



3-Wheel Sit Down Forklifts

36 & 48 Volt AC-Powered

3,000 / 3,500 / 4,000 lbs. Capacities | Cushion Tire



S P E C I F I C A T I O N S

MAIN TRUCK SPECIFICATIONS

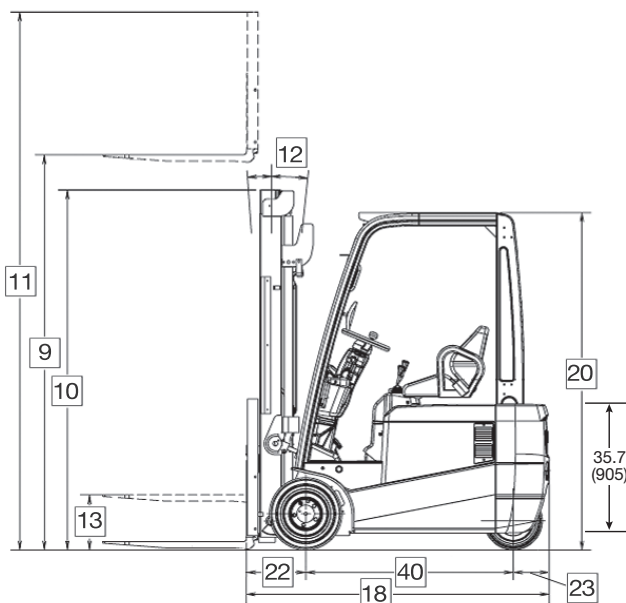
CHARACTERISTICS	1	Manufacturer's Name		UniCarriers		UniCarriers		UniCarriers	
	2	Model	Model designation	TX30N		TX35N		TX40N	
	3	Long model code		A1N1L15V		A1N1L18V		AG1N1L20V	
	4	Rated Load Capacity	At 24" (600mm) load center	lb (kg)	3000 (1350)	3500 (1600)	4000 (1800)		
DIMENSIONS	5	Power Type	Electric	voltage	36V 48V	36V 48V	36V 48V	36V 48V	
	6	Operator Orientation			Sit Down	Sit Down	Sit Down		
	7	Tire Type	Front & rear		Cushion	Cushion	Cushion		
	8	Wheels	Number front / rear (x=driven)		2 x / 2	2 x / 2	2 x / 2		
	9	Mast	Maximum fork height (MFH)	in (mm)	130 (3300)	130 (3300)	130 (3300)		
	10		Mast lowered (OHL)	in (mm)	82.9 (2105)	82.9 (2105)	82.9 (2105)		
	11		Mast extended with LBR	in (mm)	179.4 (4555)	179.4 (4555)	179.4 (4555)		
	12		Mast tilt - fwd/back	degree	4/6	4/6	4/6		
	13		Standard freelif	in (mm)	2.3 (60)	2.3 (60)	2.3 (60)		
	14		Standard carriage width	in (mm)	36.2 (920)	36.2 (920)	36.2 (920)		
	15		Standard LBR height	in (mm)	47.0 (1195)	47.0 (1195)	47.0 (1195)		
	16	Forks	Length x width x thickness	in (mm)	42 x 4 x 1.5 (1070 x 100 x 40)				
	17		Fork spread-min. / max. outside width	degree	8.1 (205) / 35.8 (910)	8.1 (205) / 35.8 (910)	8.1 (205) / 35.8 (910)		
	18	Overall Dimensions	Length (to face of forks)	in (mm)	74.6 (1895)	74.6 (1895)	78.9 (2005)		
	19		Width (standard tires)	in (mm)	43.5 (1105)	43.5 (1105)	43.5 (1105)		
	20		Height - top of OHG	in (mm)	83.1 (2110)	83.1 (2110)	83.1 (2110)		
	21	Grade Clearance Angle	Approach / breakover / departure	tan %	27 / 32 / 65	27 / 32 / 65	27 / 29 / 65		
	22	Overhang	Front	in (mm)	14.6 (370)	14.6 (370)	14.6 (370)		
	23		Rear	in (mm)	8.8 (225)	8.8 (225)	8.8 (225)		
	24	Turning Radius	Minimum outside	in (mm)	60.0 (1525)	60.0 (1525)	64.4 (1635)		
	25	Min Right Angle Stack	Add load length & clearance	in (mm)	74.6 (1895)	74.6 (1895)	78.9 (2005)		
PERFORMANCE	26	Speeds Maximum	Travel - loaded (36V / 48V)	mph (km/h)	9.0 (14.5) 9.9 (16.0)	9.0 (14.5) 9.9 (16.0)	9.0 (14.5) 9.9 (16.0)		
	27		Travel - unloaded (36V / 48V)		9.0 (14.5) 9.9 (16.0)	9.0 (14.5) 9.9 (16.0)	9.0 (14.5) 9.9 (16.0)		
	28		Lift - loaded (36V / 48V)	fpm (mm/sec)	66.9 (340) 78.7 (400)	61.0 (310) 72.8 (370)	53.1 (270) 63.0 (320)		
	29		Lift - unloaded (36V / 48V)		101.4 (515) 118.1 (600)	101.4 (515) 118.1 (600)	101.4 (515) 118.1 (600)		
	30		Lowering - loaded / unloaded	fpm (mm/sec)	98.4 (500) / 98.4 (500)	98.4 (500) / 98.4 (500)	98.4 (500) / 98.4 (500)		
	31	Drawbar Pull Maximum ¹	Full load (36V / 48V)	lb (N)	2280 (10144) 2360 (10500)	2280 (10144) 2360 (10500)	2280 (10144) 2360 (10500)		
	32	Gradeability Maximum ²	Full load / no load (36V / 48V)	tan %	20.8 / 32.3 20.4 / 30.4	18.7 / 30.0 17.9 / 27.8	16.1 / 26.0 16.1 / 25.6		
WEIGHT	33	Truck Weight	Empty - minimum battery	lb (kg)	6515 (2955)	6955 (3155)	7420 (3365)		
	34	Weight Distribution	Full load - front axle	lb (kg)	8600 (3900)	9515 (4315)	10500 (4760)		
	35		Full load - rear axle	lb (kg)	915 (415)	935 (425)	925 (420)		
	36		No load - front axle	lb (kg)	3340 (1515)	3370 (1530)	3715 (1685)		
	37		No load - rear axle	lb (kg)	3175 (1440)	3585 (1625)	3705 (1680)		
CHASSIS & WHEELS	38	Tire Size	Front	in (mm)	18 x 7 x 12-1/8	18 x 7 x 12-1/8	18 x 7 x 12-1/8		
	39		Rear	in (mm)	15 x 5 x 11-1/4	15 x 5 x 11-1/4	15 x 5 x 11-1/4		
	40	Wheelbase		in (mm)	51.2 (1300)	51.2 (1300)	55.5 (1410)		
	41	Tread - Center of Tire	Front / rear	in (mm)	36.6 / 6.9 (930/175)	36.6 / 6.9 (930/175)	36.6 / 6.9 (930/175)		
	42	Ground Clearance	Lowest point	in (mm)	2.9 (75)	2.9 (75)	2.9 (75)		
	43		Under frame, center of wheelbase	in (mm)	3.9 (100)	3.9 (100)	3.9 (100)		
	44	Service Brake	Type		Hydraulic / Electric	Hydraulic / Electric	Hydraulic / Electric		
	45	Parking Brake	Type		Hand Activated	Hand Activated	Hand Activated		
	46	Steering	On-demand		Hydrostatic	Hydrostatic	Hydrostatic		
DRIVE LINE	47	Traction Motors	Type		AC Induction	AC Induction	AC Induction		
	48		Control type		MOS FET Inverter	MOS FET Inverter	MOS FET Inverter		
	49		Rating x # of motors (36V/48V)	kW/h	5.2 x 2 7.1 x 2	5.2 x 2 7.1 x 2	5.2 x 2 7.1 x 2		
	50	Pump Motor	Type		AC Induction	AC Induction	AC Induction		
	51		Rating (36v / 48v)	kW/5min	10.7 14.6	10.7 14.6	10.7 14.6		
BATTERY	52	Required Battery Size ³	W x H - Maximum	in (mm)	38-3/4 x 25-3/8 (985 x 645)				
	53		L - Maximum	in (mm)	20.56 (520)	20.56 (520)	24.8 (630)		
	54		Capacity - Minimum (36v / 48v)	Ah/6h	680 510	680 510	750 600		
	55		Capacity - Minimum (36v / 48v)	Ah/6h	800 600	800 600	1000 780		
	56	Recommended Battery Type	Lead acid (36v / 48v)	Type	18-85-17 24-85-13	18-85-17 24-85-13	18-85-21 24-100-15		
	57	Weight	Minimum / Maximum ⁴	lb (kg)	1545 (700) / 2425 (1100)	1545 (700) / 2205 (1000)	2315 (1050) / 2535 (1150)		
	58	Lead Length	Position A / SB-350 Grey Connector	in (mm)	4.0 (100)	4.0 (100)	4.0 (100)		

MAST SPECIFICATIONS & RATED CAPACITIES

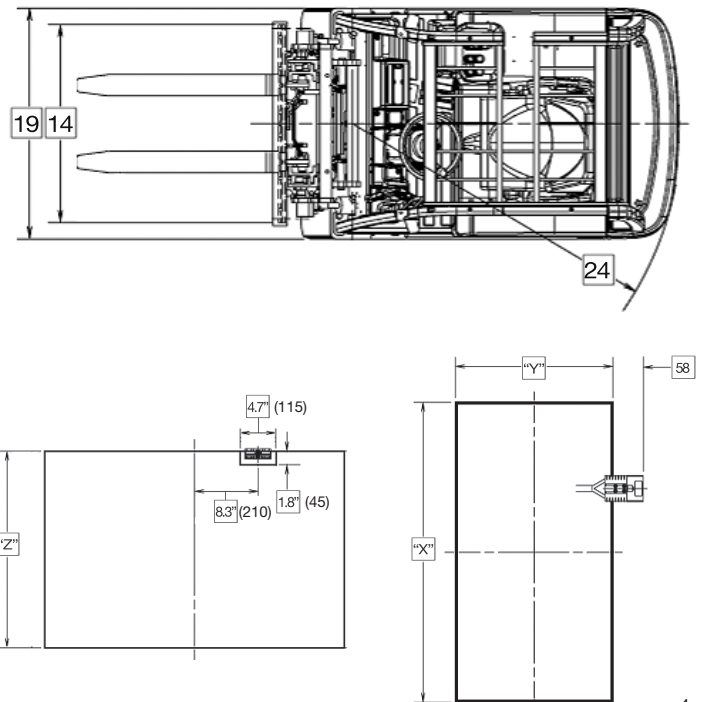
		Maximum Fork Height	Overall Height				Free Lift		Tilt Angle	Rated Capacity at 24 in (600) Load Center		
			Lowered	Fully Extended		Fwd/ Bkwd						
			MHL	OHL	With LBR	Without LBR	With LBR	Without LBR		TX30N	TX35N	TX40N
			in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	degrees	lb (kg)	lb (kg)	lb (kg)
TWO STAGE (Wide View)	2W270	106 (2700)	71.1 (1805)	155.8 (3960)	131.3 (3335)	2.3 (55)	2.3 (55)	4/6	3000 (1350)	3500 (1600)	4000 (1800)	
	2W300	118 (3000)	77.0 (1955)	167.6 (4260)	143.2 (3640)	2.3 (55)	2.3 (55)	4/6	3000 (1350)	3500 (1600)	4000 (1800)	
	2W330	130 (3300)	82.9 (2105)	179.4 (4560)	155.0 (3940)	2.3 (55)	2.3 (55)	4/6	3000 (1350)	3500 (1600)	4000 (1800)	
	2W350	138 (3500)	88.2 (2240)	187.3 (4760)	162.8 (4135)	2.3 (55)	2.3 (55)	4/6	3000 (1350)	3500 (1600)	4000 (1800)	
	2W370	146 (3700)	93.2 (2370)	195.1 (4955)	170.7 (4335)	2.3 (55)	2.3 (55)	4/6	3000 (1350)	3500 (1600)	4000 (1800)	
	2W400	157 (4000)	100.6 (2555)	206.9 (5255)	182.5 (4635)	2.3 (55)	2.3 (55)	4/6	3000 (1350)	3500 (1600)	3900 (1750)	
	2W450	177 (4500)	110.5 (2810)	226.6 (5760)	202.2 (5135)	2.3 (55)	2.3 (55)	4/6	2900 (1300)	3300 (1500)	3700 (1650)	
	2W500	197 (5000)	120.3 (3055)	246.3 (6255)	221.9 (5635)	2.3 (55)	2.3 (55)	4/6	2800 (1250)	3100 (1400)	3600 (1600)	
TWO STAGE (Full Free)	2F270	106 (2700)	71.1 (1805)	155.8 (3960)	131.3 (3335)	21.6 (545)	46.0 (1165)	4/6	3000 (1350)	3500 (1600)	4000 (1800)	
	2F300	118 (3000)	77.0 (1955)	167.6 (4260)	143.2 (3640)	27.5 (695)	51.9 (1315)	4/6	3000 (1350)	3500 (1600)	4000 (1800)	
	2F330	130 (3300)	82.9 (2105)	179.4 (4560)	155.0 (3940)	33.4 (845)	57.8 (1465)	4/6	3000 (1350)	3500 (1600)	4000 (1800)	
	2F350	138 (3500)	88.2 (2240)	187.3 (4760)	162.8 (4135)	38.7 (980)	63.1 (1600)	4/6	3000 (1350)	3500 (1600)	4000 (1800)	
	2F370	146 (3700)	93.2 (2370)	195.1 (4955)	170.7 (4335)	43.7 (1110)	68.1 (1730)	4/6	3000 (1350)	3500 (1600)	4000 (1800)	
	2F400	157 (4000)	100.6 (2555)	206.9 (5255)	182.5 (4635)	51.1 (1295)	75.5 (1915)	4/6	3000 (1350)	3400 (1550)	3900 (1750)	
	2F450	177 (4500)	110.5 (2810)	226.6 (5760)	202.2 (5135)	58.1 (1475)	83.8 (2125)	4/6	2900 (1300)	3300 (1500)	3700 (1650)	
THREE STAGE (Full Free)	3F385	152 (3850)	71.1 (1805)	201.0 (5105)	176.6 (4485)	21.6 (545)	46.0 (1165)	5/5	3000 (1350)	3400 (1550)	3800 (1700)	
	3F430	169 (4300)	77.0 (1955)	218.8 (5560)	194.3 (4935)	27.5 (695)	51.9 (1315)	5/5	2900 (1300)	3300 (1500)	3700 (1650)	
	3F475	187 (4750)	82.9 (2105)	236.5 (6010)	212.1 (5390)	33.4 (845)	57.8 (1465)	5/5	2800 (1250)	3200 (1450)	3600 (1600)	
	3F515	203 (5150)	88.2 (2240)	252.4 (6410)	227.8 (5790)	38.7 (980)	63.1 (1600)	5/5	2700 (1200)	3100 (1350)	3500 (1550)	
	3F550	217 (5500)	93.2 (2370)	266.0 (6755)	241.6 (6140)	43.7 (1110)	68.1 (1730)	5/5	2600 (1100)	2900 (1300)	3400 (1550)	
	3F600	236 (6000)	100.6 (2555)	285.7 (7260)	261.3 (6640)	51.1 (1295)	75.5 (1915)	5/5	2300 (1050)	2400 (1100)	3300 (1500)	
	3F650	256 (6500)	110.5 (2810)	305.4 (7760)	281.0 (7140)	61.0 (1545)	85.4 (2165)	5/5	1900 (850)	N/A	3200 (1450)	
	3F700	276 (7000)	120.3 (3055)	325.0 (8255)	300.6 (7635)	70.8 (1795)	95.2 (2415)	5/5	1400 (650)	N/A	3000 (1350)	
THREE STAGE OPTVIEW®	3V360	142 (3600)	71.1 (1805)	189.8 (4820)	168.4 (4280)	23.0 (580)	44.4 (1125)	5/5	2800 (1250)	3000 (1350)	3700 (1650)	
	3V405	159 (4050)	77.0 (1955)	207.5 (5270)	186.1 (4730)	28.9 (730)	50.3 (1275)	5/5	2700 (1200)	3000 (1350)	3600 (1650)	
	3V450	177 (4500)	82.9 (2105)	225.2 (5720)	203.8 (5180)	34.8 (880)	56.2 (1425)	5/5	2700 (1200)	3000 (1350)	3400 (1550)	
	3V490	193 (4900)	88.2 (2240)	241.0 (6120)	219.7 (5580)	40.1 (1015)	61.4 (1560)	5/5	2600 (1150)	2900 (1300)	3300 (1500)	
	3V525	207 (5250)	93.2 (2370)	254.8 (6470)	233.3 (5925)	45.0 (1140)	66.5 (1685)	5/5	2500 (1100)	2800 (1250)	3200 (1450)	
	3V575	226 (5750)	100.6 (2555)	274.5 (6975)	253.0 (6425)	52.5 (1330)	74.0 (1880)	5/5	2300 (1050)	2400 (1100)	3100 (1400)	
	3V633	249 (6330)	110.5 (2810)	297.3 (7550)	275.8 (7005)	62.4 (1585)	83.8 (2125)	5/5	1900 (850)	N/A	3000 (1350)	
	3V688	271 (6880)	120.3 (3055)	318.9 (8100)	297.5 (7555)	72.2 (1830)	93.7 (2380)	5/5	1400 (650)	N/A	2900 (1300)	

*Capacities are based on cushion tire. Consult factory for capacity information for solid pneumatic tires.

DIMENSIONS



Step height = 21.5" (545mm)



STANDARD EQUIPMENT

Vehicle Management

- AC TECH motor controller system
- 3 pre-set performance modes (Economy, Power, High Power)
- 1 Manual (custom) performance mode
- Secure, PIN access to personalized performance settings
- Multi-function LCD:
 - Hours meters (4), clock, calendar
 - Operator PIN security access
 - On-board diagnostics
 - Programmable service reminders
 - Speedometer and F/N/R transmission reminder
 - BDI with lift interrupt
 - Regeneration indicator
- On-board diagnostics, self-test and error code history
- Flex-logic acceleration control

Battery/Electrical

- 36/48-Volt, brushless AC drive, motor, lift and steering systems

Brake

- 5-mode regenerative braking (including controlled rollback)
- Hand-applied parking brake and button release, with warning buzzer
- Fully enclosed 6-disc wet brakes

Hydraulic System

- Deck-mounted hydraulic controls
- Load sensing, on-demand hydraulic power steering

Operator Conveniences

- Operator Presence System with seat-actuated lift-interrupt system, return to neutral, seatbelt and parking brake warning buzzers
- Overhead guard mounted headlights
- Rearview mirrors
- Rear work light
- Infinitely adjustable steering wheel
- Small diameter steering wheel
- Auto-Power off system
- Full suspension, fold down seat with weight adjustment, operator restraint, and retractable seatbelt
- Rear combination light package (turn, stop, backup)
- Four-piece overhead guard

Protection/security

- Audible back-up warning alarm

OPTIONAL EQUIPMENT*

- Battery compartment rollers¹
- Exclusive three-stage OptiView mast
- Deck-mounted fingertip control levers (single or separate levers)
- Auto-fork leveling²
- Clamp release interlock
- Hang-on and integral sideshifters
- Sideshifting fork positioner
- Extra forward tilt
- Quick disconnects
- Freezer package³
- 2" higher steering column
- Steering wheel with spinner knob
- Strobe light (various colors)
- Fire extinguisher
- Overhead guard modifications (drive-in racking, lowered design)
- Polycarbonate rain guard
- Magnetic convenience tray
- Solid pneumatic tires
- Standard, or polished and tapered, forks in a variety of lengths
- Single or dual IHR for all available mast types
- Front rubber motor cover

¹ Battery roller height from floor – Cushion tires: 7.25" (185mm); Pneumatic tires: 7.05" (180mm)

² Not available with fingertip control – single lever design

³ Operate down to -31°F (-35°C) in ½ hour intervals

* Some optional equipment may require extended lead time. Contact your UniCarriers dealer for details.

ERGONOMICS & COMFORT

The TX Series offers a variety of operator conveniences for greater productivity including a standard full suspension seat for enhanced shock absorption. The seat features weight and back-angle adjustments, hip restraints and a retractable seat belt. A standard small diameter, tilt steering wheel can be paired with an optional spinner knob for extra operator control. An optional higher steering column provides an extra 2" of height. The TX includes an anti-fatigue cushioned floor mat for a smoother, more comfortable ride. Compact front cowl offers generous leg and foot room. Low profile dashboard provides excellent fork tip visibility, while still supplying ample headroom. Our exclusive optional OptiView® three-stage mast offers increased forward visibility for enhanced load handling.

Our standard Operator Presence System includes Return-to-Neutral and Auto-Mast Lock, automatically preventing mast lift and tilt operations when the operator leaves the seat. Audible and visual warnings notify operator if seat belt is not engaged, or if parking brake is not applied before exiting truck. Other communications visible through the LCD meter panel include truck's travel speed (above 2 mph) and steer wheel indicator (below 2 mph), battery capacity, regeneration indicator, 4-mode hour meter, time, calendar, and selected power setting (performance mode).

On-demand, hydraulic power steering reduces operator effort for easier maneuvering and less fatigue, while a load sensing valve prioritizes hydraulic fluid to truck's steering system when needed. Heel-to-toe brake pedal improves the ease of operation. Hand-operated parking brake includes a lock release, and is located on the cowl, within easy reach.

Standard deck-mounted hydraulic control levers offer enhanced ergonomics. Optional fingertip control levers available with an adjustable armrest. Select this option with either a single lift/tilt lever design or separate lift and tilt control levers. Optional auto-tilt leveling system assists operator during mast/fork positioning and is not available with fingertip control, single lift and tilt lever option.

EFFICIENCY & CONTROL

Compact steering wheel provides clear view of meter panel with visibility to warnings and indicators. A standard controlled rollback feature reduces the truck's descent when the accelerator is released while on a gradient.

Dual front wheel drive provides excellent tractions and braking power. Rugged dual AC powered drive motors offer more power and quicker response. The TX Series' individually controlled drive motors mean that power is transferred to each motor independently, depending upon turn angle input. For tighter turns, the inner drive wheel counter-rotates, allowing the truck to turn on the spot.

The TX Series may be programmed with Personal Identification Number (PIN) codes to help prevent unauthorized truck usage for greater fleet control. Each of the five PINs provides access to a customized operating profile.

The TX includes three factory-programmed performance settings (Economy, Power, High Power) which can be modified to fit driver preferences, operating restrictions and/or load handling conditions. Economy mode offers extended run time. Power (standard) mode offers mid-range settings. High Power mode is intended for faster acceleration and travel, among the truck's other adjustable settings. Use the Manual mode to personalize up to 12 performance settings. All setting modifications must be made by a trained service technician.

A unique Flex-Logic acceleration control enables the truck to respond according to the speed with which the pedal is depressed, providing the driver with more accurate, precise acceleration. Can be adjusted to suit operating conditions. Maximum travel speed is also adjustable through the meter panel. Both settings can be adjusted by a trained service technician.

LOWER OPERATING COSTS

The TX Series features a 100% AC-powered motor and controller system, incorporating a single contactor for reduced maintenance. Truck includes AC pump motor to power its lift and steering system, so a separate steering motor is not required. Motor and controller system design greatly reduces or eliminates many serviceable parts (commutators, contactors and brushes), along with related inspection and replacement expenses. Its AC TECH controller includes a built-in-test-equipment module with self-diagnostics and coded service history logged by hour meter reading. Multi-function LCD panel includes on-board diagnostics with all troubleshooting completed through the instrument panel, for reduced service time. No additional handset tool is required.

Modular, four-piece overhead guard simplifies replacement of individual components if necessary, saving time and money. Hydraulic fluid access for level checks and additions is available under the hood, on the right side of the truck. The brake fluid can be checked quickly, via a door located on the front cowl.

Powertrain maintenance is simplified due to its modular design - both gear box and motor can be removed as a single unit, without the need to remove the mast for service.

EFFICIENT PERFORMANCE & GREATER UPTIME

The TX Series' AC motor and controller system features MOS-FET power inverters for DC to three phase AC power conversion. The TX Series controllers are IP65 rated. They're located between the counterweight and battery box, and protected by two removable panels. Thermal sensors help protect both motors and controller against overheating. Warning indicator will advise operator if overheating has occurred, followed by reduced travel and lift operations. Data is automatically locked into truck's service history to assist the technician.

Our AC TECH controller provides lower battery consumption and optimum operating efficiencies through regenerative braking, automatic deceleration, and on-demand power steering. Advanced regenerative braking technologies help reclaim energy using five efficient operations (switch-back/plugging, foot applied, neutral braking (accelerator off), controlled rollback and lift stopping), contributing to lower power consumption and longer operating hours. Regeneration also results in reduced heat generation and component wear, for long-term savings.

Adjustable auto-power off feature cuts power to the truck's electrical system if unit sits idle for a programmed period of time.

RUGGED & DURABLE

The TX Series' rugged, unitized frame design delivers increased durability, and longer life. Contoured counterweight design enhances maneuverability. Flat face mast design features rolled steel channels, large cross sections, and thick inner rails for greater capacity retention. Side thrust rollers on the fork carriage are easily accessed for simple carriage adjustment.

Reliable, 6-disc wet-type brake system is fully enclosed within the drive unit, helping to eliminate debris and premature brake wear. Design extends brake life and lengthens service intervals.

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