

31-20 SPECIFICATIONS

Output.....Grid Intertie 240 volt A.C. 60hz
single phase power
Rating.....20 kw
Type.....Horizontal upwind design
Cut in wind speed.....8mph
Peak output wind speed.....26 mph
Rotor type.....3 blade Variable pitch
Rotor RPM @ rated output power.....175
Rotor diameter.....31 feet
Transmission.....Offset Hypoid gear drive
Ratio - Rotor to alternator.....6.1:1
Alternator type.....Brushless 3 phase with
outboard exciter
Rating.....25KVA, 3phase, 0-180 volts

Protection:

Yaw control.....Dual fold tail vane
Overspeed.....Blade actuated governor
High wind/storm.....Offset rotor axis

Tower:

Type.....Free standing, 3 leg design
Construction.....Angle Iron
Heights available.....80' - 100' - 120'
Brake Type.....Caliper-disc type

Wind Turbine Industries Corp. continually improves its products and therefore reserves the right to change the design, materials and/or specifications without notice.

In the energy conscious person of today we see a desire to reduce electrical usage or cut the cost paid for energy consumption.

A Jacobs® Wind System can provide you a means of offsetting the ever-rising costs of your electrical energy.

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JACOBS

WIND SYSTEMS

MODEL 31-20
20KW

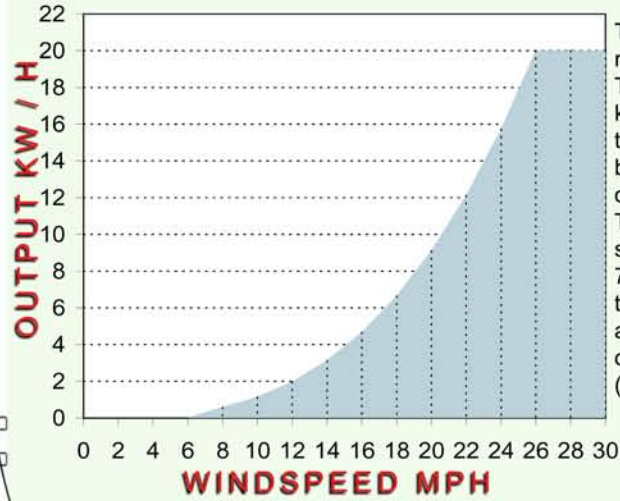
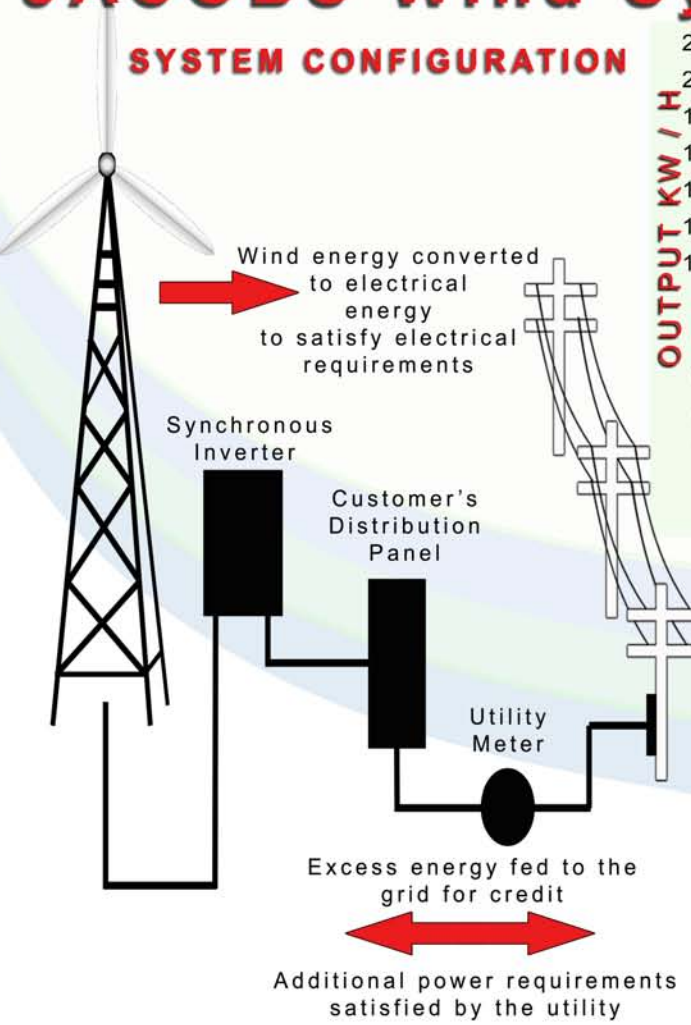


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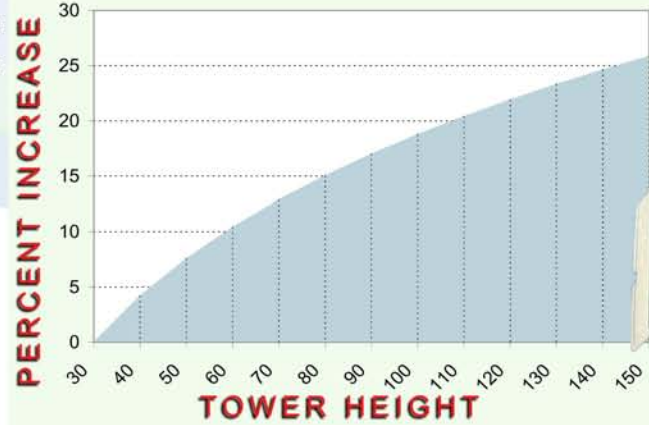
Em"powering"
Consumers
Since 1986

JACOBS Wind Systems Model 31-20

SYSTEM CONFIGURATION



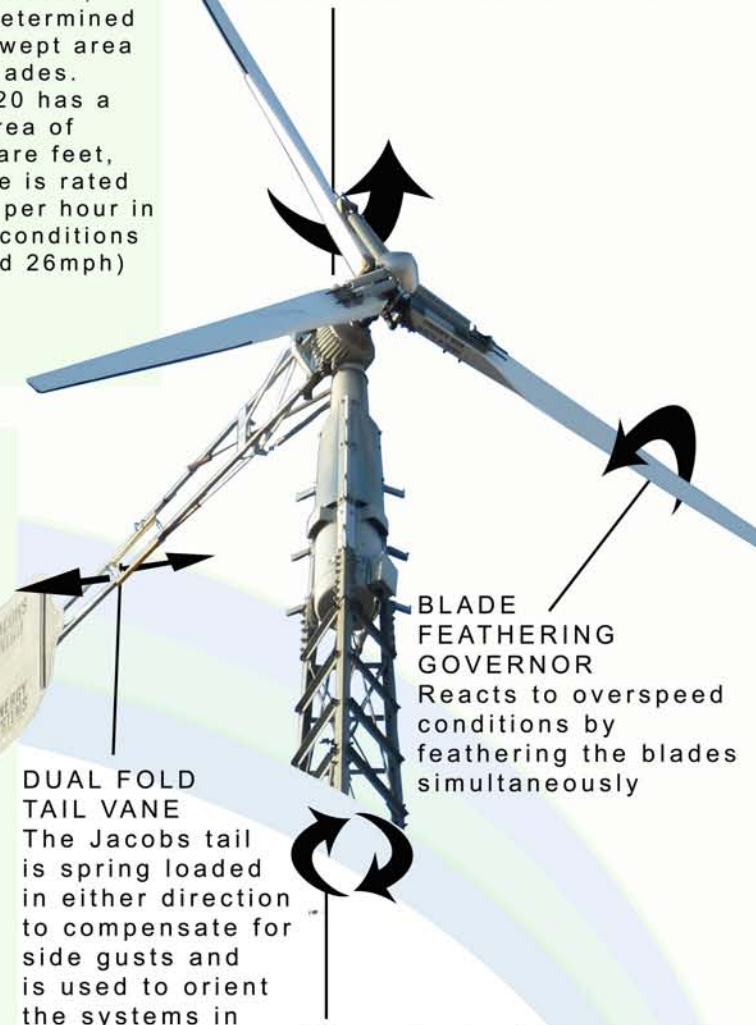
The standard measure of a wind Turbine is in kilowatt-hours; this is determined by the swept area of the blades. The 31-20 has a swept area of 755 square feet, therefore is rated at 20kw per hour in optimal conditions (sustained 26mph)



As the tower increases in height, so does the wind speed. A general rule of thumb is to have your hub height a minimum of 30' above any obstructions located within a 500 foot radius.

DESIGN FEATURES

OFFSET HYPOID GEAR DRIVE
Wind force creates rotor back thrust. Rotor back thrust is balanced to alternator load to ensure an upwind position in high winds



Alternator load is overcome and rotor turns around to the side of the tower with the blades feathered and running parallel to the wind

Net Metering - The power company is required to buy back the excess power generated by Grid Connected systems. This buy back rate varies, please check with your certified dealer or local utility for more information.

For more detailed information on wind energy please visit our site:
www.windturbine.net

*Estimated Annual Output 31-20 in Kilowatt hours

Wind Speed	10	11	12	13	14	15
Mph-	10	11	12	13	14	15
Kwh- Output	19,727	25,704	32,297	39,289	46,468	53,646

*These figures are based on assumptions using the Ralyeigh distribution figures. It is always recommended to have an expert survey your site to more accurately predict windspeed and output for your machine.

