

## Ride Measurements

<b>CARROUSEL</b>	ENGLISH	METRIC
Radii	25'	7.62 m
Inner horse	17'5"	5.31 m
Middle horse	20'5"	6.22 m
Outer horse	23'6"	7.16 m
Total ride time	2 minutes	2 minutes
Single rotation time	11 seconds	11 seconds

<b>COMET</b>	ENGLISH	METRIC
Height of first hill	84'2"	25.65 m
Height of valley	4'0"	1.22 m
Height of second hill	70'-6 1/2"	21.5 m
Horsepower of chain motor	75	55950 watts
Area of front of car	8.6 sq. ft.	.80 m <sup>2</sup>
Length of coaster train	40'0"	12.19 m
Riders each hour	1,100	1,100
Average speed	27 ft./sec.	8.23 m/s
Minimum speed	66 ft./sec.	20.12 m/s
<b>SECOND MAJOR CURVE:</b>		
Radius	35'	10.67 m
Degrees	87 degrees	87 degrees
Entering height	54'2"	16.51 m
Exit height	50'11"	15.52 m
Minimum ride height	42"	1.07 m
Ride capacity	24 a train/2 trains	24 a train/2 trains
Round trip distance	2,950'	899.1 m
Round trip time	1 min. 49 sec.	1 min. 49 sec.
Mass of train	6,200 lbs. empty/ 9,500 lbs. full	2812 kg/ 4309 kg

*NOTE: Average weight is 150 lbs. (68.04 kg) per rider.*

## Ride Measurements

<b>SIDEWINDER</b>	ENGLISH	METRIC
Height of hill (is it the same on both ends?)	121'1": Lift 1 116'5":	Lift 2 36.90 m / 35.48 m
Vertical drop of first hill	121'1"	36.90 m
Vertical drop of second hill	116'5"	35.48 m
Mass of train	14,000 lbs. empty/ 18,200 lbs. full	6350 kg/ 8255 kg
Length of train	60'	18.29 m
Total ride time	1 min. 40 sec.	1 min. 40 sec.

<b>GREAT BEAR</b>	ENGLISH	METRIC
Mass of train	22,400 lbs.	10 ton
Length of train	39' 2"	11.94 m
Distance from wheels to bottom of seat	6.5 ft.	1.9812 m
Distance of track	2,800'	853.44 m
Height of loop (Top of Loop)	106'	32.3088 m
Height of loop (Bottom of Loop)	31'	9.4488 m
Height of first hill	11' 6"	36.500652 m
Height at the bottom of first hill	10' 4"	3.1490917 m
Distance around loop - beginning and ending at the same point	187' 6"	57.15 m

<b>PIRATE</b>	ENGLISH	METRIC
Horsepower of swing engine	100 hp	74600 watts
Riders each hour	1,200	1,200
Maximum swing angle	75 degrees	75 degrees
Ride capacity	54 adults	54 adults
Round trip time 1	1/2-3 min. a ride	1 1/2-3 min. ride
Mass of boat	14,300 lbs. empty/21,050 lbs. full	6486 kg/9548 kg
Length of boat from tip of needle to stern	43'0"	13.1 m
Maximum height of center of boat	44'6"	13.6 m
Radius swing (center fulcrum down center of boat)	44'6"	13.6 m
<i>NOTE: Average weight is 150 lbs. (68.04 kg) per rider.</i>		

## Ride Measurements

<b>TRAILBLAZER</b>	ENGLISH	METRIC
Height of hill	52'0"	15.85 m
Height of valley	18'0"	5.49 m
Height of loading area	10'0"	3.05 m
Horsepower of chain motors	50 hp	37300 watts
Weight of coaster	4,000 lbs. empty/ 8,500 lbs. loaded	1814 kg/ 3856 kg
Areas of front of car	10.3 sq. ft.	0.96 m <sup>2</sup>
Riders each hour	1400	1400
Average speed	175 ft./sec.	53.34 m/s
Ride capacity	30 per train	30 per train
Round trip distance	1890'	576 m
Length of coaster	48'0"	14.63 m
Measured radius of horizontal loop	36'0"	10.97 m
<i>NOTE: Average weight is 150 lbs. (68.04 kg) per rider.</i>		

<b>SOOPERDOOPERLOOPER</b>	ENGLISH	METRIC
Height of first hill	81'0"	24.69 m
Angle of first drop - steepest	varies-38 degrees	varies-38 degrees
Height of loop	53'	16.15 m
Height of second hill	64'0"	19.51 m
Horsepower of chain motor	100 hp	74600 watts
Weight of coaster loaded	9,400 lbs.	4264 kg
Weight of coaster empty	8,000 lbs.	3629 kg
Chain speed	6-8 ft./sec.	2.07 m/s
Length of train	42'6"	12.95 m
Round trip time	1 min. 57 sec.	1 min. 57 sec.
Frontal area of train	9.3 sq. ft.	0.86 m <sup>2</sup>
Riders each hour	850	850
Average speed	22.34 ft./sec.	6.81 m/s
Minimum speed	0-2 ft./sec.	0-.61 m/s
Minimum rider height	54"	1.37 m
Rider capacity	24 a train/2 trains	24 a train/2 trains
Round trip distance	2614.8'	797 m

## Ride Measurements

<b>TIDAL FORCE</b>	ENGLISH	METRIC
Mass of boat	6,000 lbs. empty/9,000 lbs. loaded	2722 kg/4082 kg
Number of riders	20/boat - 3 boats	20/boat - 3 boats
Length of boat	18'9"	5.71 m
Height of lift	100'	30.5 m
Vertical drop	100'	30.5 m

<b>WILDCAT</b>	ENGLISH	METRIC
Mass of train	11,400 lbs.	5171 kg
Length of train	42'6"	12.95 m
Radius of first turn <i>(the one you can see best)</i>	43'6" (Turn 3)	13.26 m
Round trip distance	3100'	944.8 m
Radius of horizontal circle <i>(in the cylcone somewhere?)</i>	61' (Turn 9)	18.59 m
Number of riders per train	24	24
Vertical drop of first hill (?)	85'	25.91 m