APLYLED

arianna light looking forward

IL MITO DELLA LUCE

1.
ARIANNA

2.
PATENTS

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CONTINUAL IMPROVEMENT

THE LEGEND OF LIGHT

Arianna is the Italian name for Ariadne, the woman from Greek mythology whose ball of thread and wits helped Theseus negotiate the labyrinth, face the Minotaur and find his way back out.
Arianna is the woman loved by Dionysus, the god who unleashes the forces of nature.
Arianna is the women whose lasting legacy is a crown of light, a sparkling constellation created when her crown was thrown into the heavens.
The Greek legend of Arianna tells of how her intelligence and technique overcome the darkness, how a love of beauty makes the world a better place and how her light illuminates the night sky.
We have drawn inspiration from this legend - key to the western culture of technology - to tell our own story: one of daily commitment to research and innovation in our quest to improve the quality of life, protect the environment and save energy.
The legend was also the inspiration behind our business mission statement: to light up the dark with beauty.

7. **SPORT LIGHTING**

6. **PROFESSIONAL LIGHTING**

5. **TUNNEL LIGHTING**

4. **STREET LIGHTING**

APLYLED - ARIANNA

Arianna – specializing in the design and manufacture of LED lighting systems – was established in 2009 with the idea of bringing together two seemingly distant worlds, namely electronics and astronomy: innovation and environmental protection, in short sustainable technology – these are the cornerstone values of the research we do here at Arianna.
Our fittings illuminate roads, roundabouts, cycle paths, parks and tunnels and bring light into manufacturing facilities, supermarkets, car parks, warehouses, large shopping areas and sports fields. This is just a starting point since our sights are set on new market segments and broader horizons.

MISSION

Arianna designs innovative, cutting-edge LED lighting systems that ensure the right light while bringing high energy savings.
Whether for town squares, streets or tunnels, gymnasiums, swimming pools, warehouses or stores, our goal is to find the perfect balance between the best possible lighting and maximum energy savings.
The objective we have identified is to keep shifting this balance higher and higher, applying technological innovation and research to provide better lighting and increase savings. A strategy involving innovation and improvement of both our processes and the end result.
Our lighting systems use optics with registered international patents that guarantee final product quality and confirm technological innovation as our modus operandi.
Light Looking Forward is how we summarise our mission. Light that never stops, because we always want more and never give in to compromise. Light looking forward to a future of new needs and new opportunities.
Light that envisages tomorrow.

VALUES

EYE

The Arianna light project focuses on visual comfort because it stems from research into the needs of man. The eye that observes the world, that seeks security and that focuses its attention on objects is the real measure of the light experience.

ENVIRONMENT

We have chosen to adopt a strict environmental policy that revolves around saving energy. Our patents are the expression of our decision to optimize every fragment of energy, capturing it and multiplying it, in an interplay of mirrors focused on helping the landscape evolve without violating it. Arianna's smart technology rationalizes the light fittings and minimizes light pollution, lighting the ground uniformly while stopping light being wasted skywards.

INTEGRITY AND RELIABILITY

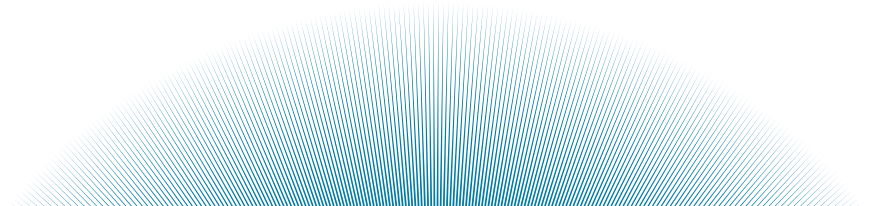
Our work ethic is founded on honesty and transparency in our dealings with clients and suppliers like, delivering on our promise of clarity of information and verifiability of each and every document. Because there's no greater motivation for the work group than producing quality designs, committed as we are to improving lighting.

INNOVATION

Here at Arianna, we tackle each challenge with an innovative approach. Our products and applications are the result of in-depth investigation and research, they are the culmination of a design process aimed at honing the shape of the light fitting so that it sits well in an urban space, providing it with a new identity. Energy efficiency and cost effectiveness remain primary concerns throughout the process.

DIVERSITY

Diversity means synergy and contamination with other sectors. It's what encourages us to push the boundaries in our work because in order to innovate, you need to keep a keen eye on what's going on outside your own box, ready to soak up input from other worlds.

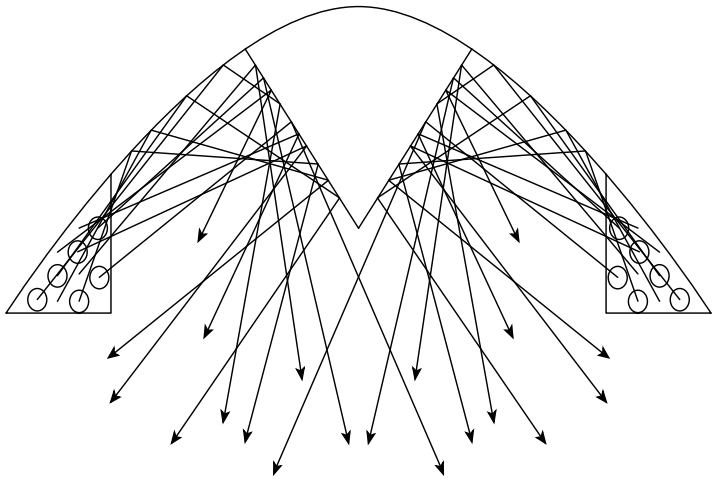


BREVETTI/ *PATENTS*

Taking our cue from the crossover between lighting and astronomy, we've developed a family of internationally registered patents that, for the first time, applies the optical principle of total reflection to LED lighting. The light emissions from each individual LED are directed towards an internal reflector that casts light uniformly down towards the ground. Evolution in this technological direction translates into improved luminaire performance and has positive effects on light quality and visual comfort.
We've taken the principle of total reflection and applied it to systems covered by three patents designed to provide targeted solutions for different lighting needs.

INTERNATIONAL PATENTS
The total reflection patent, registered in 2008 and internationally recognised, is a technological innovation that borrows from astronomy. The system involves the use of a reflector inside the luminaire, whose purpose is collect the rays of LED light and focus them onto the ground uniformly. The LEDs are thus concealed from view, significantly reducing glare. Visual comfort and energy saving are the tangible consequences of the total reflection system.
We've taken the principle of total reflection and applied it to systems covered by three patents designed to provide targeted solutions for different lighting needs.

This system has also been recognised in the United States and China

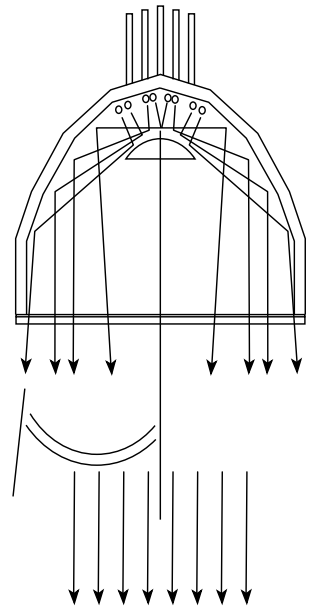


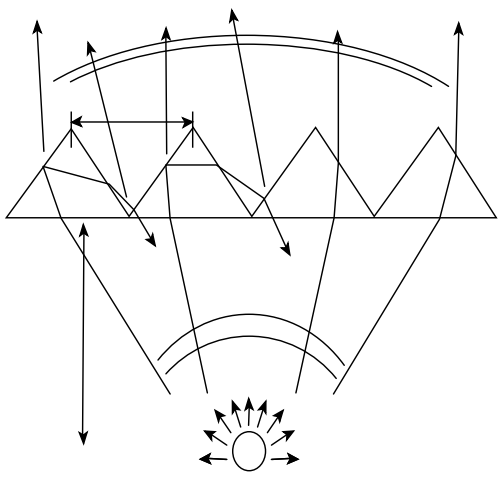
DEFLECTIVE

The DEFLECTIVE system comprises a reflector that captures and blends the light emission through the initial optical assembly and then uses a second assembly to cast it uniformly. Applied in its standard form above all for street lighting, it delivers visual comfort and uniform lighting, without creating dark spots or glare. This system has also been recognised in the United States and China.

The BACKREFLECTIVE system tailors the optical principle of Schmidt-Cassegrain telescopes in order to collimate the rays of light for long-range lighting. With its beam of intense light, it finds application in floodlighting towers.

BACKREFLECTIVE





LENSFLECTIVE

The LENSFLECTIVE system uses one optical assembly to capture the LED emission and a second assembly that acts like a Fresnel lens, using reflection rather than refraction. It is applied to solutions that require short-range lighting.

CONTINUAL IMPROVEMENT

3.

CAREL GROUP

Since 2012, Arianna has been part of the CAREL group, an Italian multinational and one of the world leaders in control solutions for air-conditioning, refrigeration and heating, and systems for humidification and evaporative cooling.

CAREL's model can be summarised in its mission to provide high efficiency solutions, both the starting point and the final objective that enclose the entire process, from conception to production and marketing of our lighting systems. As an innovative consultant and technological partner, CAREL anticipates market requirements, proposing energy efficient solutions that guarantee the highest performance.

Research, innovation and technology are the keys to Carel's success: for more than forty years, customer needs have been the at the centre of its design work, so as to offer elements of differentiation in terms of both functions and appearance. This represents an opportunity for Arianna to grow and develop, including in terms of industrial know-how.

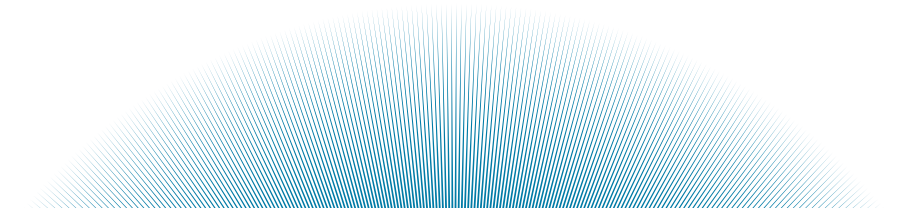
CUSTOM DESIGN

Here at Arianna, we devote special attention to the specific needs of each project, coming up with solutions tailored to the individual requirements of each site and each situation. Each element is designed based on lighting engineering calculations with attention to the tiniest detail to ensure that the resulting installation delivers in terms of performance. We also assess what changes may need to be made to systems to cater to real needs with efficient solutions.

SAFETY

Light is safety. For anyone living in an urban space, for anyone travelling along a motorway or a country road, for anyone crossing a car park, a train station, a warehouse or a playground.

Whether lighting a workplace or a city street, Arianna is fully committed to its mission: protecting the quality of life by making people's safety a priority.

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come

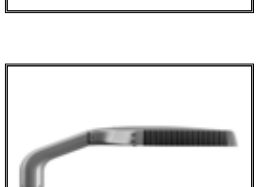
STREET LIGHTING

4.

Aplyled-Arianna luminaires are designed to provide correct lighting in an array of different urban environments. Avenues, squares, roads carrying fast-flowing traffic, cycle paths and pedestrian precincts... each come with their own unique set of requirements and are thus tackled on a case-by-case basis. With proper lighting engineering calculations, we can come up with a custom-designed solution for the most energy-efficient and cost-effective use of luminaires. Our technology's focus on visual comfort can be seen in our uniform diffused lighting, which allows you to see properly without creating dark spots. A city lit by Arianna-Aplyled is a safe city: a place where crash rates are lower and people feel free to go out at night.
So the aim is to illuminate better, not illuminate less, so that city life and the environment can sit happily alongside each other.

PRODUCTS

Phileo



Lola

Snell

Titlis

Teseo


أهلا وسهلا
Welcome

AMMAN
(JORDAN)

First LED public lighting project in Jordan
Installation of 168 Snell LED luminaires

RESULTS

- *cost effectiveness and 60% energy savings compared to traditional lighting*
- *advantages in terms of light pollution and safety*
- *conformity to JAS requirements (Jordanian organisation that controls quality and safety standards)*

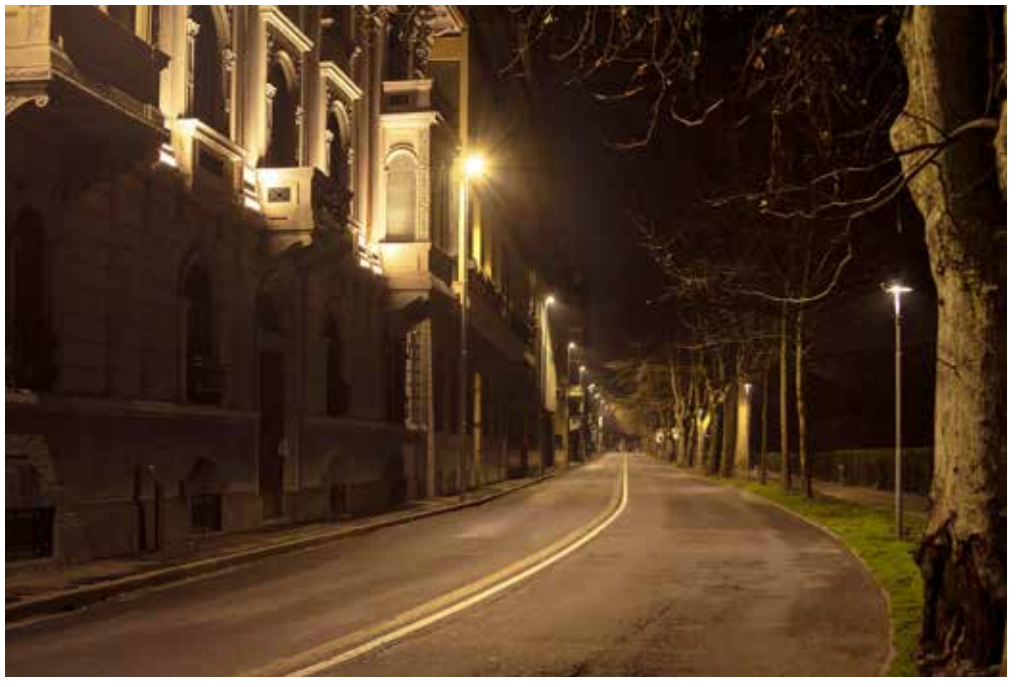

5 Giugno
LOGAN MCV
EY 521SF

NOVARA

Lighting across the whole city
Installation of 550 Lola total reflection and 650 Snell LED luminaires, replacing 1,200 mercury vapour street lamps
Installation of retrofit optics kits to reduce costs and reuse the existing infrastructure

RESULTS

- *50% reduction in electricity costs*
- *smart lighting thanks to the remote control function that allows customised management at an individual luminaire level*




DIVIETO
DI
SCARICO

MOTTA SANT'ANASTASIA

Lighting across the whole city of Motta Sant'Anastasia (CT), Italy
Installation of 1,400 Snell LED street lamps and street centre lights

RESULTS

- *58% energy savings compared to the previous products*
- *return on investment in just a few years*
- *maximum efficiency, minimum dimensions and significant versatility*

ORISTANO

Lighting of Piazza Roma, tower and neighbouring streets
Installation of 100 Titils luminaires, wall-mounted and fitted on poles designed by Renzo Piano

RESULTS

- *60% energy savings compared to traditional systems*
- *diffuse lighting without shadow areas, with very low glare levels*
- *concrete response to keep costs down*

RAVENNA

Lighting of 13 roundabouts throughout the city and on main roads (Romea)
Installation of 61 Teseo luminaires fitted on spotlight poles of different heights, from 20 to 35 metres

RESULTS

- *80% energy savings*
- *uniform lighting of extended areas, delivering light only where needed*
- *safe vision, system modularity*

TUNNEL LIGHTING

Using the various patented optical designs, we can come up with a "lighting response" to the eye's progressive adaptation inside tunnels.
For reinforcement lights systems, we've developed a counter-beam light that teams superior lighting engineering features with top energy efficiency. Boasting high performance from a safety point of view, this light's optics are designed to minimize glare. The vertical component of the luminous distribution is eliminated in favour of a more suitable luminance level.
Arianna fittings employed in permanent lighting systems stand out for their superior lighting uniformity both on the road surface and along the walls. The product's glare level is very low, barely amounting to a fifth of the legally acceptable limit. In addition, the technology used provides for more economical spacing.
The tunnel lights are designed to interface with the remote-control modules.

PRODOTTI / PRODUCTS

Teseo

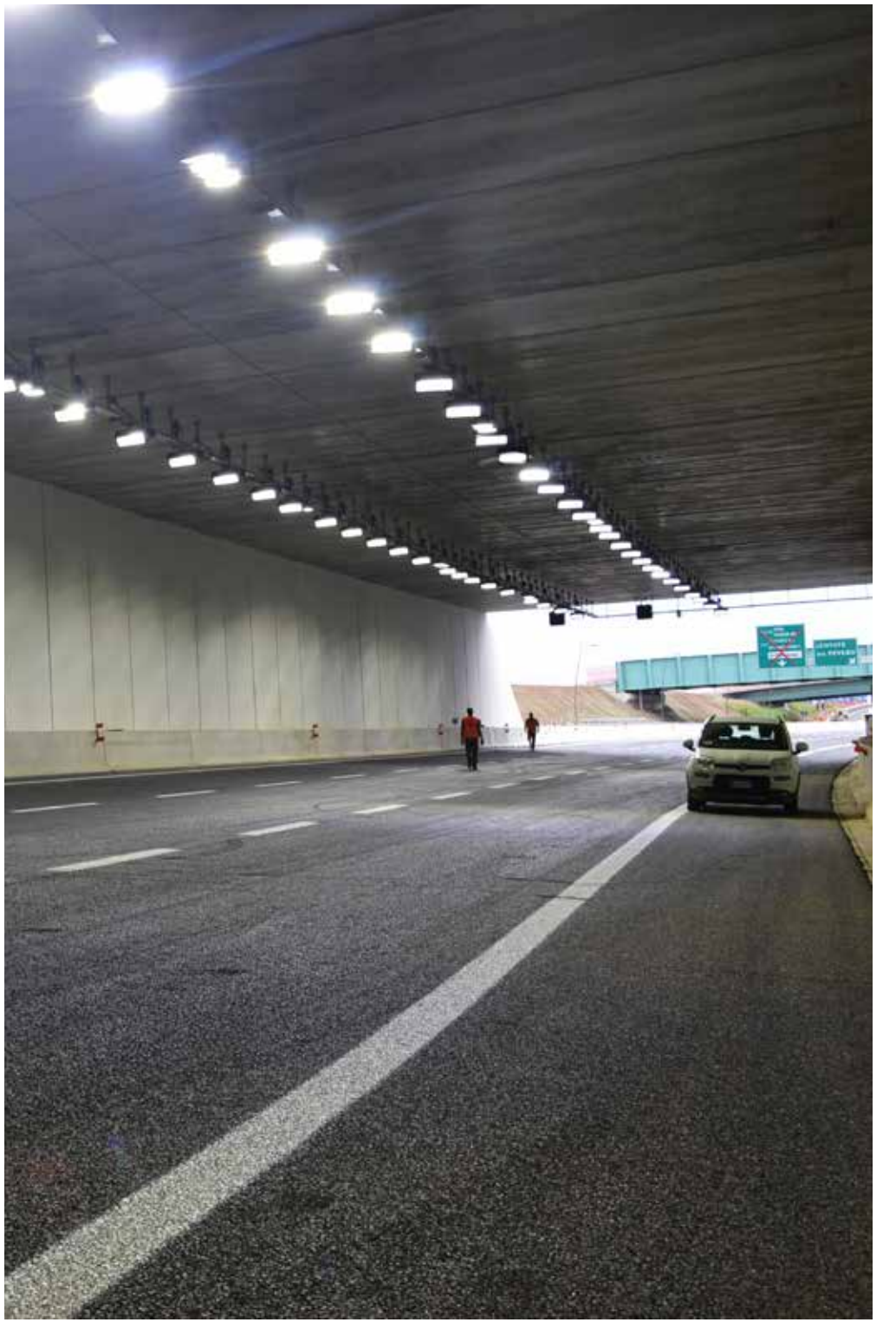
Titlis

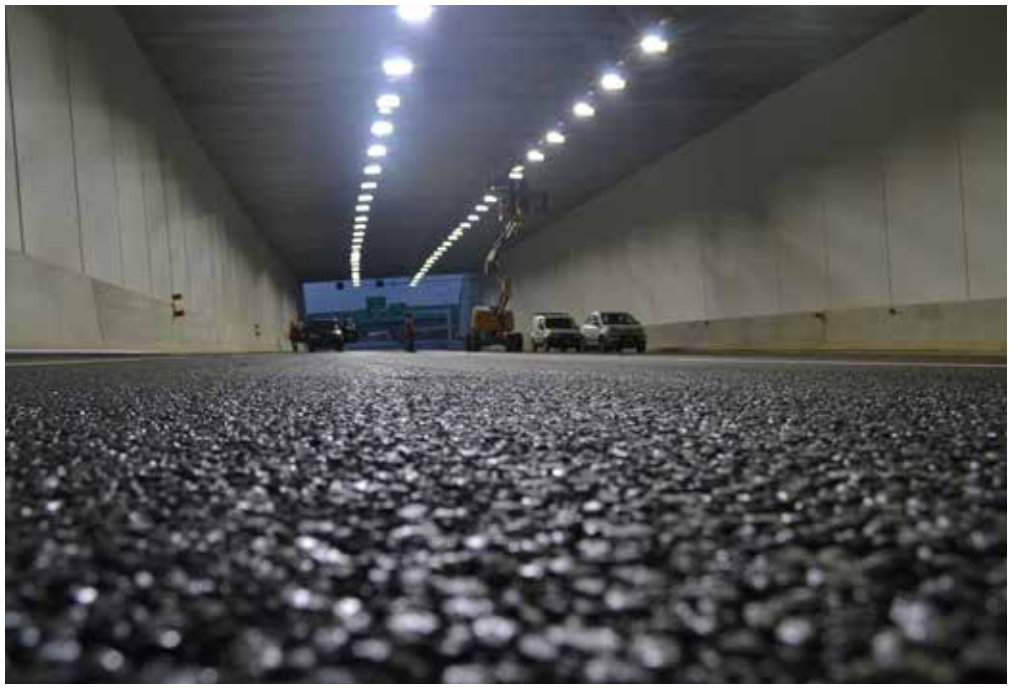
Snell

COPRENO
MONZA E BRIANZA

Lighting in a 170 metre underpass featuring by two lanes plus a deceleration lane
- *reinforcement lighting: 126 Teseo luminaires*
- *permanent lighting: 22 Titlis luminaires*

RESULTS
- *high uniformity in the permanent lighting*
- *glare below 3%, in other words, less than one fifth of the level required by the standard on tunnel lighting*
- *system of twin luminaires operating alternately: this doubles the life span of the luminaires, which are on 24 hours a day, 7 days a week*





SERRA SPIGA
COSENZA

Lighting in a 600 metre long tunnel, made up of two one-way tubes, each with two lanes and one emergency lane

- *lighting system designed from a viewpoint of energy efficiency and safety*
- *reinforcement lighting: 552 Teseo and Snell luminaires installed*
- *permanent lighting: 152 Snell luminaires installed*

RESULTS

- *permanent lighting uniformity of 90%*
- *driver safety without creating visual disturbance, efficiency*

VAL DI SAMBRO
BOLOGNA

Lighting in a 3.8 km metre long tunnel, made up of two one-way tubes, each with two lanes and one emergency lane

- *counterbeam lighting at the tunnel entrance, using the total reflection patent*
- *installation of 252 Teseo and Titlis luminaires for reinforced lighting on the southern side, and 214 on the northern side*

RESULTS

- *excellent visibility of obstacles, preventing the so-called black hole effect*
- *energy savings in excess of 60%*

PROFESSIONAL LIGHTING

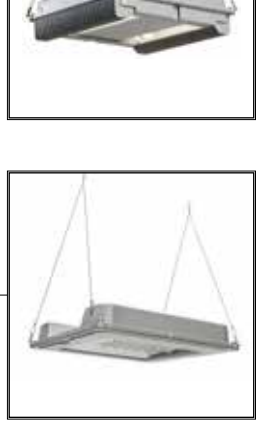
6.

Aplyled-Arianna brings technological innovation to the lighting of large industrial and shopping areas. Warehouses, shopping arcades, underground car parks, along with façades and uncovered car parks: extensive areas requiring uniform lighting that's easy on the eye while still allowing you to recognize people, objects and spaces without glare. Aplyled-Arianna delivers efficient lighting designed to ensure the investment pays for itself within the space of a few years. An integral part of the lighting solution is the remote-control system, which is designed to reduce waste and rationalize the use of light with a view to saving money and reducing environmental impact. Aplyled-*Arianna is committed to producing lighting that meets local and national code requirements through constantly updated low-impact technology.*

PRODUCTS

Titlis

Snell



OMICRON

Redevelopment of the Omicron manufacturing facilities, covering around 600 sq.m

- *installation of 24 Titlis Industrial luminaires*
- *energy saving and comfortable lighting*

RESULTS

- *total savings achieved of € 2,000 per year*
- *initial investment cost repaid in 3 years*

INTERBRAU

Replacement of traditional luminaires in storage areas
— *installation of 20 Titlis luminaires*

RESULTS
— *55% energy savings*
— *control of waste and rationalised use of light*
— *financial payback in just a few years*
— *higher workplace quality*

SPORT LIGHTING

7.

A major part of our research work is working out how to correctly light sports fields, sports facilities and gyms. Using a white light has proven to be essential in sports contexts where people not only need to be able to see the outline of objects, but also need to discern between different colours. The ability to create a space that's uniformly lit without dazzling athletes and spectators is the keystone of Arianna's Sport project.

Anyone looking for a partner to handle the lighting of sports areas will be drawn to our commitment on both cost-saving and environmental protection fronts, which makes Arianna an ideal candidate. It means choosing to make an investment that you know will pay for itself in a short period of time.

PRODUCTS

Teseo

Titlis

Snell

PISCINA DI SAN PIETRO IN CASALE

The pool is part of the new sporting complex in San Pietro in Casale (BO, Italy)
- *installation of 42 Titlis luminaires*

RESULTS
- *annual savings exceeding € 4,000*
- *62% savings in power consumption*
- *visual comfort*

PALAZZETTO DELLO SPORT DI CASTENASO

Adeguamento illuminotecnico del palazzetto che ospita squadre di Serie A di volley e basket

- installazione 36 Titlis

RISULTATI

- uniformità generale del 98% sul campo da pallavolo e del 92% sul campo da basket
- comfort visivo
- risparmio energetico pari al 63%

Adaptation of lighting system in a sport centres that hosts A league volleyball and basketball teams

- *installation of 36 Titlis luminaires*

RESULTS

- *general uniformity of 98% on the volleyball court and 92% on the basketball court*
- *visual comfort*
- *63% energy savings*

progetto grafico e sviluppo
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per charta-bureau.com

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