

AGRICULTURE

ENVIRONMENTAL

GREEN INDUSTRY

40 YEARS IN THE FIELD

FIELD-TESTED
FIELD-PROVEN

We're planning for the next 40
— looking for new ways to
save water, save energy and
do a better job of irrigating.

MORE INSIDE.



Nelson's Rotator® Sprinkler Technology celebrates 25+ years – SAVING WATER, SAVING ENERGY AND DOING A BETTER JOB OF IRRIGATING.

the evolution continues



NEW! Cap and Body for all 2000 Series Rotator® Sprinklers

Tougher
Stronger
More Durable
Longer Life

Engineered to handle all the rigors of portable pipe systems including:

- Shifting pipe with Rotator® Sprinklers in the field
- Transporting pipe with Rotator® Sprinklers on trailers
- Stacking Pipe with Rotator® Sprinklers in storage yards

The newly designed cap and body protects critical Rotator® components from damage caused by:

- Workers pruning, harvesting, or thinning crops
- Animals
- Farm implements

New stronger ½" and ¾" MNPT acme adapters

- Tighter fit to the sprinkler body
- Resistant to separation when subjected to vibration during transport

NO CHANGES IN MODELS – SAME GREAT PERFORMANCE

All 2000 Series Rotator® Sprinklers will continue to have the same plate and nozzle options. In addition, they will also have the same flow and distance of throw performance as well as high uniformity.

FULLY INTERCHANGEABLE WITH ALL EXISTING COMPONENTS

All 2000 Series Rotator® Sprinklers will be shipped with the new cap and body including the: R2000WF, R2000LP, R2000CW, PC-R2000WF, and R2000 Rotator® Sprinklers.





SEE THE NEW STYLE 2000 SERIES ROTATOR® IN ACTION

Download a free QR Code Reader
on your smart phone and scan this
code to watch video or go to:
youtube.com/pivotirrigation



Protected Motor

NEW! Impact-
Resistant Cap



Built-in Uniformity

NEW! Robust
Body Design



Same Great
Performance



Tighter Fitting
Adapter

THE IDEAL SPRINKLER TECHNOLOGY FOR THE FUTURE

Nelson engineers have made an impressive number of advancements to the original Rotator® in the 25 years since its inception. Expansion of the product across all segments of the industry has led to water savings and improved irrigation worldwide. Nelson's numerous patents and pending patents provide benefits such as:

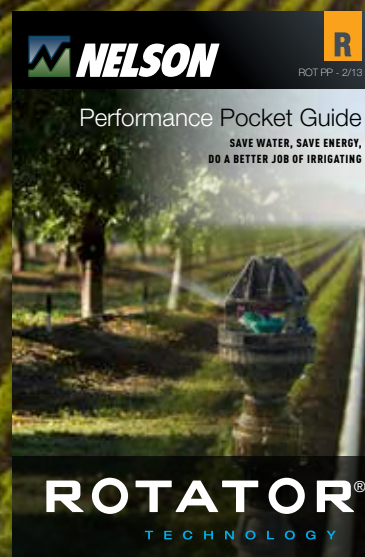
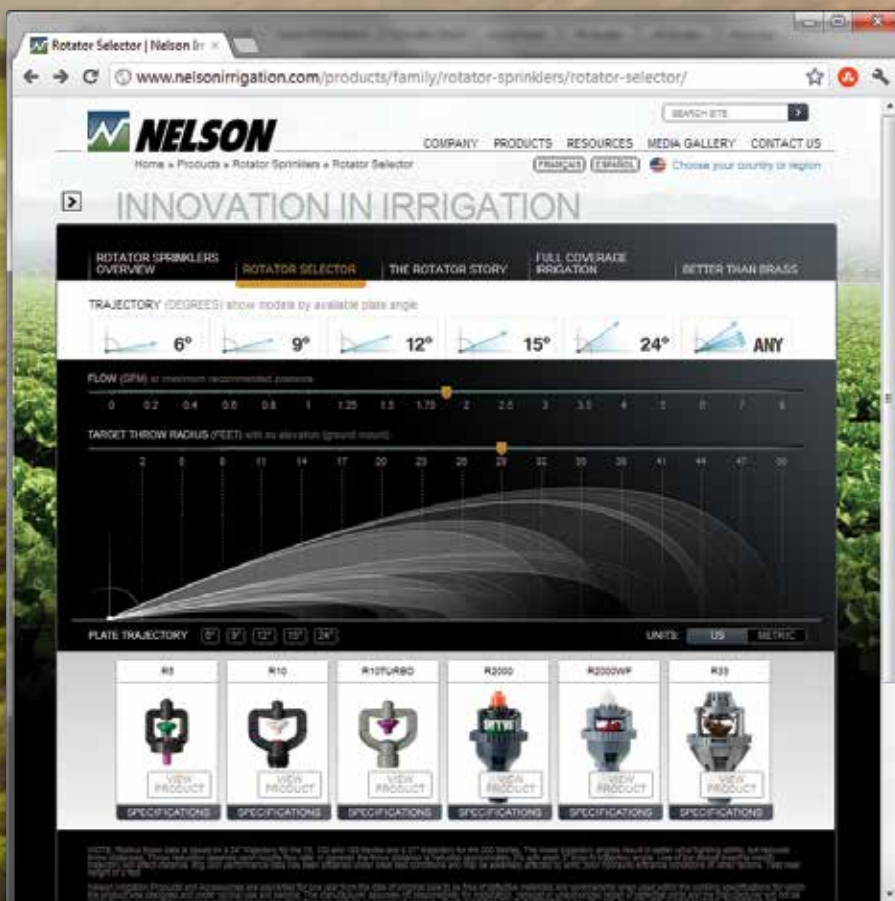
- Improved real-world uniformity.
- Greater throw distance.
- Lower application rates.
- No riser vibration.
- No splash down.
- Targeted watering.
- Operation in freezing conditions.
- Quick-change nozzle systems.
- Modularity.
- And more to come!



geocropical®

Rotator® Technology

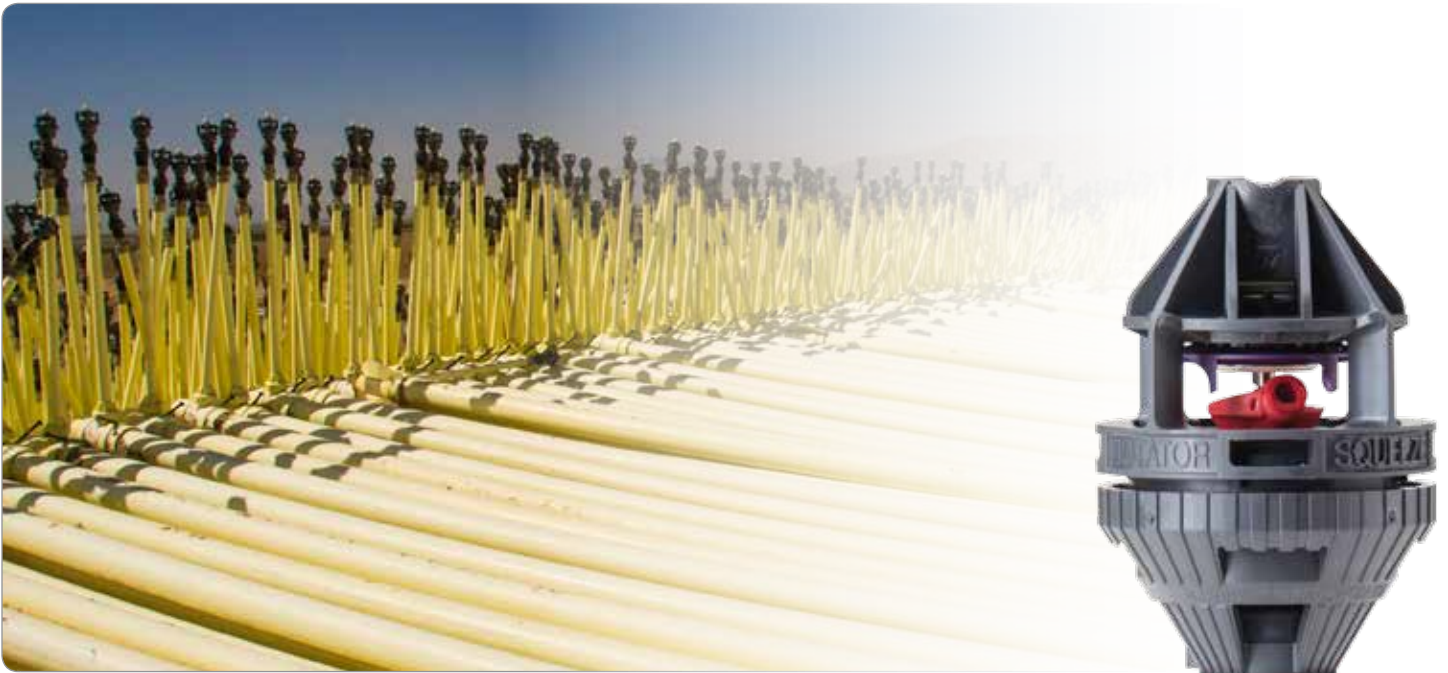
UNIFORMITY REIGNS



It's great to have options — but it's even better to know how to sort through these options. The **Rotator® Selector Tool** at nelsonirrigation.com can help you find the right Rotator® Sprinkler based on desired trajectory, flow and throw. For advanced users — our **Overlap™** software can help determine the best spacings for maximum uniformity numbers. The new on-line version will be available soon! A whole new family of literature is in the works as well.



What's the big deal about a drain check?



There's a good reason that some of the best farmers in the world — with the most on the line — use Rotator Technology® in conjunction with Nelson's Mini Regulator Drain Check or Drain Check (only). It's vitally important that these guys get the most out of their operation. Wash out from drain down at start up and shut down is not acceptable. Now, with stricter water quality standards, they must also be accountable for every drop of water on their operation and make sure nothing washes off the field into nearby waterways. With low and no pressure, the patented MRDC and MDC are closed to draining — problem solved. Once pressurized the MRDC regulates pressure ensuring even flow across the field.



New 2000 Series Stream Splitter

The new style R2000 has the option of a new stream splitter. Protect tree trunks from stream action when irrigating in orchard applications.



Market Focus

PROVEN UP-TOP APPLICATIONS FOR CENTER PIVOTS

Nelson Rotator® Sprinkler Technology mounted on top of center pivots in strong corn-producing areas has generated excellent results in recent years. Made possible by specifically engineered and finely-tuned rotating plates, the R3000 Rotator can operate down to 15 psi (1.0 bar) with high uniformity and impressive wind resistance. At 10 psi (0.7 bar), the A3000 Accelerator with the new Navy Plate offers low pressure advantages over sprayheads on top of the pipe. Evaluation of these products on top of the pivot pipe in Nebraska has shown additional water losses to be minimal and overall irrigation performance to be excellent.



A letter from **Dr. William Kranz**, Associate Professor of Biological Systems Engineering, University of Nebraska, Haskell Ag Laboratory, Concord, NE
wkranz1@unl.edu

My position with the University of Nebraska is to conduct research and deliver education opportunities aimed at producing more grain with less water. In that role I am conducting research on the impact of different water management schemes on corn grain yield. I also have spent considerable effort to develop recommendations for selecting sprinkler packages for center pivots based on soils, slopes, locations and available water supplies.

TALL CORN HYBRIDS IMPACT WATER DISTRIBUTION UNIFORMITY

The field work we have conducted in the High Plains area of Nebraska indicates that low pressure spray sprinklers mounted at truss rod height or closer to the ground have experienced a narrowing of the sprinkler's water application pattern due to the effect of corn leaves. A narrower pattern results in increased water application rates and potentially a reduction in water application uniformity. If the center pivot is used to apply fertilizer and/or pesticides, the non-uniform water application caused by sprinklers operating in-canopy can greatly impact grain yields. **If irrigating corn is part of a cropping rotation, one good option is to place the sprinklers on top of the pipeline.** Additional water losses are generally less than 2% for our conditions and each crop will be irrigated using a full sprinkler pattern which will limit the potential for runoff and ensure that both water and agrichemicals are applied uniformly.

O3000 ORBITOR

New "Finer Droplet" Purple Plate



**A3000
ACCELERATOR
NAVY PLATE**

6-15 PSI (0.4-1.0 BAR)



**R3000
ROTATOR®
WHITE PLATE**

15-30 PSI (1.0-2.1 BAR)



The Orbitor's strutless design provides outstanding uniformity and optimal droplets at low pressure (10-20 psi / 0.7-1.4 bar).

**gentle
drops**



Nelson is proud to announce the limited release of a new finer droplet plate for the O3000 Orbitor. The new (purple) plate delivers a consistently smaller droplet — ideal for germination of crops and soils requiring finer droplets.

Pressure Regulation

Field-proven in tough environments, Nelson pressure regulators offer precision accuracy and proper sprinkler operation over the life of a sprinkler package. A heavy-duty design ensures a long wear life. Nelson's patented single strut inlet seat is standard in the Universal Flo and Hi Flo models, minimizing plugging compared to other designs.



- **PATENTED SINGLE STRUT SEAT** design minimizes hang up of debris.
- Patented dampening system handles severe pressure surges and water hammer.
- Wide flow range from pivot point to the last sprinkler on the pivot.
- High degree of accuracy.
- 100% factory tested after assembly.
- Chemical resistant materials.



End of System Solutions

OPTIMAL PERFORMANCE & RELIABILITY



NEW! R55A

LOW PRESSURE
END OF SYSTEM
SPRINKLER

Limited
Release



40-50'

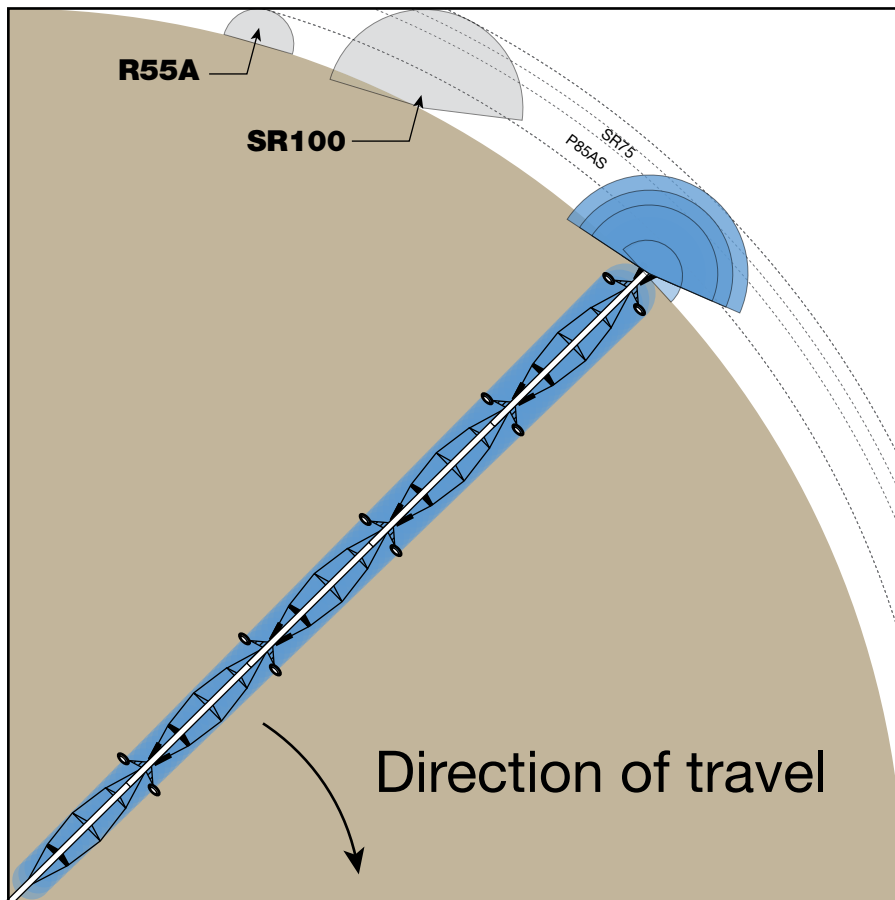
(12-15 m) Radius
@ 15-30 PSI
(1.0-2.1 bar)

Options for Short & Long Radius of Throw

Today, irrigating valuable land in the corners of pivots provides quick payback. Nelson's engineers are providing innovations to make this even easier and with improved performance.

NELSON END OF SYSTEM SOLUTIONS

← 3000 SERIES PACKAGE	R55A*	P85AS	SR75	SR100
	40-50' (12-15 m) @ 15-30 PSI (1.0-2.1 bar)	50-70' (15-21 m) @ 30-60 PSI (2.1-4.2 bar)	70-90' (21-28 m) @ 25-80 PSI (1.7-5.5 bar)	90-120' (28-37 m) @ 40-80 PSI (2.8-5.5 bar)



TYPICAL ADDED ACREAGE ON A 1/4 MILE PIVOT



R55A

Contact Nelson Factory for Detailed Mounting Specifications & Performance



P85AS

8-11 acres (3.2-4.5 ha) irrigating full circle
6-7 acres (2.4-2.8 ha) corners only



SR75 BIG GUN®

11-15 acres (4.5-6.1 ha) irrigating full circle
7-9 acres (2.8-3.6 ha) corners only



SR100 BIG GUN®

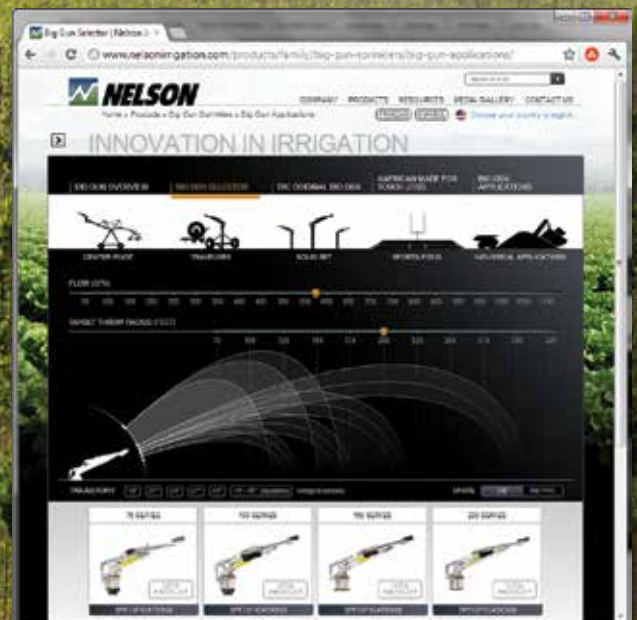
15-20 acres (6.1-8.1 ha) irrigating full circle
9-10 acres (3.6-4.1 ha) corners only

*Preliminary data.

The Original Big Gun®

A CLASSIC NEVER GOES OUT OF STYLE

As irrigation and environmental needs evolve, the locations and applications for the traditional Big Gun® have dramatically changed. Irrigators and dust control experts have relied on the heavy-duty durability of the Nelson Big Gun® for over 40 years now. The SR Series, introduced 30 years ago, perfected the slow reverse mechanism on part-circle models. There are continuous improvements on existing models, while we also explore new technologies to accommodate the ever-changing needs of high-volume irrigation.



MANUFACTURING

Continuous Methods Improvements



LEAN & MEAN

Every minute of every work day the Nelson team works on ways to simply make things better. A change that happens on a machine on the shop floor affects things at all levels. Assembly, shipping, inventory, etc. For instance — in an effort to streamline the production of the 3000 Series cap/plate/body assembly — we can now offer our customers this enhanced option at a very economic price.

In the same vein — we incorporated an add-on to our 3TN Nozzle machine — which enables us to provide these nozzles in convenient bags of 100.



CB Model Big Gun® Sprinklers Discontinued

After several years of offering a lighter-duty lower bearing option (CB) in the 75 & 100 Series Big Gun®, Nelson is discontinuing this version. Even though the CB offered superior performance and reliability for many applications, we've found the vast majority of Nelson dealers prefer the precision manufactured and engineered Heavy Duty (HD) lower bearing assembly for their valued customers. The lifetime sealed and lubricated twin ball bearing system in the HD lower unit is simply second to none.



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— 40 YEARS —



Customer Service: (left to right) Jeff Lyford, Donna Nelson, Michelle Block, Leslie Fletcher, Cathy Ungerecht.

Thank you for giving us the opportunity to take your order, explain our products, join in on a field call — that’s what it’s all about — the people and the process. And, helping to find ways to improve upon the state-of-the-art of irrigated agriculture.

