



Doosan Infracore
Forklifts

PRO5
SERIES



B40X / B45X / B50X-5
8,000lb to 10,000lb Capacity
80 VOLT
Solid Soft Rider Tire

Full Product Line

Doosan offers a full line of lift trucks from 3,000lb(1,500kg) to 36,000lb(16,000kg) pounds to fill all your material handling needs. Contact your dealer for specific information on our various models and configurations.

Complete Distribution Network

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For corporate information go to :
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4 Wheel Electric Forklift Trucks

B40X / B45X / B50X-5

8,000lb to 10,000lb Capacity



PSC0708A0 (August.2007)



Doosan Infracore
Forklifts

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AUTHORIZED DEALER

Product and specifications are subject to improvement and change without notice.

B40X / 45X / 50X-5 4 WHEEL ELECTRIC TRUCK

***High Performance, Great Productivity, Energy Efficiency, Superior Ergonomics and Easy Service
You Get All This With Our
New Generation of Doosan Electric Forklifts***

- Optimized operator compartment, for driving & operating comfort.
- A.C.T. (Active Control Technology) incorporated into full AC (Drive and Hydraulic) system provides smooth & efficient control.
- Proven and durable components for excellent reliability and extended maintenance intervals.
- AC Motors & OCDB provide excellent productivity.
- Tool-less side cover and wide opening hood provide excellent service access.



DRIVE THE DIFFERENCE...

DRIVE DOOSAN !

Comfort comes Standard !

Our Spacious And Well Planned Operator Compartment Will Make Your Drivers Feel Right At Home.



- **Auto Tilt Leveling (Optional).**
Easily returns mast to upright vertical position by simply pushing a button.

- **Finger-tip Controlled Hydraulic Control Valve (Optional)**
Permits precisely controlled load movement by literally lifting only a finger to significantly reduce operator movement and expended effort.

- **Deluxe Suspension Seat (Optional) with OSS**
A comfortable deluxe suspension seat with OSS(operator sensing system), a large seatback angle, longer seat travel length and operator's weight resistance on front side allow multiple adjustments for optimum seating comfort.



- **Convenience Tray**
Easily handles refreshments, paperwork, small tools, etc for operator efficiency.



- **Spacious Operator compartment**
Wide open leg room, stepless tiltable steering column and ergonomically located operator pedals with low cowl height facilitate operator efficiency.



- **High Visibility Overhead Guard and Front-end**
Wider mast window, repositioned hydraulic hoses and flat bar style overhead guard optimize operator sight lines forward, up and to the load.



DRIVE THE DIFFERENCE...

DRIVE DOOSAN !

Productive, But Energy Efficient !



DRIVE THE DIFFERENCE...

The bottom line for evaluating a lift truck is PRODUCTIVITY.... and that's where the Pro5 Series really stands out. Productivity of an electric truck is a combination of speed, control and energy consumption --- which have been achieved through several exclusive Doosan design innovations.

● DOOSAN Exclusive ACT (Active Control Technology)

This innovative system provides several productivity advantages:



- Active Performance Control : self-adjusts performance criteria to changes in operating conditions
- Active Energy control : maintains consistent performance through 80% of battery charge life
- Active Comfort Control : customizes operating parameters to match driver's style for increased comfort, confidence & control
- Active Heat Control : system self protects when overheating detected to correct temperature imbalance

● Operator-Centric Performance Selection

Operator controls the truck's performance capability and can optimize productivity and battery consumption rate to match application requirements.



- H-mode (High Performance)
- S-mode (Standard Performance)
- E-mode (Energy Efficient Performance)
- Turtle mode (Reduces Travel Speed while maintaining lift speed)

● More Work per Battery Charge

Programmable operating functions customize truck performance for energy efficiency to achieve more run time per battery charge.

● ITC (Intelligent Torque Control)

Closed-loop feedback system monitors loads on drive and hydraulic motors to maintain speed consistency whether the truck is empty or loaded.

It also provides :

- Responsive acceleration
- Excellent gradeability
- Full protection against short / open circuits
- Continuous temperature monitoring of panel and motors to maximize material handling productivity.



DRIVE DOOSAN !

Efficiency Comes First !



DRIVE THE DIFFERENCE...

Doosan's Goal Is to Make Your Material Handling Operation Smooth and Secure.

● Lift Lock and Tilt Lock Function (ISO 3691)

Lift and tilt function are locked when operator leaves truck.

● OSS (Operator Sensing System)

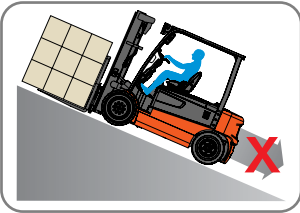
Audible alarm will sound when operator leaves the seat without parking brake applied.

Truck movement halts with directional switch in either forward or reverse when operator leaves the truck without parking brake applied. (automatically return to neutral position)



● Parking Brake with Stopper

Prevents parking brake release from external shock



● Anti Roll Back & Down

When stopping on a grade, anti roll back & down system holds truck in place.



● Steering Angle Sensing System

The angle sensing information controls the travel speed while turning by automatically reducing the travel speed for optimum control when cornering.

● Intelligent Instrument and Control Panels



The combination of LED displays and 7-digit graphic LCD display intelligently provides operators with all the details they need, including operational information, diagnostics, and programmable settings.

The 4 display buttons offers a choice of four power modes; heavy duty, standard duty, economic duty and slow travel speed mode. Standard instrument images are displayed at the right.



DRIVE DOOSAN !

Minimized Maintenance and Easy serviceability
is One of Doosan's Top Priorities



Oil- Cooled Disc Brakes(ODB)
Virtually maintenance-free, ODB is standard equipment on the PRO5 Series,B45X-5. The enclosed brake system eliminates outside contamination significantly extending the brake life up to 5 times longer when compared to conventional shoe brakes.

Rugged and Durable Twin Drive Axle
Doosan unique designed twin drive axle is installed on PRO5 Series, B45X-5. It is controlled by integrated drive controller and the twin drive axle effectively transfers the power and torque of the drive motor to the final drive for smooth and quite operation.

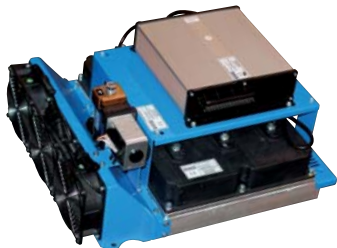
Run Time and Trouble shooting Diagnostics
Our truck talks to you!
The Controller provides both run-time and trouble-shooting diagnostic capability to tell you the source of a problem so it can be corrected quickly and easily.
In addition all controller programming can be locked in to guard against tampering.

Maintenance Free Electric Motors
Our innovative AC technology of drive and hydraulic motors eliminates motor brushes, commutators and directional contactors, thus reducing maintenance and decreasing overall operating costs. The large, 10kw drive motor provides outstanding power capability throughout the operating shift.



AC Controller

The Command Center of the B45X PRO 5 Series is our AC Controller consisting of a main logic board and independent power modules with direct links to drive motor and the hydraulic motor to manage, direct and monitor every operating system on the truck.
This control unit regulates and monitors the following functions :



- fAnti-Roll Back and Anti-Roll Down with adjustable ramp stop time
- fRegenerative Braking
- fElectrically Assisted Braking
- fStatic Return to Off (SRO)
- fDrive Speed Compensation (Load/Unload)
- fDrive Speed Acceleration/Deceleration/Reduction
- fContinuous Lift Speed Control/ Pump Motor Speed Compensation
- fBattery Discharge Indicator with Adjustable Reset Value

- fOver Temperature Protection for power modules and Motors
- fLow and High Voltage Limit
- fDiagnostics and Stored Error Codes
- fPower Line Fault Detection (Fuse/Contactor)
- fContinuous Temperature Measuring (Controller, Motor)
- fFull Protection against Short or Open Circuits

Intelligent Technology Provides Industry
Leading Features!

Option Availability	
	: Standard : Optional
Options	B40X / B45X / B50X-5
Lift and Tilt Locking Hydraulic Control Valve	
Finger Tip Control Hydraulic Valve	
Solid Soft Tires	
Non-marking Tires	
Full Suspension Deluxe Seat - Vinyl	
Full Suspension Deluxe Seat with Armrest	
Modular Operator Cabs	
Mono-ped Foot Direction and Acceleration Control	
Emergency Switch	
Cold Storage Package	
Keyless Ignition Switch	
Two Front and Rear Combination Lights	
One Rear Flood Light	
Back-up Alarm	
Rear Strobe Light	
Rear View Mirror	
Integral Sideshifting Fork Positioner	
Hydraulic Accumulator	





Doosan Infracore
Forklifts

TECHNICAL SPECIFICATIONS

4 Wheel Electric Forklift Trucks

B40X / B45X / B50X-5

8,000lb to 10,000lb Capacity

PRO5
SERIES



8,000/9,000/10,000 lb Capacities

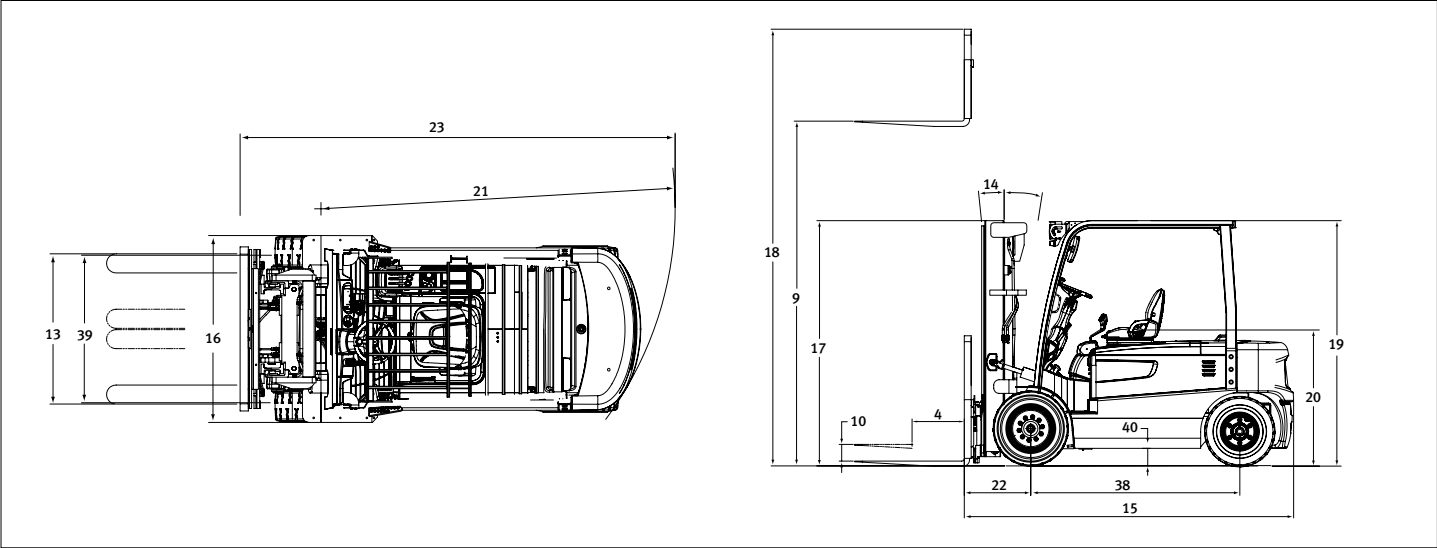
4 Wheel Electric Forklift Trucks

MAIN VEHICLE SPECIFICATIONS

CHARACTERISTICS	1	Manufacture			DOOSAN	DOOSAN	DOOSAN
	2	Model			B40X-5	B45X-5	B50X-5
	3	Load Capacity	at rated load center	lb(kg)	8000(4000)	9000(4500)	10000(5000)
	4	Load Center		in(mm)	24(500)	24(500)	24(500)
	5	Power type			electric	electric	electric
	6	Operator type			Driver seated	Driver seated	Driver seated
	7	Tire type	P:Pneu, E:Solid Soft, C: Cush		E	E	E
DIMENSIONS	8	Wheels (x=Driven)			2x / 2	2x / 2	2x / 2
	9	Max. Fork Height	with STD 2-stage mast	in(mm)	130(3300)	130(3300)	130(3300)
	10	Free Lift		in(mm)	5.9(150)	6.3(160)	6.3(160)
	12	Fork Carriage	ISO Class		III	III	IV
	13	Forks	Length x Width x Thickness	in(mm)	2.0 x 5.9 x 41.3 (50 x 150 x 1050)	2.0 x 5.9 x 41.3 (50 x 150 x 1050)	2.0 x 5.9 x 41.3 (50 x 150 x 1050)
			Fork Spacing(Min x Max)	in(mm)	12.2 x 46.5 (310 x 1182)	12.2 x 46.5 (310 x 1182)	13.4 x 50.8 (340 x 1290)
	14	Tilt of Mast	Forward / Backward	deg	6 / 9	6 / 9	6 / 9
	15	Overall Dimensions	Length to Fork Face	in(mm)	120.6(3062)	120.6(3062)	121.7(3092)
	16		Overall Width	in(mm)	57.9(1470)	57.9(1470)	57.9(1470)
	17		Mast Lowered Height	in(mm)	91.7(2330)	92.1(2340)	92.1(2340)
	18		Mast Extended Height	in(mm)	164.2(4170)	164.6(4180)	165.6(4205)
	19		Overhead Guard Height	in(mm)	91.7(2330)	91.9(2335)	91.9(2335)
	20		Seat Height	in(mm)	50.5(1282)	50.7(1288)	50.7(1288)
	21	Turning Radius	Minimum outside	in(mm)	108.7(2760)	108.7(2760)	109.6(2785)
	22	Load Moment Center		in(mm)	22.7(577)	22.7(577)	22.7(577)
	23	Aisle 90 degree stacking(add load length & clearance)		in(mm)	178.6(4537)	178.6(4537)	179.6(4562)
PERFORMANCE	24	Travel Speed	Loaded / Unloaded	mph(km/h)	9.3 / 9.9 (15 / 16)	9.3 / 9.9 (15 / 16)	9.3 / 9.9 (15 / 16)
	25	Lifting Speed	Loaded / Unloaded	fpm(mm/s)	68.9 / 92.5 (350 / 470)	65.0 / 88.6 (330 / 450)	61.0 / 88.6 (310 / 450)
	26	Low e d	Loaded / Unloaded	fpm(mm/s)	94.5 / 88.6 (480 / 450)	94.5 / 88.6 (480 / 450)	94.5 / 88.6 (480 / 450)
	28	Max. drawbar pull	Loaded / Unloaded(5 min. rating)	lbf(kgf)	4608.5 / 4789.3 (2090 / 2172)	4383.5 / 4608.5 (1988 / 2090)	4136.6 / 4136.6 (1876 / 1876)
	30	Max. gradeability	Loaded / Unloaded(5 min. rating)	%	19 / 31	17 / 29	15 / 25
WEIGHT	32	Total Service Weight	with minimum weight of battery	lb(kg)	15410.3(6990)	16248.0(7370)	17107.9(7760)
	33	Axle Load at Loaded	Front / Rear	lb(kg)	21508.3 / 2720.5 (9756 / 1234)	22379.1 / 3789.7 (10151 / 1719)	24469.1 / 3639.8 (11099 / 1651)
	34	Axle Load at Unloaded	Front / Rear	lb(kg)	7941.0 / 7469.3 (3602 / 3388)	7116.5 / 9131.5 (3228 / 4142)	7544.2 / 9563.6 (3422 / 4338)
CHASSIS	35	Tires	Number of wheels(F/ R)		2/2	2/2	2/2
	36		Size, Front		250-15	28x12.5-15	28x12.5-15
	37		Size, Rear		7.00-12	7.00-12	7.00-12
	38	Wheel Base	Distance	in(mm)	78.7(2000)	78.7(2000)	78.7(2000)
	39	Tread Width	Front	in(mm)	46.0(1168)	45.7(1160)	45.7(1160)
			Rear	in(mm)	43.7(1111)	43.7(1111)	43.7(1111)
	40	Ground Clearance	at the lowest point	in(mm)	5.1(130)	5.1(130)	5.1(130)
	41		at center of wheelbase	in(mm)	6.3(160)	6.3(160)	6.3(160)
	42	Brakes	Service		FOOT/ HYD	FOOT/ HYD	FOOT/ HYD
			Parking		HAND / MECH	HAND / MECH	HAND / MECH
POWER TRAIN	45	Battery	Type		DIN43536A	DIN43536A	DIN43536A
			Capacity (5 Hours Rating)	V/AH	80 / 720	80 / 720	80 / 720
			Battery compartment sizes(WxLxH)	in	40.5x39.0x30.9 (1028x990x784)	40.5x39.0x30.9 (1028x990x784)	40.5x39.0x30.9 (1028x990x784)
			Weight (Minimum)	lb(kg)	4761.9(2160)	4761.9(2160)	4761.9(2160)
	47	Electric Motors	Drive motor(1 HR Rating)	HP(kW)	14.7X2.7 (11X2)	14.7X2.7 (11X2)	14.7X2.7 (11X2)
	48		Hyd. Motor(15% Duty)	HP(kW)	34.9(26)	34.9(26)	34.9(26)
	54	Control Type	Drive and hydraulic	type	Inverter AC	Inverter AC	Inverter AC
	57	Relief Pressure	System	psi(bar)	2755.0(190)	3045.0(210)	3335.0(230)
			Attachment	psi(bar)	2247.5(155)	2247.5(155)	2247.5(155)

Note: Specification values quoted in this specification sheet has been rounded. Performance may vary due to operation conditions.
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DIMENSIONAL DRAWING



MAST SPECIFICATIONS and RATED CAPACITIES

Mast Type	Maximum Fork Height		Fully Lowered Height		Fully Extended Height				Free Lift				Soild Soft Tire		
					With Load Backrest		W/O Load Backrest		With Load Backrest		W/O Load Backrest		Tilt Angle	Load Capacities	
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	FWD/BWD deg	LC500mm kg	LC 24 in lb
STD	3000	118	2180	86	4255	168	3870	152	150	6	150	6	6/9	4000	8000
STD	3300	130	2330	92	4555	179	4170	164	150	6	150	6	6/9	4000	8000
STD	3650	144	2505	99	4905	193	4520	178	150	6	150	6	6/9	4000	8000
STD	4000	158	2830	111	5255	207	4870	192	150	6	150	6	6/9	4000	8000
STD	4250	167	2955	116	5505	217	5120	202	150	6	150	6	6/9	4000	8000
STD	4850	191	3405	134	6105	240	5720	225	150	6	150	6	6/5	4000	8000
FF	3000	118	2160	85	4240	167	3765	148	960	38	1435	57	6/9	4000	8000
FFT	4000	158	2040	80	5255	207	4765	188	840	33	1335	53	6/9	4000	8000
FFT	4250	167	2130	84	5520	217	5030	198	930	37	1425	56	6/9	4000	8000
FFT	4700	185	2280	90	5970	235	5480	216	1080	43	1575	62	6/9	4000	8000
FFT	5150	203	2430	96	6420	253	5930	234	1230	48	1725	68	6/5	4000	8000
FFT	5600	221	2580	102	6870	271	6380	251	1380	54	1875	74	6/3	3875	7800
FFT	6050	238	2730	108	7320	288	6830	269	1530	60	2025	80	6/3	3750	7600

Mast Type	Maximum Fork Height		Fully Lowered Height		Fully Extended Height				Free Lift				Soild Soft Tire		
					With Load Backrest		W/O Load Backrest		With Load Backrest		W/O Load Backrest		Tilt Angle	Load Capacities	
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	FWD/BWD deg	LC500mm kg	LC 24 in lb
STD	3000	118	2190	86	4265	168	3880	153	160	6	160	6	6/9	4500	9000
STD	3300	130	2340	92	4565	180	4180	165	160	6	160	6	6/9	4500	9000
STD	3650	144	2515	99	4915	194	4530	178	160	6	160	6	6/9	4500	9000
STD	4000	158	2840	112	5265	207	4880	192	160	6	160	6	6/9	4500	9000
STD	4250	167	2965	117	5515	217	5130	202	160	6	160	6	6/9	4500	9000
STD	4850	191	3415	134	6115	241	5730	226	160	6	160	6	6/5	4500	9000
FF	3000	118	2170	85	4250	167	3775	149	970	38	1440	57	6/9	4500	9000
FFT	4000	158	2050	81	5265	207	4770	188	850	34	1345	53	6/9	4500	9000
FFT	4250	167	2140	84	5530	218	5035	198	940	37	1430	56	6/9	4500	9000
FFT	4700	185	2290	90	5980	235	5485	216	1090	43	1580	62	6/9	4500	9000
FFT	5150	203	2440	96	6430	253	5935	234	1240	49	1730	68	6/5	4500	9000
FFT	5600	221	2590	102	6880	271	6385	251	1390	55	1880	74	6/3	4350	8800
FFT	6050	238	2740	108	7330	289	6835	269	1540	61	2030	80	6/3	4225	8500



B50X-5

Mast Type	Maximum Fork Height		Fully Lowered Height		Fully Extended Height				Free Lift				Soild Soft Tire		
					With Load Backrest		W/O Load Backrest		With Load Backrest		W/O Load Backrest		Tilt Angle	Load Capacities	
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	FWD/BWD deg	LC500mm kg	LC 24 in lb
STD	3000	118	2190	86	4415	174	3905	154	160	6	160	6	6/9	5000	10000
STD	3300	130	2340	92	4715	186	4205	166	160	6	160	6	6/9	5000	10000
STD	3650	144	2515	99	5065	199	4555	179	160	6	160	6	6/9	5000	10000
STD	4000	158	2840	112	5415	213	4905	193	160	6	160	6	6/9	5000	10000
STD	4250	167	2965	117	5665	223	5155	203	160	6	160	6	6/9	5000	10000
STD	4850	191	3415	134	6265	247	5755	227	160	6	160	6	6/5	5000	10000
FF	3000	118	2170	85	4395	173	3860	152	820	32	1355	53	6/9	5000	10000
FFT	4000	158	2050	81	5410	213	4870	192	700	28	1240	49	6/9	5000	10000
FFT	4250	167	2140	84	5675	223	5135	202	790	31	1330	52	6/9	5000	10000
FFT	4700	185	2290	90	6125	241	5585	220	940	37	1480	58	6/9	5000	10000
FFT	5150	203	2440	96	6575	259	6035	238	1090	43	1630	64	6/5	5000	10000
FFT	5600	221	2590	102	7025	277	6485	255	1240	49	1780	70	6/3	4825	9700
FFT	6050	238	2740	108	7475	294	6935	273	1390	55	1930	76	6/3	4675	9400

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