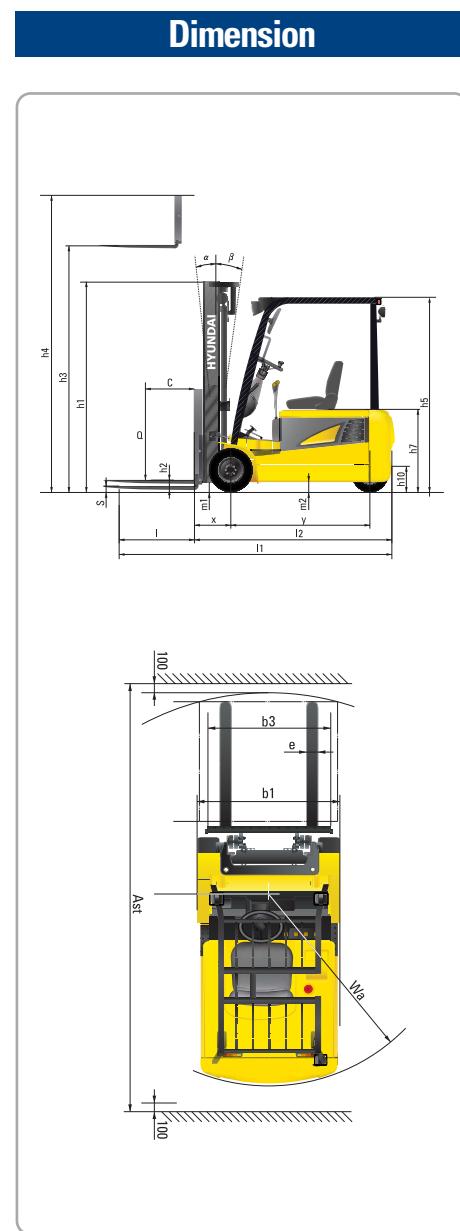


We build a better future



Specification					
Identification					
1. 1	Manufacturer	HYUNDAI	HYUNDAI	HYUNDAI	HYUNDAI
1. 2	Manufacturer's type designation	15BT-7	18BT-7	20BT-7	20BT-7
1. 3	Drive : electric(battery or mains),diesel, petrol,fuel gas, manual	Electric	Electric	Electric	Electric
1. 4	Type of operation : hand, pedestrian, standing, seated, order - picker	Seated	Seated	Seated	Seated
1. 5	Load capacity / rated load	Q (t)	1.5	1.8	2.0
1. 6	Load center distance	c in(mm)	24(500)	24(500)	24(500)
1. 8	Load distance, center of drive axle to fork	x in(mm)	14.2(360)	14.2(360)	14.4(365)
1. 9	Wheelbase	y in(mm)	53.3(1,355)	56.7(1,440)	56.7(1,440)
Weights					
2. 1	Service weight	lb(kg)	6,570(2,980)	7,011(3,180)	7,357(3,337)
2. 2	Axle loading, loaded front / rear	lb(kg)	8,774/1,102(3,980/500)	9,594/1,274(4,352/578)	10,478/1,288(4,753/584)
2. 3	Axle loading , unloaded front / rear	lb(kg)	3,307/3,263(1,500/1,480)	3,402/3,609(1,543/1,637)	3,389/3,969(1,537/1,800)
Wheels, Chassis					
3. 1	Tires : solid rubber, superelastic, pneumatic, polyurethane	SE	SE	SE	SE
3. 2	Tires size, front(φ x width)		18x7-8	18x7-8	200/50-10
3. 3	Tires size, rear(φ x width )		15x4.5-8	15x4.5-8	15x4.5-8
3. 5	Wheels, number front/rear(x = driven wheels)		2x2	2x2	2x2
3. 6	Track width, front	in(mm)	35.2(895)	35.2(895)	35.6(905)
3. 7	Track width, rear	in(mm)	6.7(170)	6.7(170)	6.7(170)
Basic Dimensions					
4. 1	Mast/ fork carriage tilt forward / backward	degrees	5 / 7	5 / 7	5 / 7
4. 2	Lowered mast height	h1 in(mm)	83.5(2,120)	83.5(2,120)	83.8(2,129)
4. 3	Free lift	h2 in(mm)	5.3(135)	5.3(135)	5.3(135)
4. 4	Lift height	h3 in(mm)	130(3,300)	130(3,300)	130(3,300)
4. 5	Extended mast height	h4 in(mm)	170.6(4,332)	170.6(4,332)	170.6(4,332)
4. 7	Overhead load guard (cab) height	h5 in(mm)	77.6 (1,970)	77.6 (1,970)	78 (1,980)
4. 8	Seat height	h7 in(mm)	36.2(920)	36.2(920)	36.6(930)
4. 12	Coupling height	h10 in(mm)	16.1(410)	16.1(410)	16.1(410)
4. 19	Overall length	l1 in(mm)	110.8(2,815)	114.2(2,900)	116(2,945)
4. 20	Length to face of forks	l2 in(mm)	75.4 (1,915)	78.7 (2,000)	80.5 (2,045)
4. 21	Overall width	b1 in(mm)	43.3 (1,100)	43.3 (1,100)	43.5 (1,105)
4. 22	Fork dimensions	s / e / l in(mm)	35.4x3.9x1.4(900x100x35)	35.4x3.9x1.4(900x100x35)	35.4x3.9x1.6(900x100x40)
4. 23	Fork carriage ISO 2328, class / type A, B		2A	2A	2A
4. 24	Fork - carriage width	in(mm)	38.6(980)	38.6(980)	38.6(980)
4. 31	Ground clearance, loaded, under mast	m1 in(mm)	3.3(85)	3.3(85)	3.7(94)
4. 32	Ground clearance, centre of wheelbase	m2 in(mm)	3.5(90)	3.5(90)	3.9(100)
4. 33	Aisle width for pallets 1,000 x 1,200 crossways	Ast in(mm)	128.1(3,255)	131.1(3,330)	132.7(3,370)
4. 34	Aisle width for pallets 800 x 1,200 length ways	Ast in(mm)	121.1(3,075)	124(3,150)	125.6(3,190)
4. 35	Turning radius	Wa in(mm)	61.8 (1,570)	64.8 (1,645)	66.3 (1,685)
4. 36	Smallest pivot point distance	in(mm)	-	-	-
Performance Data					
5. 1	Travel speed, loaded / unloaded	(48V) mph(km/h)	10/10.6(16/17)	10/10.6(16/17)	10/10.6(16/17)
		(36V) mph(km/h)	9.3/10(15/16)	9.3/10(15/16)	9.3/10(15/16)
5. 2	Lift speed, loaded / unloaded	(48V) fpm(mm/sec)	80.7/118.1(410/600)	80.7/118.1(410/600)	80.7/118.1(410/600)
		(36V) fpm(mm/sec)	65/98.4(330/500)	65/98.4(330/500)	65/98.4(330/500)
5. 3	Lowering speed, loaded/ unloaded	fpm(m/sec)	98.4/88.6(0.5/0.45)	98.4/88.6(0.5/0.45)	98.4/88.6(0.5/0.45)
5. 5	Drawbar pull, S2 3 min	(loaded) N (unloaded) N	3,300 3,427	3,252 3,388	2,992 3,198
5. 6	Max. drawbar pull, S2 5 min	(loaded) N (unloaded) N	15,102	15,190	14,367
5. 7	Gradient performance, S2 3 min	(loaded) % (unloaded) %	- -	- -	- -
5. 8	Max. gradient performance, S2 5 min	(loaded) %	29.5	27.5	24.5
5. 10	Service brake	-	Hydr.	Hydr.	Hydr.
E - Motor					
6. 1	Drive motor rating S2 60 min	(48V / 36V) kW	4.4 / 3.5	4.4 / 3.5	4.4 / 3.5
6. 2	Pump motor rating at S3 - 15 %	(48V / 36V) kW	15.8 / 9.9	15.8 / 9.9	15.8 / 9.9
6. 4	Battery voltage, nominal capacity K5	(48V / 36V) V / Ah	505 / 800	585 / 1,000	585 / 1,000
6. 5	Battery weight (min)	lb(kg)	1,565(710)	1,841(835)	1,841(835)
	Battery dimensions L / W / H	in(mm)	39/21.5/25(990/545/636)	39/24.8/25(990/630/636)	39/24.8/25(990/630/636)
6. 6	Type of drive control		AC	AC	AC



# 15/18/20BT-7 AC

FORKLIFT TRUCKS Environmentally - Friendly

 **HYUNDAI**  
HEAVY INDUSTRIES CO., LTD.  
**FORKLIFT**

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2008. 01 Rev 0.

 **HYUNDAI**  
HEAVY INDUSTRIES CO., LTD.

## The New AC Control BT Series

Designed with a durable frame and built to offer excellent stability and a smooth ride, AC Control BT Series trucks are real workhorses.



### High Technology ZAPI Controller

The efficient, almost noiseless, 8Khz(high frequency) ZAPI controller provides smooth operation and protection for low & high voltage, overheating and fault recording.

- Features**
- Regeneration : Direction change, Deceleration, Braking
  - AC motor's efficiency is higher than dc motor's.(10%)
  - Enhanced Efficiency
    - H (High) Mode, N (Normal) Mode, E (Economic) Mode
    - Turtle Mode



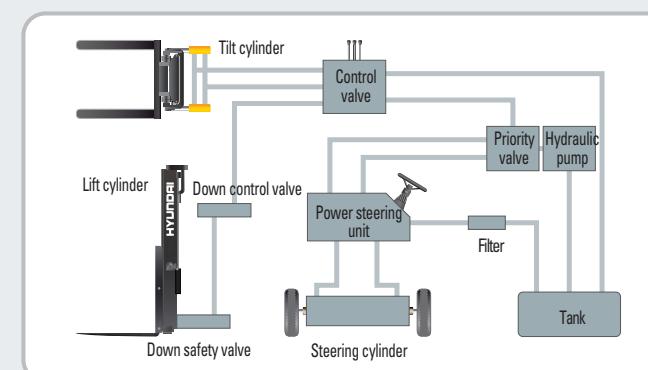
## Superior Power & Optimal Performance

Smooth running, efficiency and ergonomic design, AC Control BT series are built to meet your needs.



### Fork Safety Features

When the forks are being lowered, a down-control valve maintains the controlled speed. The down-safety valve prevents forks from dropping down in case of sudden damage of hydraulic line.



### State-of-the-art hydraulic System

The latest large-capacity hydraulic system reacts quickly during operation, and a low noise control valve increases both efficiency and durability.

### Anti-Rollback System, Faster Travel Speed & Gradeability

ZAPI's anti-rollback system provides safe ramp operation plus exceptional ramp start capabilities. The powerful high-output motors provide greater acceleration, better gradeability and faster travel speed on any tough terrain or slope.



### Travel Speed (MAX)

Model	km/hr(mph)
15BT-7	17(10.6)
18BT-7	17(10.6)
20BT-7	17(10.6)

### Gradeability (MAX)

Model	%(deg)
15BT-7	16.4(29.5)
18BT-7	15.3(27.5)
20BT-7	13.7(24.5)



### Increased Mast tilting Angle

Utilizing the mast tilting angle of 5 degrees forward and 7 degrees backward, the operator can rapidly perform loading and unloading jobs safely.



### Disc Type Brake

Multiple disc brake in oil bath makes maintenance free and is enclosed to protect from dust, water.



### Enhanced Stability by Adopting Dual Rear tires

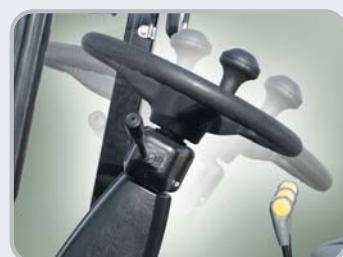
This feature provides better stability during lifting. Better control at high mast height is another way to boost handling efficiency.



### OPS System

## Comfortable Operation

A design based on human engineering relieves fatigue and increases operator's efficiency.



### Adjustable Steering Wheel

Steering wheel can be adjusted by a lever on the right-hand side for the most comfortable operator position.



### High visibility for safe operation

The operator is able to work with increased safety and accuracy due to a wider view.



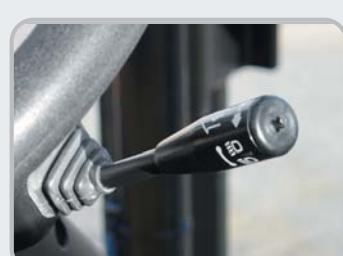
### Easy Control Direction Lever

Finger tip control of forward and reverse lever allows the operator to remain in control of equipment.



### Perfect Fit Against Long Time Work

An ergonomically designed operator's compartment enables the driver to select the most comfortable working position for increased productivity.



### Multi-Functional Switch

Integrated multi-functional switch lever enables the driver to operate lights and horn conveniently.



### Optimum Pedal Position & Non-slip Mat

Based on human engineering, the accelerator and brake pedals are optimally positioned for convenience while operating the equipment.



### Prompt Response of Operating Control Levers

Only minimal operator's effort is required for precise, safe and productive control.



### Easily Adjustable Suspension Seat

An attractive and adjustable seat, based on a human engineering design, provides greater comfort, safety and durability.

■ Options : Seat belt, Arm rest, Hip restraint



### AC Control System Features

#### Excellent Control Ability

- Various performance modes according to working conditions (H.N.E mode & speed limit - Turtle mode)
- Slow rolling on ramp & ramp start

#### Enhanced System Efficiency

- : Enhanced motor efficiency & Excellent regeneration

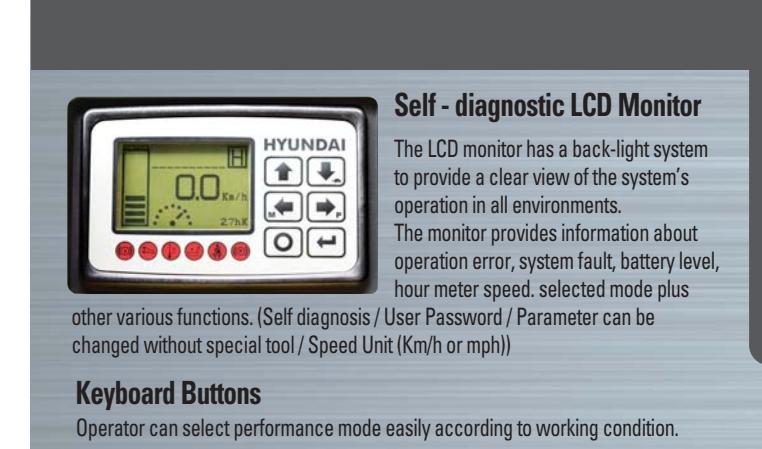
#### Lower maintenance costs

- : No motor brush & Commutator

#### Enhanced durability

- by using an sealed AC motor

■ Photo may include optional equipment.



### Console Box & Cup Holder

Additional storage spaces are located inside the operating space for operator's convenience.



### Self - diagnostic LCD Monitor

The LCD monitor has a back-light system to provide a clear view of the system's operation in all environments.

The monitor provides information about operation error, system fault, battery level, hour meter speed, selected mode plus other various functions. (Self diagnosis / User Password / Parameter can be changed without special tool / Speed Unit (Km/h or mph))

### Keyboard Buttons

Operator can select performance mode easily according to working condition.

## High Durability & Simple Arrangement

An ideal arrangement of component parts ensures easy access and convenience for maintenance.



■ Photo may include optional equipment.



### Strong Overhead Guard

The safety overhead guard meets EEC and ANSI regulations and protects the operator during hazardous work.



### Parking Brake

Ratchet type parking brake requires less effort from the operator to set.



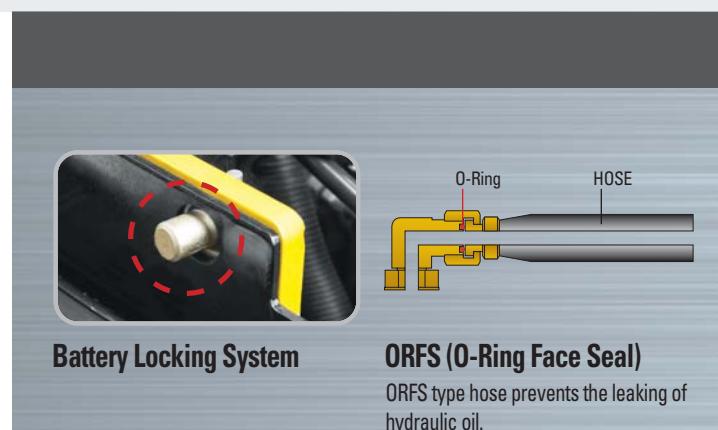
### Large Footboard & Hand Grip

Wide "open" step and large hand grip offer convenience and safety when entering and exiting the truck.



### Rear Safety Lamp

Rear combination lamps with turn signal lamps, tail lamp and brake lights are positioned for high visibility to ensure safety.



### Battery Locking System

### ORFS (O-Ring Face Seal)

ORFS type hose prevents the leaking of hydraulic oil.



### High quality AC motors

Enclosed motors prolong durability. No brush and no commutator. (No arc and no spark)

## Easy Maintenance & Serviceability

Battery change is easy with a swing-up compartment and a slotted overhead guard. Opening and closing of the battery cover is made easy with a gas-spring assisted cylinder.



### Easy battery replacement

Battery change is easy with swing-up compartment and slotted overhead guard. Opening and closing of battery cover is made easy with a gas-spring assist cylinder.



### Hydraulic motor



### Battery Disconnect Lever / Switch



A concentrated fuse box for easy inspection



### Oil Tank Port



### Steering Sensor



### Easy to Check Brake Oil Level



### High Visibility Headlights & Rear Work Light



### DC-DC Converter

DC-DC converter, satisfied with UL & CE, prevents from short circuit, overload and reverse polarity.

## Mast Specification (15/18BT-7)

Mast Type	Overall Height (Lowered) mm(in)		Maximum Fork Height mm(in)		Free Lift mm(in)		Tilt Angle (deg) Fwd / Bwd	Load Capacity without side shift at 500mm LC (24in LC) kg(lb)	Load Capacity with side shift at 500mm LC (24in LC) kg(lb)	Truck Weight (Unloaded) kg(lb)				
					With Backrest									
	15BT-7	18BT-7	15BT-7	18BT-7	15BT-7	18BT-7								
2 / Stage limited free lift	V250	1720 (67.7)	1720 (67.7)	2525 (99.4)	2525 (99.4)	135 (5.3)	135 (5.3)	5 / 7	1500 (3000) 1750 (3500) 1400 (2800) 1650 (3300) 2943 (6488)	3143 (6929)				
	V270	1820 (71.7)	1820 (71.7)	2725 (107.3)	2725 (107.3)	135 (5.3)	135 (5.3)	5 / 7	1500 (3000) 1750 (3500) 1400 (2800) 1650 (3300) 2956 (6517)	3156 (6958)				
	V300	1970 (77.6)	1970 (77.6)	3025 (119.1)	3025 (119.1)	135 (5.3)	135 (5.3)	5 / 7	1500 (3000) 1750 (3500) 1400 (2800) 1650 (3300) 2976 (6560)	3176 (7001)				
	* V330	2120 (83.5)	2120 (83.5)	3325 (130.9)	3325 (130.9)	135 (5.3)	135 (5.3)	5 / 7	1500 (3000) 1750 (3500) 1400 (2800) 1650 (3300) 2995 (6603)	3195 (7044)				
	V350	2220 (87.4)	2220 (87.4)	3525 (138.8)	3525 (138.8)	135 (5.3)	135 (5.3)	5 / 7	1500 (3000) 1750 (3500) 1400 (2800) 1650 (3300) 3008 (6632)	3208 (7073)				
	V370	2320 (91.3)	2320 (91.3)	3725 (146.7)	3725 (146.7)	135 (5.3)	135 (5.3)	5 / 7	1500 (3000) 1750 (3500) 1400 (2800) 1650 (3300) 3022 (6661)	3222 (7102)				
	V400	2470 (97.2)	2470 (97.2)	4025 (158.5)	4025 (158.5)	135 (5.3)	135 (5.3)	5 / 7	1500 (3000) 1750 (3500) 1400 (2800) 1650 (3300) 3045 (6714)	3245 (7155)				
	V450	2820 (111.0)	2820 (111.0)	4525 (178.1)	4525 (178.1)	135 (5.3)	135 (5.3)	5 / 5	1500 (3000) 1750 (3500) 1400 (2800) 1650 (3300) 3109 (6854)	3309 (7295)				
	V500	3070 (120.9)	3070 (120.9)	5025 (197.8)	5025 (197.8)	135 (5.3)	135 (5.3)	5 / 5	1450 (2950) 1700 (3500) 1365 (2800) 1614 (3300) 3142 (6926)	3342 (7367)				
	V550	3320 (130.7)	3320 (130.7)	5525 (217.5)	5525 (217.5)	135 (5.3)	135 (5.3)	5 / 5	1400 (2850) 1450 (3200) 1320 (2700) 1365 (3000) 3174 (6997)	3374 (7438)				
3 / Stage full free lift	TF370	1770 (69.7)	1770 (69.7)	3735 (147.0)	3735 (147.0)	763 (30.0)	763 (30.0)	5 / 5	1500 (3000) 1750 (3500) 1400 (2800) 1650 (3300) 3093 (6818)	3293 (7259)				
	TF400	1870 (73.6)	1870 (73.6)	4035 (158.9)	4035 (158.9)	863 (34.0)	863 (34.0)	5 / 5	1500 (3000) 1750 (3500) 1400 (2800) 1650 (3300) 3108 (6853)	3308 (7294)				
	TF430	1970 (77.6)	1970 (77.6)	4335 (170.7)	4335 (170.7)	963 (37.9)	963 (37.9)	5 / 5	1500 (3000) 1750 (3500) 1400 (2800) 1650 (3300) 3128 (6896)	3328 (7337)				
	TF450	2070 (81.5)	2070 (81.5)	4535 (178.5)	4535 (178.5)	1063 (41.9)	1063 (41.9)	5 / 5	1500 (3000) 1750 (3500) 1400 (2800) 1650 (3300) 3143 (6930)	3343 (7371)				
	TF470	2120 (83.5)	2120 (83.5)	4735 (186.4)	4735 (186.4)	1113 (43.8)	1113 (43.8)	5 / 5	1475 (2950) 1725 (3500) 1390 (2800) 1640 (3300) 3153 (6951)	3353 (7392)				
	TF500	2220 (87.4)	2220 (87.4)	5035 (198.2)	5035 (198.2)	1216 (47.9)	1216 (47.9)	5 / 5	1450 (2900) 1700 (3450) 1365 (2800) 1600 (3250) 3173 (6995)	3373 (7436)				
	TF550	2420 (95.3)	2420 (95.3)	5535 (217.9)	5535 (217.9)	1416 (55.7)	1416 (55.7)	5 / 5	1375 (2800) 1425 (3150) 1295 (1860) 1340 (2950) 3211 (7078)	3411 (7519)				
	TF600	2620 (103.1)	2620 (103.1)	6035 (237.6)	6035 (237.6)	1613 (63.5)	1613 (63.5)	5 / 5	925 (2050) 1000 (2200) 845 (1850) 930 (2050) 3274 (7219)	3474 (7660)				
	TF650	2820 (111.0)	2820 (111.0)	6535 (257.3)	6535 (257.3)	1813 (71.4)	1813 (71.4)	5 / 5	900 (1950) 950 (2100) 820 (1800) 900 (1950) 3318 (7315)	3518 (7756)				
	TF700	3020 (118.9)	3020 (118.9)	7035 (277.0)	7035 (277.0)	2013 (79.3)	2013 (79.3)	5 / 5	600 (1350) 650 (1450) 550 (1200) 600 (1350) 3355 (7395)	3555 (7836)				

\* Standard

## Mast Specification (20BT-7)

Mast Type	Overall Height (Lowered) mm(in)		Maximum Fork Height mm(in)		Free Lift		Tilt Angle (deg) Fwd / Bwd	Load Capacity without side shift at 500mm LC (24in LC) kg(lb)	Load Capacity with side shift at 500mm LC (24in LC) kg(lb)	Truck Weight (Unloaded) kg(lb)				
					With Backrest mm(in)									
	20BT-7	20BT-7	20BT-7	20BT-7	20BT-7	20BT-7								
2 / Stage limited free lift	V250	1729 (68.1)	2530 (99.6)	140 (5.5)	140 (5.5)	5 / 7	2000 (4000)	1890 (3850)	3305 (7287)					
	V270	1829 (72.0)	2730 (107.5)	140 (5.5)	140 (5.5)	5 / 7	2000 (4000)	1890 (3850)	3319 (7316)					
	V300	1979 (77.9)	3030 (119.3)	140 (5.5)	140 (5.5)	5 / 7	2000 (4000)	1890 (3850)	3338 (7359)					
	* V330	2129 (83.8)	3330 (131.1)	140 (5.5)	140 (5.5)	5 / 7	2000 (4000)	1890 (3850)	3358 (7403)					
	V350	2229 (87.8)	3530 (139.0)	140 (5.5)	140 (5.5)	5 / 7	2000 (4000)	1890 (3850)	3371 (7432)					
	V370	2329 (91.7)	3730 (146.9)	140 (5.5)	140 (5.5)	5 / 7	2000 (4000)	1890 (3850)	3384 (7461)					
	V400	2479 (97.6)	4030 (158.7)	140 (5.5)	140 (5.5)	5 / 7	2000 (4000)	1890 (3850)	3408 (7513)					
	V450	2829 (111.4)	4530 (178.3)	140 (5.5)	140 (5.5)	5 / 5	1950 (4000)	1845 (3850)	3472 (7653)					
	V500	3079 (121.2)	5030 (198.0)	140 (5.5)	140 (5.5)	5 / 5	1850 (4000)	1750 (3850)	3504 (7725)					
3 / Stage full free lift	V550	3329 (131.1)	5530 (217.7)	140 (5.5)	140 (5.5)	5 / 5	1800 (3950)	1700 (3750)	3537 (7797)					
	TF370	1779 (70.0)	3740 (147.2)	777 (30.6)	1278 (50.3)	5 / 5	2000 (4000)	1890 (3850)	3455 (7617)					
	TF400	1879 (74.0)	4040 (159.1)	877 (34.5)	1378 (54.3)	5 / 5	1950 (4000)	1850 (3850)	3471 (7652)					
	TF430	1979 (77.9)	4340 (170.9)	977 (38.5)	1478 (58.2)	5 / 5	1900 (4000)	1800 (3800)	3491 (7695)					
	TF450	2079 (81.9)	4540 (178.7)	1077 (42.4)	1578 (62.1)	5 / 5	1875 (4000)	1775 (3750)	3506 (7729)					
	TF470	2129 (83.8)	4740 (186.6)	1127 (44.4)	1628 (64.1)	5 / 5	1850 (4000)	1750 (3700)	3515 (7750)					
	TF500	2229 (87.8)	5040 (198.4)</											