



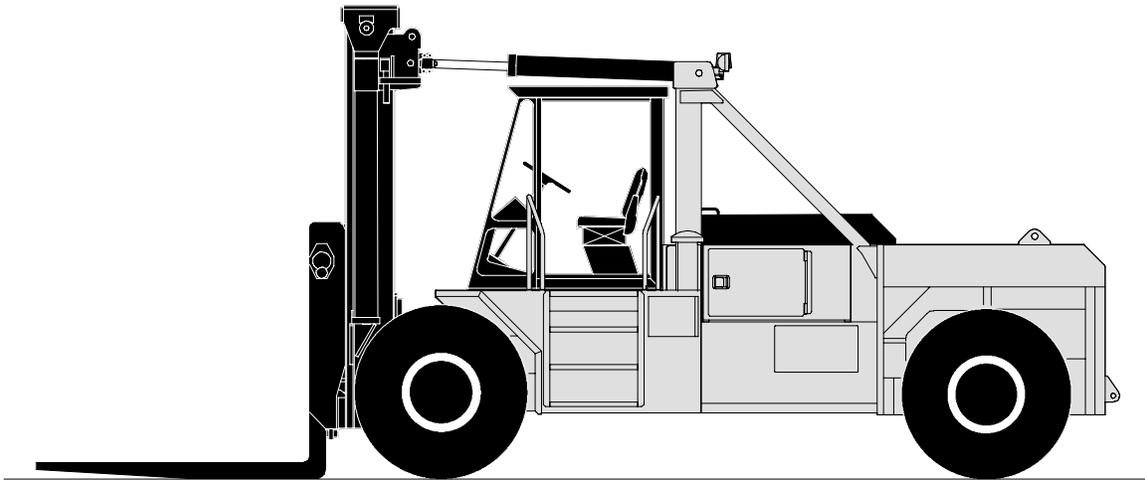
“Big Red” TE-520M

Taylor Industrial Truck Standard Specifications

Rated Capacity 52,000-lbs. (23,587 kg)

48-in. (1,219 mm) Load Center

170-in. (4,318 mm) Wheelbase



"Big Red" TE-520M

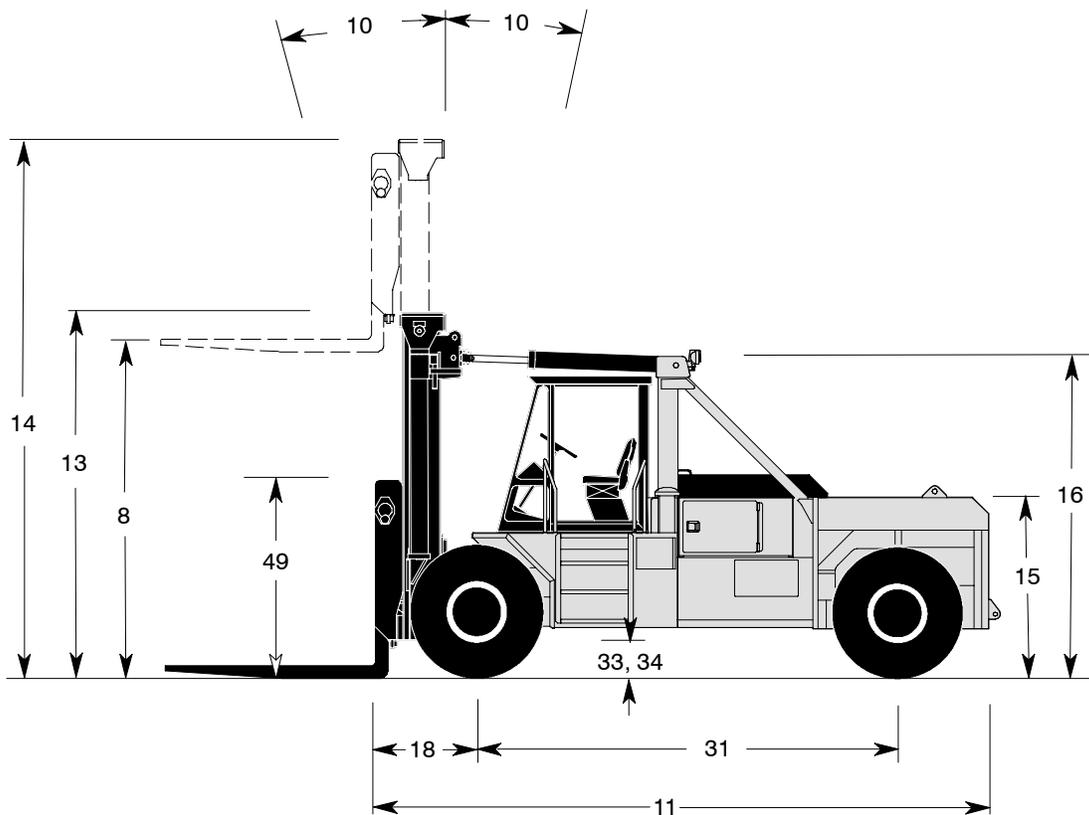
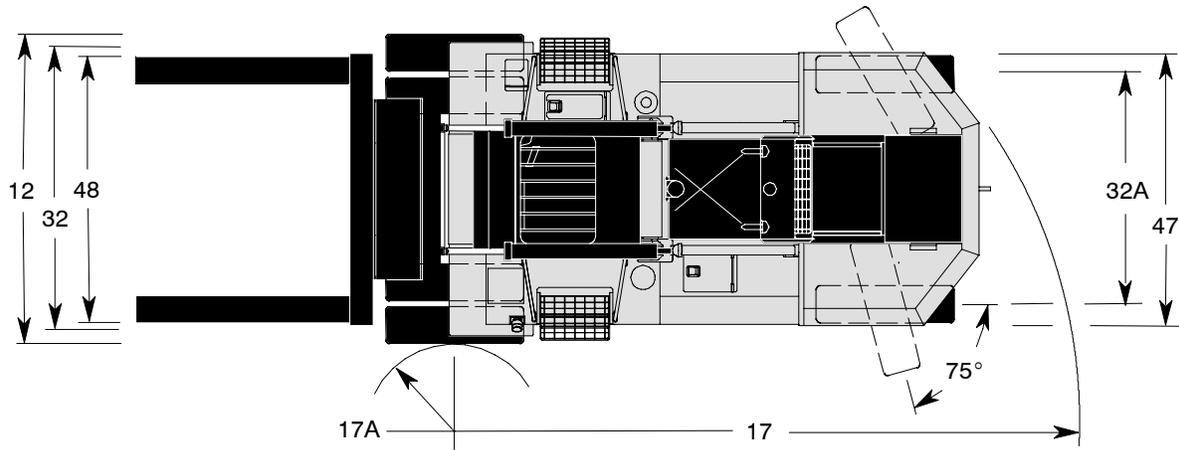
GENERAL	1	Manufacturer	Manufacturer's Name	TAYLOR		
	2	Model	Manufacturer's Designation	TE-520M		
				English	Metric	
	3	Capacity	Rated Capacity	lb (kg)	52,000 / 23,587	
	4	Load Center	Distance	in (mm)	48 / 1,219	
	5	Power Type	Gas, LPG, Or Diesel	Diesel		
	6	Tire Type	Cushion, Pneumatic Front / Rear	Pneumatic / Pneumatic		
	7	Wheels	Number (X = Driven) Front / Rear	4X / 2		
DIMENSIONS	8	Upright Lift	Standard Lift (Top Of Fork)	in (mm)	137 / 3,480	
	9	Forks	Thickness	in (mm)	5 / 127	
	9A		Width	in (mm)	10 / 254	
	9B		Length	in (mm)	96 / 2,438	
	10		Tilt Angle	Standard Upright - Forward / Backward	deg.°	15 / 12
	11	Overall Dimensions	Length To Face Of Forks	in (mm)	249.25 / 6,331	
	12		Width (Standard Tires)	in (mm)	120 / 3,048	
	13		Height, Standard Upright Lowered	in (mm)	147 / 3,734	
	14		Height, Standard Upright Extended	in (mm)	213 / 5,410	
	15		Height To Top Of Counterweight	in (mm)	72 / 1,829	
	16		Height To Top Of A-Frame	in (mm)	129 / 3,277	
	17	Turning Radius	Minimum Outside	in (mm)	235 / 5,969	
	17A		Minimum Inside	in (mm)	26 / 660	
		18	Load Distance	Center of Wheel To Face Of Forks	in (mm)	42.25 / 1,073
		19	Aisle Width	(Add Load Length For 90° Stacking)	in (mm)	277.25 / 7,042
	PERFORMANCE	20	Stability	Comply With ANSI?	Yes	
		21	Speeds	Travel Speed - Maximum Forward	mph (km/h)	15.7 / 25.3
		22		Lift Speed - No Load	fpm (m/s)	56 / 0.28
		22A		Lift Speed - With Load	fpm (m/s)	49 / 0.25
23		Lowering Speed - No Load / With Load		fpm (m/s)	Adjustable	
24		Drawbar Pull	Powershift (Maximum At Stall)	lb (kN)	35,300 / 157	
25		Gradeability	Powershift (Maximum At Stall) No Load	%	30.2	
25A	Powershift (Maximum At Stall) With Load		%	28.4		
WEIGHT	26	Ttl. Apprx. Wt.	Standard Truck	lb (kg)	73,800 / 33,476	
	27	Axle Loading	Static With Rated Load - Front	lb (kg)	113,965 / 51,695	
	27A		Static With Rated Load - Rear	lb (kg)	11,835 / 5,368	
	27B		Static With No Load - Front	lb (kg)	34,350 / 15,581	
	27C		Static With No Load - Rear	lb (kg)	39,350 / 17,849	
WHEELS / TIRES	28	Tires	Number - Front / Rear	4 / 2		
	29		Size - Front	14.00 x 25 - 20 PR		
	30		Size - Rear	14.00 x 25 - 20 PR		
	31	Wheelbase	Distance	in (mm)	170 / 4,318	
	32	Tread	Center Of Outside (Dual) Tires - Front	in (mm)	86 / 2,184	
	32A		Center Of Tires - Rear	in (mm)	91 / 2,311	
	33	Ground Clearance	No Load At Lowest Point	in (mm)	14.5 / 368	
	34		No Load At Center Of Wheelbase	in (mm)	18 / 457	
	35	Brakes	Service / Parking - Method Of Control	Foot / Hand		
	36		Service / Parking - Method Of Operation	Air / Spring		
POWER UNITS / XMSN	37	Battery	Volts / Ampere Hours (2 Batteries)	V/Ah	12 / 2300	
	38	Internal Combustion Engine	Make / Model	Cummins C8.3-C215		
	39		Output - Intermittent Per SAE Standards	hp (kW)	215 / 160	
	40		Governed Speed - With Load	rpm	2200	
	41		Cycle / Number Of Cylinders / Displacement	cu in (L)	4 / 6 / 504.5	4 / 6 / 8.3
	42	Clutch	Type	Declutch		
	43	Gear Change	Type	Hand		
	44	Transmission	Number Of Speeds - Forward / Reverse	3 / 3		
	45		Type	Powershift		
	46	Relief Press.	For Attachments	psi (bar)	1500 / 103	
47		Width Across Counterweight	in (mm)	108 / 2,743		
48		Standard Fork Spread	in (mm)	100 / 2,540		
49		Ground To Top Of Carriage	in (mm)	79 / 2,007		
50		Load Moment	in-lbs (m-kg)	4,693,000 / 54,070		

† NOTE: Performance specifications are for trucks equipped as described on the back page of this specification sheet. Performance specifications are affected by the condition of the vehicle, its components, and the nature and condition of the operating area. If these specifications are critical, the proposed application should be discussed with your Taylor sales representative.

"Big Red" TE-520M

Mast Dimensions (inches / millimeters)

2-Stage ULTRA-VU Telescopic Mast	Optional Lift Height (8)		OAHL (13)		OAGR (14)	
	English	Metric	English	Metric	English	Metric
	137	3,480	147	3,734	213	5,410
	161	4,089	159	4,039	237	6,020
	185	4,699	171	4,343	261	6,629
	221	5,613	189	4,801	297	7,544



“Big Red” TE-520M

Engine

Cummins C8.3-C215 turbo-charged diesel engine. 504.5 cu-in. (8.3 L) displacement. 4.49-in. (114 mm) bore x 5.32-in. (135 mm) stroke, 215 (160 kW) gross brake horsepower at 2200 rpm (all engine ratings are based on SAE J 1349 conditions). Peak torque is 642 ft-lbs. (870 N-m) at 1500 rpm. The engine is rubber mounted to increase noise control. The fuel tank capacity is 60 gallons.

Air Cleaner

The dry air cleaner has a safety element and restriction indicator.

Cooling System

Coolant recovery cooling system has an extra large down flow radiator for maximum efficiency. The wide fin spacing reduces dirt build-up and provides optimum engine cooling.

Electrical, Instrumentation, and Accessories

The one-piece instrument panel flips down for easy servicing and is pre-wired to accommodate heavy-duty accessories. All wiring is color coded.

The unit has a 12-volt electrical system. Standard equipment includes a key-type anti-restart ignition system, 2 heavy-duty batteries, 100-amp alternator, mechanical pressure gauges, electrical temperature gauges, reset circuit breakers, lighted instruments, horn, work lights (two front, and two rear), key-switch actuated amber strobe light, reverse-actuated warning alarm and tilt steering.

Gauges include fuel level, ammeter, hourmeter, air pressure, engine oil pressure, engine coolant temperature, transmission oil pressure, and transmission oil temperature. Lights included are seat belt light, low air light, parking brake light, and step lights.

Transmission

The three-speed, fully reversing, modulated, powershift transmission has declutch and electric shift control. Brakes behind declutch. The filler pipe dipstick and large, heavy-duty, oil filter are easily accessible. Separate air-to-oil cooler. The integrally built torque converter has constant mesh gear sets actuated by hydraulic clutch packs. An automatic powershift control is standard.

Drive Axle

The heavy-duty planetary type drive axle housing is welded to the frame.

Steer Axle

The single hydraulic cylinder design steer axle, with heavy-duty links from the cylinder ram directly to tapered roller bearing mounted spindles, has tapered wheel and kingpin bearings. All joints are sealed, can be lubricated, and never need adjusting.

Brake System

The force cooled, wet disc, air/hydraulic actuated, service brakes are mounted on the drive axle. The transmission is equipped with a spring-applied drum brake for parking.

Chassis

The all welded frame has an integral, sloped, counterweight and tubular A-frame. A spring-assisted hood and hinged doors provide easy access to service points.

The canopy is integral with the operator station base. The center mount operator station is standard and can be optionally located offset to the left side of the vehicle. The tinted, unbreakable, Lexan top with steel crossbars provides maximum visibility and protection. The suspension seat with an operator seat belt is adjustable.

Hydraulic System

The large capacity hydraulic tank has a spin-on tank breather, suction strainers, return line filters, and replaceable elements in the tank. The hydraulic system utilizes transmission-driven gear type pumps. The tank refill capacity is 72 gallons (273 L). The tilt lock valve prevents mast drift and reduces torsional stress. Dual lift cylinders have chrome-plated rods and self-adjusting packing. Control levers are conveniently located. Valves are controlled with hydraulic remotes.

Mast, Carriage, and Rollers

The 11-ft. (3.4 m) ULTRA-VU telescopic, nested-channel mast, with two multiple-leaf lift chains, is constructed of high-strength steel for minimum weight. The two lifting eyes and bolt-on caps permit safe, easy removal of the mast.

The “C” type carriage has a high strength-to-weight ratio. The forks are pin-mounted and fully adjustable from 100-in. (2,540 mm) outside to 2-in. (51 mm) inside the center brace.

Main rollers have shielded, tapered, roller bearings; chain rollers use shielded ball bearings. The carriage side rollers are adjustable to compensate for wear. All rollers can be lubricated.

Forks

The forks are hammer forged from heat treated alloy steel.

Standard size:

5-in. x 10-in. x 96-in. (127 mm x 254 mm x 2438 mm).

This vehicle is certified to meet the applicable design and performance criteria required for Powered Industrial Trucks in OSHA Safety and Health Standards, Title 29 CFR, Part 1910.178, and the applicable design and performance requirements in ANSI B56.1 that were in effect at the time of manufacture. These standards also apply to the user and should be adhered to while operating this vehicle.

All specifications are subject to change without notice. Some operating data may be affected by the condition of the operating area. If these specifications are critical, contact the factory.

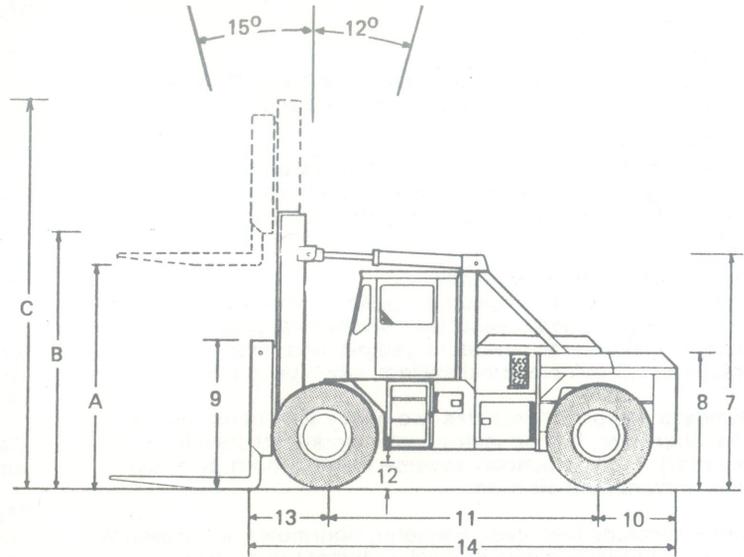
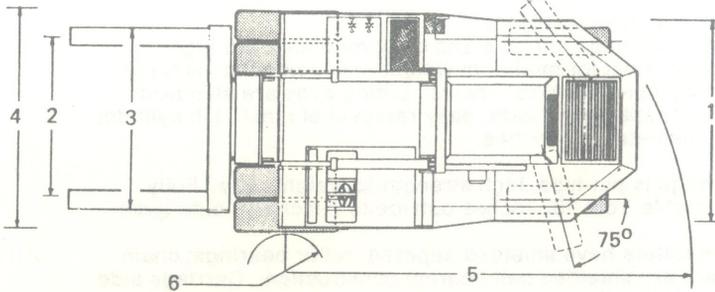
TAYLOR



Lift Truck Specifications

Model TY-520M

52,000 lb. Capacity at 48-inch Load Center
167-inch Wheelbase



1 - Width across counterweight		108 in.		
2 - Tread width, drive axle		86 in.		
3 - Fork spread (standard)		100 in.		
4 - Width over tires		118.50 in.		
5 - Outside turn radius (tail swing)		239.50 in.		
6 - Inside turn radius		25 in.		
7 - Height to top of A-frame		125.50 in.		
8 - Height to top of counterweight		71.75 in.		
9 - Height to top of carriage		78 in.		
10 - Steer axle CL to rear of counterweight		44.75 in.		
11 - Wheelbase		167 in.		
12 - Underclearance (mast)		13 in.		
13 - Drive axle CL to carriage face		41.25 in.		
14 - Overall length, less forks		253 in.		
Weight	Drive axle	32,750 lbs.		
	Steer axle	39,700 lbs.		
	Total	72,450 lbs.		
Load moment		4,641,000 in.-lbs.		
Tractive effort (maximum) at stall and .9 coef.		39,242 lbs.		
Minimum aisle for right angle stacking (+ load length)		280.75 in.		
Gradeability at .9 coef.	Empty	40.7%		
	Loaded	29.5%		
Grade clearance	Center of truck	59%		
	Rear overhang	72%		
Tires		14.00 x 24 - 20 PR		
Travel speed: forward and reverse		Empty	Loaded	
	First	3.1 mph	3.1 mph	
	Second	6.4 mph	6.1 mph	
	Third	10.6 mph	10.0 mph	
Lift speed	Fourth	17.7 mph	14.6 mph	
		47 fpm	31 fpm	
Upright dimensions A, B, and C (11-ft. Telescopic Mast, standard)	Telescopic Mast			Rigid Mast
	Opt. Lift Height (A)	OAHL (B)	OAHR (C)	OAH
	132 in. (11 ft.)	146 in.	212 in.	210 in.
	156 in. (13 ft.)	158 in.	236 in.	234 in.
	180 in. (15 ft.)	170 in.	260 in.	258 in.
	216 in. (18 ft.)	188 in.	296 in.	294 in.

Engine

DDC 4-71 diesel. 4-valve, 2-cycle, 284 cubic inch displacement. 4.25-inch bore x 5-inch stroke. 157 basic rated horsepower at 2300 rpm (standard SAE conditions). Gross maximum torque 407 ft. lbs. at 1400 rpm. Engine is rubber mounted.

Air Cleaner

Farr 2-stage, heavy-duty cleaner using exhaust from brake system to remove dust from pre-cleaner panel.

Cooling System

Crossflow radiator for maximum efficiency and low hood profile. Deaeration tank provides optimum engine cooling; sight gauge for coolant level check (hood does not have to be raised).

Electrical and Instrumentation

One piece, flip-down, instrument panel is prewired to accommodate heavy-duty accessories. Mechanical pressure gauges, electrical temperature gauges, and reset circuit breakers. 12-volt electrical system; key-type ignition.

Standard equipment includes two heavy-duty batteries, 55 amp alternator, lighted instruments, worklights (two front, two rear), rotating beacon, reverse warning horn, two rear view mirrors, and air horn.

Gauges include fuel level, ammeter, hourmeter, air pressure, engine oil pressure, engine coolant temperature, transmission oil pressure, and transmission oil temperature.

Transmission

Four-speed powershift transmission with inching control. Single lever, roll shift, mounted on steering column. Separate air-to-oil transmission oil cooler. Filler pipe with dipstick and heavy-duty oil filter are easily accessible for servicing.

Drive Axle

Heavy-duty planetary. Hypoid ring gear and pinion with Hi-Traction® differential gearing. Axle housing is welded to frame.

Steer Axle

Taylor steer axle is mounted on self-aligning, hardened-steel, spherical bushings. Kingpins with replaceable bushings are mounted on tapered roller thrust bearings.

Air Brakes

Air-actuated S-cam service brakes with treadle valve and hand-operated spotting brake control. 20.25-inch diameter x 7-inch wide heavy-duty linings with cast steel drums.

10-inch diameter x 3-inch wide drum-type parking brake, mounted on transmission output shaft, is operated by over-center hand lever.

Power Steering

Hydrostatic, steer-on-demand system for constant response at all engine speeds.

Chassis

All-welded frame has integral, sloped, counterweight and tubular A-frame. Spring-assisted hood and hinged doors provide easy access to service points.

Rubber-mounted canopy, integral with base assembly, forms a one-piece operator's module which is offset to left-hand side. Tinted, unbreakable Lexan® top has steel crossbars for maximum visibility and protection.

Hydraulic System

Automatic 2-speed lift. One-gallon accumulator. 100-wire mesh strainers mounted in hydraulic tank. Separate return-line filter with replaceable spin-on element. Crankshaft-driven, gear-type pump with external pressure-check fittings. Separate, stacked, spool-type control valves mounted in fender for easy access. Tilt-lock valve prevents mast drift and reduces torsional stress. Pin-mounted lift cylinder with double, self-adjusting packing. Overhead tilt cylinders with chrome-plated rods and self-adjusting packing. Conveniently located control levers with adjustable stops.

Mast, Carriage and Rollers

Telescopic mast uprights and crossmembers are high-strength steel for minimum weight and maximum visibility. Two multiple-leaf hoist chains. Lifting eyes are standard. Bolt-on caps permit safe, easy removal of mast. Lift cylinder ram diameter is 9-inches.

Carriage is pin-type, high strength-to-weight ratio. Fully adjustable from 100-inches outside to 2-inches inside forks.

Main rollers have shielded, tapered, roller bearings; chain rollers are shielded ball bearing construction. Carriage side rollers are adjustable to compensate for wear. All rollers can be lubricated.

Forks

Forks are hammer forged from heat treated alloy steel; 96-inches long x 10-inches wide x 5-inches thick (standard).

Service Capacities

Radiator	42 quarts
Fuel tank	60 gallons
Engine lubrication	22 quarts
Transmission	36 quarts
Drive axle:	
Differential	16 quarts
Wheel end (each)	8 quarts
Steer axle hub (each)	1 quart
Hydraulic tank	72 gallons

This vehicle is certified to meet the design and performance criteria set forth by ANSI B56.1-1969 Part II safety standard for powered industrial trucks as required by Title 29 Part 1910.178 of the Occupational Safety and Health Standards. This truck also meets the revised safety standards of ANSI B56.1-1975, 1983-85. These standards apply to the use of this powered industrial truck and should be complied with in the use of this truck.

All specifications are subject to change without notice. Some operating data may be affected by the condition of the vehicle, how it is operated, and the nature and condition of the operating area. If these specifications are critical, contact the factory.