# **BirdSpring Specifications**

# **MR-MANUFACTURER**

Birdzoff manufactures BirdSpring parts from stainless steel.

# **PR-PRODUCT PRESENTATION**

BirdSpring bird deterrent system is effective against medium and large birds including Crows, California Condors, Eagles, Gulls, Hawks, Osprey, Vultures, and Raptors to deter them from perching and roosting on railings, parapets, walls, ledges, pole tops, light fixtures/arms and flat surfaces.

Common BirdSpring installation locations include offshore oil and gas rigs, ships, marine equipment and facilities, and telecommunications infrastructure.

#### **Many Options and Configurations**

BirdSpring has a variety of components to provide a solution to most problem areas.

The system has three attachment variations: hose clamp, flat base, and magnet base. The hose clamp is ideal for railings, pipes, and angle iron. The flat round base is ideal for any flat surface and has two attachment variations: adhesive or holes (use screws or nails). Holes must be special ordered. The magnet base has a chrome covered steel top, a stainless steel bottom and is ideal for flat metal surfaces.

The springs are made with 316 stainless steel. Each spring has a flat end designed to maintain an upright profile when secured on any surface. Springs have three sections of tight coils: the bottom can be located by the flat end of the spring and is where the attachment is connected.

316 stainless steel wire runs through the springs.

A ground clip can be added to hose clamp attachments for electrostatic discharge (ESD) for rig safety.

## **UA-Uses**, Applications

BirdSpring is a simple perch deterrent that can be attached to railings, parapets, walls, ledges, pole tops, light fixtures and arms and flat surfaces to exclude medium and large birds. BirdSpring creates both a visual and physical barrier to keep birds from landing on exposed ledges and other surfaces. The visual appearance and physical instability of the combined flexible springs and connecting wires alerts medium and large birds of an unstable perch that prevents them from safely balancing on the system. BirdSpring is not recommended for deterring pigeons and smaller birds.

## **AI-Assembly, Installation**

Pre-assembly of attachments and springs is recommended. Hose clamp: simply locate the flat end of the spring, open the hose clamp, and insert the hose clamp band one inch away from the worm gear and at least two coils above the bottom. Flat base and magnet base: locate flat end of spring, place flat end of spring over bolt, insert large washer, small washer, lock washer, and capture with the nut.

To install wires, insert installation tool into spring and push first wire into the middle section of tight coils until wire meets installation tool leaving two inches of wire past the spring. Repeat this action on the top section of tight coils. Once installed on the first spring, bring both wires over to the second spring, insert installation tool, install the first wire into the middle coils and second wire into the top coils. When connecting two wires in the same section of tight coils, insert each wire in a separate tight coils. Repeat until affected area is covered.

Installation of the attachments varies. The hose clamps attach on railings, pipes, and angle iron with a nut driver. To dissipate ESD on static sensitive locations, attach a ground clip with a ground wire.

The flat base can be attached with high-quality epoxy or adhesive. Flat bases with predrilled holes can be attached with nails in wood, or screws in wood or metal. Before installing bases with epoxy adhesive, abrade and clean the base and the designated surface area well to ensure maximum attachment benefits.

Before installing the magnet base, clean the designated surface area and simply placing the base on the designated area.

Creative shims can be added for additional attachment options for exclusion on unique platforms.

The springs and wires are easy to remove and reinstall, allowing for maintenance or installation of new equipment. Remove retaining clip, then connecting wires from one spring at a time. To remove springs with a hose clamp attachment, use a 5/16" nut driver to open the hose clamp. To remove springs with flat base or magnet base attachments, unscrew nut, remove washers, and lift spring from bolt. Wires can be stored in installation kit container or tied together with hose clamps, zip ties, or rubber bands. Once maintenance or new installation is complete, remove hose clamp/cable tie and place springs back in bases, carefully unfolding to limit tangling. Reinstall connecting wires and retainer clips to secure system.

#### **ST-Spacing Tips**

The BirdSpring should be placed no more 5' between springs. Chalk lines are helpful for maintaining a linear installation. Determining length between BirdSpring bases on curved areas must be done on site to identify the most effective distance between springs. BirdSpring base attachments should be installed no more than 2" from the front edge of a platform. When installing multiple rows, each additional row should sit 10" from adjacent row and staggered  $2\frac{1}{2}$ ' distance-centered from the nearest post.

When installing with epoxy or adhesive, it is important that



the surface area is clean, dry and solid. For an additional level of protection and stability, add screws in the designated holes. Tapcon screws may be used when installing on cement surfaces.

### **ME-Maintenance**

BirdSpring is virtually maintenance free and should be checked every 3 months.

# **TS-Technical Support**

Birdzoff provides free consultations for installation and maintenance questions. Call 866-247-3693 with inquiries.

#### Guarantee

BirdSpring is made with marine-grade 316 stainless steel. BirdSpring comes with a 5-year guarantee for manufacturing defects.

