

"...Not affected by Cyclone..."

Dear Sir, I have much pleasure in stating that the Comet Windmill erected at the Commercial hotel is indeed a beautiful piece of machinery. It works in the slightest breeze, & has not given me a moment's trouble. As you are aware, this mill is 'working' under extraordinary conditions. I mention that a recent cyclone took the roof off the stable adjoining the mill also the same iron off the roof of the kitchen & verandah, but did not have the slightest effect on the mill, which proves that the Comet Windmill is immune to cyclones and this certainly was 'some' cyclone.

"...Outputs to 250,000 gallons daily..."

On the Sesbania Trust Bore QLD a 35ft Comet Windmill gave an output of above 250,000 gallons daily under test by Government Engineers.

"...Proven ability to pump distances..."

On Bowen Downs Station in QLD a 27ft Comet Windmill with a 12inch pump has been supplying 12 miles (19.3km) of bore drain with up to 200,000 gallons daily for many years.



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Comet Windmill

pump range....

The tradition of high quality products flows through to the complete range of windmill pumps. Comet manufactures a standard range to suit any condition and can also supply custom made sizes for larger quantities of water.

Standard Range

Flush End Pumps (A)

- Sizes: 1¼, 2, 2¼, 2½, 3, 3¼, 3½, 4, 4½, 5, and 6 inches
- Shallow pumping from bores and wells
- Gun metal bronze construction
- Leather or rubber buckets
- 12" stroke
- Larger sizes available on request



A

B

C

Syphon Pumps (B)

- Sizes: 1¼, 2, 2¼, 2½, 3, 3¼, 3½, 4, 4½, 5, and 6 inches
- Surface water pumping from dams and rivers
- Leather or rubber buckets
- Vertical or side discharge (pictured)
- Heavy duty casting
- 12" stroke
- Larger sizes available on request

Stainless Steel Draw Plunger Pump (C)

- Sizes: 1¼, 2, 2¼, 2½, 3, 3¼ and 4¼ inches
- Deep bore pumping over 250ft depths
- Ideal for hard or dirty water
- Heavy duty pumps
- Sleeve valve
- 24" stroke

COMET WINDMILLS PUMP TABLE

"The pumping capacities of Comet Mills, shown in the Table (below), are based on the number of pumping strokes (inches) in 7.7 m.p.h. (12.39 k.m.p.h) winds. Our Pumping Table is based on 10 hours of pumping over a 24 hour period allowing for slip/friction. Of course, if the wind blows for longer periods you will get more water.

PUMP SIZE Inches mm	WHEEL DIAMETER												PUMP SIZE Inches mm										
	8ft 2.44m	10ft 3.05m	12ft 3.66m	14ft 4.27m	16ft 4.88m	18ft 5.49m	20ft 6.10m	22ft 6.71m	24ft 7.32m	27ft 8.23m	30ft 9.14m												
1¼	157	970 g	270	1000	355	1080	508	1170								1¼							
44mm	48	4410 lt	82	4550	108	4910	155	5320								44mm							
2	124	1280	220	1320	279	1420	410	1540	548	2100	710	1880				2							
50	31	7370	54	7590	69	8090	100	8820	138	12180	186	12180	242	12640		50							
2½	86	2000	144	2060	193	2200	290	2300	377	3300	520	2940	690	3440	793	3820	2½						
65	26	9090	44	9370	59	10000	88	10460	115	15000	159	13370	210	15640	242	17370	65						
2¾	75	2420	123	2500	162	2650	230	2900	326	4000	435	3570	595	4160	683	3900	903	4330	2¾				
70	23	11000	38	11370	49	12050	70	13180	99	18180	133	16230	181	18910	208	17730	275	19680	70				
3	63	2880	102	2950	138	3150	200	3400	272	4800	364	4250	505	4950	600	4650	776	5150	3				
80	19	13090	31	13410	42	14320	61	15460	83	21820	111	19320	154	22500	183	21140	237	23410	80				
3¼	53	3390	86	3450	117	3700	173	4000	231	5600	313	4950	430	5800	515	5420	685	6000	885	6000	3¼		
83	16	15410	26	15680	36	16820	53	18180	70	25460	95	22500	131	26370	187	24640	209	27280	270	27280	83		
3½	46	3940	77	4050	102	4250	147	4700	205	6400	270	5750	374	6750	445	6300	586	7000	800	6930	985	6430	3½
90	14	17910	24	18410	31	19320	45	21370	63	29100	82	21640	114	30690	136	28640	179	31820	244	31500	300	29350	90
4	36	5100	60	5300	78	5600	116	6100	162	8400	216	7530	298	8820	350	8250	445	9100	613	9100	775	8260	4
100	11	23190	18	24090	24	25460	35	27730	49	38190	66	34230	91	40100	107	37510	136	41370	187	41370	236	37550	100
4¼	31	5750	51	5950	70	6300	103	6800	143	9500	192	8450	264	10000	317	9330	397	10350	555	10250	715	9320	4¼
108	10	26140	16	27050	21	28640	31	30910	44	43190	59	38410	81	45460	97	42410	121	47050	169	46600	218	42370	108
4½	25	6450	46	6650	61	7100	91	7700	128	10700	165	9550	231	11200	269	10400	350	11500	490	11400	634	10450	4½
114	8	29320	14	30230	19	32280	28	35000	39	48640	50	43190	70	50920	82	47280	107	52280	149	51830	193	47510	114
5	21	7500	38	8250	49	8700	75	9500	103	13200	130	11750	168	13750	214	12850	278	14200	392	14200	503	12900	5
127	6	34100	12	37510	15	39550	23	43190	31	60000	40	53420	51	62510	65	58420	85	64550	120	64550	153	58640	127
6	15	10500	27	11500	33	12600	43	13700	59	19000	87	16900	116	19800	151	18500	191	20550	265	20400	359	18550	6
152	5	47730	8	52280	10	57280	15	62280	21	86370	27	76830	35	90010	46	84100	58	93420	81	92740	109	84330	152
7	18	15500	25	17050	35	19750	48	25650	65	23000	85	26300	90	31500	143	28000	198	27800	160	25300			7
178	6	70460	8	77510	11	83780	15	116610	20	104560	26	119560	28	143200	44	127290	60	126380	79	115010			178
8	18	22400	27	25650	36	33850	50	29900	66	33850	87	30000	110	40300	150	36400	200	32800					8
203	6	101830	8	116610	11	153880	15	153880	20	154560	21	183200	34	163200	46	165480	61	149110					203
10	17	39800	24	51400	32	46000	43	52700	44	63000	72	55400	100	55200	132	50000							10
254	5	180930	7	233670	10	209120	13	239570	13	286400	22	251850	31	250940	40	227300							254
12	22	66700	30	76200	31	90700	50	80600	68	81000	90	73800											12
304	7	303220	9	346400	10	402320	15	366400	21	368230	28	335500											304

- Domestic, Stock & Industrial Pumping
- 130 Years Proven Technology
- 11 Sizes for all Applications
- 100% Renewable Energy
- No Fuel or Power Bills
- New Safety Features
- Low Maintenance



SINCE 1879



All you need
is a breeze....



Comet windmills are designed to operate in the lightest of winds, they are legendary for their sensitivity, simplicity and great strength.

They begin cost-effective operation in wind speeds as low as 4mph (6.5kph). Wind speeds of 4mph occur 95% of the time over the earth's surface.

Comet Windmills are Direct Acting which means the Comet Windmill pumps more water at a lower cost, at any depth and in any wind speed.

With proven pumping ability and reliability for over 130 years, they are reliable and virtually maintenance free in harsh working conditions.

"C PATTERN"
COMET
WINDMILLS

Governing device ensures smooth action even in violent changeable winds

Large well balanced ball bearing turntable for ample support and sensitive movement

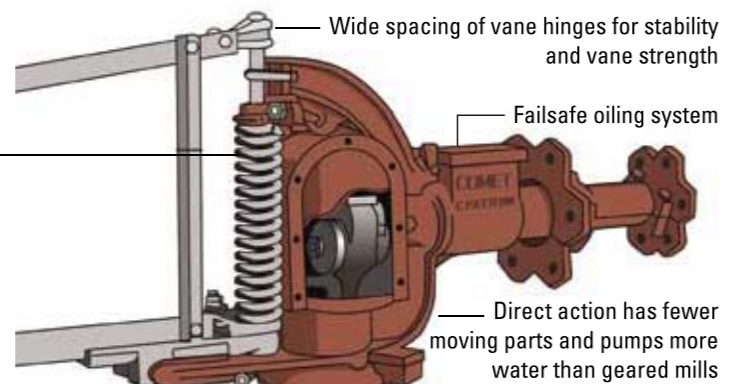
Windmill Head Sizes

Wheel	6	8	10	12	14	(feet)
Diameter	1.8	2.4	3.0	3.6	4.2	(metres)
Tower	20	30	40	50	60	(feet)
Heights	6	9	12	15	18	(metres)

Drawbar

Double pull out chains

Pull out wire



Inner and outer pullout collars

Mastpipe

Roller guides

4 post tower for maximum strength and stability

Double pull out chains

Pull out wire

Why choose a Comet Windmill?...

Pollution Free
Installing a Comet Windmill will reduce your carbon footprint. Windmills convert wind into mechanical energy with zero net CO2 emissions therefore lowering your impact on the environment.

Stability and Safety
All Comet towers are designed with a high safety factor. The 4-post design and heavy steel construction provides greater stability to stand firm in strong winds. Four posts will always be stronger and safer than three. Available in 20ft to 60ft heights.

Long Life
The Comet Windmill has been proven for over 130 years backing up claims of long life and sustainability. A maintained windmill can last many years with a little oil and checking bolts every six months to keep the windmill performing at its' best.

No Fuel or Power Bill
This has to be the main draw card for the Comet Windmill. The initial outlay for the windmill is quickly offset by the reduction in your fuel or power bill. All you need is a breeze, and the windmill will start pumping.

Low Maintenance
Our systems have been designed to be self sufficient requiring very little attention during the normal remote operation of a windmill. All steel work is hot dip galvanised, and the principal parts are cast from heavy duty materials giving longer life.

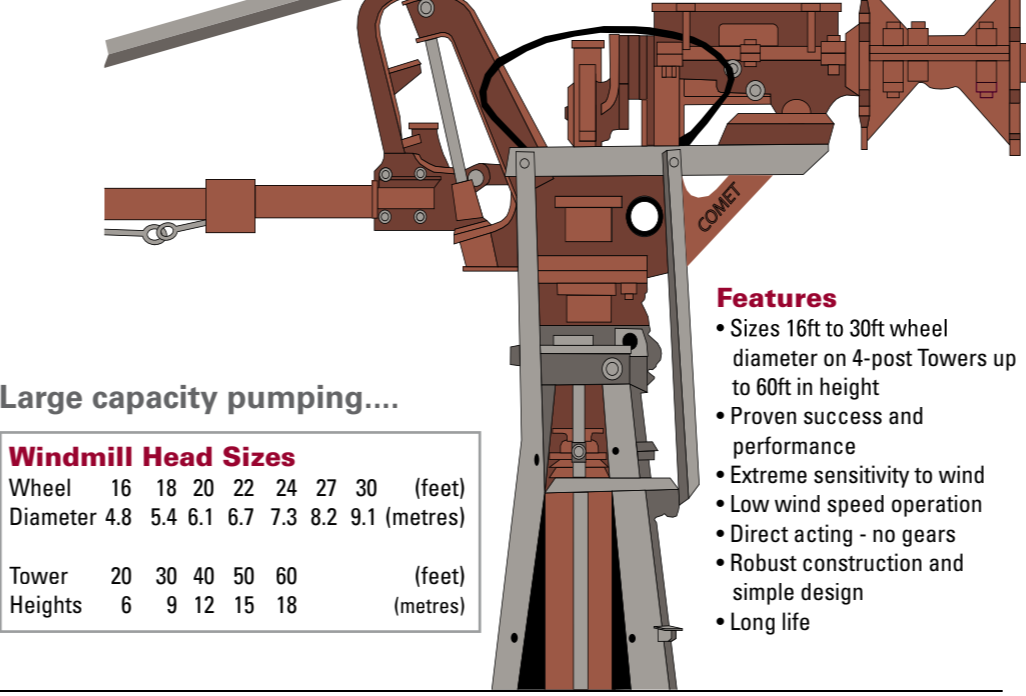
Ideal for Remote Areas
The Comet Windmill operates under all climatic extremes from snow fields and arid deserts, to tropical cyclones where they run without supervision for long periods of time.

Safety Features
Unlike other windmill designs Comet Windmills have a unique galvanised steel platform with antislip grate floor, perimeter toe plate and heavy duty support angles. The large area provides a safe environment to carry out maintenance.

How Far can the Water be Pumped?
The powerful action of the Comet Windmill can push the water (depending on the size of the windmill head, and the pump diameter) up to 1,000ft. Apart from this, the distance is not much of an issue.



"D PATTERN"
COMET
WINDMILLS



Large capacity pumping....

Windmill Head Sizes

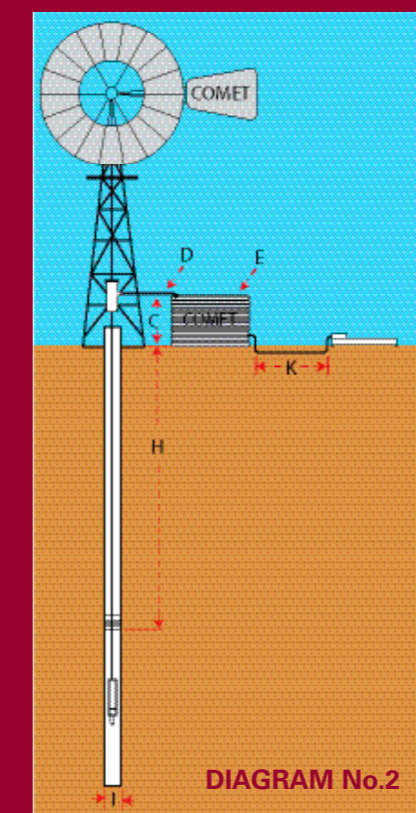
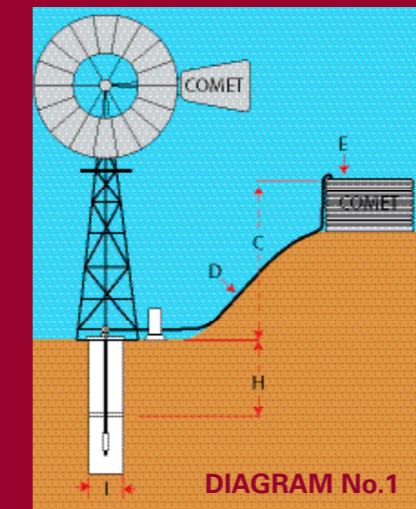
Wheel	16	18	20	22	24	27	30	(feet)
Diameter	4.8	5.4	6.1	6.7	7.3	8.2	9.1	(metres)
Tower	20	30	40	50	60			(feet)
Heights	6	9	12	15	18			(metres)

Simple Design
There is no need for skilled technicians or tradesmen to erect, maintain or troubleshoot. Our experienced staff are only too happy to help. Comet does not endorse the use of non genuine parts as it causes more damage to your windmill over its life. Companies claiming to make parts

suitable for Comet Windmills and stating that these parts are stronger or better, have no grounds or proven experience to guarantee or make these claims. Genuine Comet parts have been made for over 130 years of unfailing quality from certified engineer drawings.

Other sustainable solutions....

- Irrigation
- Eco Tourism
- Aquaculture
- Mine Rehabilitation
- Radio/Turbine Towers
- Galvanised Steel Tank Stands
- Poly Rod Borehole System
- Windmill Spare Parts
- Pump Buckets



Comet Windmill selection guide....

Accurate measuring is essential.
Wind - Winds, especially the light breezes, must have free access to the mill from all directions. The bottom of the wheel must be at least 15ft (4.5metres) above all wind obstructions within 150yds (137 metres) of the mill.

Elevations - The mill should be loaded and balanced so that it will start pumping in light breezes. Its size depends upon the size of the pump and total elevation. The latter includes not only the vertical heights for suction and delivery elevations but also an allowance for probable water flow friction in the pipeline. The delivery pipe size should be at least half the pump diameter.

Suction - In a bore or well it is best to submerge the pump. For a creek or dam the pump should be placed close to the water and the suction elevation must not exceed 30ft (9m), or less if the suction pipeline is long.

Instructions
It is very important that you provide accurate measurements so that the most efficient and economical pumping plant can be recommended to suit your requirements. First choose the diagram that is most similar to your proposed site. Answer the general data questions with accurate measurements and include pumping details.

- General Data**
- State the number of the diagram which is similar to your proposed layout. If your layout is different, send a sketch showing the dimensions below and details of any pipelines.
 - Amount of water in gallons/litres required per day.
 - Height from ground level to top of tank or point of discharge.
 - Length of discharge pipe or delivery pipeline.
 - Capacity and type of storage tank.
 - Distance and height of trees and other wind obstructions within 150yds (137m) of mill site.
 - Are average wind conditions light, medium or good?

- Pumping from bores or wells**
Source of supply?
- Distance from ground level to lowest water level.
 - Inside diameter of bore casing or size of well.

- Pumping from Surface Water - Creeks, Earth Tanks, Dams or Shallow Wells**
Source of supply?
- Vertical height from normal water level to ground level at mill site.
 - Distance from the water source to proposed pump site.
 - Vertical height from lowest water level to ground level at mill site.

