

### **TOYOTA** 8FBM16/18/20T



Battery Voltage (V) 48

Load Capacity (lbs.) 3000-4000

Load Center (in.) 24

Maximum Lift Height (in.) 296.5

Travel Speed With/Without Load (mph)\* 12.4/12.4

Lift Speed With/Without load (fpm)\* 82.7/120

> Turning Radius (in.)\* 71.3

Overall width (in.)\* 41.7

Length to Fork Face (in.)\* 83.5

Height of Overhead Guard (in.)\* 80.9

## **STRONG & WEAK POINTS**

**KEY FEATURES** 

✓+ System oft Active Stability (SAS)<sup>™</sup>

- + Wet Disc Brakes + Seat Mounted Hydraulic Mini Levers + Drive Unit Protector + Low & Wide Step Height
- ✓+ Full Suspension Seat Standard

### + Syncronized Steering

+ Full Belly Pan + Curve Control (opt) + Shockless Landing Lift (opt)

ADDITONAL NOTES T360 Support Plus Option - extended warranty + 1 year free maintenance

### HYSTER J30-40XN YALE ERP30-040VF



Battery Voltage (V) 36/48

Load Capacity (lbs.) 3000-4000

Load Center (in.) 24

Maximum lift height (in.) 259

Travel speed with/without load (mph)\* 8.7-9.9/8.7-9.9

Lift speed with/without load (fpm)\* 71/128

> Turning Radius (in.)\* 65.1

Overall width (in.)\* 41.3

Length to Fork Face (in.)\* 77.8

Height of Overhead Guard (in.)\* 81.5

+ Zero Degree Turning Radius

- Seat Side Mechanical Levers

+ Wet Disc Brakes

- Non Suspension Seat Std.

### CAT EPC4000-EP4000 JUNGHEINRICH EFT 316K-320



Battery Voltage (V) 36/48

Load Capacity (lbs.) 3100-3880

Load Center (in.) 24

Maximum lift height (in.) 255.0

Travel speed with/without load (mph)\* 10.6/10.6

Lift speed with/without load (fpm)\* 72.8/108.3

> Turning Radius (in.)\* 78.1

Overall width (in.)\* 44.1

Length to Fork Face (in.)\* 82.6

Height of Overhead Guard (in.)\* 80.4

- + Electric Power Steering + LiB Battery Option + IP54 Rating Drive Motors + 1000 HR Serivce Interval + Full Suspension Seat + Curve Control + Full Floating Cabin - Dry Disc Brakes
- + Seat Mounted Hydraulic Mini Levers

ADDITONAL NOTES Note: 2-shift/1-charge marketing. This appears to have requirements that if applied to competitive models, the results would be similar

\*MODEL EFG 318

\*MODEL 8FBM18T



### **LINDE** E20/20P/20C



Battery Voltage (V) 36/48

Load Capacity (lbs.) 4000

Load Center (in.) 24

Maximum lift height (in.) 188.0

Travel speed with/without load (mph)\* 10/10

Lift speed with/without load (fpm)\* 60/102

> Turning Radius (in.)\* 70.4

Overall width (in.)\* 42.0

Length to Fork Face (in.)\* 85.9

Height of Overhead Guard (in.)\* 80.5

Dual pedal for Forward/Reverse (Hydrostat style)
Overhead guard mounted tilt cylinders - damage prone
+ IP54 rating Drive Motors
+ Seat Mounted Hydraulic Mini Levers
+ 1000 Hr Service Interval
+ Zero Degree Turning Radius
+ Wet Disc Brakes
+ Full Suspension Seat

+ Curve Control

\*MODEL E20P



### **TOYOTA** 9FBM25



Battery Voltage (V) 80 Load Capacity (lbs.) 4000-7000 Load Center (in.) 24 Maximum lift height (in.) 257.0 Travel speed with/without load (mph)\* 11.8/12.4 Lift speed with/without load (fpm)\* 90.6/124

Turning Radius (in.)\* 79.7

Overall width (in.)\* 47.0

Length to Fork Face (in.)\* 89.8

Height of Overhead Guard (in.)\* 87.2

✓+ System oft Active Stability (SAS)<sup>™</sup>

HYSTER J45-70XN YALE ERP 045-070VL



Battery Voltage (V) 80

Load Capacity (lbs.) 4500-7000

Load Center (in.) 24

Maximum lift height (in.) 217.0

Travel speed with/without load (mph)\* 11.2/11.2

Lift speed with/without load (fpm)\* 75.0/124.0

> Turning Radius (in.)\* 76.0-81.6

Overall width (in.)\* 46.9

Length to Fork Face (in.)\* 91.7-97.0

Height of Overhead Guard (in.)\* 86.3

- MONOTROL Foot Direction Control

+ Zero Turn Steer Axle

- Mechanical Hydraulic Levers Std.

- Small Black & White LCD display

- Operator's compartment part of the frame.

- Non-Suspension Seat Std.

- IP54 Rated Drive Motors (Opt.)

### CAT 2EPC5000-6500 JUNGHEINRICH EFT 425-S30



Battery Voltage (V) 80

Load Capacity (lbs.) 4928-6608

Load Center (in.) 24

Maximum lift height (in.) 295.0

Travel speed with/without load (mph)\* 10/10.6

Lift speed with/without load (fpm)\* 84.7/108.3

> Turning Radius (in.)\* 78.7

Overall width (in.)\* 47.2

Length to Fork Face (in.)\* 90.4

Height of Overhead Guard (in.)\* 88.2

+ Seat Mounted Finger-tip controls + IP54 Drive Motors + LiB Battery Option + Curve Control + Electric Power Steering + Full Suspension Seat - Blue & White LCD display

ADDITONAL NOTES Note: 2-shift/1-charge marketing. This appears to have requirements that if applied to competitive models, the results would be similar.

\*MODEL EFG 425

## **STRONG & WEAK POINTS**

**KEY FEATURES** 

 Fingertip Hydraulic controls with Integrated Color Display

 Shockless Landing Lift
 Full Floating Driver Compartment
 IP 54 Rated Drive Motors

 Full Suspension Seat Standard
 Low Step Height with Large, Deep Steps

 Color Touchscreen Display (Opt)
 Load Weight Display with Touchscreen Display. (Opt)
 Curve Control

ADDITONAL NOTES T360 Support Plus Option - extended warranty + 1 year free maintenance

\*MODEL 9FBM25T

\*MODEL J50XN

### LINDE E20-35 P/PL/PHL



Battery Voltage (V) 80

Load Capacity (lbs.) 4000-7000

Load Center (in.) 24

Maximum lift height (in.) 254.5

Travel speed with/without load (mph)\* 12.5/12.5

Lift speed with/without load (fpm)\* 88/110

> Turning Radius (in.)\* 79.5

Overall width (in.)\* 45.3

Length to Fork Face (in.)\* 97.0

Height of Overhead Guard (in.)\* 81.9

Dual pedal for Forward/Reverse (Hydrostat style)
 Overhead guard mounted cylinders - damage prone

 Traction Control
 Full Floating Cab
 Seat Mounted Hydraulic Mini Levers
 1000 Hr Service Interval
 Zero Degree Turning Radius
 Full Suspension Seat
 Curve Control
 Small Black & White LCD display

\*MODEL E25PL



### **TOYOTA** 8FBM40/45/50T



Battery Voltage (V) 80

Load Capacity (lbs.) 8000-11000

Load Center (in.) 24

Maximum lift height (in.) 258.0

Travel speed with/without load (mph)\* 11.0/11.0

Lift speed with/without load (fpm)\* 68.9/90.6

Turning Radius (in.)\* 100.1

Overall width (in.)\* 53.0

Length to Fork Face (in.)\* 114.4

Height of Overhead Guard (in.)\* 92.9

### **KEY FEATURES**

### **HYSTER** J80–120 XN **YALE ERP 080-120VM**



Battery Voltage (V) 80

Load Capacity (lbs.) 8000-12000

Load Center (in.) 24

Maximum lift height (in.) 236.0

Travel speed with/without load (mph)\* 9.9/11.0

Lift speed with/without load (fpm)\* 87/118

Turning Radius (in.)\* 94.9

Overall width (in.)\* 54.7

Length to Fork Face (in.)\* 114.5

Height of Overhead Guard (in.)\* 92.0

### **CAT 2EPC7000-11000 JUNGHEINRICH EFG 535K-S50**



Battery Voltage (V) 80

Load Capacity (lbs.) 7000-11000

Load Center (in.) 24

Maximum lift height (in.) 295.3

Travel speed with/without load (mph)\* 8.7/10

Lift speed with/without load (fpm)\* 61/84.6

> Turning Radius (in.)\* 98.0

Overall width (in.)\* 52.8

Length to Fork Face (in.)\* 110.7

Height of Overhead Guard (in.)\* 93.1

+ Seat Mounted Fingertip Hydraulic Controls + Curve Control + Full Floating Cab

- + IP54 rating Drive Motors
- + Full Suspension Seat
- Speed Control is optional

ADDITONAL NOTES Note: 2-shift/1-charge marketing. This appears to have requirements that if applied to competitive mdoels, the results would be similar.

+ Zero Degree Turn Steer Axle - MONOTROL Foot Direction Control - Mechanical Hood Mounted Hydraulic Levers - High Step In Height - Non-Suspension Seat Std.

✓+ System oft Active Stability (SAS)<sup>™</sup> + Seat Mounted Hydraulic Mini Levers + Drive Unit Protector + Low & Wide Step Height ✓+ Full Suspension Seat Standard

ADDITONAL NOTES T360 Support Plus Option – extended warranty + 1 year free maintenance

## **STRONG & WEAK POINTS**

\*MODEL 05-8FBM40T

\*MODEL EFG540

### **LINDE** E35-50/600 H/HL



**Battery Voltage (V)** 80

Load Capacity (lbs.) 7500-11000

Load Center (in.) 24

Maximum lift height (in.) 236.9

Travel speed with/without load (mph)\* 12.5/12.5

Lift speed with/without load (fpm)\* 82/110

> Turning Radius (in.)\* 93.0

Overall width (in.)\* 56.7/50.3

Length to Fork Face (in.)\* 107.2

Height of Overhead Guard (in.)\* 92.9

– Dual pedal for Forward/Reverse (Hydrostat style) - Overhead guard mounted tilt cylinders - damage prone + IP54 rating Drive Motors + Seat Mounted Hydraulic Mini Levers + 1000 Hr Service Interval + Full Floating Cab + Full Suspension Seat + Curve Control

\*MODEL E40P/600H



### **TOYOTA** 9FBM60-80/H80T



Battery Voltage (V) 80 Load Capacity (lbs.)

13000-17500

Load Center (in.) 24/36

Maximum lift height (in.) 278.5

Travel speed with/without load (mph)\* 11.0/12.0

**KEY FEATURES** 

**STRONG & WEAK POINTS** 

Lift speed with/without load (fpm)\* 71.0/95.0

> Turning Radius (in.)\* 118.3

Overall width (in.)\* 78.9

Length to Fork Face (in.)\* 137.4

Height of Overhead Guard (in.)\*

111.6

✓+ System oft Active Stability (SAS)<sup>™</sup> + Automatic Parking Brake + Full Floating Cab + Full Suspension Seat Standard + Drive Unit Protector + Electric Power Steering + Two Large Assist Grips

+ Shockless Landing Lift + Tilt & Telescoping Steering Wheel

+ Air Suspension Seat (Opt)

ADDITONAL NOTES T360 Support Plus Option - extended warranty + 1 year free maintenance Automotive styled cab design with great 360 visibility

### **HYSTER** J155-190XNL **YALE ERP 155-190VNL**



Battery Voltage (V) 350

Load Capacity (lbs.) 15500-19000

Load Center (in.) 24/36

Maximum lift height (in.) 258.0

Travel speed with/without load (mph)\* 14.9/14.9

Lift speed with/without load (fpm)\* 84.6/129.9

> Turning Radius (in.)\* 121.3

Overall width (in.)\* 82.0

Length to Fork Face (in.)\* 137.6

Height of Overhead Guard (in.)\* 100

**LINDE** E60-80/900



Battery Voltage (V) 80 Load Capacity (lbs.) 1300-17500

Load Center (in.) 24/36

Maximum lift height (in.) 244

Travel speed with/without load (mph)\* 10/10

Lift speed with/without load (fpm)\* 59.1/90.5

> Turning Radius (in.)\* 118

Overall width (in.)\* 83.1

Length to Fork Face (in.)\* 138

Height of Overhead Guard (in.)\* 112

+ Integrated LiB with Battery Management System - Mechanical Parking Brake + Air Suspension Vinyl Seat + Turn Assist System (155 & 175 only) + Liquid Cooling System for Motors and Controllers - Tilt Steering Wheel

ADDITONAL NOTES Truck is offered in LiB models only -Battery is integrated into the truck chassis

– Dual pedal for Forward/Reverse (Hydrostat style) - Overhead guard mounted tilt cylinders - damage prone + Automatic Parking Brake + Full Floating Cab - Full Suspension Seat + Curve Control - Hydrostatic Power Steering - Tilt Steering Wheel

\*MODEL 8FBM18T

\*MODEL 8FBM18T





### **TOYOTA SENS**



**Field of View** 130°

**Detection Time** 0.14 seconds

**Maximum Distance** 32 ft

**Operationg Condition** -40°F to 140°F

**Buzzer Volume** 85db Indicator Type Audio and Visual

Ingress Rating IP67

Distinguish Pedestrians vs. Objects Yes Number of Zones

3

wide field of view

+ Configurable detection zones

+Configurable Alerts

Some limitations to environment and pedestrian orientation

ADDITONAL NOTES SEnS is designed and manufactured by Toyota using Toyota design standards and TPS

BLAXTAIR



**Field of View** 90° **Detection Time** 

0.30 Seconds **Maximum Distance** 

23 ft **Operating Condition** 

-40°F to 167°F

**Buzzer Volume** Configurable

Indicator Type Optional

**Ingress Rating** IP69K (Camera Only)

Distinguish Pedestrians vs. Objects Yes

Number of Zones 2

**SEEN SAFETY IRIS 860** 



**Field of View** 60°

**Detection Time** Instantaneous

**Maximum Distance** 26.24 ft

**Operating Condition** -4°F to 140°F

> **Buzzer Volume** Configurable

> Indicator Type Audio

> **Ingress Rating** IP67

Distinguish Pedestrians vs. Objects No

> Number of Zones 2

**STRONG & WEAK POINTS** 

**KEY FEATURES** 

- Optional display is expensive, can be easily damaged  $\checkmark$  + Longest sensing distance with - Highest price - Requires separate large controller box to be mounted on truck + Configurable for objects or Pedestrians + Optional Telematics + Configurable detection zones  $\checkmark$  + Affordably priced with most features

ADDITONAL NOTES Requires a large controller box which may have to be mounted to the top of the overhead guard. This is not practical and can easily be damaged.

onal 7" display provides live video but may cause operator to not look in direction of travel when traveling in the rearward direction

Alarm and lights provide notification to both the forklift operator and pedestrians Additional camera and controller box can be added to double the field of view, but is cost prohibitive

- Requires reflective tape to detect (safety vest required) - Field of view up to 120° with extra sensors - Cannot distinguish between objects and pedestrians + Unaffected by ambient lighting

+ Lowest price

ADDITONAL NOTES Requires safety vests to be worn by pedestrians at all times. This may not be practical in many facilities.

Due to the narrow Field of View, may require (2) devices which adds more costs.

### SICK BACKUP ASSISTANCE SYSTEM (BAS) **2D LIDAR TECHNOLOGY**



**Field of View** 270°

**Detection Time** Instantaneous

**Maximum Distance** 13.12 ft

**Operating Condition** 14°F to 122°F

> **Buzzer Volume** Configurable

> Indicator Type Optional

> **Ingress Rating** IP67

Distinguish Pedestrians vs. Objects No

> Number of Zones 2

- Critical on mounting position for detection - Objects and pedestrians cannot be distinguished - Limited coverage area (2D detection only) + Can connect up to 3 extra sensors + Moderately priced

### ADDITONAL NOTES

Lidar emits a field which is a 2 dimensional plane. It can not identify objects that are above or below this plane. Multiple Lidars can be added, but soon becomes cost prohibitive



### **TOYOTA** ER1-ES60.80



Battery Voltage (V) 24 Load Capacity (lbs.) 6000-8000 Maximum lift height (in)

9.8

Travel speed with/without load (mph) 6.5/9.0

Lift speed with/without load (fpm) 5.0/5.8 Turning Radius (in) 98.1

> Overall Width (in) 40

Length to Fork Face (in) 45.3

Step Height (in) 10.0

### **KEY FEATURES**

### HYSTER BE80-100ZHD YALE MPR080-MPR100VG



Battery Voltage (V) 24

Load Capacity (lbs.) 8000-10000

Maximum lift height (in) 9.3

Travel speed with/without load(mph) 6.5/9.0

Lift speed with/without load (fpm) n/a

> Turning Radius (in) 101.1

Overall Width (in) 38

Length to Fork Face (in) n/a

Step Height (in) 11.3

### **CROWN** PR 4500



Battery Voltage (V) 24

Load Capacity (lbs.) 6000-8000

Maximum lift height (in) 9.3

Travel speed with/without load(mph) 6.5/8

Lift speed with/without load (fpm) n/a

Turning Radius (in) 134.4

Overall Width (in) 38

Length to Fork Face (in) 44.7

> Step Height (in) 11.7

+ Electric steering
 + Auto slow down when cornering
 + Auto centers steer tire on start up

 + Low Step Height

ADDITONAL NOTES Single pedal on floorboard allows operator to change feet positions. Compartment Sensing System option - provides (2) light sensors which span the entry to the operator compartment.

T360 Support Plus Option - extended warranty + 1 year free maintenance

+ 10,000 lb. Capacity + Quad Pallet Forks (can carry 8 pallets) + Electric Steering + Largest compartment area

ADDITONAL NOTES Load wheel life for 10k loads may be an issue, depending upon floor condition. + Torsion Bar with Quick Adjust Casters
- Longest turning radius (134.4" vs. 98")
- Space for operator's right foot is small
- Hydraulic steer assist
- Does not have auto slow down when cornering

ADDITONAL NOTES Dual pedals on the floorboard make it difficult for operator to mvoe feet positions

## **STRONG & WEAK POINTS**

### **JUNGHEINRICH** ERE SERIES



Battery Voltage (V) 24

Load Capacity (lbs.) 5500

Maximum lift height (in) 4.8

Travel speed with/without load(mph) 5.9/8.7

Lift speed with/without load (fpm) 9.8/13.8

> Turning Radius (in) n/a

Overall Width (in) 30.3

Length to Fork Face (in) 27.4

> Step Height (in) 7.1

+ Electric Steering + Auto slow down when cornering + Integrated charger option - Light duty (only 5,500 lb capacity)

ADDITONAL NOTES May not be available in double or triple length forks.



### **TOYOTA** CR1-LP60.80



Battery Voltage (V) 24

Load Capacity (lbs.) 6000-8000

Maximum Platform Height (in) 47

Travel speed with/without load (mph) 6.5/9.0

Fork Lift speed with/without load (fpm) 6.7/8.8 | 5.9/8.8

Operator Platform Lift Speed (fpm) 33

Turning Radius Left/Right (in) 99/101 | 119/121

**Overall Width (in)** 33.3

Length to Fork Face 63.6

### **HYSTER** L02.5

**YALE** M055-80



Battery Voltage (V) 24 Load Capacity (lbs.)

6000-8000

Maximum Platform Height (in) 38.6

Travel speed with/without load (mph) 5.3/6.5

Fork Lift speed with/without load (fpm) 5/8

Operator Platform Lift Speed (fpm) 37

Turning Radius Left/Right (in) 111.3

> Overall Width (in) 31.3

Length to Fork Face 64.8

+ Shortest turn radius

+ Optional 8 mph optional travel speed (empty)

+ Travel at Height

+ Hands free lowering

- Light duty "Euro" design

– No storage tray

ADDITONAL NOTES Note: front cover and backrest plastic content does not appear durable for a forklift in the N.A. market

### **CROWN** GPC 3000 SERIES



Battery Voltage (V) 24 Load Capacity (lbs.) 6000

Maximum Platform Height (in) 37.4

Travel speed with/without load (mph) 5.3/7.8

Fork Lift speed with/without load (fpm) n/a

Operator Platform Lift Speed (fpm) n/a

Turning Radius Left/Right (in) 121.1

> Overall Width (in) 31.9

Length to Fork Face 59.9

+ QuickPick Remote allows operator control the unit while walking along side or behind unit + Slows Speed Around Curves + Optional Fold down step for second level picking + Optional adjustable fold down lean seat - 6000 lb maximum compared to 8k and 10k of competitors - Cannot travel while platform is elevated - Slower travel speeds - Does not have hands free lowering - Does not have IP65 protection - No storage tray - Light duty "Euro" design

### + Higher lift height (47" vs 38" elevated height) + Travel at Height + North American design and durability + Hands-free lowering

+ 21" heavy-duty operator compartment + IP65 protection from harsh environments

+ Large storage tray

+ Heavy duty design

+ 500 hour maintenance interval

ADDITONAL NOTES With the highest operator platform height (47" vs 38")

T360 Support Plus Option – extended warranty + 1 year free maintenance

## **STRONG & WEAK POINTS**

**KEY FEATURES** 





**KEY FEATURES** 

**STRONG & WEAK POINTS** 

### **TOYOTA** RF1-BH1X45



Battery Voltage (V)

Load Capacity (lbs.) 3500-4500

Load Center (in.) 24

Maximum lift height (in.) 372

Travel speed with/without load (mph) 7/7.5

Lift speed with/without load (fpm) 65/115

Right Angle Stack (40x48 Pallet) 99.7

> Overall width (in.) 42.5

Length to Fork Face (in.) 55.3

Height of Overhead Guard (in.) 90.8

### + 4-Cylinder Open View Mast with view through carriage

+ Ductile Iron Baselegs + Choice of Fore-Aft or Side Stance +7" Touch screen display integrated with optional mast features (camera, load weight, height indicator, etc.)

+ 500 hour maintenance interval + Inertial Dampener option (standard above 271") + Steered caster wheel option (standard above 271") - Padded floorboard

T360 Support Plus Option – extended warranty + 1 year free maintenance

### **HYSTER** N40ZRS3



Battery Voltage (V) 36

Load Capacity (lbs.) 3500-4000

Load Center (in.) 24

Maximum lift height (in.) 272

Travel speed with/without load (mph) 6.5/6.5

Lift speed with/without load (fpm) 50/77

Right Angle Stack (40x48 Pallet) 98

> Overall width (in.) 42.8

Length to Fork Face (in.) 54.21

Height of Overhead Guard (in.) Step Height (in)

10.0

+ Choice of Fore-Aft or Side Stance

+ Suspended floorboard (optional)

+ Pedal-less operator presence system

+ Adjustable steer tiller, armrest, and backrest

- Steered caster wheel (Special request only)

+ Automotive steering (forward steering) in both

directions with Fore-Aft Stance

- 7" color display is optional only

- Welded fabricated baselegs

- Restricted view through mast and carraige

### **CROWN** RR5725-45



Battery Voltage (V) 36

Load Capacity (lbs.) 3500-4500

> Load Center (in.) 24

Maximum lift height (in.) 400

Travel speed with/without load (mph) 7.2/8

Lift speed with/without load (fpm) 82/153

Right Angle Stack (40x48 Pallet) n/a

> Overall width (in.) 42

Length to Fork Face (in.) 52.91

Height of Overhead Guard (in.)

Step Height (in) 9.4

- Side-Stance only + Suspended floorboard + Available in standing or seated version - Welded fabricated baselegs - Load weight display optional (Capacity Data Monitor) - Single line display limited information to operator - Restricted view through mast and carraige + Anti-slip drive tire feature

ADDITONAL NOTES Dual pedals oon the floorboard make it difficult for operator to move feet

### Step Height (in) 9.25

+ Load weight display standard

ADDITONAL NOTES Single pedal on floorboard allows operator to change feet positions.

### **JUNGHEINRICH ETR345**



Battery Voltage (V) 36

Load Capacity (lbs.) 3000-4500

Load Center (in.) 24

Maximum lift height (in.) 450

Travel speed with/without load (mph) 7.5/7.5

Lift speed with/without load (fpm) 75/120

Right Angle Stack (40x48 Pallet) n/a

> Overall width (in.) 41.5

Length to Fork Face (in.) 55

Height of Overhead Guard (in.)

Step Height (in) 9.0

- Side stance only - Butterfly dual pedal design is a bit awkward for entry/exit - Small color display + 2-shift/1-charge marketing. This appears to have requirements that if applied to competitive models, the results would be similar. - Padded floorboard - Welded fabricated baselegs - Restricted view through mast and carraige



### **TOYOTA** RF1-SD1X45



Battery Voltage (V)

Load Capacity (lbs.) 3500-4500

Load Center (in.) 24

Maximum lift height (in.) 372

Travel speed with/without load (mph) 6.5/8

Lift speed with/without load (fpm) 80/150

Right Angle Stack (40x48 Pallet) 101

> Tractor width (in.) 42.5

Length to Fork Face (in.) 57.3

Height of Overhead Guard (in.) 93.4

> Step Height (in) 9.25

> > carriage

+ Ductile Iron Baselegs

### + 4-Cylinder Open View Mast with view through + Choice of Fore-Aft or Side Stance + 7" Touch screen display integrated with optional mast features

**KEY FEATURES** 

**STRONG & WEAK POINTS** 

(camera, load weight, height indicator, etc.) + 500 hour maintenance interval + Inertial Dampener option (standard above 271") - Padded floorboard + Available in standing or seated version

ADDITONAL NOTES sing System option - proivides (2) light sensors which span the entry to the operator compartment

T360 Support Plus Option - extended warranty + 1 year free maintenance

### **HYSTER** N45ZR3



Load Capacity (lbs.)

Load Center (in.)

Maximum lift height (in.)

Travel speed with/without load (mph) 6.5/7.5

Lift speed with/without load (fpm) 80/150

101

Tractor width (in.) 426

Length to Fork Face (in.) 57.2

95

10.0

**CROWN** RR5700



Battery Voltage (V) 36

Load Capacity (lbs.) 4500

> Load Center (in.) 24

Maximum lift height (in.) 442

Travel speed with/without load (mph) 7.5/8.3

Lift speed with/without load (fpm) 82/153

**Right Angle Stack (40x48 Pallet)** n/a

> Tractor width (in.) 48

Length to Fork Face (in.) 56.66

Height of Overhead Guard (in.) 95 Step Height (in)

9.4

- Side-Stance only + Suspended floorboard + Available in standing or seated version - welded fabricated baselegs - Load weight display optional (Capacity Data Monitor) - Single line display limited information to operator - Restricted view through mast and carraige + Anti-slip drive tire feature

ADDITONAL NOTES Dual pedals on the floorboard make it difficult for operator to move feet positions

Battery Voltage (V) 36

4500

24

368

Right Angle Stack (40x48 Pallet)

Height of Overhead Guard (in.)

Step Height (in)

+ Choice of Fore-Aft or Side Stance + Suspended floorboard (optional) + Pedal-less operator presence system + Adjustable steer tiller, armrest, and backrest - Steered caster wheel (Special request only) + Automotive steering (forward steering) in both directions with Fore-Aft Stance - 7" color display is optional only - Welded fabricated baselegs + Regen/powered lowering option - Restricted view through mast and carraige

### **JUNGHEINRICH ETR345**



Battery Voltage (V) 36

Load Capacity (lbs.) 3000-4500

Load Center (in.) 24

Maximum lift height (in.) 450

Travel speed with/without load (mph) 7.5/7.5

Lift speed with/without load (fpm) 75/120

Right Angle Stack (40x48 Pallet) n/a

> Tractor width (in.) 41.5

Length to Fork Face (in.) 55

Height of Overhead Guard (in.)

Step Height (in) 9.0

- Side stance only - Butterfly dual pedal design is a bit awkward for entry/exit - Small color display + 2-shift/1-charge marketing. This appears to have requirements that if applied to competitive models, the results would be similar. - Padded floorboard - Welded fabricated baselegs - Restricted view through mast and carraige



**KEY FEATURES** 

**STRONG & WEAK POINTS** 

### **TOYOTA RF1-HP1X45**



Battery Voltage (V)

Load Capacity (lbs.) 4500

Load Center (in.) 24

Maximum lift height (in.) 444

Travel speed with/without load (mph) 6/8

Lift speed with/without load (fpm) 95/160

Right Angle Stack (40x48 Pallet) 109

> Overall width (in.) 42.5

Length to Fork Face (in.) 62.2

Height of Overhead Guard (in.) 93.4 Step Height (in)

9.25

### 🖊 + 4-Cylinder Open View Mast with view through carriage + Ductile Iron Baselegs + Choice of Fore-Aft or Side Stance + 7" Touch screen display integrated with optional mast features (camera, load weight, height indicator, etc.) + 500 hour maintenance interval

+ Steered caster wheel option (standard above 271") - Padded floorboard + Available in standing or seated version + Regen lowering standard

ADDITONAL NOTES Single pedal on floorboard allows operator to change feet positions

T360 Support Plus Option - extended warranty + 1 year free maintenance

### **HYSTER** N45ZR3



Battery Voltage (V) 36

Load Capacity (lbs.) 4500

Load Center (in.) 24

Maximum lift height (in.) 444

Travel speed with/without load (mph) 6.5/8

Lift speed with/without load (fpm) 95/175

Right Angle Stack (40x48 Pallet) 110

> Overall width (in.) 426

Length to Fork Face (in.) 62.12

Height of Overhead Guard (in.) 95

Step Height (in) 10.0

+ Choice of Fore-Aft or Side Stance + Pedal-less operator presence system + Adjustable steer tiller, armrest, and backrest - Steered caster wheel (Special request only) + Automotive steering (forward steering) in both directions with Fore-Aft Stance - 7" color display is optional only - Welded fabricated baselegs + Regen/powered lowering option - Restricted view through mast and carraige - Regen/powered lowering optional only

ADDITONAL NOTES Note: Hyster requires High Speed Option to match performance of TMH RF1-HP

### **CROWN** RM6025-45



Battery Voltage (V) 36

Load Capacity (lbs.) 4500

> Load Center (in.) 24

Maximum lift height (in.) 442

Travel speed with/without load (mph) 7.2/8

Lift speed with/without load (fpm) 95/160

Right Angle Stack (40x48 Pallet) n/a

> Overall width (in.) 42

Length to Fork Face (in.) 60.4

Height of Overhead Guard (in.) 95 Step Height (in)

9.4

### - Side-Stance only

+ Suspended floorboard standard + Available in standing or seated version - Welded fabricated baselegs - Load weight display optional (Capacity Data Monitor) - Single line display limited information to operator + Powered lowering option (fastest lowering speed) - Monomast restricts visibility to left outrigger and left front side of truck. + Anti-slip drive tire feature

ADDITONAL NOTES Powered lowering option – when considering cycle times, this option doesn't have significant increase at normal heights (less than 400")

Dual pedals on the floorboard make it difficult for operator to move feet position

### **JUNGHEINRICH ETR345**



Battery Voltage (V) 36

Load Capacity (lbs.) 3000-4500

Load Center (in.) 24

Maximum lift height (in.) 450

Travel speed with/without load (mph) 7.5/7.5

Lift speed with/without load (fpm) 75/120

Right Angle Stack (40x48 Pallet) n/a

> Overall width (in.) 41.5

Length to Fork Face (in.) 60

Height of Overhead Guard (in.)

Step Height (in) 9.0

- Side stance only - Butterfly dual pedal design is a bit awkward for entry/exit - Small color display + 2-shift/1-charge marketing. This appears to have requirements that if applied to competitive models, the results would be similar. - Padded floorboard - Welded fabricated baselegs - Restricted view through mast and carraige



### **TOYOTA** RF1-HC1Z45



Battery Voltage (V)

Load Capacity (lbs.) 4500

Load Center (in.) 24

Maximum lift height (in.) 542

Travel speed with/without load (mph) 6.5/7.5

Lift speed with/without load (fpm) 90/168

Lowering Speed with/without load (fpm) 230/230

Right Angle Stack (40x48 Pallet) 112

> Overall width (in.) 49.5

Length to Fork Face (in.) 65.2

Height of Overhead Guard (in.) 93.4

> Step Height (in) 9.25

+ 4-Cylinder Open View Mast with view through carriage

+ Ductile Iron Baselegs

+ Choice of Fore-Aft or Side Stance

+ 7" Touch screen display integrated with optional mast features

(camera, load weight, height indicator, etc.) + Regen/High Speed lowering standard + Load weight display standard + 500 hour maintenance interval + Inertial Dampener option (standard above 271") + Steered caster wheel option (standard above 271") - Padded floorboard + Available in standing or seated version

+ Multi-function handle -ease of use, precision control

ADDITONAL NOTES T360 Support Plus Option - extended warranty + 1 year free maintenance Compartment Sensing System Option - provides (2) light sensors which span the entry to the operator compartment Highest Reach Truck in the industry, best capacity at 505" (2000lbs)

### **CROWN** RM6095S-45VV



Battery Voltage (V) 36

Load Capacity (lbs.) 4500

Load Center (in.) 24

Maximum lift height (in.) 505

Travel speed with/without load (mph) 7.5/8.3

Lift speed with/without load (fpm) 95/160

Lowering Speed with/without load (fpm) 110/110

Right Angle Stack (40x48 Pallet) n/a

> Overall width (in.) 48

Length to Fork Face (in.) 62.4

Height of Overhead Guard (in.) 89

> Step Height (in) 9.4

Side-Stance only
Suspended floorboard
Available in standing or seated version
Welded fabricated baselegs
Load weight display optional (Capacity Data Monitor)
Single line display limited information to operator
Powered lowering option (240 fpm loaded/empty)
Monomast restricts visibility to left outrigger and left front side of truck.
Anti-slip drive tire feature

> ADDITONAL NOTES Dual pedals on the floorboard make it difficult for operator to move feet positions

### **KEY FEATURES**

**STRONG & WEAK POINTS** 



### **TOYOTA** RRE200H



Battery Voltage (V) 48

Load Capacity (lbs.) 3000-5500

Load Center (in.) 24

Maximum lift height (in.) 512

Travel speed with/without load (mph) 6.8/8.7

Lift speed with/without load (fpm) 84.6/133.9

> Turning Radius (in.) 72.4

Overall width (in.) 50

Length to Fork Face (in.) 54.2

Height of Overhead Guard (in.) 89

 + Available as indoor only or indoor/outdoor model
 + Industry exclusive tilting compartment model available
 + Highly adjustable operator compartment (floor, seat, steer tiller, armrest, controls)

+ 2-axis steer tiller adjustability

+ Flip-up steer tiller for ease of entry/exit

+ Optional air-ride seat

+ Large color, touchscreen interactive display + Ergonomic multi-function control

ADDITONAL NOTES T360 Support Plus Option - extended warranty + 1 year free maintenance

### HYSTER R2.0HD



Battery Voltage (V) 48

Load Capacity (lbs.) 3000-5500

Load Center (in.) 24

Maximum lift height (in.) 501

Travel speed with/without load (mph) 8.7/8.7

Lift speed with/without load (fpm) 72.8/126

Turning Radius (in.) 69.6

Overall width (in.) 52.9

Length to Fork Face (in.) 54.8

Height of Overhead Guard (in.) 85.6

+ Heated, enclosed cab option available + Large color, touchscreen display

- 1-axis steer tiller adjustability
 + Cloth, vinyl, and heated seats available
 + Transparent overhead guard option available
 + Heated, enclosed cab option available
 - Available as indoor model only

### **CROWN** ESR1060-45



Battery Voltage (V) 48

Load Capacity (lbs.) 4500

Load Center (in.) 24

Maximum lift height (in.) 534

Travel speed with/without load (mph) 8.7/8.7

Lift speed with/without load (fpm) 116/140

> Turning Radius (in.) 68.3

Overall width (in.) 50.6

Length to Fork Face (in.) 53

Height of Overhead Guard (in.)\* 93.5

+ Large color, touchscreen display
+ Optional regenerative lowering
+ Adjustable operator compartment (floor, seat, steer tiller, armrest, controls)
+ 2-axis steer tiller adjustability
+ Heated, enclosed cab option available
- Available as indoor model only

# **STRONG & WEAK POINTS**

**KEY FEATURES** 

### **JUNGHEINRICH ETV SERIES**



Battery Voltage (V) 48

Load Capacity (lbs.) 4400

Load Center (in.) 24

Maximum lift height (in.) 511

Travel speed with/without load (mph) 8.7/8.7

Lift speed with/without load (fpm) 74.8/126

> Turning Radius (in.) 67.3

Overall width (in.) 50.8

Length to Fork Face (in.) 51.8

Height of Overhead Guard (in.) 86.2

+ Available as indoor only or indoor/outdoor model
+ Heated, enclosed cab option available
- Color display is not touchscreen
- 1-axis steer tiller adjustability



**KEY FEATURES** 

**STRONG & WEAK POINTS** 

### **TOYOTA SRI SERIES**



Battery Voltage (V)

Load Capacity (lbs.) 3000-5000

Load Center (in.) 24

Maximum lift height (in.) 270.5

Travel speed with/without load (mph) 8.0/8.0

Lift speed with/without load (fpm 65/110

> Turning Radius (in.) 63

Overall width (in.) 42.5

Length to Fork Face (in.) 74

Height of Overhead Guard (in.) 88

> Step Height (in) 9.4

### + 5000 lb capacity\* +Suspension Floorboard with no adjustment required\*\*

+ High visibility mast\*\*\* + Multi-function handle -ease of use, precision control + 500 hour PM interval + Better travel and lift speeds for higher throughput + Two pillar overhead guard – high RH side visibility

### ADDITONAL NOTES

Compartment Sensing System - provides (2) light sensors which span the entry to the operator compartment Single pedal on floorboard allows operator to change feet positions Robust design with 5000lb. capacity and 500 hour pm schedule as oopposed to 250 hour PM schedule T360 Support Plus Option – extended warranty + 1 year free maintenance \* On HP model only \*\* Comfort stance floor std. on HP, opt. on BE \*\*\* 4 cylinder design, on HP model only

### **CROWN 5700 SERIES**



Battery Voltage (V) 36

Load Capacity (lbs.) 3000-4000

Load Center (in.) 24

Maximum lift height (in.) 276

Travel speed with/without load (mph) 7.2/7.2

Lift speed with/without load (fpm 55/110

> Turning Radius (in.) 62.8

Overall width (in.) 42

Length to Fork Face (in.) 71.5

Height of Overhead Guard (in.) 88

Step Height (in) 9.5

- 5000 lb capacity not available - Suspension floorboard requires adjustment - Slower performance + Adjustable armrest - 250 hour PM interval - Noisy gearbox / mast rattle /mast staging

### **HYSTER** E30–40HSD SERIES **YALE ESC030-40AD**



Battery Voltage (V) 36

Load Capacity (lbs.) 3000-4000

> Load Center (in.) 24

Maximum lift height (in.) 283

Travel speed with/without load (mph) 7.2/7.2

Lift speed with/without load (fpm 59/83

> Turning Radius (in.) 57.4

Overall width (in.) 42

Length to Fork Face (in.) 71

Height of Overhead Guard (in.) 88

Step Height (in) 9.5

- 5000 lb capacity not available + Suspension Floorboard with no adjustment required - Slowest performance + Smallest turning radius

### **JUNGHEINRICH ETG SERIES**



**Battery Voltage (V)** 36

Load Capacity (lbs.) 3000-4000

Load Center (in.) 24

Maximum lift height (in.) 276

Travel speed with/without load (mph) 8.0/8.0

Lift speed with/without load (fpm 83/118

> Turning Radius (in.) 57.8

Overall width (in.) 41

Length to Fork Face (in.)

71

Height of Overhead Guard (in.) 88

> Step Height (in) 9.4

### - 5000 lb capacity not available

- Suspension floorboard requires adjustment

+ Best performance

+ Adjustable armrest

+ 1000 hour PM interval

+ Smaller tiller = more space in compartment

ADDITONAL NOTES 1000 hour PM interval - this may not be an apples to apples comparison as the customer may have to do more of their own maintenance on Jungheinrich trucks