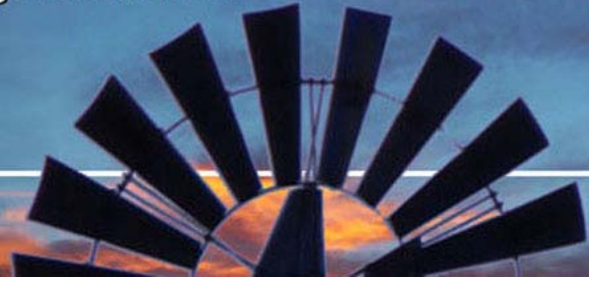


A new day dawns in wind power generation . . .



**WindGen**



The original company Merrick Machine Company was founded by Jim Merrick in 1961. It was established to manufacture a new line of highly automated and specialized machinery. The company, having proved extremely successful, began a diversification program into the plastics business in 1972. As the company grew and developed, it was incorporated into various divisions.

Today these companies are structured as Limited Partnerships, and each business is a stand-alone company doing business in separate facilities with independent offices, manufacturing and warehousing. With sustained and programmed growth, our companies have continued to modernize and expand the physical assets, state-of-the-art equipment, and talented, skilled personnel.

With many Fortune 500 customer accounts, we produce a wide range of products serving almost every area of the economy. This diversity includes products for energy, housing, commercial building, material handling, recreation, agriculture, breweries, cookware, automotive, plumbing, manufacturing and medical industries in both domestic and international markets.

Total company employment is 250 dedicated, quality employees. With a strong commitment to customer satisfaction we have assembled certified engineers supported by CAD-CAM systems, marketing professionals that meet customer expectations, and CPA's and the clerical staff that can complete the information flow.

Welcome, and please take time to look over our offerings to make your company the competition to beat!



P.O. Box 130 Alda, NE 68810

Phone: 800-568-7423 Ext 158

Fax: 308-384-8326

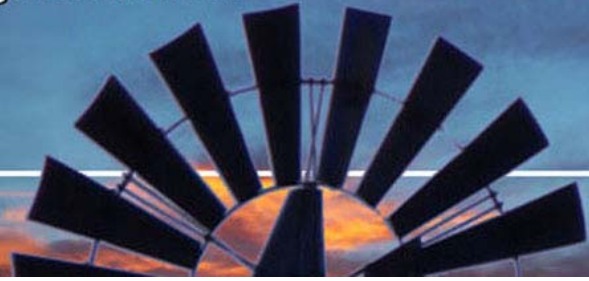
E-mail: [cdsmith@triadwindgen.com](mailto:cdsmith@triadwindgen.com)

<http://www.triadwindgen.com>

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# WindGen



## FEATURES AND BENEFITS:

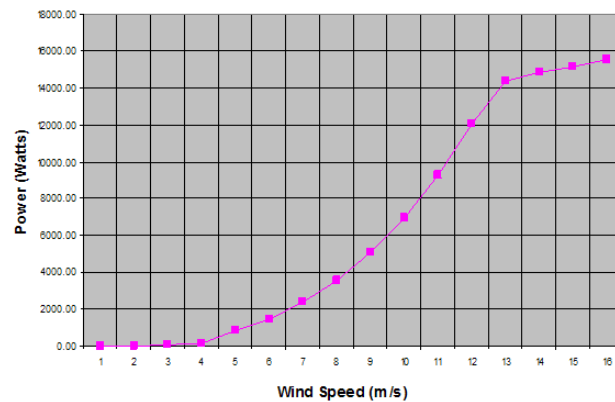
- AESTHETICALLY APPEALING (OUR “LEGACY DESIGN” LOOKS FAMILIAR TO YOU AND YOUR NEIGHBORS)
- RUGGED METAL CONSTRUCTION
- VERY LOW START-UP SPEED
- BOTH ON-GRID AND OFF-GRID CAPABLE.
- 5 YEAR WARRANTY.
- VERY LOW MAINTENANCE.
- DESIGNED BY PROFESSIONAL ENGINEERS.
- OVER 50 YEARS OF MACHINE MANUFACTURING EXPERIENCE.
- MADE IN THE WINDY MIDWEST “USA”
- *INCLUDES* FREESTANDING TOWER

## Harvest the wind!

### WindGen Power Curve

The following graph represents the power curve of the Triad WindGen. The values are based on actual initial test data. This table will be updated as more data is collected.

### Electrical Power



Let our knowledgeable dealers explain to you just how affordable the Triad *WindGen* will be for you.

- USDA grant ( 25% of total installed cost)
- USDA low interest loans available (50% of the installed cost)
- Only 25% up-front “out of pocket” expense.
- 30% Renewable Energy Tax Credit also available
- Local and state incentives may also be available.



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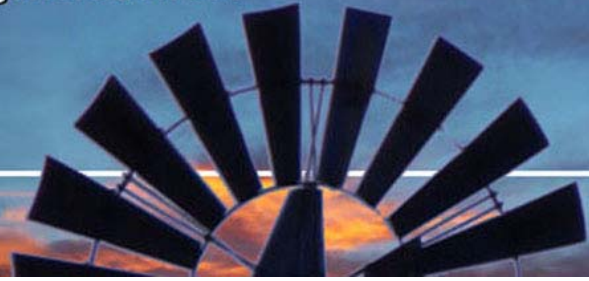
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# WindGen



**Power to you. . .  
As sure as the wind blows!**



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## Turbine Specifications

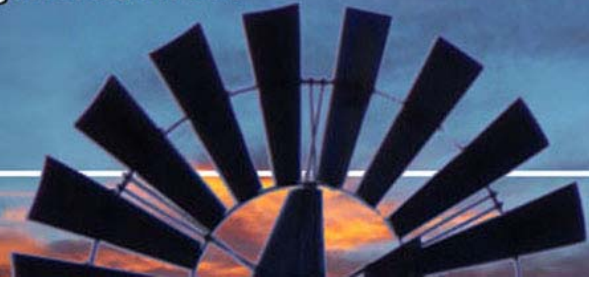
<b>Fan Diameter</b>	25'
<b>Power rating (25 mph)</b>	10 KW
<b>DC Buss Voltage</b>	24 VDC
<b>AC Buss Voltage</b>	220 VAC
<b>AC Frequency</b>	60 Hz
<b>AC Phases</b>	Single
<b>Grid-tie connect</b>	Standard
<b>Battery Bank</b>	Standard
<b>Battery Expansion?</b>	Yes
<b>Head to Ground Cable</b>	Standard
<b>Alternator type</b>	Excited Field
<b>Turbine Type</b>	Axial
<b>Fan Style</b>	Legacy
<b>Yaw Control</b>	Passive
<b>Furling Method</b>	Passive-Auto
<b>Tower Type</b>	FSL <sup>1</sup>
<b>Tower Anchor</b>	Lagged Hinge
<b>Max Tower Height</b>	80'
<b>Tower inclusion</b>	Standard
<b>Access ladder</b>	Standard
<b>Head Gearing</b>	Chain/Belt
<b>Brake (Safety)</b>	Manual
<b>Control Voltage</b>	24 VDC
<b>Control System</b>	PLC <sup>2</sup>
<b>Availability</b>	In Stock

<sup>1</sup> Free-Standing Lattice    <sup>2</sup> Programming Logic Controller

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**WindGen**



# Triad WindGen

Wind power is now a reality for the farm, ranch, home, or business thanks to the Triad WindGen. Learn more about the Triad WindGen, wind power, or our growing dealer network.

## *The Benefits of Wind Power*

### Environmental and Health **Benefits**

- *A widespread, inexhaustible resource:* 46 of 50 states have wind resources that could be developed.
- *Low emissions:* Reduces smog and eliminates a major source of acid rain; could reduce total US emissions of carbon dioxide (a greenhouse gas) by 1/3 and world emissions by 4%.
- *Potential for growth:* Development of just 10% of 10 of the windiest states could provide more than enough energy to displace emissions from coal-fired power plants.
- Cleaner air means healthier air, especially for people with respiratory disabilities.

***The Future Is Now: Harvest the Wind!***



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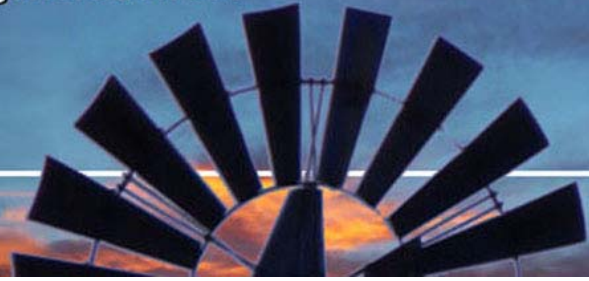
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**WindGen**



## Triad WindGen Advantages

- The proven technology of a legacy design
- A conventional look that is aesthetically pleasing and will be acceptable to you and your neighbors
- Rugged metal construction
- No guy-wires (along with their associated big footprint)
- Low start-up wind speed Many turbine manufacturers tout their power output at wind speeds that you will rarely experience. Far more important is its performance in the lower wind-speed ranges that are more common.
- Lower blade speeds mean *much* lower noise (one of the leading complaints of three-blade systems). Higher speed also means higher friction (and therefore higher wear and maintenance concerns). The lower rotation speed of the Triad WindGen means quieter & a more dependable/lower maintenance unit and one that is actually pleasing to live with (for you and your neighbors)!
- Plastic/fiberglass permanent magnet units must shut down to protect themselves from flying apart in higher winds. Not the all-steel WindGen! It produces power when the others have shut down.
- Thanks to its daily reliable power generation, a smaller battery bank can be utilized.
- Both on-grid and off-grid capable
- Made in the windy mid-west USA
- Designed by a team of professional engineers
- Backed by over 50 years of machine manufacturing experience
- In-house support personnel to answer any questions you may have
- 5 YEAR warranty



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**WindGen**



## Financial Incentives

How many things do we purchase that have the ability to literally pay for themselves? The Triad WindGen is one of them!

Even better, the Federal Government is encouraging wind power adoption with grants and loans that can reduce your "out of pocket" expense even further. These programs include:



- [USDA Rural Energy for America Program \(REAP\) - Grants](#) Max. Limit: 25% of project cost
- [USDA Rural Energy for America Program \(REAP\) - Loan Guarantees](#) Max. Limit: 50% of project cost
- [Personal Tax Credit: Residential Renewable Energy Tax Credit](#) Up to 30% on small wind (no cap)

In addition, State, Local and Utility incentives may be available!



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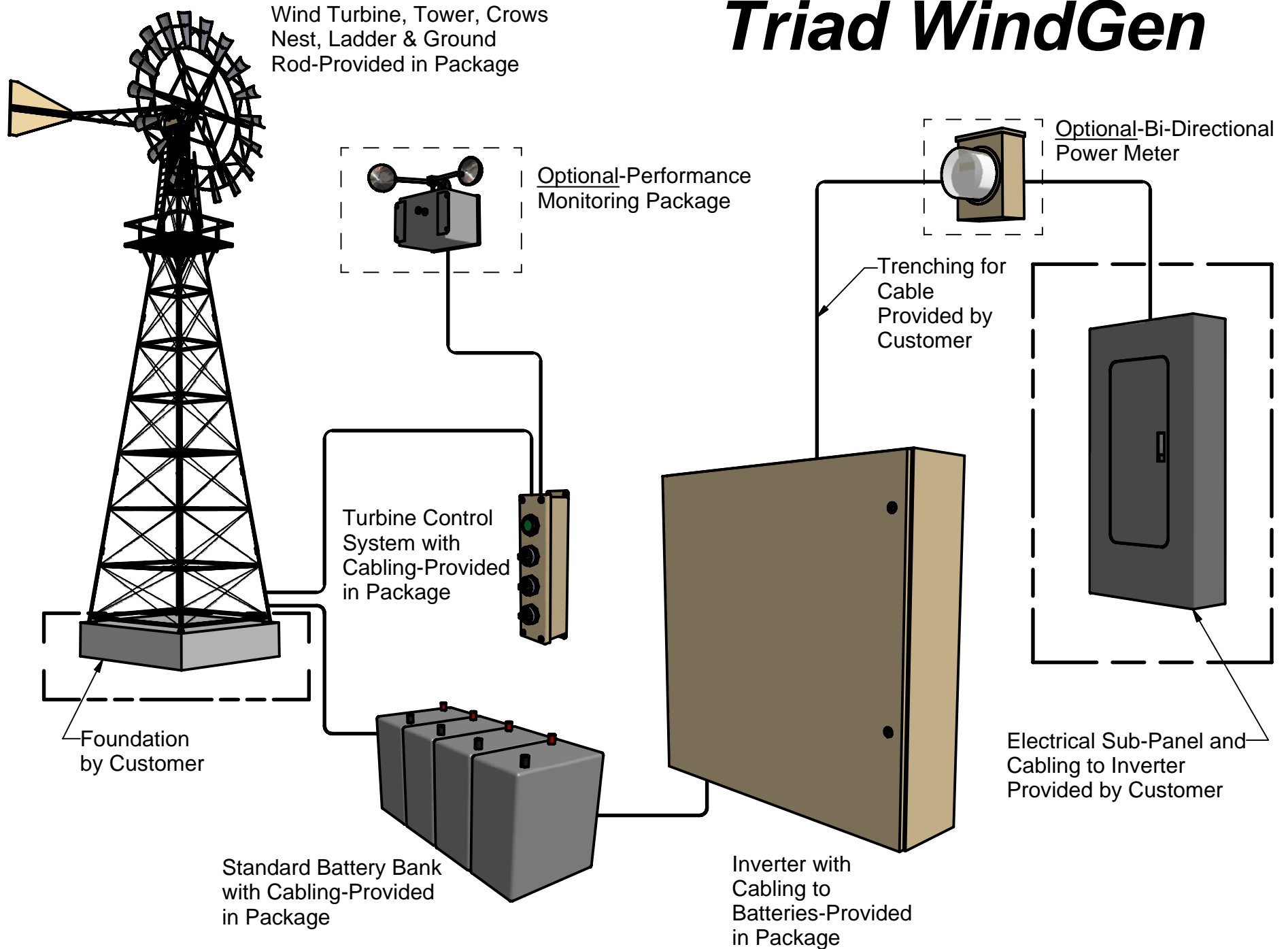
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# Triad WindGen



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# WindGen



## WIND POWER EVALUATION FORM

### Is a Wind Turbine right for you?

Before answering this question, you'll need to do a little homework! Answer the following questions to assess the feasibility of wind energy in your location.

1. Is there any restriction in your area or with your utility company that would prohibit you from erecting a wind turbine?
2. What was your energy usage last year? This value should be in kilowatt-hours. (AU)
3. What do you pay the utility company per kilowatt-hour? (PP)
4. What would your utility company pay you per kilowatt-hour should you sell back to the grid? (SBP)
5. What is your annual wind speed in your area? Check: <http://www.awea.org/faq/usresource.html>

Use the chart below to determine the average amount of power you should produce in a year, based on the wind speed in your area.

Wind Speed (m/s)	Wind Speed (mph)	Instantaneous Power Output (Watts)	Annual Power Output (kW-hr/yr)
1	2.24	0.00	0.00
2	4.47	18.45	161.62
3	6.71	55.36	484.95
4	8.95	125.82	1,102.18
5	11.18	840.58	7,363.48
6	13.42	1,501.90	13,156.64
7	15.66	2,384.97	20,892.34
8	17.90	3,560.07	31,186.21
9	20.13	5,068.93	44,403.83
10	22.37	6,953.26	60,910.56
11	24.61	9,254.79	81,071.96
12	26.84	12,015.24	105,253.50
13	29.08	14,389.15	126,048.95
14	31.32	14,811.77	129,751.11
15	33.55	15,164.04	132,836.99
16	35.79	15,516.31	135,922.88

### Do the Math!

Assuming there is nothing prohibiting you from erecting a wind turbine, it is simply a matter of crunching some numbers to add to your "Pros and Cons" list!

First, take the annual power output value and multiply it by 0.7. This should account for maintenance intervals, unexpected events, high wind attenuation, and just simply to be more conservative! This is your "Adjusted Annual Power Output" (AAPO).

If your Adjusted Annual Power Output is less than your annual power usage, simply multiply it by your cost per kilowatt hour to see how much money you could save per year.

$$AAPO \times PP = \text{Cost Savings}$$

If your Adjusted Annual Power Output is greater than your annual power usage, subtract your annual power usage from it and multiply the result by the "sell-back" price. You could receive that money, plus save your entire annual power bill!

$$(AAPO - AU) \times SBP = \text{Money Paid by Utility}$$

### More information?

Contact your local Triad WindGen dealer for more information. Call: 1-800-568-7423 ext 158 for a dealer near you or check out our website: <http://www.triadwindgen.com>.



**MISCELLANEOUS IRRIGATION**

**&**

**AGRICULTURAL PRODUCTS**

**FROM THE**

**TRIAD FAMILY OF COMPANIES**

**800-568-7423**



## The Triad “Dam Gate”

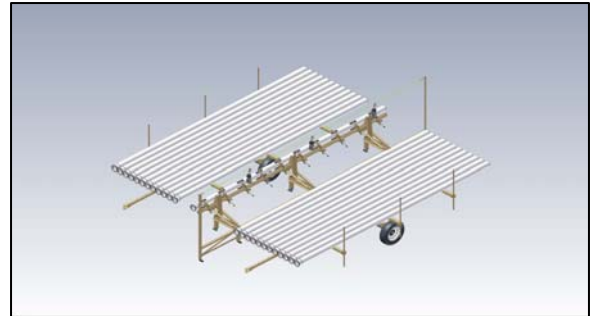
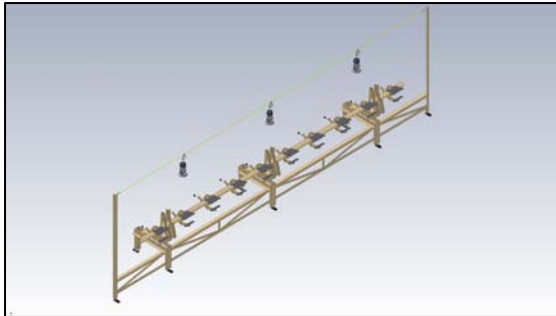
Triad’s DAM GATES are the only name in gated flood irrigation! The DAM GATE can be used with many different crops and provide an affordable solution to crop irrigation. Installation is quick and easy using the specially designed provided tool. Triad’s DAM GATES are manufactured to the highest standard to ensure maximum life. The Triad DAM GATE product line is produced and backed by over 30 years of manufacturing excellence and product development from Triad Fastener. Triad Fastener is ISO 9002 Certified and QS 9000 Registered company serving the irrigation industry with worldwide distribution.

Quick and Easy to Install! Designed for use with PVC and aluminum pipe.

Superior Service and longevity!

Triad’s DAM GATES virtually sell themselves due to the superior design and materials used when compared to the competition. Worldwide leader in flood irrigation!

Call (308) 384-1780 today for further information!



# TRIAD GATE HOLE ROUTER

- Heavy-duty table top to accommodate any length pipe up to 20'
- Top accommodates 6", 8" and 10" diameter pipe
- Manually loaded and unloaded
- Handle operated clamp
- Removable/replaceable gate template
- Uses standard hand router with guide plate follower
- Heavy-duty structural steel construction
- Painted Triad Tan
- (3) industrial routers
- (11) adjustable stations

## Options:

- De-burring package
- Spare bit package
- Loading & Un-Loading Carts
- Installation

For additional information call: 800-568-7423



## BullPoint Marker

By  
Triad Products Company

- \* Heavy duty non-slip buckles with teeth assure secure fit
- \* 5000 lb tested coarse nylon straps
- \* Rugged reinforced polyvinyl harness won't lose its shape when exposed to dirt, water, or other fluids
- \* Stainless steel ink reserve holds enough ink for 55 to 60 mountings, or 25 to 30 cows
- \* Buckles allow easy adjustment on any bull
- \* Designed to fit under the chin of the bull
- \* The spring mounted steel ball marks cows in heat with specially formulated non-toxic ink that adheres to the ball and resists drying
- \* The BullPoint Marker comes in both 18 gauge and 22 gauge



**888-253-4227**



# SMV Signs

Cindi Salazar  
1801 West B St.  
Hastings, NE 68901  
Phone: 1-888-462-1937  
Fax: 1-402-462-2246  
[cindis@triadproducts.com](mailto:cindis@triadproducts.com)

All Triad Slow Moving Vehicle signs are made of the highest quality materials available.  
Certified to meet or exceed ASABE S276.6 Standards



PM10-1600-2A

Triad SMV with Plastic Backing  
Part # PM10-1600-2A -12pk. \$93.00  
Volume discounts available

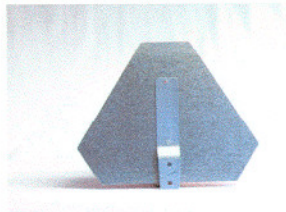


Triad plastic back signs are made of injected molded plastic. Mounting holes are molded into the backing for a universal fit. Certified to meet ASABE S276.6 standards



PM10-1105-2A

Triad's SMV with Metal Backing  
Part # PM10-1105-2A-12pk. \$81.48  
Volume discounts available

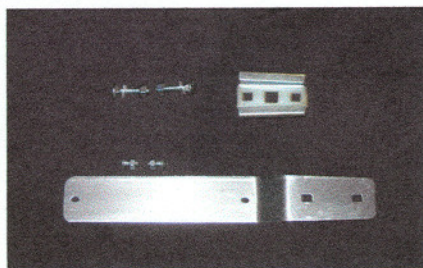


Triad metal backed signs are made of rust resistant metal backing. Mounting holes are pre-punched for easy installation. Certified to meet ASABE S276.6 standards.



Triad SMV Decal  
PM10-1303-2A-12pk. \$69.72  
Volume discounts available

Triad SMV Decals are designed with cold weather adhesive for direct application on equipment. Certified to meet ASABE S276.6 standards.

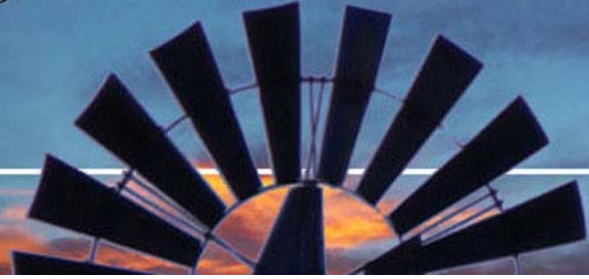


Mounting Sockets and Spades with Hardware  
Socket with Hardware: PM11-2201-12pk. \$15.44  
Spade with Hardware: PM11-2409-12pk. \$13.80  
Volume discounts available  
Triad Sockets and Spades comes with all necessary hardware to securely attach a Triad SMV sign to your equipment.

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**WindGen**



## Useful web-sites:

- \* [www.triadwindgen.com](http://www.triadwindgen.com)
- \* [www.windpoweringamerica.gov](http://www.windpoweringamerica.gov)
- \* [www.dsireusa.org](http://www.dsireusa.org)
- \* [www.awea.org](http://www.awea.org)
- \* [www.nrel.gov](http://www.nrel.gov)
- \* [www.damgates.com](http://www.damgates.com)
- \* [www.triadproducts.com](http://www.triadproducts.com)
- \* [www.triadruvo.com](http://www.triadruvo.com)



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