

Technical sheet :

ME 435



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The image contains two technical drawings of a forklift, labeled 'Ast'.

Top View (Left): Shows the forklift from above. Dimensions include:

- $b1 / b3$: Overall width at the forks.
- $b10$: Width of the fork arms.
- $h10$: Height of the fork arms.
- e : Distance between the fork arms.
- Wa : Angle of the mast.
- $b11$: Width of the chassis.
- $b13$: Width of the rear section.
- 100 : Distance from the fork tip to the front edge of the chassis.

Side View (Right): Shows the forklift from the side. Dimensions include:

- $h4$: Total height to the top of the mast.
- $h3$: Height to the top of the chassis.
- $h1$: Height to the top of the mast when tilted.
- $h6$: Height to the top of the operator's seat.
- $h7$: Height to the top of the rear chassis.
- $h10$: Height of the rear wheel.
- $h2$: Height of the front wheel.
- s : Distance from the front wheel to the mast.
- x : Distance from the front wheel to the rear wheel.
- $m1$: Distance from the front wheel to the center of gravity.
- $m2$: Distance from the rear wheel to the center of gravity.
- y : Distance from the rear wheel to the mast.
- l : Wheelbase (distance between wheels).
- $l1$: Total length of the chassis.
- $l2$: Distance from the rear wheel to the mast.
- α and β : Mast tilt angles.

Characteristics of masts and residual capacities

Full Visibility Duplex (FVD)		FVD 30	FVD 33	FVD 35	FVD 37	FVD 40	FVD 43	FVD 45	FVD 48	FVD 50
Mast/fork carriage tilt, forward	°	5	5	5	5	5	5	5	5	5
Mast/fork carriage tilt, backward	°	8	8	8	8	8	5	5	5	5
h1 - Mast lowered height	in (mm)	88 (2235)	93.9 (2385)	97.8 (2485)	112.5 (2858)	111.6 (2835)	117.5 (2985)	121.5 (3085)	127.4 (3235)	131.3 (3335)
h2 - Mast free lift	in (mm)	5.9 (150)	5.9 (150)	5.9 (150)	5.9 (150)	5.9 (150)	5.9 (150)	5.9 (150)	5.9 (150)	5.9 (150)
h3 - Mast lifting height	in (mm)	118.1 (3000)	129.9 (3300)	137.8 (3500)	145.7 (3700)	157.5 (4000)	169.3 (4300)	177.2 (4500)	189 (4800)	196.9 (5000)
h4 - Mast extended height	in (mm)	151.1 (3838)	162.9 (4138)	170.8 (4338)	178.7 (4538)	190.5 (4838)	202.3 (5138)	210.2 (5338)	222 (5638)	229.8 (5838)
Residual capacity at max height	lb (kg)	7716 (3500)	7716 (3500)	7716 (3500)	7716 (3500)	7716 (3500)	7716 (3500)	7716 (3500)	7716 (3500)	7496 (3400)
Residual capacity with integrated side shift at max height	lb (kg)	7716 (3500)	7716 (3500)	7716 (3500)	7716 (3500)	7716 (3500)	7716 (3500)	7496 (3400)	7385 (3350)	7496 (3400)
Residual capacity with hooked-on side shift at max height	lb (kg)	7716 (3500)	7716 (3500)	7716 (3500)	7716 (3500)	7716 (3500)	7716 (3500)	7496 (3400)	7275 (3300)	7055 (3200)
Height at max capacity	in (mm)	118.1 (3000)	129.9 (3300)	137.8 (3500)	145.7 (3700)	157.5 (4000)	169.3 (4300)	177.2 (4500)	189 (4800)	157.5 (4000)
Height at max capacity with integrated sideshift	in (mm)	118.1 (3000)	129.9 (3300)	137.8 (3500)	145.7 (3700)	157.5 (4000)	169.3 (4300)	157.5 (4000)	157.5 (4000)	157.5 (4000)

Free Lift Duplex (FLD)		FLD 30	FLD 33	FLD 37	FLD 40
Mast/fork carriage tilt, forward	°	5	5	5	5
Mast/fork carriage tilt, backward	°	8	8	8	8
h1 - Mast lowered height	in (mm)	84.1 (2135)	90 (2285)	97.8 (2485)	105.7 (2685)
h2 - Mast free lift	in (mm)	50.2 (1275)	56.1 (1425)	64 (1625)	71.9 (1825)
h3 - Mast lifting height	in (mm)	118.1 (3000)	129.9 (3300)	145.7 (3700)	157.5 (4000)
h4 - Mast extended height	in (mm)	152 (3860)	163.8 (4160)	179.5 (4560)	191.3 (4860)
Residual capacity at max height	lb (kg)	7716 (3500)	7716 (3500)	7716 (3500)	7716 (3500)
Residual capacity with integrated side shift at max height	lb (kg)	7716 (3500)	7716 (3500)	7716 (3500)	7716 (3500)
Residual capacity with hooked-on side shift at max height	lb (kg)	7716 (3500)	7716 (3500)	7716 (3500)	7716 (3500)
Height at max capacity	in (mm)	118.1 (3000)	129.9 (3300)	145.7 (3700)	157.5 (4000)
Height at max capacity with integrated sideshift	in (mm)	118.1 (3000)	129.9 (3300)	145.7 (3700)	157.5 (4000)

Free Lift Triplex (FLT)		FLT 40	FLT 43	FLT 48	FLT 50	FLT 55	FLT 60
Mast/fork carriage tilt, forward	°	5	5	5	5	5	5
Mast/fork carriage tilt, backward	°	5	5	5	5	5	5
h1 - Mast lowered height	in (mm)	84.1 (2135)	88 (2235)	95.9 (2435)	99.8 (2535)	107.7 (2735)	117.5 (2985)
h2 - Mast free lift	in (mm)	50.2 (1275)	54.1 (1375)	62 (1575)	65.9 (1675)	73.8 (1875)	83.7 (2125)
h3 - Mast lifting height	in (mm)	157.5 (4000)	169.3 (4300)	189 (4800)	196.9 (5000)	216.5 (5500)	236.2 (6000)
h4 - Mast extended height	in (mm)	184.3 (4680)	203.1 (5160)	222.8 (5660)	230.7 (5860)	250.4 (6360)	270.1 (6860)
Residual capacity at max height	lb (kg)	7716 (3500)	7496 (3400)	7275 (3300)	7055 (3200)	6945 (3150)	6614 (3000)
Residual capacity with integrated side shift at max height	lb (kg)	7716 (3500)	7385 (3350)	7165 (3250)	7055 (3200)	6945 (3150)	6614 (3000)
Residual capacity with hooked-on side shift at max height	lb (kg)	7496 (3400)	7165 (3250)	6834 (3100)	6724 (3050)	6614 (3000)	6283 (2850)
Height at max capacity	in (mm)	98.4 (2500)	98.4 (2500)	98.4 (2500)	98.4 (2500)	98.4 (2500)	98.4 (2500)



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