



**Four-Wheel Drive
Rough Terrain Forklift**
with capacities of 2,500 to 3,500kg



EMCOL  **Bulldog**



BULLDOG trucks conform to the European Safety Requirements.

2025 VERSION. COPYRIGHT 2025/06

CONCEPT

The multipurpose concept refers to the capability of the forklift truck to work in many different areas, with a great performance no matter how hard the conditions are.

We studied all the specifications of the best forklifts in the world, specialized in industrial and rough terrain types, determining the characteristics that makes a forklift work well in an industrial environment. After that, we combined such information, to prepare the basis of the design of our product.

INTRODUCTION

BULLDOG 2.5~3.5t 4W rough terrain forklifts is a tough, compact forklift with a four-wheel drive system. It is based on two-wheel drive rough terrain forklift. It is world renowned for superior performance, economy and longevity.



6 reasons

choose

Four-Wheel Drive

Rough Terrain Forklift

- ▶ **RELIABILITY**
- ▶ **PRODUCTIVITY**
- ▶ **ENVIRONMENTAL FRIENDLINESS**
- ▶ **COMFORTABLE OPERATION**
- ▶ **EASY MAINTENANCE**
- ▶ **HIGH PERFORMANCE**



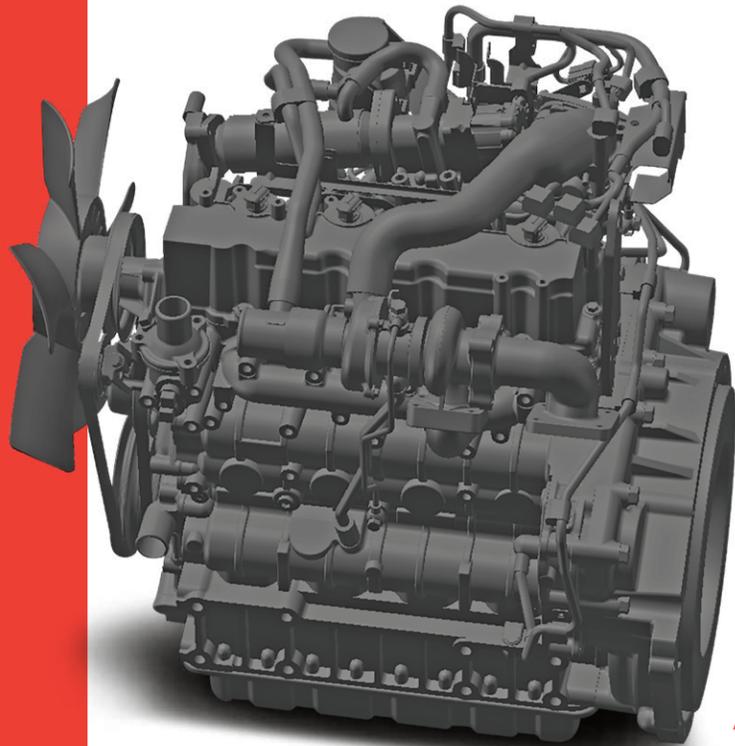
BULLDOG be with you at every stage

Efficient, reliable solutions for your demands

STAGE V & TIER 4F

With BULLDOG you can meet all Stage V/Tier 4f emissions standards which provides customer demands for value, innovation and performance. The technologies include common rail fuel systems, diesel oxidation catalysts (DOC) and diesel particulate filters (DPF). Designed and optimised to every engine model, our forklift truck maximises efficiency and reliability.

**Powerful/
Efficient/
Reliable**



KUBOTA



Interactive instrument: The instrument adopts 4.0-inch color LCD display with four interactive buttons, and has one CAN bus communication function. The communication protocol is compatible with SAE J1939 standards.



BULLDOG Forklift with StageV and T4F

No.	Capacity	Series	Manufacturer	Engine	Drive power	Model	Emission Std.	Transmission	Power (kw/rpm)
1	2.5-3.5t	RT	KUBOTA	V2607-CR-TE5B	Diesel	CPCD25/30/35-XW98C-RT4	StageV / Tier4 final	CHINA	47.3/2400

Note: RT means 2WD/4WD Rough Terrain forklift

RELIABILITY

The full-floating hydraulic transmission gearbox, with 2WD and 4WD switch function, can provide higher running speed and stronger gradeability;



Wide-base deep tread tyres

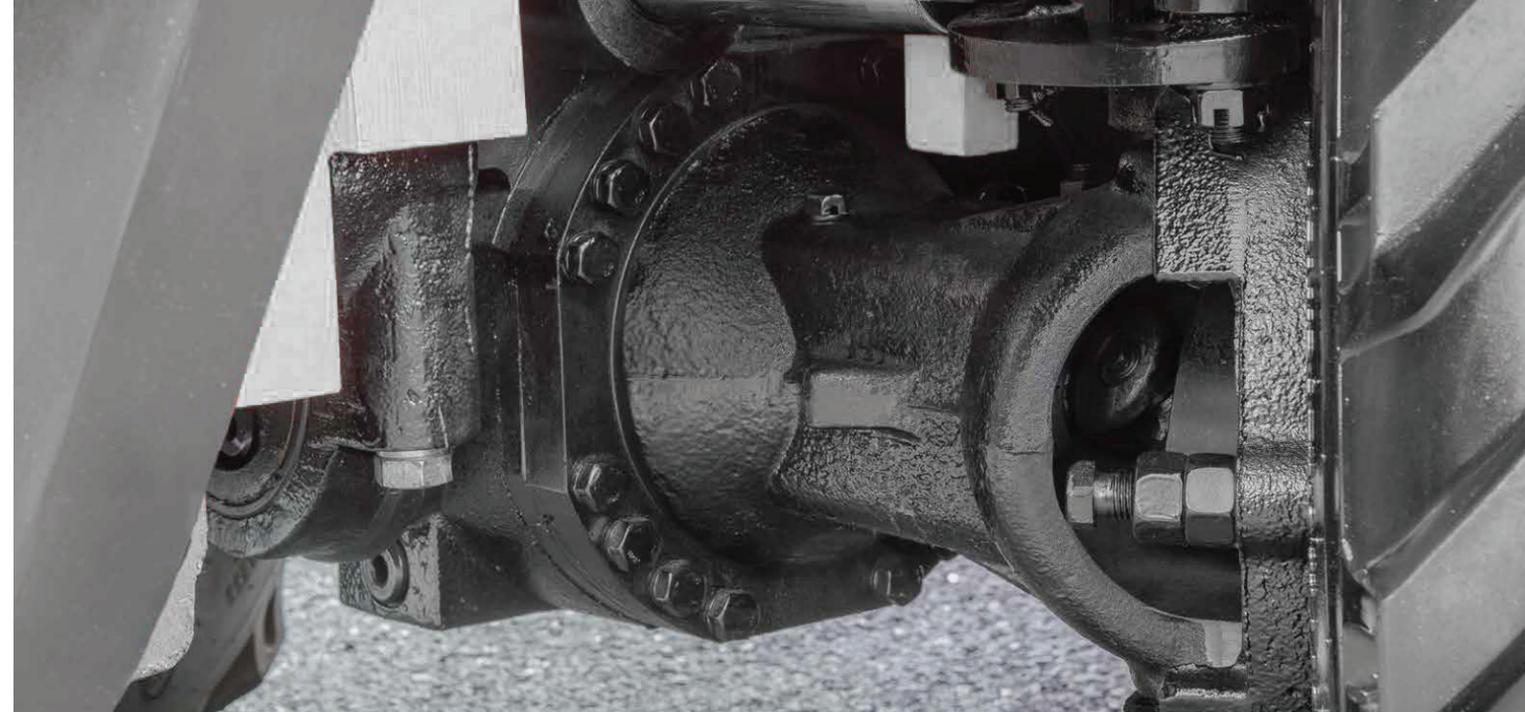
The drive axle is equipped with wide-base deep tread tyres, wet brake, differential mechanism with electronic lock, as well as reinforced steering drive axle, and can better adapt to special working conditions.

Front tyre:14-17.5

Rear tyre:10.0/75-15.3

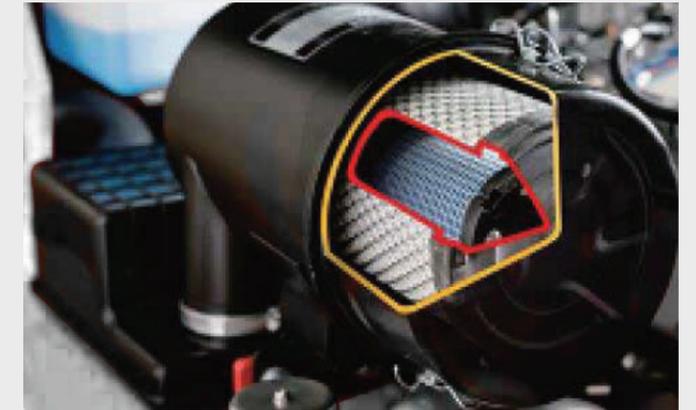


Higher specification fork mounting level-3B, more weight can be loaded.



Oscillating steer axle allows either wheel to step over obstacles keeping the truck and load level.

Dual air filter, extra capacity combined radiator with serpentine wave and optimized heat dissipation channel enhance the heat dissipation capability to keep engine reliability even in heavy-duty applications.



The differential is specifically designed for rough terrain and features manual differential lock providing ultimate traction during inclement weather conditions and rough operating surfaces, it differential lock prevents power loose when one wheel spins.



PRODUCTIVITY



The new Dynamic load sensing hydraulic steering system contributes to reduce loss of hydraulic and improve energy efficiency.



The new efficiency lighting system employs LED illuminant and new type reflector to reduce energy consumption, improve significantly illumination performance and prolong work time.



COMFORTABLE OPERATION

In developing the rough terrain forklift, comfort and easy operation is always considered, for example, improved vibrating levels, compound engine damper and full floating seat and cabin are all applied.

Comfortable also contribute to increased productivity and reduced the noise.



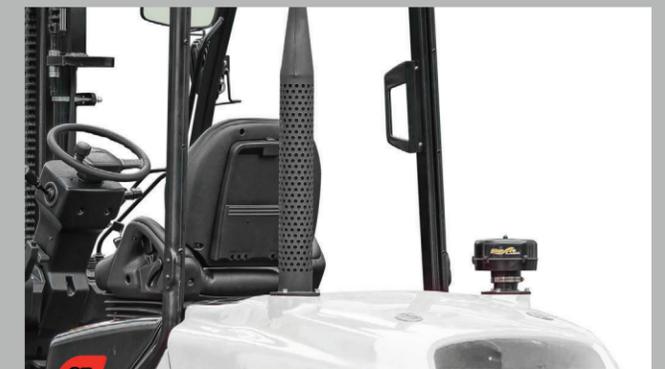
1. In addition to rubber damper between overhead and frames, compound engine damper and full floating power train achieve flexible connection between frames and driving system, as a result, traveling vibrations and vibrations from the driving system are significantly reduced.



2. The extra foot space is provided to reduce operator fatigue significantly, non-slip step makes getting in and out easy and safe. The new designed steering wheel, new brake system and the easy-to-operate levers provide total handling operation.



3. Optimized designing structure to offer a good visibility.



4. The new design mast provides broad forward visibility due to the longer distance between inside mast.



EASY MAINTENANCE



Newly-developed LCD instrument has more comprehensive functions and more stable performance and entirely displays the full truck state, fault code and other important information, which can make the operator more intuitively and conveniently have a better knowledge of truck state and make the maintenance conveniently.



Adoption of new generation integrated electric box makes maintenance and repair convenient, layout becomes more reasonable and with better water-proof performance.



The easy-to-open hook provides quick access to the engine compartment.



Wet brake offers maximum service life for your brake system.

- / The cover on the Panel can be lifted up simply to check the brake fluid.
- / The two-piece design makes the floorboard easy to lift and remove for access to the power train.
- / The fasteners of the radiator cover can be turned easily by hand to enable quick inspections or servicing.



FOUR-WHEEL DRIVE ROUGH TERRAIN FORKLIFT



HIGH PERFORMANCE



Maneuverability

The distance to ground is 270mm for 3.0t, it offers greater maneuverability and keep the truck moving in the roughest of applications, and yet we keep a very low center of gravity, by using a distributed weight in the forklift, giving it an excellent stability.



Three forward gears

Suspension hydraulic transmission with three forward gears, top speed reach 26km/h.

Standard specification

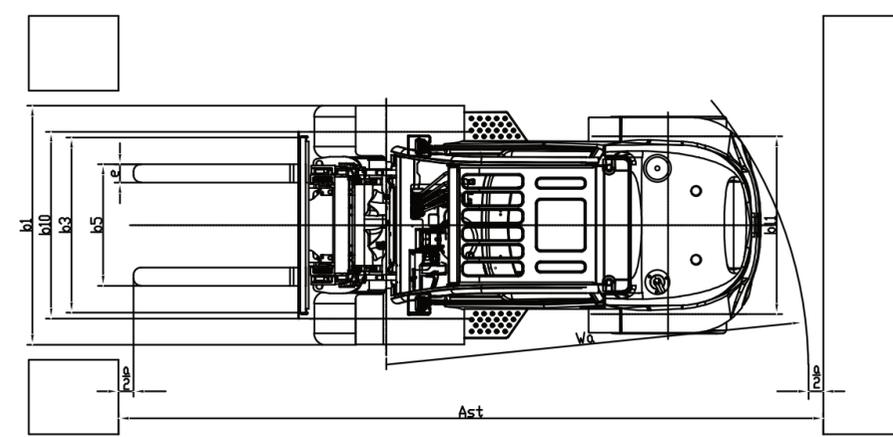
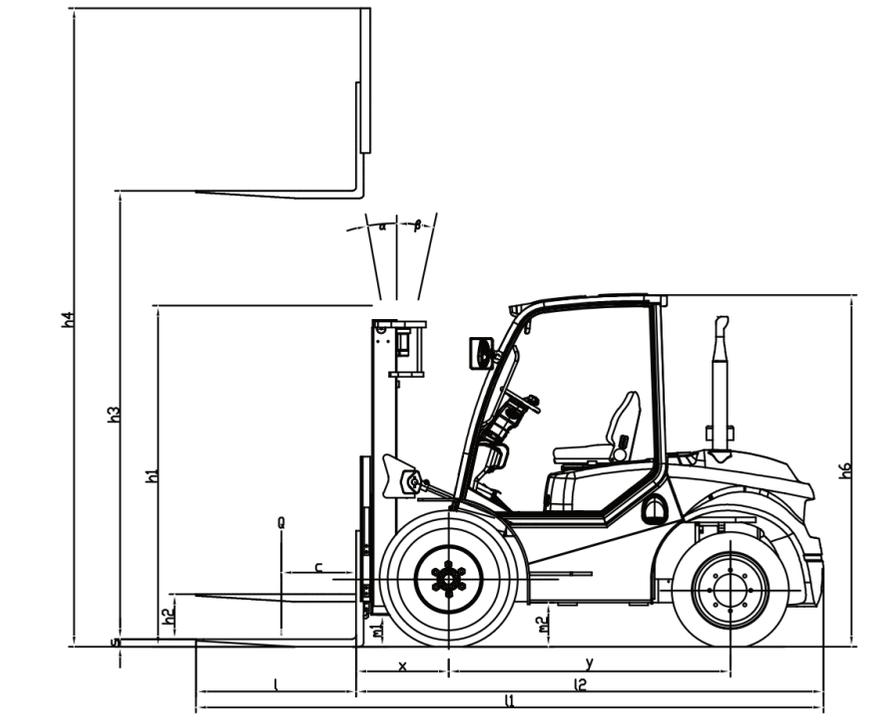
- / Suspension transmission
- / Differential lock
- / 2-wheel drive, 4-wheel drive system
- / Suspension seat
- / Return oil filter
- / Big capacity aluminum radiator
- / Air filter
- / Rear working light
- / Warning lamp
- / Cover for tilt cylinder
- / Reversing assist grip
- / Wider fork carriage
- / Wider load backrest
- / LED light

Options

- / Cabin
- / Heater
- / Front window
- / L/R mirror
- / Extinguisher
- / Customer painting
- / OPS system
- / Sparkle arrester
- / Purified exhaust system
- / Auxiliary hydraulic valve
- / Front working light
- / Triplex wide view free-lift mast
- / Special forks
- / Weigher system
- / Attachments
- / Net cover of radiator
- / Solid tyre

FOUR-WHEEL DRIVE ROUGH TERRAIN FORKLIFT SPECIFICATION:

		BULLDOG GROUP CO.,LTD.									
Distinguishing mark	1.1	Manufacturer									
	1.2	Manufacturer's type designation	CPD25-XW33C-RT4	CPD30-XW33C-RT4	CPD35-XW33C-RT4	CPD25-XW98C-RT4	CPD30-XW98C-RT4	CPD35-XW98C-RT4	CPD25-XG72C-RT4	CPD30-XG72C-RT4	CPD35-XG72C-RT4
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel
Weight	1.4	Operator type: hand, pedestrian, standing, seated, order picker	Seated	Seated	Seated	Seated	Seated	Seated	Seated	Seated	Seated
	1.5	Rated capacity/rated load	Q (kg)	2500	3000	3500	2500	3000	3500	2500	3000
	1.6	Load centre distance	c (mm)	500	500	500	500	500	500	500	500
Tyres, chassis	1.8	Load distance, centre of drive axle to fork	x (mm)	585	600	600	585	600	585	600	600
	1.9	Wheelbase	y (mm)	1880	1880	1880	1880	1880	1880	1880	1880
	2.1	Service Weight	kg	4850	5340	5600	4850	5340	5600	4850	5340
Dimensions	2.2	Axle loading, laden front/rear	kg	6190/1160	7200/1140	7900/1200	6190/1160	7200/1140	7900/1200	6190/1160	7200/1140
	2.3	Axle loading, unladen front/rear	kg	2130/2720	2340/3000	2300/3300	2130/2720	2340/3000	2300/3300	2130/2720	2340/3000
	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic
	3.2	Tyre size, front		12-16.5-14PR	14-17.5-14PR	14-17.5-14PR	12-16.5-14PR	14-17.5-14PR	12-16.5-14PR	14-17.5-14PR	14-17.5-14PR
	3.3	Tyre size, rear		10.0/75-15.3-12PR	10.0/75-15.3-12PR	10.0/75-15.3-12PR	10.0/75-15.3-12PR	10.0/75-15.3-12PR	10.0/75-15.3-12PR	10.0/75-15.3-12PR	10.0/75-15.3-12PR
	3.5	Wheels, number front / rear (x = driven wheels)		2x/2x	2x/2x	2x/2x	2x/2x	2x/2x	2x/2x	2x/2x	2x/2x
	3.6	Tread, front	b ₁₀ (mm)	1250	1250	1250	1250	1250	1250	1250	1250
	3.7	Tread, rear	b ₁₁ (mm)	1190	1190	1190	1190	1190	1190	1190	1190
	4.1	Tilt of mast/fork carriage forward/backward	α(B°)	10/12	10/12	10/12	10/12	10/12	10/12	10/12	10/12
	Performance data	4.2	Height, mast lowered	h ₁ (mm)	2215	2350	2350	2215	2350	2350	2215
4.3		Free lift	h ₂ (mm)	140	150	150	140	150	150	140	150
4.4		Lift	h ₃ (mm)	3000	3000	3000	3000	3000	3000	3000	3000
4.5		Height, mast extended	h ₄ (mm)	4122	4269	4269	4122	4269	4269	4122	4269
4.7		Height of overhead guard	h ₅ (mm)	2390	2420	2420	2390	2420	2420	2390	2420
4.19		Overall length	l ₁ (mm)	4345	4360	4360	4345	4360	4360	4345	4360
4.20		Length to face of forks	l ₂ (mm)	3125	3140	3140	3125	3140	3140	3125	3140
4.21		Overall width	b ₁ (mm)	1557	1599	1599	1557	1599	1599	1557	1599
4.22		Fork dimensions ISO 2331	s/e/l (mm)	40×122×1220	50×122×1220	50×122×1220	40×122×1220	50×122×1220	50×122×1220	40×122×1220	50×122×1220
Combustion-engine		4.23	Fork carriage DIN 15 173 --- ISO 2328, class/type A,B		B	B	B	B	B	B	B
	4.24	Fork-carriage width	b ₃ (mm)	1150	1150	1150	1150	1150	1150	1150	1150
	4.25	Distance between fork-arms	b ₅ (mm)	290-1150	290-1150	290-1150	290-1150	290-1150	290-1150	290-1150	290-1150
	4.31	Ground clearance, laden, below mast	m ₁ (mm)	240	270	270	240	270	270	240	270
	4.32	Ground clearance, centre of wheelbase	m ₂ (mm)	260	290	290	260	290	290	260	290
	4.34	Aisle width	Ast (mm)	5305	5320	5320	5305	5320	5320	5305	5320
	4.35	Turning radius	Wa (mm)	3300	3300	3300	3300	3300	3300	3300	3300
	5.1	Travel speed, laden/unladen	km/h	24/26	24/26	24/26	23/25	23/25	23/25	24/26	24/26
	5.2	Lift speed, laden/unladen	m/s	0.62/0.64	0.49/0.51	0.43/0.51	0.62/0.64	0.47/0.51	0.45/0.51	0.62/0.64	0.49/0.51
	Addition data	5.3	Lowering speed, laden/unladen	m/s	0.5/0.44	0.5/0.45	0.5/0.45	0.5/0.44	0.5/0.45	0.5/0.45	0.5/0.44
5.5		Drawbar pull, laden	N	40000	45000	45000	42000	47000	49000	40000	45000
5.7		Gradeability, laden	%	58	55	52	60	58	54	58	55
5.10		Service brake		Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic
7.1		Engine manufacturer/type		YANMAR 4TNE98	YANMAR 4TNE98	YANMAR 4TNE98	KUBOTA V2607-CR-TE5B	KUBOTA V2607-CR-TE5B	KUBOTA V2607-CR-TE5B	XINCHAI 4D32XG30-011	XINCHAI 4D32XG30-011
7.2		Emission standard		StageIIIA / EPA Tier3	StageIIIA / EPA Tier3	StageIIIA / EPA Tier3	EU StageV / Tier 4f	EU StageV / Tier 4f	EU StageV / Tier 4f	/	/
7.3		Engine power according to DIN ISO 1585	kw/r/min	42.1/2300	42.1/2300	42.1/2300	47.3/2400	47.3/2400	47.3/2400	45/2500	45/2500
7.4		Rated speed	N/m/r/min	206/1700	206/1700	206/1700	221.7/1500	221.7/1500	221.7/1500	200/1500-1800	200/1500-1800
7.4		Number of cylinders/displacement	(-) / (cm ³)	4/3319	4/3319	4/3319	4/2615	4/2615	4/2615	4/3168	4/3168
7.10		Battery voltage/nominal capacity	V/Ah	12/90	12/90	12/90	12/90	12/90	12/90	12/90	12/90
10.3	Hydraulic Tank - capacity (drain & refill)	liter	60	60	60	60	60	60	60	60	
10.4	Fuel tank capacity	liter	60	60	60	55	55	55	60	60	



2.5-3.5t Mast:(pneumatic)

Type	Model	Max. fork height	Overall height						Free lift				Front Overhang				Capacity max height											
			Lowered (mm)			Extended			Without backrest (mm)		With backrest (mm)		(mm)		Load Center 500mm			Load Center 600mm										
			mm	2.5t	3/3.5t	2.5t	3/3.5t	2.5t	3/3.5t	2.5t	3/3.5t	2.5t	3/3.5t	ISO 22915-2		ISO 22915-13		ISO 22915-2		ISO 22915-13								
Wide view mast	RTE25/35M270	2700	2065	2200	3482	3693	3822	3969	140	150	140	150	585	600	10	12	2500	3000	3500	2500	3000	3500	2280	2750	3200	2280	2750	3200
	RTE25/35M300	3000	2215	2350	3782	3993	4122	4269	140	150	140	150	585	600	10	12	2500	3000	3500	2500	3000	3500	2280	2750	3200	2280	2750	3200
	RTE25/35M330	3300	2365	2500	4082	4293	4422	4569	140	150	140	150	585	600	10	12	2500	3000	3500	2500	3000	3400	2280	2750	3200	2280	2750	3100
	RTE25/35M350	3500	2465	2600	4282	4493	4622	4769	140	150	140	150	585	600	10	12	2500	3000	3500	2500	2800	3200	2280	2750	3200	2280	2560	2900
	RTE25/35M370	3700	2615	2700	4482	4693	4822	4969	140	150	140	150	585	600	10	12	2500	3000	3500	2500	2600	2800	2280	2750	3200	2280	2380	2560
	RTE25/35M400	4000	2815	2950	4782	4993	5122	5269	140	150	140	150	585	600	10	12	2500	3000	3400	2100	2400	2500	2280	2750	3100	1920	2200	2290
	RTE25/35M430	4300	2965	3100	5082	5293	5422	5569	140	150	140	150	585	600	10	12	2400	2800	3200	1950	2150	2250	2190	2560	2930	1780	1970	2060
	RTE25/35M450	4500	3065	3200	5282	5493	5622	5769	140	150	140	150	585	600	10	12	2200	2500	3000	1700	2000	2000	2010	2290	2750	1550	1830	1830
	RTE25/35M480	4800	3215	3350	5582	5793	5922	6069	140	150	140	150	585	600	10	12	2100	2400	2900	1600	1900	1900	1920	2200	2650	1460	1740	1740
	RTE25/35M500	5000	3315	3450	5782	5993	6122	6269	140	150	140	150	585	600	6	6	2000	2200	2800	1500	1800	1800	1830	2010	2560	1370	1650	1650
Wide view full free triple mast	RTE25/35N400	4000	2115	2300	4860	5025	5122	5269	1255	1275	993	1031	603	618	10	12	2500	2900	3300	2000	2300	2400	2280	2650	3020	1830	2100	2200
	RTE25/35N430	4300	2215	2400	5160	5325	5422	5569	1355	1375	1093	1131	603	618	10	12	2400	2700	3000	1900	2100	2200	2190	2470	2750	1730	1920	2000
	RTE25/35N450	4500	2265	2450	5360	5525	5622	5769	1405	1425	1143	1181	603	618	10	12	2200	2500	2900	1700	1900	1900	2010	2290	2650	1550	1740	1740
	RTE25/35N470	4700	2365	2550	5560	5725	5822	5969	1505	1525	1243	1281	603	618	10	12	2000	2300	2700	1400	1500	1500	1830	2100	2470	1280	1370	1370
	RTE25/35N480	4800	2415	2600	5660	5825	5922	6069	1555	1575	1293	1331	603	618	10	12	2000	2200	2600	1400	1400	1400	1830	2010	2380	1280	1280	1280
	RTE25/35N500	5000	2515	2700	5860	6025	6122	6269	1655	1675	1393	1431	603	618	6	6	1900	2100	2500	1100	1200	1200	1730	1920	2290	1000	1100	1100
	RTE25/35N550	5500	2715	2900	6360	6525	6622	6769	1855	1875	1593	1631	603	618	6	6	1500	1900	2300	800	900	900	1370	1740	2100	730	820	820
	RTE25/35N600	6000	2965	3150	6860	7025	7122	7269	2105	2125	1843	1881	603	618	6	6	1200	1600	1900	600	700	700	1090	1460	1740	540	640	640
	RTE25/35N650	6500	3165	3350	7360	7525	7622	7769	2305	2325	2043																	