**ST-90 Written Specifications**

**Part 1 – General**

1.1The ST-90 is a long-distance rotary gear-driven sprinkler designed for Synthetic Turf sports field appications. It features a jar-top body cap that allows for quick access to the filter screen with no extra pieces, parts, or tools required.

**Part 2 – Parts and Material**

2.1The ST-90 shall be available in the following versions: 3" (8 cm) pop-up.

1. The sprinkler shall be constructed from corrosion- and impact-resistant ABS plastic.
2. The sprinkler shall have a ratcheting, ABS plastic riser.
3. The sprinkler shall be equipped with a durable, stainless steel riser spring.
4. The sprinkler shall be available with 2 nozzle choices in flow rates from 74.5 to 92.0 GPM (6.9 to 20.9 m3/hr; 282.0 to 348 l/min).
5. The arc of the sprinkler shall be adjustable from 40° to 360°.
6. The sprinkler shall be equipped with through-the-top arc adjustment.
7. The sprinkler shall be equipped with a QuickCheck™ arc mechanism.
8. The sprinkler shall be equipped with a factory-installed green rubber cover.
9. The sprinkler shall be available with a user-installed rubber cover kit.
10. All secondary nozzles shall come with blocked standard from the factory.

2.2. Rotor dimensions

 A. ST-90

* + - Pop-up height: 3" (8 cm)
		- Overall height: 11" (28 cm)
		- Exposed diameter: 3½" (9 cm)
		- Inlet size: 1½" (40 mm) female NPT

2.3 Warranty

 A. The sprinkler shall carry a five-year exchange warranty.

**Part 3 – Function and Operation**

3.1 Recommended pressure range: 100 to 120 PSI (6.9 to 8.3 bar; 690 to 830 kPa)

 A. Operating pressure range: 100 to 120 PSI (6.9 to 8.3 bar; 690 to 830 kPa)

3.2Radius: 103' to 120' (31.4 to 36.6 m)

3.3 Flow rate: 74.5 to 92.0 GPM (6.9 to 20.9 m3/hr; 282 to 348 l/min)

3.4 Precipitation rate: 1.25 in/hr (35 mm/hr) approximately

3.5 Nozzle trajectory: Standard: 22.5° approximately,