

## LASER TECHNOLOGY FOR BIRD DISPERSAL

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**Abstract** Industrial sites are in conflict with nature if it comes to birds. The roofs and ledges of factories and other buildings are an ideal habitat for birds to breed and forage. These places are often without human presence, making them an optimal place for birds to perch. The presence of birds and guano at industrial sites is a globally recognized problem that can seriously jeopardize safe working conditions and prove costly. Inspired by wildlife control programs at airports, we developed a new integrated approach that enables performance-based bird control. Results are significantly better than conventional methods. Many bird deterring products only focus on dealing with the symptoms of bird presence. They leave an important issue unaddressed: how can we integrate industrial activities into the natural environment in a sustainable way? Bird Control Group developed an integrated approach consisting of 3 main elements: 1. Continuous monitoring and analyzing of bird data using optical camera technology. 2. Avoiding birds entering the area by influencing the habitat and deploy automated lasers for bird repelling. 3. Direct intervention by wildlife officers. We furthermore developed the tools needed to put this approach into practice. The laser equipment is based on a scientific new technology: an automatic laser beam that makes use of the fear reflex of birds for green light. Built-in safety methods make sure that the laser can never dazzle aircraft, vehicles or the general public. The birds will stop seeing the industrial area as a safe haven since the system keeps firing its animal friendly laser ‘attacks’. Bird Control Group has introduced a laser system that repels birds automatically from so-called ‘bird hotspots’. The principle of repelling birds with a laser beam is inspired by nature. Birds perceive the approaching laser beam as a physical object. It appeals to the survival instinct, causing the birds to fly away. The continuous presence of the moving laser beam keeps areas free of birds, 24 hours a day. Numerous users in more than 70 countries make use of the technology. Some of these clients are leading international companies. Leading pest control companies around the world implement the approach at their clients. In a business case of a well-known tire warehouse, 40,000 square meter of roof is protected from birds with one laser system. The investment of about 10,000 Euro saves the company tens of thousands of Euro each year.