

DanTruck 3000 Power Hydrogen



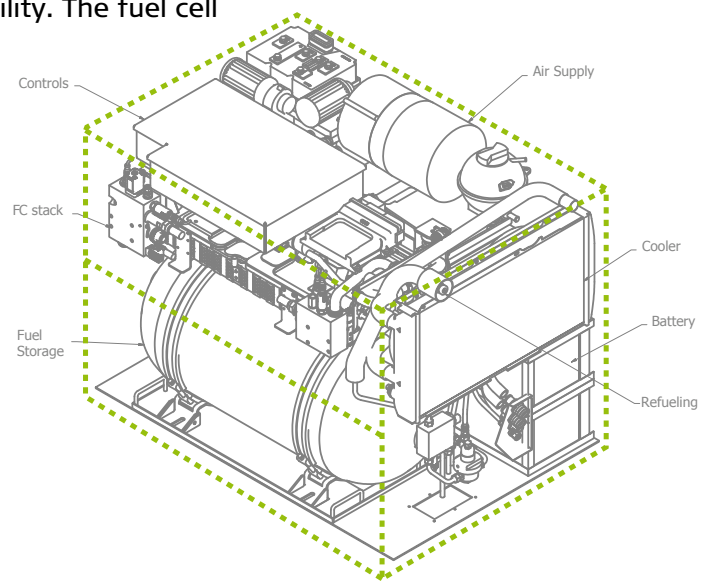
CeMAT edition

DanTruck 3000 Power Hydrogen - from hydrogen to power!

A fuel cell is an electrochemical device that converts the chemical energy in hydrogen into electrical energy – or electrical power – that is used to power the electric motor onboard the vehicle. Other than electrical power the fuel cell system will generate only water and heat – which in fact can be used for cabin heating without any loss of range.

Since fuel cell systems have no major moving parts, noise and vibration are practically nonexistent. The lack of moving parts also enables very high reliability. The fuel cell system also has an integrated battery pack for storage of peak regenerative power, a hydrogen storage tank and finally a systems control unit.

H2Drive® delivers electrical power like a battery but does not run down or require recharging as long as hydrogen is provided. When the hydrogen tank is empty, a new refueling only takes a few minutes.



- Continuous full performance 24/7 operation
- Costs competitive with diesel and LPG
- Quick refueling like LPG/diesel
- No power reduction in cold/warm surroundings
- No charging or swapping of batteries
- No need for extra batteries
- Zero emission, no CO2 or particle emission
- Energy efficient, lower fuel costs
- Silent, no vibrations
- Quick driver acceptance: "Feels like a fully charged battery at all times"

EXAMPLE:

An LPG forklift with a fuel consumption of 3.6 kg per hour that operates 1,500 hours per year, has an annual CO2 emissions of more than 16 ton!

GENERAL INFORMATION	Brand			DanTruck	DanTruck	DanTruck	DanTruck
	Model			3420FC	3425FC	3430FC	3435FC
	Power source			Fuel cell	Fuel cell	Fuel cell	Fuel cell
	Operation			Seated operator	Seated operator	Seated operator	Seated operator
	Load capacity	Q	t	2,0	2,5	3,0	3,5
	Load center	c	mm	500	500	500	500
	Load distance	x	mm	465	465	480	480
	Wheelbase	y	mm	1650	1650	1700	1850
WEIGHT	Unladen weight		kg	3580	3800	4500	4700
	Axle load, with load, front/rear		kg	4720/860	5470/830	6520/980	7160/1040
	Axle load, without load, front/rear		kg	1480/2100	1410/2390	1740/2760	1800/2900
TYRES	Tyre type, front/rear (S=Super-elastic, P=Pneumatic)			P/P	P/P	P/P	P/P
	Size, front			7.00-12-12P.R.	7.00-12-12P.R.	8.15-15-12P.R.	8.15-15-12P.R.
	Size, rear			6.00-9-10P.R.	6.00-9-10P.R.	6.50-10-10P.R.	6.50-10-10P.R.
	Number, front/rear			2/2	2/2	2/2	2/2
	Track width, tyre centre, front	b10	mm	970	970	1055	1055
	Track width, tyre centre, rear	b11	mm	985	985	985	985
	Mast tilt, forward/backward		grad	6/6	6/6	6/6	6/6
DIMENSIONS	Mast height, lowered (Duplex)	h1	mm	2166	2166	2166	2166
	Free lift	h2	mm	0	0	0	0
	Lift height	h3	mm	3300	3300	3300	3300
	Mast height, extended	h4	mm	4520	4520	4520	4520
	Overhead guard height	h6	mm	2190	2190	2210	2210
	Overheadguard/Std. Cabin hight	h6	mm	2295	2295	2315	2315
	Seat height (lowest/highest)	h7	mm	975/1010	975/1010	975/1010	975/1010
	Tow bar height	h10	mm	310	310	360	360
	Overall length	l1	mm	3820	3820	3920	4020
	Length to face of forks	l2	mm	2600	2600	2700	2800
	Overall width	b1/b2	mm	1150	1150	1300	1300
	Forks	s/e/l	mm	40*120*1220	40*120*1220	50*120*1220	50*120*1220
	Fork carriage DIN 15173, Class, Type A, B			2A	2A	3A	3A
	Carriage width	b3	mm	1024	1024	1150	1150
	Ground clearance, below mast	m1	mm	120	120	120	120
	Ground clearance, centre of wheelbase	m2	mm	200	200	240	240
	Aisle width, pallet 1000 x 1200 sideways	Ast	mm	3835	3835	4095	4295
Aisle width, pallet 800 x 1200 lengthways	Ast	mm	3635	3635	3895	4095	
Turning radius	Wa	mm	2040	2040	2430	2615	
ENGINE	Model			FCS-10-3-DIN, 80V	FCS-10-3-DIN, 80V	FCS-10-3-DIN, 80V	FCS-10-3-DIN, 80V
	Type		Nm	LT-PEM fuel cell hybrid system	LT-PEM fuel cell hybrid system	LT-PEM fuel cell hybrid system	LT-PEM fuel cell hybrid system
	Avg. power output			~10 kW	~10 kW	~10 kW	~10 kW
	Max. power output			~35 kW for 15 sec.	~35 kW for 15 sec.	~35 kW for 15 sec.	~35 kW for 15 sec.
	System efficiency			>48% @ 10 kW	>48% @ 10 kW	>48% @ 10 kW	>48% @ 10 kW
	Hydrogen storage capacity			~1,5 kg @ 350 bar	~1,5 kg @ 350 bar	~1,5 kg @ 350 bar	~1,5 kg @ 350 bar
	Battery storage capacity			100 Ah	100 Ah	100 Ah	100 Ah
	Run time on full tank			5-6 hours / 1 working shift	5-6 hours / 1 working shift	5-6 hours / 1 working shift	5-6 hours / 1 working shift
	Refuelling time			3-4 min.	3-4 min.	3-4 min.	3-4 min.
	Approval			CE marked & TÜV	CE marked & TÜV	CE marked & TÜV	CE marked & TÜV
MISCELLANEOUS	Hydrogen fuel quality			N35 (no CO, CO2 or S)	N35 (no CO, CO2 or S)	N35 (no CO, CO2 or S)	N35 (no CO, CO2 or S)
	Transmission			Auto	Auto	Auto	Auto
	Operating pressure for attachments		bar	185KG/CM2	185KG/CM2	185KG/CM2	185KG/CM2
	Oil flow for attachments		l/min	33	33	33	33

MAST PROGRAMME FOR 2,0/2,5/3,0/3,5 TONNES:

DUPLEX	Lift height mm	3300	3500	4000	4500	5000		
	Mast height, lowered mm	2166	2266	2566	2816	3116		
	Free lift mm	0	0	0	0	0		
DUPLEX FREE LIFT	Lift height mm	3300	3500	4000	4500	5000		
	Mast height, lowered mm	2150	2250	2550	2800	3100		
	Free lift mm	1515	1615	1865	2115	2365		
TRIPLEX FREE LIFT	Lift height mm	4500	4800	5000	5500	6000	6500	7000
	Mast height, lowered mm	2100	2150	2250	2433	2650	2816	2983
	Free lift mm	1365	1465	1531	1698	1865	2031	2197



DanTruck

Dealer: