

NELSON BIG GUN[®]

FEATURES & BENEFITS

The Nelson Big Guns are used all around the world for the irrigation of crops, spreading of municipal, animal or food processing waste, irrigating sports fields as well as dust suppression of cattle feed lots, coal piles and industrial sites. They are also used in the mining industry for leaching minerals with very toxic solutions. Here is a list of features and benefits that have been developed from over two decades of experience in a very wide range of applications.

FEATURES

The **Nelson** name.

The **Leader**

The most **Reliable** Big Gun on the market.

BENEFITS

Nelson Irrigation Corporation has been manufacturing Big Guns for 30 years. The Nelson name is synonymous with **the best quality available**.

Nelson Irrigation is the leading manufacturer of Big Guns. They are used extensively all around the world. **The infrastructure is in place** for information sales, service and specialty applications.

Nothing comes close to the reliability of a Nelson Big Gun. **The life of a Nelson Big Gun is commonly 10,000 to 15,000 hours** and they consistently last longer than other brands in all applications. The sealed ball bearings in the Nelson Big Gun have proven themselves in dust, waste manure, industrial waste and of course irrigation water. Other brands have no ball bearings or they have ball bearings that are not sealed. These options will never be able to match the life expectancy of a Nelson Big Gun.

The greatest range of
Options.

If you need it we have it. The Nelson Big Guns come with more options than any other brand.

- Full circle or part circle models.
- Three sizes, the 100, 150 and 200 series.
- Nozzles from 0.5" to 1.9" with flow rates from 50 gpm to 1200 gpm.
- Three styles of nozzles, the taper bore for maximum performance, a ring nozzle set for economic nozzle size changes, and a taper ring nozzle that combines the benefits of both.
- Trajectories of 18°, 21°, 24°, 27° and 43°.
- The standard construction material is aluminum. Anodized or anodized and polyester powder coated options are available for increased resistance to corrosion in industrial applications.
- A 316 stainless steel Nelson Big Gun is available for very corrosive applications.
- An integral Nelson Big Gun and Nelson Control Valve unit is available. This single unit includes the Big Gun and a control valve for automation and or pressure regulation.
- A Nozzle Valve Big Gun is available and is particularly suited to the pivot end Gun applications. This Big Gun eliminates valve friction loss and valve plugging problems.
- Quick Coupler valve options are available. This feature enables a user to shift the Big Gun to another hydrant without shutting the whole system down.
- Counter balance kits are available for operation on steep slopes.
- Kits are available to allow the SR200 to operate with various slurry consistencies and densities.
- A two speed drive vane for the SR150 is available.

No Adjustments Needed.

The Nelson Big Gun requires no adjustments. It is ready to go right out of the box. The patented drive vane automatically compensates over a wide range of pressures and flows.

Heavy Duty Lower Bearing Unit.

The heavy duty lower bearing unit is the key to the long life of the Nelson Big Guns. Two heavy duty sealed ball bearings take the force of the thrust energy and keep the seals aligned. The ball bearings provide the best wear protection in the lower unit so the seals remain aligned for a much longer time. Other types of bearing are more susceptible to wear and consequently the seals are damaged, accelerating the wear.

9 Sealed Ball Bearings

The Nelson SR Big Gun series has 9 ball bearings - all sealed and lifetime lubricated for long wear life and reliability.

Sheer Simplicity

The sheer simplicity of the F100, F150, and F200 is a feature in itself. These Big Guns are great work horses.

Excellent drive action.

The rotation of the Nelson Big Gun is **slow and steady**, even on sloping ground. This is made possible by the patented drive spoon and the brake on the lower unit.

Same forward and reverse speeds.

The SR models of the Big Gun have the same slow forward and reverse speeds. This increases the stability of the Big Gun, improves uniformity of water application and takes away the extreme danger of fast reverse brands.

Consistent Brake Load

The brake provides a consistent resistance to rotation over the life of the Big Gun. This is made possible by a wear resistant brake surface and springs that ensure the brake produces a constant resistance regardless of brake wear.

Aluminum Taper Bore Nozzles.

The aluminum taper bore nozzles are very resistant to wear. Actual wear has been measured at only 0.001-0.002 inches after thousands of hours in sandy water. The low wear rate is due to the low contraction angle of the nozzle and the quality control in the manufacturing process. No special tools are required to change a nozzle.

Spreader nozzle.

A second smaller nozzle can be fitted as an option to the Nelson Big Guns. This is often used to **improve uniformity** where the Big Guns are spaced farther apart or when low pressure is used.

Easy Arc Setting.

The SR Big Gun models have hand adjustable arc controls. These controls have a flexi-handle for easy adjustment. The arc stops are positive and will not creep like wire clamps. No tools are required.

Precise Arc Control.

The watering arc can be set to within 1° using the hand controls. The top of the brake surface on the 100 series Big Guns has notches every 10°. This makes it very easy to set the Nelson Big Gun to a required arc, e.g. 270°.

Service and Support

Nelson Irrigation offers excellent technical manuals and training videos for the repair of the Nelson Big Guns. We have highly skilled engineering and marketing staff that can help you with specialized applications. Spare parts are consistent over many years so your inventory of parts can be kept to a minimum. Call us with your questions.