. Box 7367, Greenville, North Carolina 27835-7367

© 2010, Yale Materials Handling Corporation • www.yale.com

2311
03/10

3,000 • 3,500 • 4,000 lbs

Yale® ESC-AC

The ESC-AC industrial fork lift truck combines leading technology and operator comfort for high performance and productivity in docking, drive-in/drive-through rack applications within retail distribution, food manufacturing and processing, general warehousing and manufacturing, storage, plastic products, and freight transportation.

AC Technology

AC technology provides the ability to control the traction motor fields and armature independently. This results in enhanced performance and battery efficiency. In combination with the Metal Oxide Semiconductor Field Effect Transistor (MOSFET) motor controller we have reduced wearable components and improved performance. The AC control system provides high travel speeds and improved acceleration. Variable regenerative braking occurs when the throttle handle is reversed. Regenerative braking improves efficiency and reduces wear on brake components. The controller parameters are fully programmable including settings for acceleration, top speed, and neutral braking.

Operator's Compartment

The Yale ESC-AC features a new movement forward in ergonomic design. Designed for side-stance operation, the truck allows the driver flexibility of an angled stance with expanded hip room.

The fully padded operator's compartment provides back, hip, arm and knee support and offers the operator a cooler workspace. The high backrest support provides the operator both comfort and protection. The noticeably large floor has room for movement. The shock dampened suspended operator's compartment floor with full 3/4" thick cushioned floor mat absorbs vibration and minimizes fatigue. The brake pedal design allows for an easy entrance and exit into the operator compartment.

Drive Motors/Transaxles

The dual horizontal AC drive motors are designed and built specifically for the Yale three wheel trucks and are individually mounted for easy servicing. The motors have a temperature sensor mounted internally to monitor and provide feedback to the CAN bus. The temperature sensor monitors the motor thermal state and can react to various situations to self protect the motor. The dual transaxles are independently controlled for optimization of power and maneuverability. Power transfer occurs via a quiet double reduction design using a combination of spiral bevel and helical gears. Dual front wheel, continuous differential drive enables both wheels to be under power at all times, but operating separately. This gives power to each drive motor as needed for greater efficiency. The motors are controlled by two controllers, one for each motor. Cornering Speed Control provides proportional reduction of speed in cornering and automatically slows the truck depending on the radius of the turn. Parameters can be adjusted or disabled through Display or PC service tool by qualified technician.

Yale's Multi-Function Control Handle

Ergonomically designed with an integral palm rest, the Yale multi-function control handle is comfortably operated with a gloved or bare hand. The handle provides control for forward/reverse, lift/lower, tilt, horn, and up to two optional auxiliary functions for attachments. Hoist, travel and one additional hydraulic function can be activated simultaneously. Depressing the handle function pad activates tilt or optional sideshift. The 3rd optional auxiliary function is activated by depressing buttons on the underside of the handle grip. Right-Left travel control is standard. Optional Push-Pull travel control is also available.

Brake System

The spring applied, electrically released brake assemblies provide emergency stopping and parking for the truck. The pre-adjusted brake assemblies require no maintenance and all truck models are equipped with brake over-ride connectors to move a disabled truck. During operation, as the operator releases the brake pedal, regenerative motor braking occurs to stop the truck. If the RPM of the AC traction motors reaches zero for at least 1 second, power is removed from the brakes engaging them. This feature eliminates unnecessary wear on the brake disc and provides positive engagement of the parking brake.

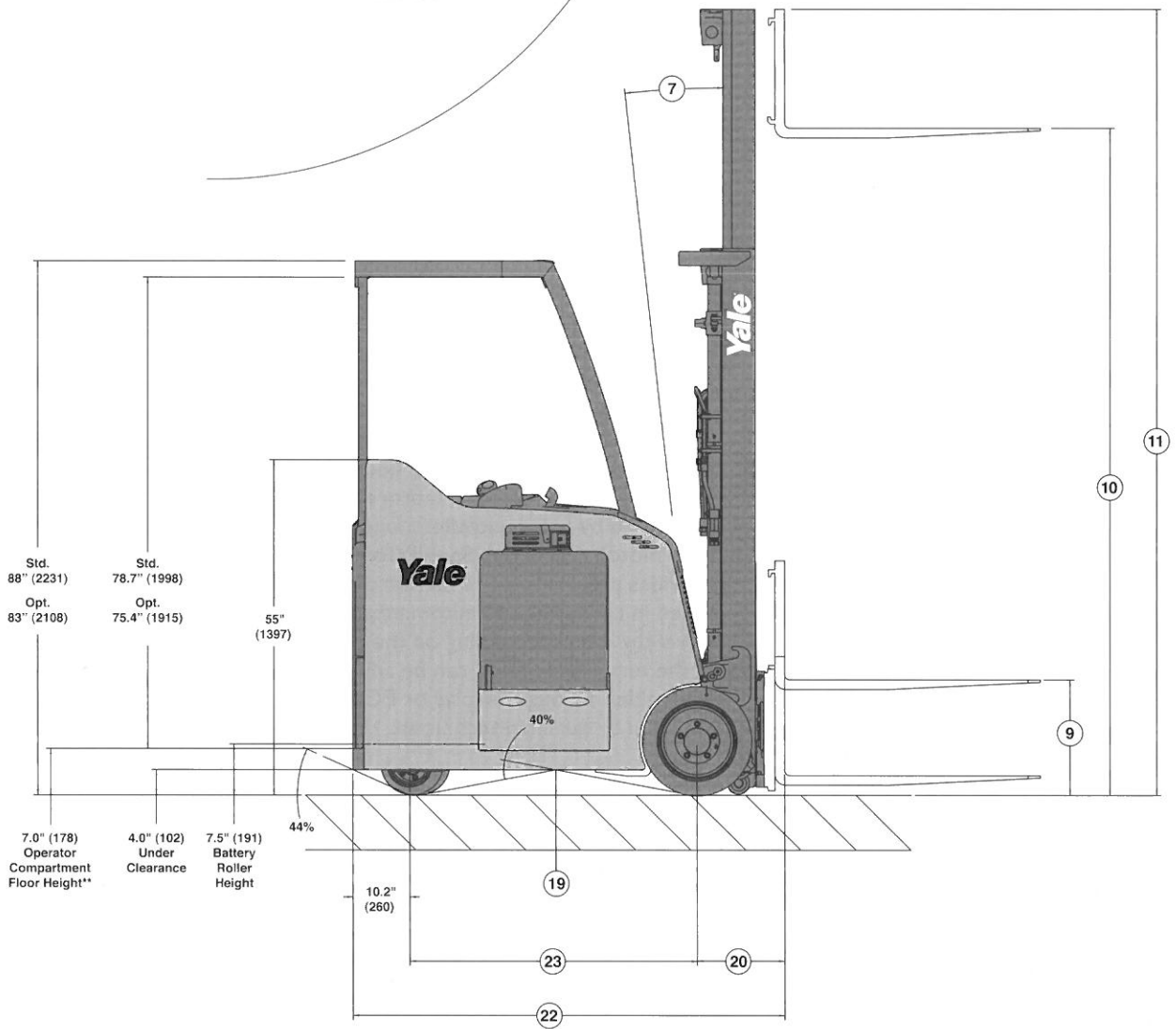
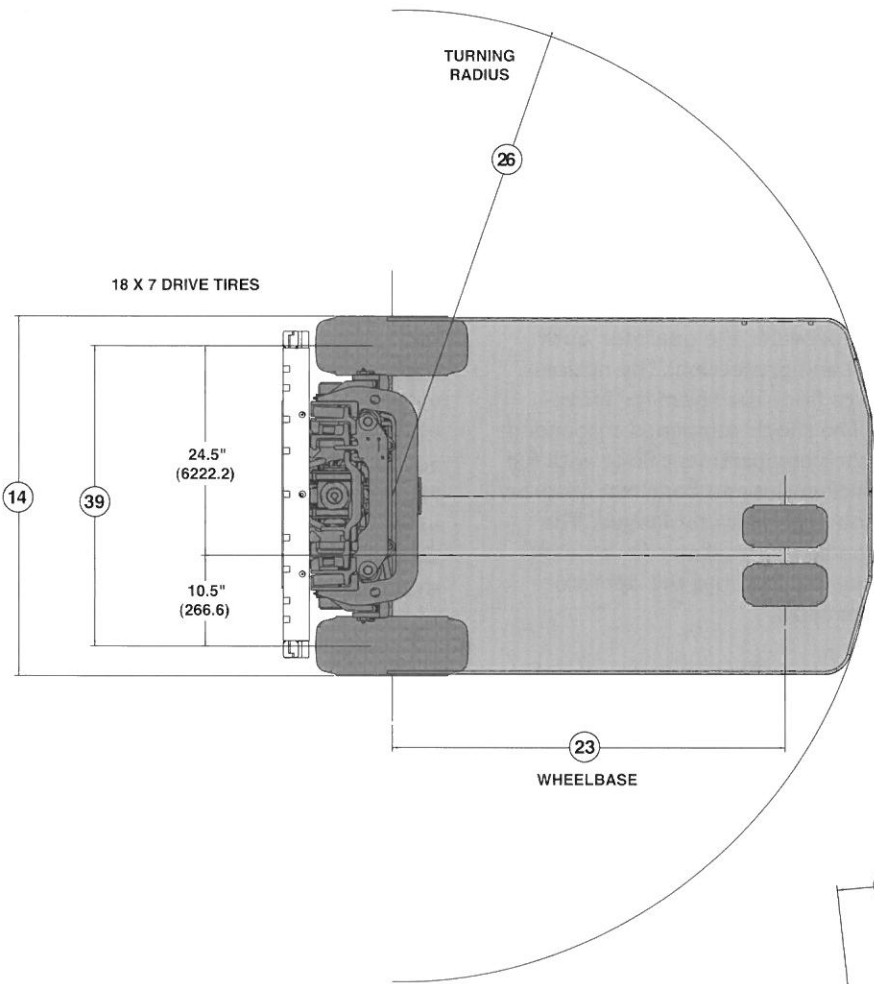
Transistor Hydraulic Control System

The AC Transistor Lift Pump Control matches pump speed with hydraulic flow requirements for increased efficiency, quieter operation and reduced maintenance. The transistor hydraulic control system controls the hydraulic motor with a Metal Oxide Semiconductor Field Effect Transistor (MOSFET) controller that provides smooth, quiet, energy-efficient operation. The controlled acceleration feature reduces pump and motor loadings on start-up for increased system life.

(continued on back)



Truck shown with optional equipment



GENERAL	1	Manufacturer			Yale®
	2	Model Designation			ESC030AC
	3	Power / Voltage			Electric / 36 Volts
	4	Operation Type			Stand
	5	Rated Capacity		lb. (kg)	3000 (1361)
	6	Load Center		in. (mm)	24 (609)
DIMENSIONS	7	Mast Tilt Std (Opt)		degrees	5F / 5B (10F / 5B)
	8	Mast – Lowered Height (Std Mast)		in. (mm)	84 (2130)
	9	Free Lift – Top of Fork (Std 2 Stg Limited Free Lift Mast)		in. (mm)	5 (140)
		Free Lift – Top of Fork (Opt 2 Stg Full Free Lift Mast w/wo LBR)		in. (mm)	33 / 61 (860 / 1555)
	10	Lift Height – Top of Fork (Std 2 Stg Limited Free Lift Mast)		in. (mm)	131 (3332)
	11	Mast – Extended Height (Std Mast with / without LBR)		in. (mm)	180 / 154 (4555 / 3912)
	12	Overhead Guard Height (Std / Opt)		in. (mm)	88 / 83 (2234 / 2108)
	13	Grade Clearance (NL)		% %	40
	14	Overall Width		in. (mm)	42 (1067)
	15	Forks (Thickness x Width x Length)		in. (mm)	1.5 x 4 x 42 (38 x 102 x 1067)
	16	Standard Carriage Width (Class II)		in. (mm)	38.5 (978)
	17	Floor to Top of Battery Rollers		in. (mm)	7.5 (190)
	19	Ground Clearance (Center of Wheelbase) NL / RL		in. (mm)	4 (102)
	20	Load Distance (Center of Wheel to Face of Forks)		in. (mm)	12.6 (321)
	21	Battery Compartment	Height	in. (mm)	31.1 (790)
			Width	in. (mm)	18.3 (465)
		Length	Nominal	SIZE	38"
			Actual	in. (mm)	38.6 (980)
		22	Length to Face of Forks		in. (mm)
	23	Wheelbase		in. (mm)	43.9 (1115)
24	Aisle Width (Add Load Length for 90 Deg Stack)		in. (mm)	67.6 (1717)	
25	Equal Aisle (90° Intersecting Aisle) (with pallet W=32, L=30)		in. (mm)	69.2 (1757)	
26	Turning Radius		in. (mm)	55.0 (1397)	
PERFORMANCE	27	Travel Speed (NL / RL)		mph (km/h)	7.2 / 7.2 (11.6 / 11.6)
	28	Lift Speed	Std 2 Stg LFL Mast (NL / RL)	ft/min (m/sec)	89 / 69 (0.45 / 0.35)
			Opt 2 Stg FFL Mast (NL / RL)	ft/min (m/sec)	55 / 43 (0.28 / 0.22)
			Opt 3 Stg FFL Mast (NL / RL)	ft/min (m/sec)	83 / 65 (0.42 / 0.33)
	29	Lower Speed	Std 2 Stg LFL Mast (NL / RL)	ft/min (m/sec)	55 / 102 (0.28 / 0.52)
			Opt 2 Stg FFL Mast (NL / RL)	ft/min (m/sec)	30 / 59 (0.15 / 0.30)
			Opt 3 Stg FFL Mast (NL / RL)	ft/min (m/sec)	71 / 88 (0.36 / 0.45)
	30	Gradability	5 Minute Rating (NL / RL)	%	15 / 15
			60 Minute Rating (NL / RL)	%	3.47 / 2.57
	31	Drawbar Pull	5 Minute Rating (NL / RL)	lbf	2645 / 2412
32	Brake	Method of Control (Service / Parking)		Spring Apply / Elec. Released	
		Method of Operation (Service / Parking)		Foot / Foot	
WT.	33	Truck Weight	Without Battery (NL)	lb. (kg)	6355 (2882)
	34	Axle Loading – Drive	Static with Max. Wt. Battery (NL / RL)	lb. (kg)	4058 (1841) / 9563 (4338)
	35	Axle Loading – Steer	Static with Max. Wt. Battery (NL / RL)	lb. (kg)	4182 (1897) / 1677 (761)
TIRES/WHEELS	36	Tire Type – Rubber, Polyurethane etc. (Drive / Steer)			Rubber / Polyurethane
	37	Tire Size (Drive / Steer)		in.	18 x 7 - 12.1 / 10 x 5 - 6.5
	38	Wheels – Number (X=Driven) Drive / Steer			2X / 2
39	Tread (Tires) Std Dr / Steer / Steer		in. (mm)	35 / 10.5 / 24.5 (889 / 267 / 622)	
BATT.	40	Battery	Type		Lead Acid
			Volts		36
			Minimum Weight	lb. (kg)	1885 (855)
MOTORS	41	Traction Motors (Dual) 60 Minute Rating each		hp (kW)	6.4 (4.8)
	42	Pump Motor 15 Minute rating		hp (kW)	16.1 (12)
	43	Traction Motors (Type / Control Method)			AC / Transistor
	44	Pump Motor (Type / Control Method)			AC / Transistor
	45	Number of Speeds (Traction & Pump)			Infinitely Variable
OTHER	46	Step Height		in. (mm)	7 (179)
	47	Attachment Relief Pressure		psi (bar)	2000 (13789)
	49	Sound Level (Measured per ANSI B56.11.5)		dB (A)	69

Dimensions displayed in inches. Dimensions in parenthesis represent metric.

(continued from page 1)

Console Covers

Console covers are UV resistant, thermally formed, high impact ABS plastic. The top and front covers provide access to main electrical components and are easy to remove without tools. The formed covers provide unobstructed use of the multi-function control handle. Storage areas in the operator's compartment supply a place to store pens, pencils, markers, etc.

Standard Premium Dash Display

The LCD displays vehicle status, warning, and fault messages. The primary screen presents battery level, throttle command, vehicle speed, vehicle direction, steer angle, performance mode, and hours. In the service menus, the three line LCD is used for information display depending on submenu. The display contains vehicle diagnostics with fault history and can store 30 operator specific passwords. The display is also a control system input from operator or technician. The operator can select travel mode, enter passwords, or verify truck inspection when that option is installed. A service technician can input truck set-up values via dash to the control system.

Hydraulic Control System

The hydraulic functions of the truck are managed by the AC hoist controller. This system in conjunction with the electro-hydraulic valve provides low noise and low heat. Efficient design has allowed us significant reduction of hydraulic fittings reducing potential leak points. A replaceable cartridge full flow hydraulic filter is located at the top of the hydraulic tank. It has a bypass relief valve to ensure oil flow in the event of filter clogging. The filter contains a 10 micron element that protects the hydraulic system from contaminants, promotes reliable performance, and helps to provide long life for all the system components.

Power Steering

The on-demand power steering system is timed-off when not used, reducing noise and conserving energy. This system is powered by a brushless motor virtually eliminating maintenance.

Masts/Carriage/Forks/Load Backrest Extension

Yale simplex, duplex, triplex and quad masts provide excellent visibility. The mast features flush face design with geometrically matched, load rollers, which are canted, yet provide full-face roller contact. The mast front rail flange angle coupled with the inverted "J" inner channel and 3-degree mast rollers significantly reduces channel web milling and roller wear. Trunnion mounts have replaceable bushings for longer life. The standard Class II carriage features pre-lubed and sealed full radius, angled load rollers that resist forward, backward and lateral forces. Forks are "upset forged" from a single piece of high strength steel to give strength and added thickness for wear. A 48" load backrest extension is standard.

Frame/Overhead Guard

The frame is a unitized stress-tested welded steel construction. Battery compartment has standard corrosion resistant ball bearing rollers. The frame is designed to distribute loads and stress uniformly throughout the structure. The application of this design concept through the finite element modeling and extensive stress testing produces a balanced design with long-term durability. There are two wheelbase lengths, one for 18" nominal battery, and one for the 21" nominal battery. The shorter truck offers 3,000 and 3,500 lb. capacities. The longer truck will offer 3,500 and 4,000 lb. capacities. Overhead Guard offers excellent visibility and strength. A single rear overhead guard leg provides additional operator protection.

All Wiring

Wiring is color coded for easy troubleshooting. Sealed electrical connectors are used throughout the truck. Electrical connections are provided for convenient field installation of electric options.

Key Switch

The key switch is located to the left of the multi-function control handle. The power disconnect handle disrupts all power circuits when depressed. Power is reinstated when battery is reconnected by returning the disconnect handle back to the on position.

Additional Features

A bolt-on 48 inch (1220 mm) load backrest extension and 42 inch (1067 mm) hook type forks are standard. All non-sealed friction points are equipped with high pressure grease fittings. The truck is painted gold, parchment, and black.

Options

- Regulated Auxiliary Power Supply (suitable for electronic equipment) 25 amps / 300 watts @ 12 volts
- Headlights
 - Mast Mounted
 - Overhead Guard Mounted
 - LED or Halogen
- Rear Worklight (LED or Halogen)
- Drive-in Rack Overhead Guard
- 10 Degree Forward Tilt
- Integral Sideshifter
- Cooler/Freezer Package (Operating Temperatures: 0° to + 120°F)
- SubZero Freezer Package (Operating Temperatures: -40° to + 120°F)
- Various Drive & Steer Tire Types
- Dome Light and Two Speed Fan
- Backup Alarms
- Strobe Lights
- Operator Compartment Rear Door
- Push – Pull Travel Control
- Reduced Speed Tilt
- Hydraulic Attachment Extension Tubes with and without Quick Disconnect Fittings
- Keyless Start
- AC hoist controller
- Fire Extinguisher
- Quad Masts

Truck performance may be affected by the condition of the vehicle, how it is equipped and the application. Consult your Yale® Industrial Truck Dealer if any of the information shown is critical to your application. Specifications are subject to change without notice.

This truck meets all design specifications of ANSI B56.1 Safety Standard for Powered Industrial Trucks at the time of manufacture. Classified by Underwriters' Laboratories, Inc. as to fire hazard only for type "E" industrial trucks.

The Yale products included in this document may be covered by US patent 6,684,148 and other patents pending.

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Manufactured in our own ISO 9001:2000 Registered Facilities

			1	GENERAL
ESC035AC	ESC035AC	ESC040AC	2	
Electric / 36 Volts	Electric / 36 Volts	Electric / 36 Volts	3	
Stand	Stand	Stand	4	
3500 (1588)	3500 (1588)	4000 (1814)	5	
24 (609)	24 (609)	24 (609)	6	
5F / 5B (10F / 5B)	5F / 5B (10F / 5B)	5F / 5B (10F / 5B)	7	
84 (2130)	84 (2130)	84 (2130)	8	
5 (140)	5 (140)	5 (140)	9	
33 / 61 (860 / 1555)	33 / 61 (860 / 1555)	33 / 61 (860 / 1555)	10	
131 (3332)	131 (3332)	131 (3332)	11	
180 / 154 (4555 / 3912)	180 / 154 (4555 / 3912)	180 / 154 (4555 / 3912)	12	
88 / 83 (2234 / 2108)	88 / 83 (2234 / 2108)	88 / 83 (2234 / 2108)	13	
40	40	40	14	
42 (1067)	42 (1067)	42 (1067)	15	
1.5 x 4 x 42 (38 x 102 x 1067)	1.5 x 4 x 42 (38 x 102 x 1067)	1.5 x 4 x 42 (38 x 102 x 1067)	16	
38.5 (978)	38.5 (978)	38.5 (978)	17	
7.5 (190)	7.5 (190)	7.5 (190)	18	
4 (102)	4 (102)	4 (102)	19	
12.6 (321)	12.6 (321)	12.6 (321)	20	
31.1 (790)	31.1 (790)	31.1 (790)	21	
18.3 (465)	20.8 (528)	20.8 (528)	22	
38"	38"	38"	23	
38.6 (980)	38.6 (980)	38.6 (980)	24	
66.7 (1696)	69.2 (1759)	69.2 (1759)	25	
43.9 (1115)	46.4 (1178)	46.4 (1178)	26	
67.6 (1717)	70.1 (1780)	70.1 (1780)	27	
69.2 (1757)	69.2 (1757)	69.2 (1757)	28	
55.0 (1397)	57.5 (1460)	57.5 (1460)	29	
7.2 / 7.2 (11.6 / 11.6)	7.2 / 7.2 (11.6 / 11.6)	7.2 / 7.2 (11.6 / 11.6)	30	
89 / 67 (0.45 / 0.34)	89 / 67 (0.45 / 0.34)	88 / 63 (0.45 / 0.32)	31	
55 / 41 (0.28 / 0.21)	55 / 41 (0.28 / 0.21)	55 / 41 (0.28 / 0.21)	32	
83 / 62 (0.42 / 0.32)	83 / 62 (0.42 / 0.32)	83 / 59 (0.42 / 0.30)	33	
55 / 106 (0.28 / 0.54)	55 / 106 (0.28 / 0.54)	55 / 106 (0.28 / 0.54)	34	
30 / 61 (0.15 / 0.31)	30 / 61 (0.15 / 0.31)	30 / 61 (0.15 / 0.31)	35	
71 / 91 (0.36 / 0.46)	71 / 91 (0.36 / 0.46)	71 / 91 (0.36 / 0.46)	36	
15 / 15	15 / 15	15 / 15	37	
3.30 / 2.38	3.41 / 2.44	4.30 / 2.26	38	
2582 / 2335	2602 / 2356	2562 / 2280	39	
Spring Apply / Elec. Released	Spring Apply / Elec. Released	Spring Apply / Elec. Released	40	
Foot / Foot	Foot / Foot	Foot / Foot	41	
6838 (3102)	6410 (2908)	6893 (3127)	42	
4285 (1944) / 10707 (4857)	4347 (1972) / 10612 (4814)	4434 (2011) / 11594 (5259)	43	
4853 (2201) / 1931 (876)	4563 (2070) / 1798 (816)	5154 (2338) / 1994 (904)	44	
Rubber / Polyurethane	Rubber / Polyurethane	Polyurethane / Polyurethane	45	
18 x 7 - 12.1 / 10 x 5 - 6.5	18 x 7 - 12.1 / 10 x 5 - 6.5	18 x 7 - 12.1 / 10 x 5 - 6.5	46	
2X / 2	2X / 2	2X / 2	47	
35 / 10.5 / 24.5 (889 / 267 / 622)	35 / 10.5 / 24.5 (889 / 267 / 622)	35 / 10.5 / 24.5 (889 / 267 / 622)	48	
Lead Acid	Lead Acid	Lead Acid	49	
36	36	36	50	
2300 (1043)	2500 (1134)	2695 (1222)	51	
6.4 (4.8)	6.4 (4.8)	6.4 (4.8)	52	
16.1 (12)	16.1 (12)	16.1 (12)	53	
AC / Transistor	AC / Transistor	AC / Transistor	54	
AC / Transistor	AC / Transistor	AC / Transistor	55	
Infinitely Variable	Infinitely Variable	Infinitely Variable	56	
7 (179)	7 (179)	7 (179)	57	
2000 (13789)	2000 (13789)	2000 (13789)	58	
69	69	69	59	

DIMENSIONS

PERFORMANCE

WT.

TIRES/WHEELS

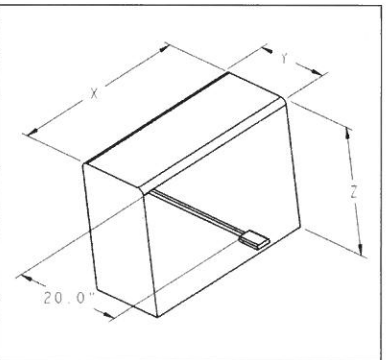
BATT.

MOTORS

OTHER

MAST DIMENSIONS					
Maximum Fork Height (TOF) +	Overall Lowered Ht.	Overall Extended Height w/Load Backrest	Overall Extended Height w/o Load Backrest	Free-Lift (TOF) w/ Load Backrest	Free-Lift (TOF) w/o Load Backrest
in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)
2-STAGE LIMITED FREE-LIFT (LFL) MAST					
131 (3332)	84 (2130)	180 (4562)	154 (3906)	5 (140)	5 (140)
139 (3532)	88 (2230)	188 (4762)	162 (4106)	5 (140)	5 (140)
2-STAGE FULL FREE-LIFT (FFL) MAST					
130 (3318)	84 (2130)	180 (4568)	154 (3913)	35 (900)	61 (1555)
138 (3518)	88 (2230)	188 (4768)	162 (4113)	39 (1000)	65 (1655)
3-STAGE FULL FREE-LIFT (FFL) MAST					
187 (4750)	82 (2080)	236 (5980)	210 (5325)	33 (850)	59 (1505)
192 (4900)	84 (2230)	238 (6030)	212 (5375)	35 (900)	61 (1555)
198 (5050)	88 (2230)	248 (6280)	221 (5625)	39 (1000)	65 (1655)
222 (5650)	98 (2480)	271 (6880)	245 (6225)	49 (1250)	75 (1905)
228 (5800)	100 (2530)	277 (7030)	251 (6375)	51 (1300)	77 (1955)
4-STAGE FULL FREE-LIFT (FFL) MAST					
241 (6121)	84 (2121)	289 (7340)	264 (6708)	37 (935)	60 (1524)
259 (6578)	90 (2273)	306 (7772)	282 (7165)	43 (1087)	65 (1651)
283 (7188)	99 (2502)	331 (8407)	306 (7775)	52 (1316)	74 (1880)

BATTERY AND COMPARTMENT SPECIFICATIONS												
Truck Model	Compartment Dim.			Battery Dim - Max			Volts	No. of Cells	Plates per Cell	Max Capacity	Weight	
	Width (X)	Length (Y)	Height (Z)	"X"	"Y"	"Z"				6 Hr Rate	Min	Max
	in (mm)			in (mm)						amp hr (kwh)	lb (kg)	
ESC030AC Standard 18.3" Compartment	38.6 (980)	18.3 (465)	31.1 (790)	38.6 (980)	17.9 (455)	31 (787)	36	18	15	1085 (37.9)	2300 (1043)	2700 (1225)
ESC030AC *Optional 16.3" Compartment	38.6 (980)	16.3 (414)	31.1 (790)	38.6 (980)	15.8 (401)	31 (787)	36	18	13	930 (32.5)	1885 (855)	2300 (1050)
ESC035AC Standard 18.3" Compartment	38.6 (980)	18.3 (465)	31.1 (790)	38.6 (980)	17.9 (455)	31 (787)	36	18	15	1085 (37.9)	2300 (1043)	2700 (1225)
ESC035AC *Optional 20.8" Compartment	38.6 (980)	20.8 (528)	31.1 (790)	38.6 (980)	20.4 (518)	31 (787)	36	18	17	1240 (43.3)	2500 (1152)	3050 (1383)
ESC040AC Standard 20.8" Compartment	38.6 (980)	20.8 (528)	31.1 (790)	38.6 (980)	20.4 (518)	31 (787)	36	18	17	1240 (43.3)	2695 (1222)	3050 (1383)
ESC040AC *Optional 18.3" Compartment	38.6 (980)	18.3 (465)	31.1 (790)	38.6 (980)	17.9 (455)	31 (787)	36	18	15	1085 (37.9)	2300 (1043)	2700 (1225)



Battery compartment length is measured from front to rear. Battery Compartment Width is measured across the truck.

Battery Connector: 350 Amp / 36 Volt

Battery Lead: Length 20" (508 mm) 2/0 gauge leads, "B" Position, Requires disconnect handle.

* 18.3" battery compartment with a 2.5" spacer to accommodate a 16" Battery.

* 20.8" battery compartment with a 3.0" spacer to accommodate a 18" Battery.