

The background of the entire page is a photograph of a worker in a dark industrial setting. The worker is wearing a brown protective suit, blue safety goggles, and brown gloves. They are using a power tool to grind a piece of metal, which is creating a large spray of bright orange and yellow sparks. In the background, there are blurred lights and a yellow hard hat hanging from a hook.

INDUSTRIAL LIGHTING SOLUTION

Elevating safety & productivity



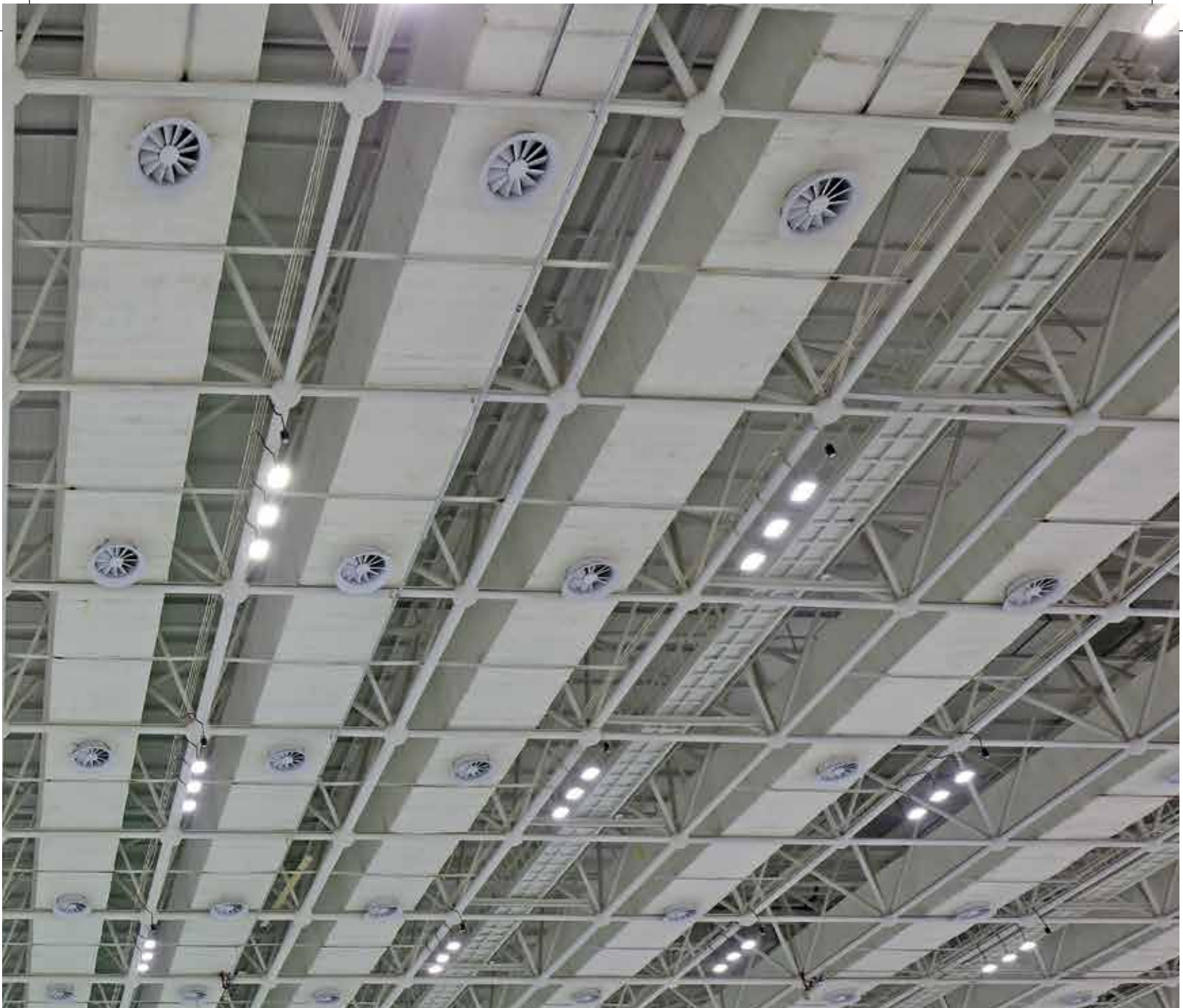
Elevating **Safety and Productivity**

There are different types of tasks that are performed in an industry and each of these tasks require specific lighting solutions. Bajaj Luminaires understands these requirements and provide different lighting solutions. The core of these solutions are based on 3 pillars of good lighting.

ENERGY EFFICIENCY: Attaining the right amount of light levels with least energy consumption. Bajaj Luminaires are equipped with the best of current LED technology which can help save energy upto 50%.

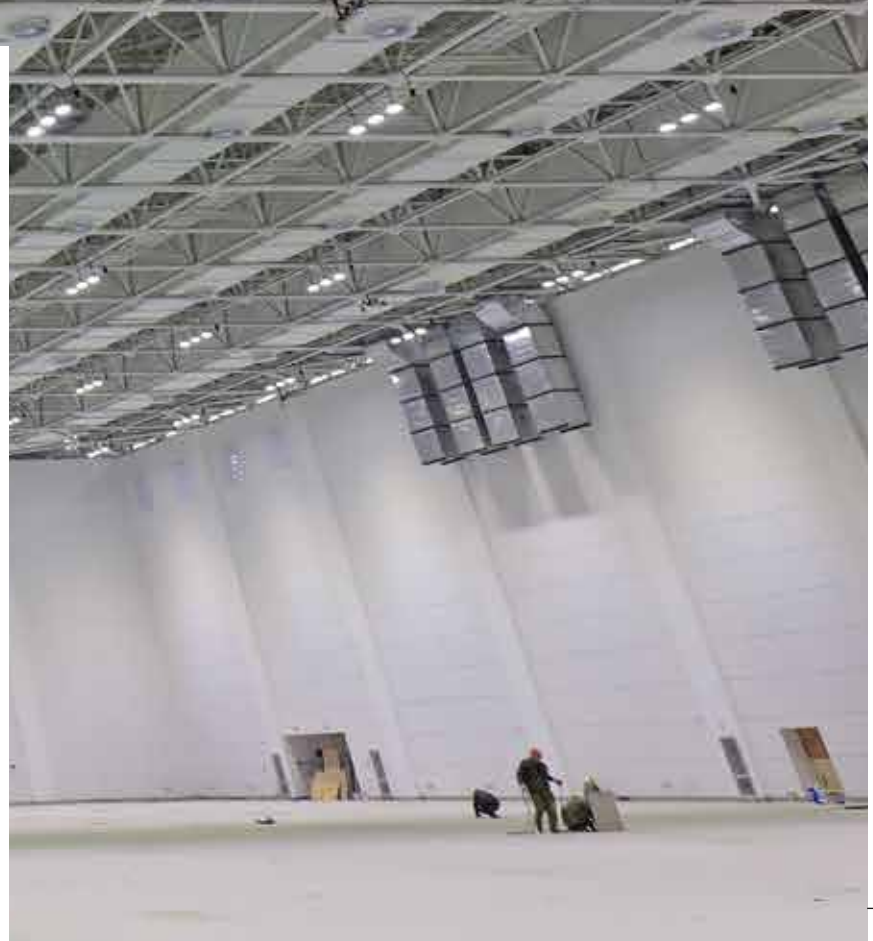
RELIABILITY: Lighting is required round the clock in a factory and any hindrance in the same can lead to loss in productivity and more importantly compromise in safety. Design and quality are the core features in Bajaj Luminaires to ensure a trouble free operations in the factory.

QUALITY OF LIGHTING: Lighting quality plays a crucial role in ensuring a comfortable working environment in a factory. Bajaj Luminaires are equipped with one of the best optics and LED technology which helps in maintaining the quality of lighting



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How to Choose A Right LED luminaire?

LED is a relatively new technology and there are various aspects you should know before purchasing the LED luminaire. Here are some important questions that you should ask while selecting the LED luminaire:



What is the benefit of using optics in LED luminaire?

Even the most efficient light sources would be rendered useless without high quality optics. LED's are single directional as compared to omnidirectional conventional light sources. Secondary lenses in LED lighting system will distribute the light uniformly on the working plane thus ensuring that there are no dark patches.

What is more beneficial- Chip lumen output or System lumen output?

System lumen output means the delivered lumen of the luminaire whereas chip lumen depicts the efficacy of bare LED chip. Hence understandably the chip lumen will be always greater than system lumen. As a user, it is important to check the delivered lumen as that is the actual lumen provided by luminaire as a whole system.

Which component of the LED luminaire is most susceptible to failure?

LED drivers are prone to failure due to voltage surge supplied to the system. It is critical that these drivers are designed in such a way that it is protected against voltage surges.

Benefit of thermal management in LED system?

There is a certain amount of heat which is generated by the LED chip during operation. It is very critical that the heat is taken out of the system to ensure that the quality of light emitted from the LED does not degrade. A good thermal design in the luminaire ensures that the system works properly without any compromise in the lighting levels.

What is the maximum ambient temperature under which LED luminaire can operate?

Most of the declared lifetime of the luminaire are for the room temperature. For Industrial applications, It is very important to know the maximum ambient temperature at which the luminaire can be operated.

How is the life of LED measured?

With an LED source light, output diminishes over time. Lifetime typically refers to the useful life of the light output (also referred to as lumen maintenance). The lifetime of a white LED is the time till which at least 70% of the original light output remains.



1 Manufacturing Bays



6 Control Room & Admin Office



2 Assembly Line



7 Area Lighting/ Truck Parking Area



3 Warehouse



4 Cleanroom Production Area



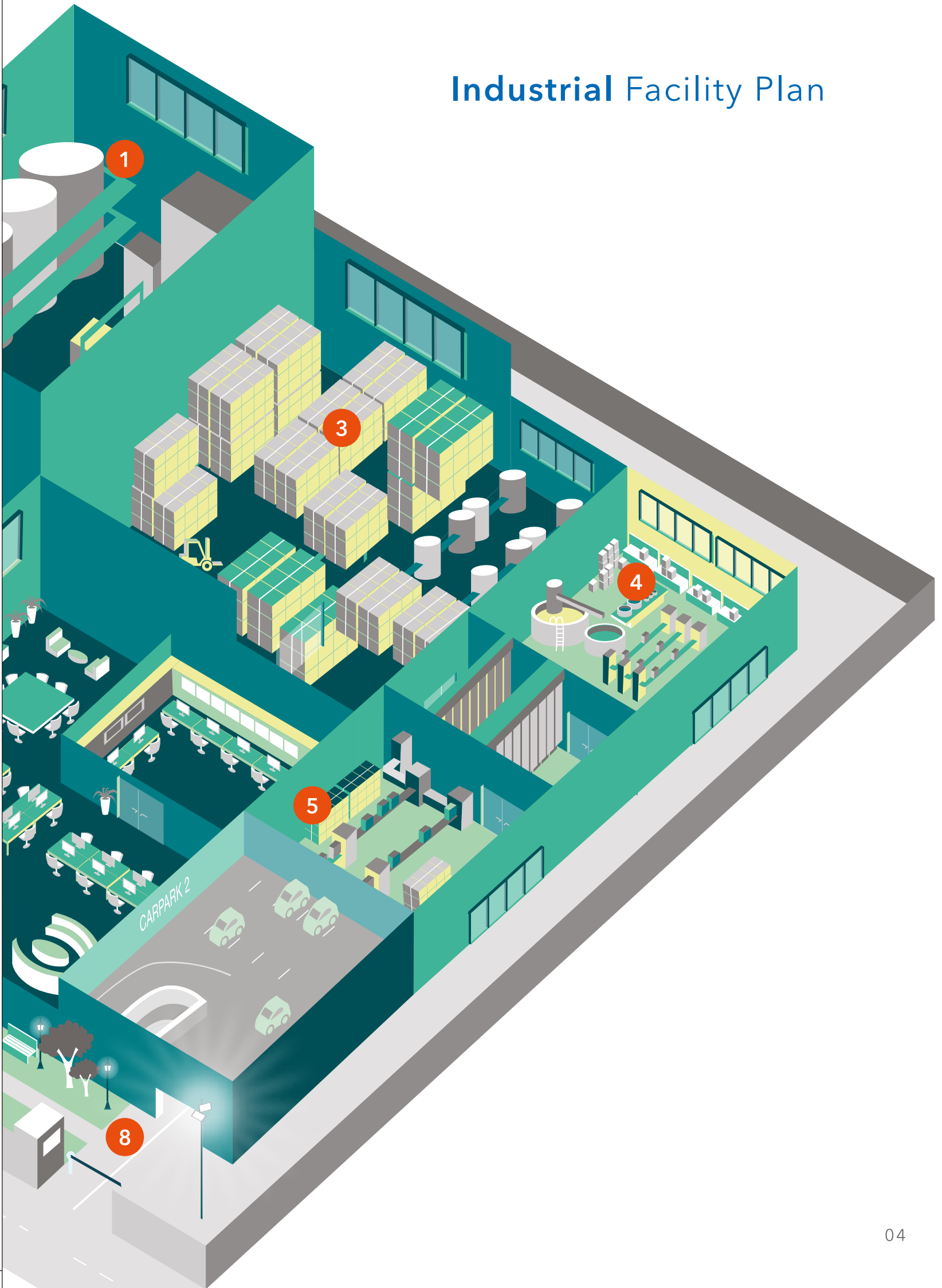
5 Conveyors



8 Path Lighting



Industrial Facility Plan



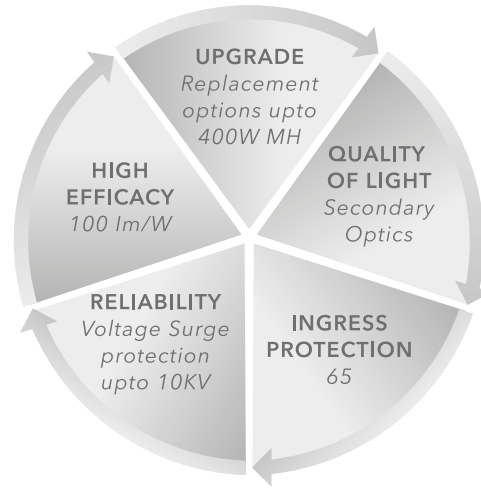


Manufacturing Bays Bright production process

Manufacturing area is the most important part of the factory and the place where productivity is defined. Lighting plays a crucial role in ensuring comfort for workers and saving energy for the factory. Lighting for medium to high ceiling require precise optics for proper distribution of light on the shop floor and reliability, as regular maintenance of these lights installed becomes a tedious and costly activity.

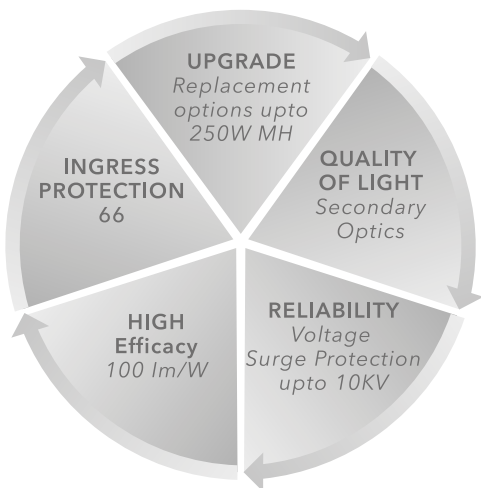
DURANTO

Its unique design with fins and ventilation technology ensures that the heat is dissipated properly from the system and it is protected against voltage surge.
Wattages- 80W, 100W, 120W, 150W and 200W.



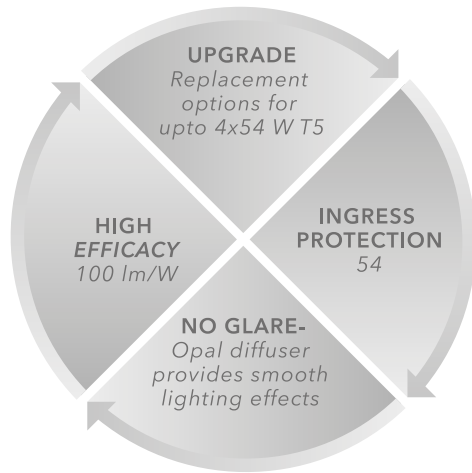
FORCE BAY

Force Bay is a user friendly solution which can be installed easily. It is equipped with secondary optics which ensures that light is distributed uniformly. The reliability of the product is further improved with the help of surge protection devices that provide protection against high voltage surges. Wattages- 80W, 100W, 120W and 150W.



TRENDY

Trendy is a compact and economical luminaire utilizing the latest in LED technology. With different lumen packages available, Trendy offers exceptional lighting in mid to high ceiling applications. Save energy without straining the project budget or sacrificing light output.



DURANTO

for upgrade solution - Payback period

Objective: Upgrade 100 nos. of 250 W Metal halide high bays to 150 W LED highbay

Sr. No.	Description	250 W MH	150 W LED
1	Number of Luminaires	100	100
2	Type of Lamp	MH	LED
3	Type of Ballast	HID Ballast	Electronic Driver
4	Power Consumption per lamp including ballast loss (W)	284	150
5	Energy Saving per lamp point (W)	---	134
6	Total Lighting Load (kW)	28.4	15
7	Reduction in Total Lighting Load (kW)	---	13.4
8	Usage per Day (Hrs.)	12	12
9	Usage per Year (Days)	365	365
10	Cost per Unit (Rs./ kWh)	7.5	7.5
11	Savings due to reduction in Total Lighting Load (Rs.)		440190
12	Cost per Lamp (Rs.)	800	0
13	Average Economic Life per Lamp (Hrs.) *	10000	50000
14	Number of Lamps replaced per year	10	0
15	Cost of Lamp Replacement per year (Rs.)	8000	0
16	Cost of Maintenance (Assuming 10% failure @ 200 per point, Including Ballast)	2000	Nil
17	Savings due to reduction in Lamp Replacement Cost (Rs.)		8000
18	Savings due to reduction in Maintenance Cost (Rs.)		2000
19	Total Savings per year (Rs.) Total Extra Investment Required		450190
20	Cost of Luminaire	8800	18800
21	No. of Luminaires	100 880000	100 1880000
22	Total Extra Investment (Rs.)		1000000
23	Payback (Years)		2.2

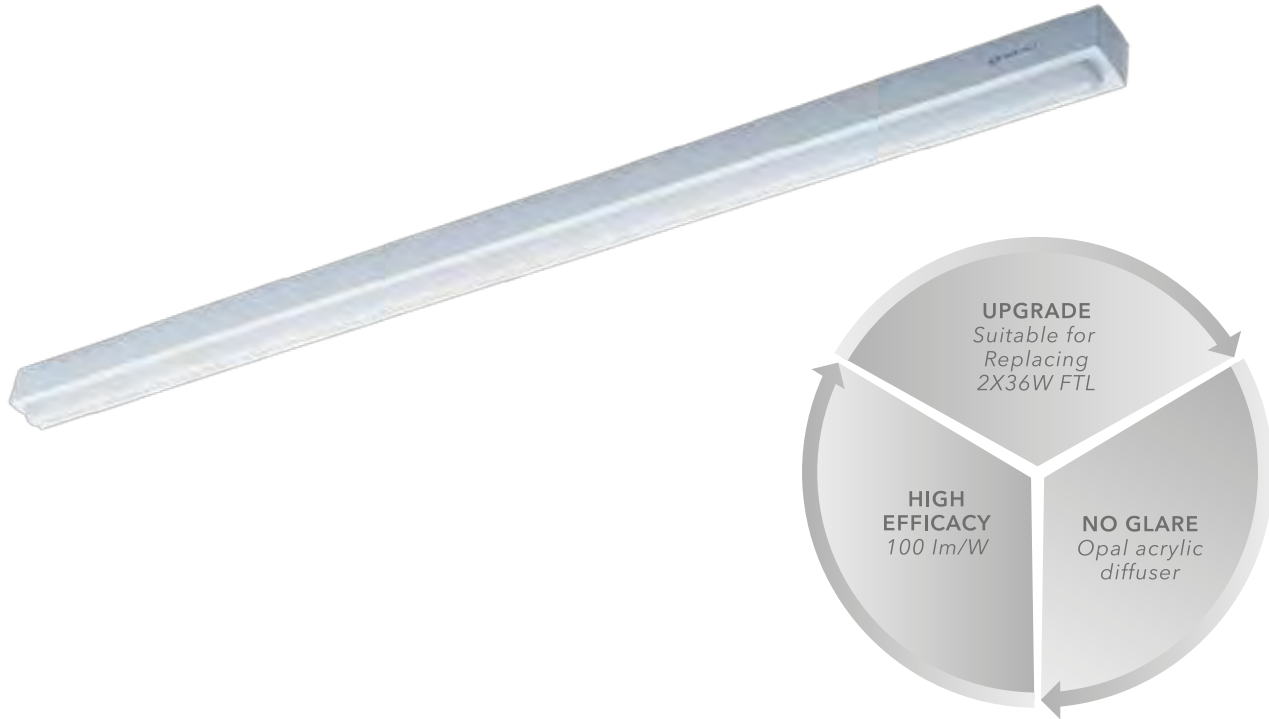


Assembly Line Shimmering discipline

Assembly line is the place where product comes to life. It's crucial that adequate and efficient lighting is present to help the workmen increase the speed of assembling, identify faults if any in the product and at the same time reduce energy consumption.

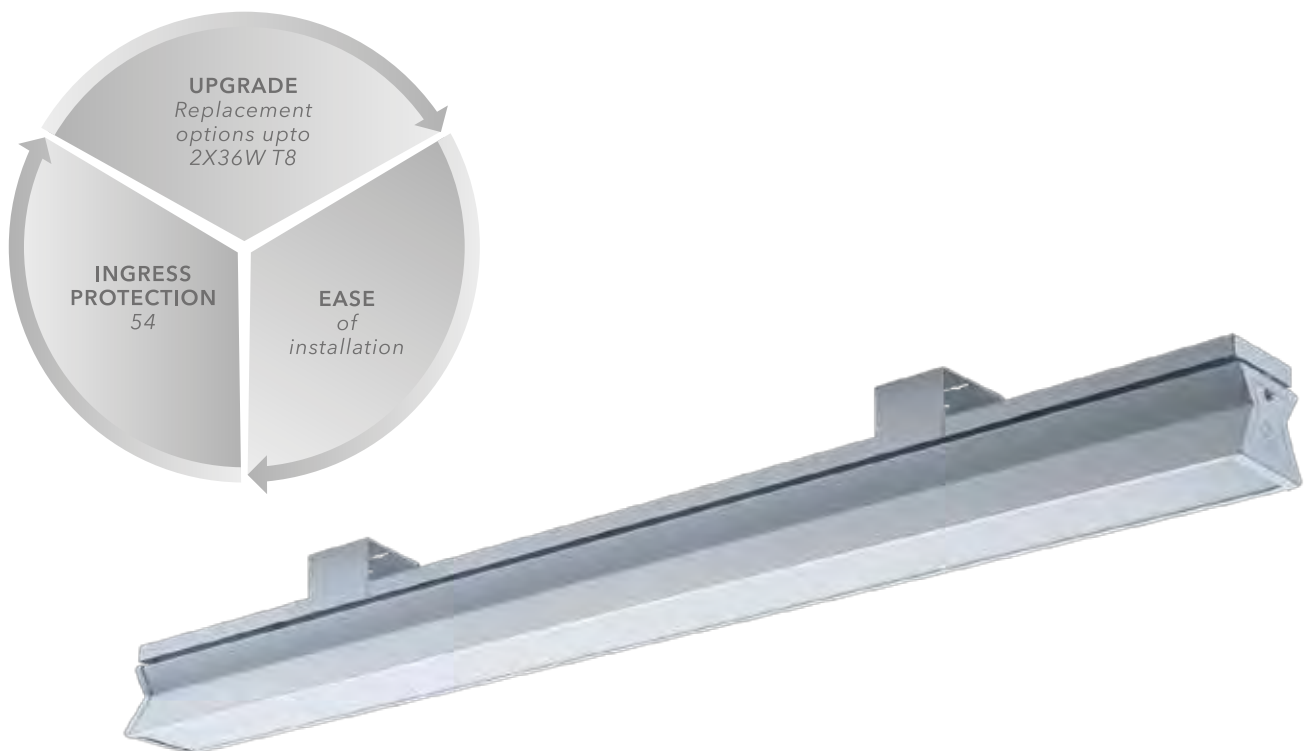
LINEA

Linea LED is unique, sustainable and fully integrated. Appearance and compact structure brings customer to a new experience of soft LED lighting. It has been specially designed as a replacement solution. Wattage- 40W.



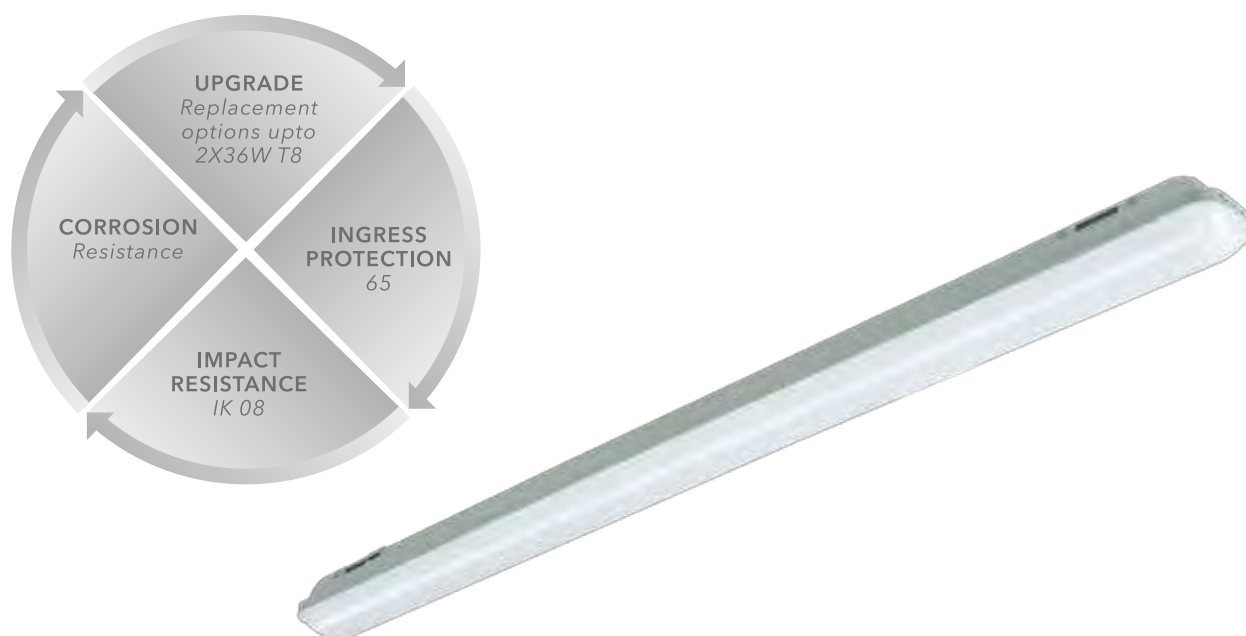
LINEA PRIME

Linea Prime is a carefully designed solution for application areas which requires luminaires with higher degree of ingress protection. It is equipped with mounting clamps which makes it easier for the user to install it. Wattage- 40W.



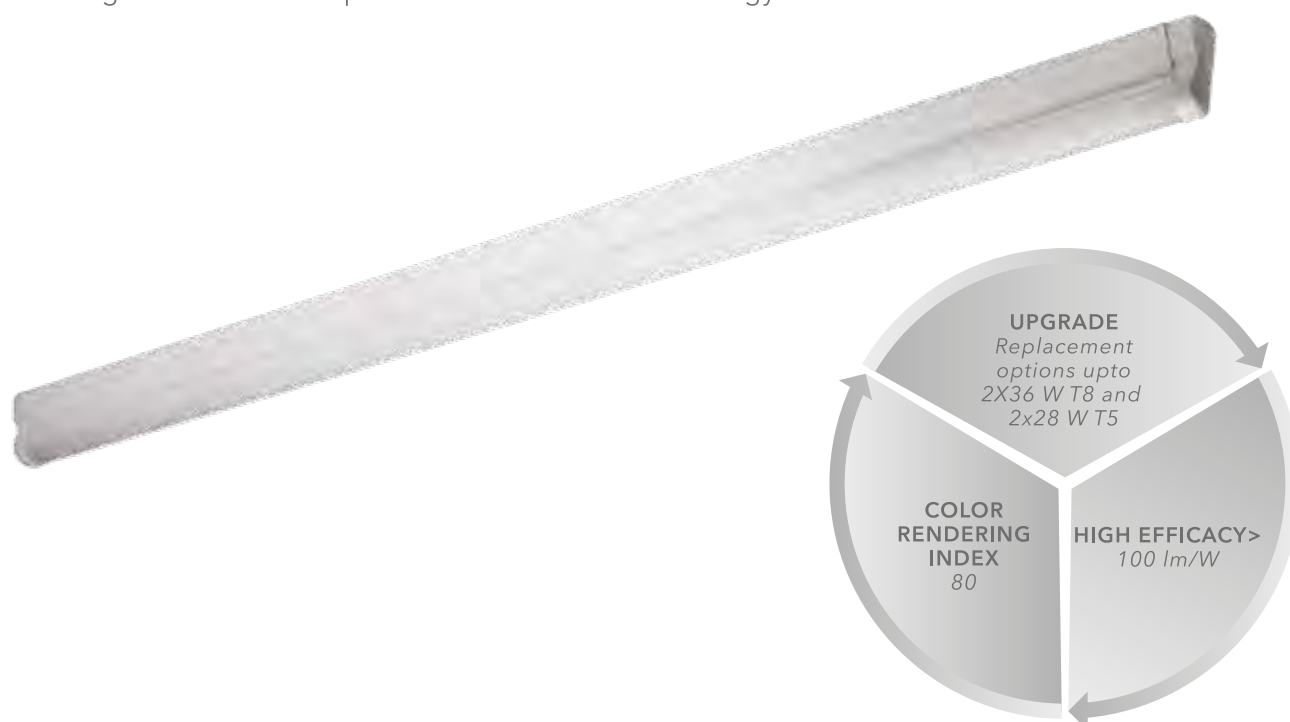
LINEA EXCEL

Linea Excel is the apt lighting solution for manufacturing areas which requires the luminaire to be weather proof and water proof. It is designed with high quality poly carbonate cover which provides high degree of ingress protection and is one of the most efficient luminaire. The solution is made more robust with the help of high impact resistance.



LINEA RETRO

A cost effective and energy efficient solution for factory owners who are looking for a quick retrofit solution. Bajaj LED tubes can be used in the existing conventional batons and this will help in reducing the carbon foot prints and in turn reduce energy cost.





LINEA

for upgrade solution - Payback period

Objective: Upgrade 100 nos. of 2x36 W FTL Luminaire to Linea 40 W LED Luminaire

Sr. No.	Description	2X36 W FTL	Linea
1	Number of Luminaires	100	100
2	Type of Lamp	FTL	LED
3	Type of Ballast	Electronic Ballast	Electronic driver
4	Power Consumption per lamp including ballast loss (W)	88	40
5	Energy Saving per lamp point (W)	---	48
6	Total Lighting Load (kW)	8.8	4
7	Reduction in Total Lighting Load (kW)	---	4.8
8	Usage per Day (Hrs.)	12	12
9	Usage per Year (Days)	365	365
10	Cost per Unit (Rs./ kWh)	7.5	7.5
11	Savings due to reduction in Total Lighting Load (Rs.)		157680
12	Cost per Lamp (Rs.)	60	0
13	Cost of lamps per luminaire	120	
14	Average Economic Life per Lamp (Hrs.) *	10000	50000
15	Number of Lamps replaced per year	10	0
16	Cost of Lamp Replacement per year (Rs.)	600	0
17	Cost of Maintenance (Assuming 10% failure @ 200 per point, Including Ballast)	2000	Nil
18	Savings due to reduction in Lamp Replacement Cost (Rs.)		600
19	Savings due to reduction in Maintenance Cost (Rs.)		2000
20	Total Savings per year (Rs.) Total Extra Investment Required		160280
21	Cost of Luminaire	2270	3600
22	No. of Luminaires	100 227000	100 360000
23	Total Extra Investment (Rs.)		133000
24	Payback (Years)		0.8

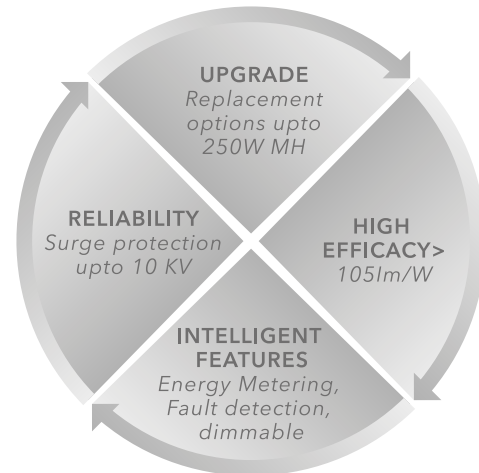


Warehouse Luminous shipment

Effective warehouse aisle lighting is essential to ensure safety and maintain productivity. Good visibility helps in selecting right items, reduces eye strain and provides a better working environment. Lighting represents more than 60% of the average warehouse's electricity end use. Unfortunately, much of the electricity used to light those fixtures is wasted, primarily due to outdated technology. Wasted electricity in warehouses comes in many forms, but the reliance on older lighting technologies, such as high-intensity discharge (HID) and linear fluorescents, is the most notable example. That is why many warehouse owners and managers are turning to light emitting diodes (LEDs) for their high-bay fixtures.

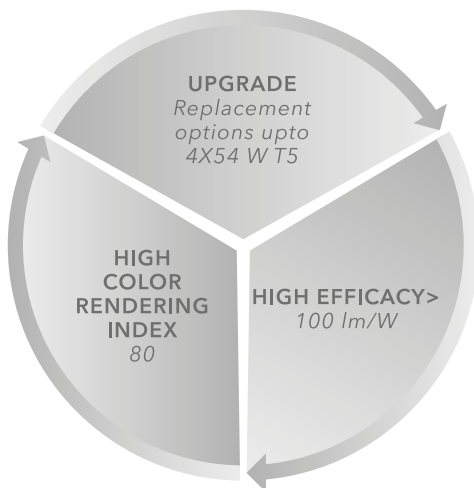
COSMO INTELLI

A smart and energy efficient solution for warehouses. It has the capability to increase or decrease the intensity of light on the basis of physical movement of works man or forklift thus ensuring that a further optimising the usage of the luminaire. It can also provide fault detection data to the user for maintenance purpose A user friendly solution which can be suspended, surface mounted and recessed mounted. Reliability is further enhanced with the help of additional protection against voltage surges. Wattages- 80W and 100W.



PERK

The Perk linear High Bay is an ideal one-to-one replacement for conventional 4X54W T5 fluorescent lighting systems. The longitudinal design provide a uniform illumination and best in class efficiency makes it an ideal solution for lighting up the pathways in the warehouses. Wattages- 80W and 120W.



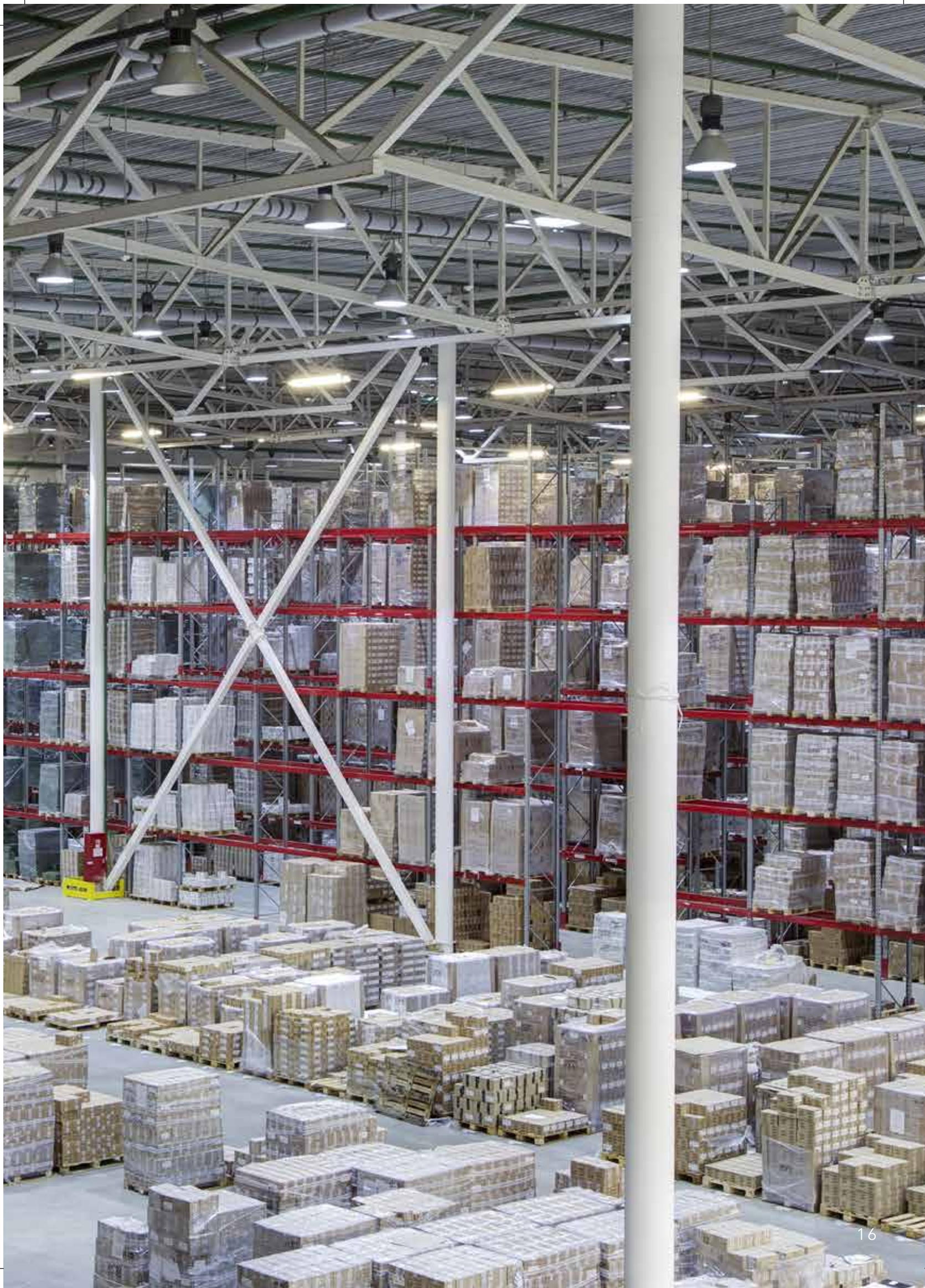


COSMO

for upgrade solution - Payback period

Objective: Upgrade 100 nos. of 250 W MH Highbay to 100 W LED Highbay

Sr. No.	Description	250 W MH Highbay	100W LED Cosmo
1	Number of Luminaires	100	100
2	Type of Lamp	MH	LED
3	Type of Ballast	HID ballast	Electronic driver
4	Power Consumption per lamp including ballast loss (W)	288	100
5	Energy Saving per lamp point (W)	---	188
6	Total Lighting Load (kW)	28.8	10
7	Reduction in Total Lighting Load (kW)	---	18.8
8	Usage per Day (Hrs.)	12	12
9	Usage per Year (Days)	365	365
10	Cost per Unit (Rs./ kWh)	7.5	7.5
11	Savings due to reduction in Total Lighting Load (Rs.)		617580
12	Cost per Lamp (Rs.)	800	0
13	Average Economic Life per Lamp (Hrs.) *	10000	50000
14	Number of Lamps replaced per year	10	0
15	Cost of Lamp Replacement per year (Rs.)	8000	0
16	Cost of Maintenance (Assuming 10% failure @ 200 per point, Including Ballast)	2000	Nil
17	Savings due to reduction in Lamp Replacement Cost (Rs.)		8000
18	Savings due to reduction in Maintenance Cost (Rs.)		2000
19	Total Savings per year (Rs.) Total Extra Investment Required		627580
20	Cost of Luminaire	8560	13500
21	No. of Luminaires	100 856000	100 1350000
22	Total Extra Investment (Rs.)		494000
23	Payback (Years)		0.8



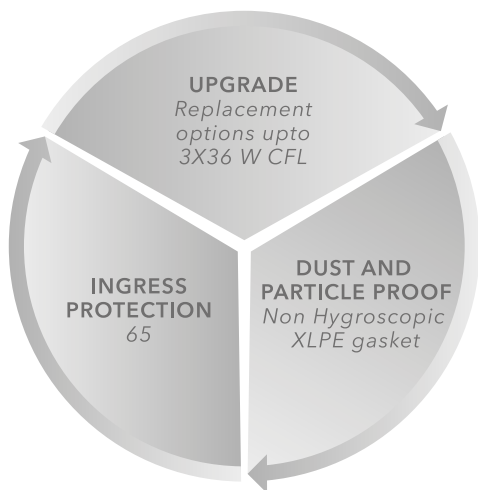


Cleanroom Production Area Spic and span workspace

Customers operating highly hygienic facilities - in hospitals, laboratories, and certain production environments, e.g. in the food industry - require special IP65, easy-to-clean, dust-free luminaires that meet all applicable lighting requirements and norms.

PRISTINE

With the latest LED engine on board, Pristine represents the ideal solution, delivering market-leading energy performance - far beyond fluorescent solutions - over 50,000 hours of maintenance-free operation. This means extremely low operational cost over the total lifetime of the luminaire and an excellent financial return on investment. Pristine is available with 2 options: bottom openable and top openable. Top openable luminaire useful for production areas which has walkable ceiling. Wattages- 36W, 45W, 60W and 80W.



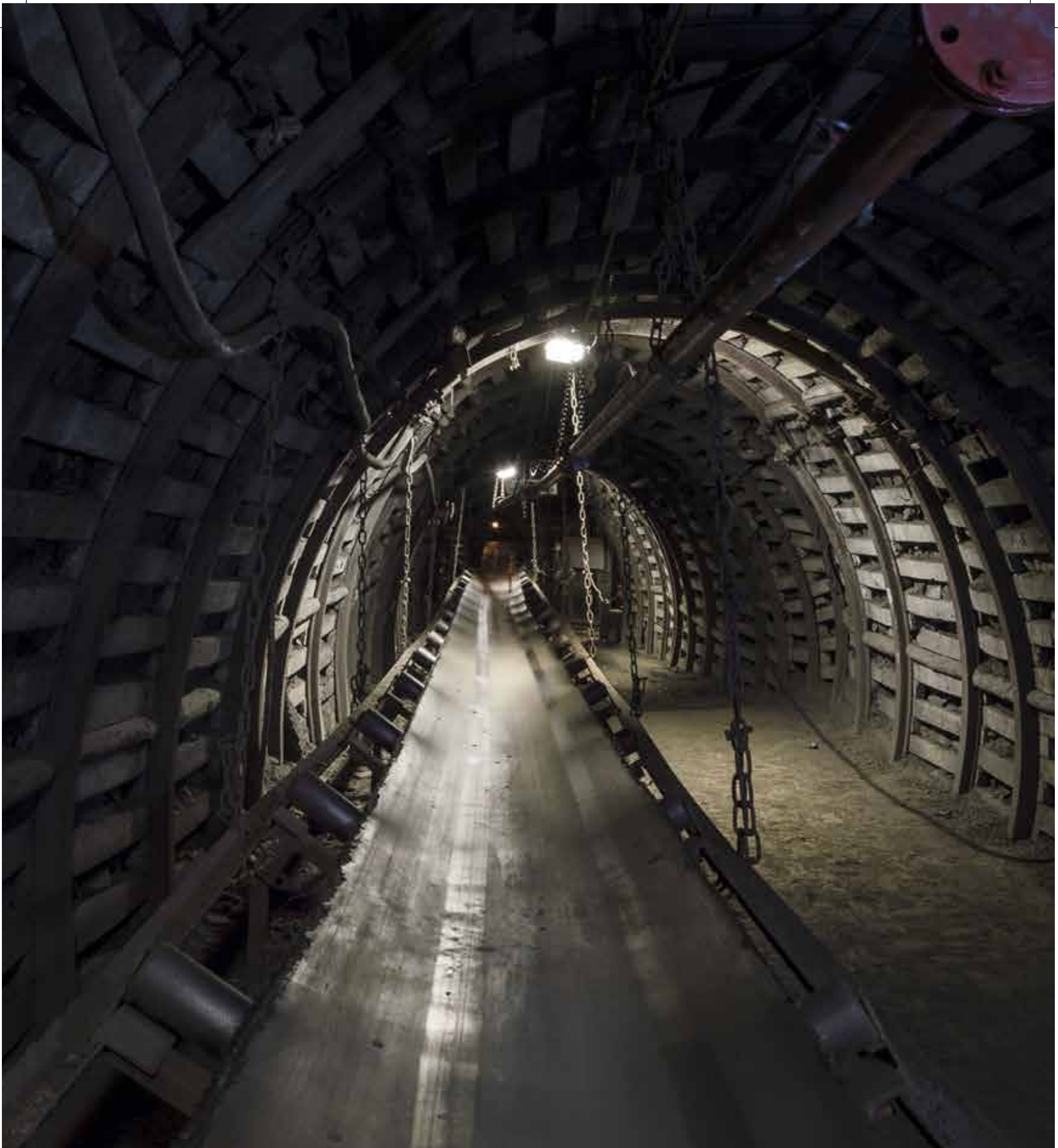
PRISTINE

for upgrade solution - Payback period

Objective: Upgrade 100 nos. of 2X36 W CFL luminaire to 45 W LED cleanroom

Sr. No.	Description	2X36 W CFL	Pristine 45W
1	Number of Luminaires	100	100
2	Type of Lamp	CFL	LED
3	Type of Ballast	Electronic Ballast	Electronic driver
4	Power Consumption per lamp including ballast loss (W)	76	45
5	Energy Saving per lamp point (W)	---	31
6	Total Lighting Load (kW)	7.6	4.5
7	Reduction in Total Lighting Load (kW)	---	3.1
8	Usage per Day (Hrs.)	12	12
9	Usage per Year (Days)	365	365
10	Cost per Unit (Rs./ kWh)	7.5	7.5
11	Savings due to reduction in Total Lighting Load (Rs.)		101835
12	Cost per Lamp (Rs.)	150	0
13	Cost of lamps per luminaire	300	
14	Average Economic Life per Lamp (Hrs.) *	10000	50000
15	Number of Lamps replaced per year	10	0
16	Cost of Lamp Replacement per year (Rs.)	1500	0
17	Cost of Maintenance (Assuming 10% failure @ 200 per point, Including Ballast)	2000	Nil
18	Savings due to reduction in Lamp Replacement Cost (Rs.)		1500
19	Savings due to reduction in Maintenance Cost (Rs.)		2000
20	Total Savings per year (Rs.) Total Extra Investment Required		105335
21	Cost of Luminaire	9010	9300
22	No. of Luminaires	100 901000	100 930000
23	Total Extra Investment (Rs.)		29000
24	Payback (Years)		0.8





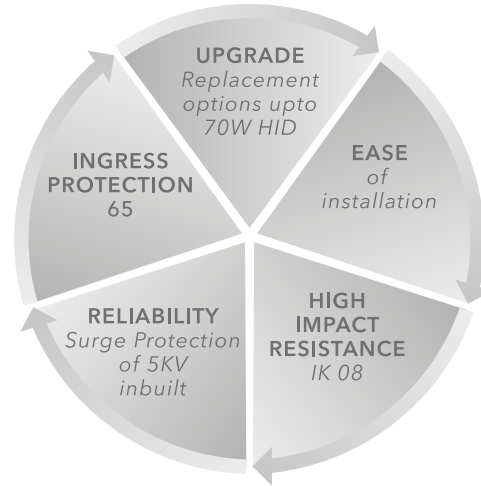
Conveyors

Continuum spread of brightness

Conveyors are the carrier of material from one section to another section in plant. These conveyors can be in kilometres, in certain industries such as power plants. These conveyors are generally lit up with large number of conventional luminaires and require these luminaires to be effective in rugged conditions.

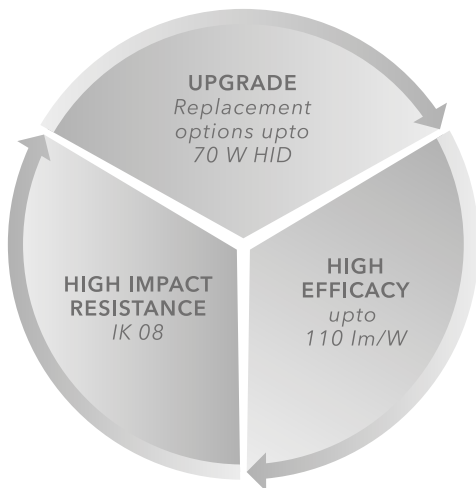
VERDANT

Verdant is a highly durable solution which has impact resistance rating IK 08 and ingress protection of IP 65. The added feature of inbuilt junction box makes it an even more user friendly. It is available with both clear and diffused covers. Wattage- 35W and 42W.



VERDANT NEO

Verdant Neo is a unique range of LED well glass luminaire having different lumen packages to suit the user's needs. State of art design and new age LED technology makes it capable of providing system efficacy up-to 125 lm/W. Verdant Neo has ingress protection of IP 65 which makes it apt solution for rugged conditions. Wattage- 27W.



VERDANT NEO

for upgrade solution - Payback period

Objective: Upgrade 100 nos. of 70 W SV Well glass to 27 W LED Well glass

Sr. No.	Description	70 W SV	27 W LED
1	Number of Luminaires	100	100
2	Type of Lamp	SV	LED
3	Type of Ballast	HID ballast	Electronic driver
4	Power Consumption per lamp including ballast loss (W)	88	27
5	Energy Saving per lamp point (W)	---	61
6	Total Lighting Load (kW)	8.8	2.7
7	Reduction in Total Lighting Load (kW)	---	6.1
8	Usage per Day (Hrs.)	12	12
9	Usage per Year (Days)	365	365
10	Cost per Unit (Rs./ kWh)	7.5	7.5
11	Savings due to reduction in Total Lighting Load (Rs.)		200385
12	Cost per Lamp (Rs.)	200	0
13	Average Economic Life per Lamp (Hrs.) *	10000	50000
14	Number of Lamps replaced per year	10	0
15	Cost of Lamp Replacement per year (Rs.)	2000	0
16	Cost of Maintenance (Assuming 10% failure @ 200 per point, Including Ballast)	2000	Ni
17	Savings due to reduction in Lamp Replacement Cost (Rs.)		2000
18	Savings due to reduction in Maintenance Cost (Rs.)		2000
19	Total Savings per year (Rs.) Total Extra Investment Required		204385
20	Cost of Luminaire	2920	4000
21	No. of Luminaires	100 292000	100 400000
22	Total Extra Investment (Rs.)		108000
23	Payback (Years)		0.5





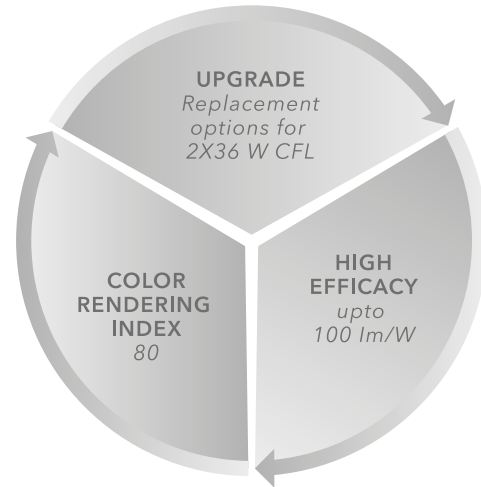
Control Rooms & Admin Office

Right light management

Crucial back office activities are mostly located in the control rooms and admin offices, which are situated within the plant. It becomes very critical that the basic nature of lighting in these areas are human centric such that it creates a comfortable and productive environment for the staff.

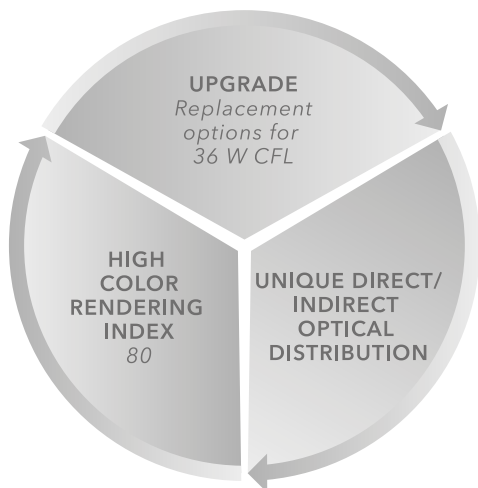
SKYLUX

Skylux a flagship range of Bajaj Luminaire in commercial segment and has been awarded by SEAD as the most energy efficient luminaire. Different colour temperatures helps the user choose the lighting environment as per the requirement. Skylux range has options for both square as well as rectangular cut outs. Wattages- 30W and 36W.



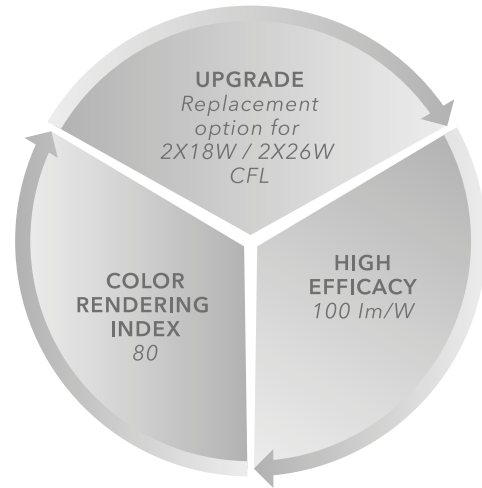
GREEN CENTER

The Green Center range blends savvy styling with a unique optical design to deliver best of the class performance and energy savings. Green Center is a combination of advanced LED technology with a fully luminous center panel to generate optimal light uniformity and enhanced visual comfort. Wattage- 36W.



DOVEE PRO

Dovee LED Downlight is designed to offer an effective and efficient alternative to traditional CFL downlights. With a robust construction, stylish finish and quality light output, this LED Downlight is suitable for a wide range of applications. Wattages-12W, 15W and 18W.

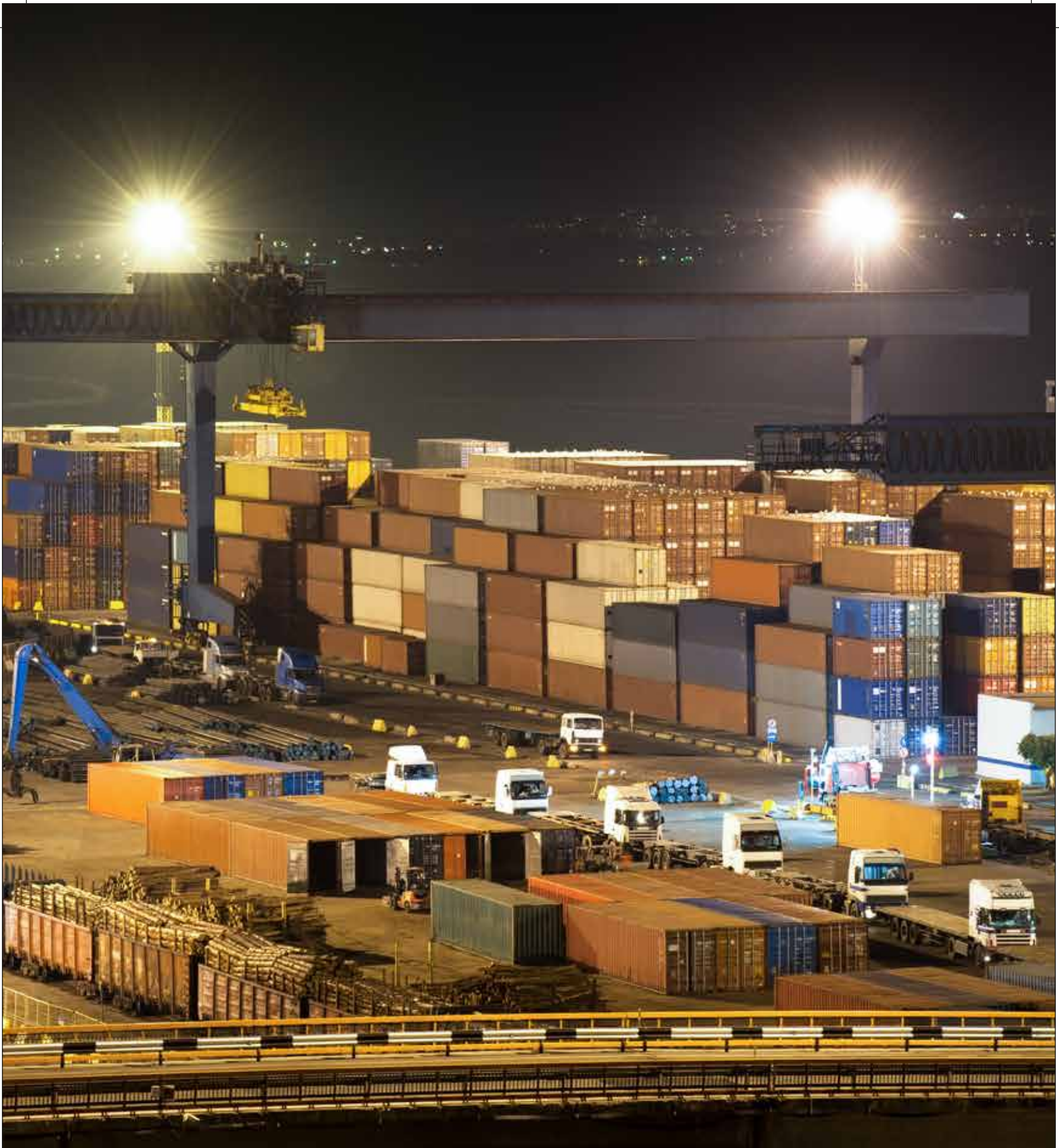


SKYLUX

for upgrade solution - Payback period

Objective: Upgrade 100 nos. of 2X36 W CFL Square Luminaire to 100 nos. 36W LED tile Luminaire

Sr. No.	Description	2X36 W CFL Tile luminaire	Skylux 36 W LED
1	Number of Luminaires	100	100
2	Type of Lamp	CFL	LED
3	Type of Ballast	Electronic Ballast	Electronic driver
4	Power Consumption per lamp including ballast loss (W)	76	36
5	Energy Saving per lamp point (W)	---	40
6	Total Lighting Load (kW)	7.6	3.6
7	Reduction in Total Lighting Load (kW)	---	4
8	Usage per Day (Hrs.)	12	12
9	Usage per Year (Days)	365	365
10	Cost per Unit (Rs./ kWh)	7.5	7.5
11	Savings due to reduction in Total Lighting Load (Rs.)		131400
12	Cost per Lamp (Rs.)	150	0
13	Cost of lamps per luminaire	300	
14	Average Economic Life per Lamp (Hrs.) *	10000	50000
15	Number of Lamps replaced per year	10	0
16	Cost of Lamp Replacement per year (Rs.)	1500	0
17	Cost of Maintenance (Assuming 10% failure @ 200 per point, Including Ballast)	2000	Nil
18	Savings due to reduction in Lamp Replacement Cost (Rs.)		1500
19	Savings due to reduction in Maintenance Cost (Rs.)		2000
20	Total Savings per year (Rs.) Total Extra Investment Required		134900
21	Cost of Luminaire	4450	5200
22	No. of Luminaires	100 445000	100 520000
23	Total Extra Investment (Rs.)		75000
24	Payback (Years)		0.6



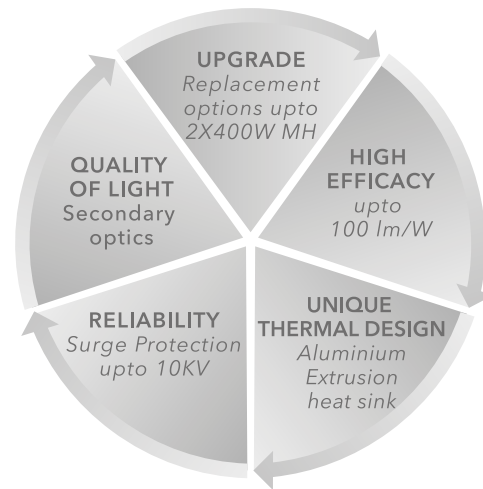
Area Lighting / Truck Parking Area Luminous parking

Typically wide areas in factory campus such as truck parking areas, entry areas etc require a good lighting levels for safety and security reasons. For this purpose, luminaires are usually mounted on high masts so that a large area around the mast is lighted up. Reliability of the luminaires mounted at such heights are critical in such cases as its not feasible for regular maintenance of the same.

TURBO

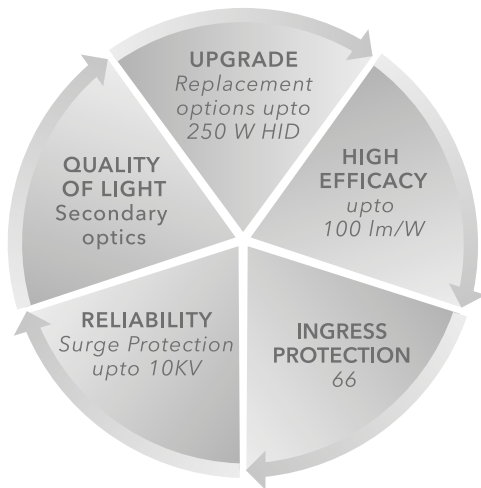
Turbo range is provides an ultimate delight to the user. Its heat sink design made up of aluminium extrusion makes the system one of the best to dissipate heat from the system and hence makes it very reliable. The range provides solution for high mast lighting of up to 30 meters and a one to one replacement up to 2X400 MH floodlight.

Wattages- 80W, 100W, 120W, 160W, 180W, 200W, 240W, 300W and 350W.



FORCE

Force range is known for its ability to provide energy efficient, uniform lighting and at the same time economical. It provides solution for high mast lighting up to 20 meters and one to one replacement of 250W metal halide. Wattages- 80W, 100W, 120W and 150W.





FORCE

for upgrade solution - Payback period

Objective: Upgrade 100 nos. of 250 W SV floodlight to 150 W LED floodlight

Sr. No.	Description	250 W SV Floodlight	Force 150 W LED
1	Number of Luminaires	100	100
2	Type of Lamp	SV	LED
3	Type of Ballast	HID ballast	Electronic driver
4	Power Consumption per lamp including ballast loss (W)	284	150
5	Energy Saving per lamp point (W)	---	134
6	Total Lighting Load (kW)	28.4	15
7	Reduction in Total Lighting Load (kW)	---	13.4
8	Usage per Day (Hrs.)	12	12
9	Usage per Year (Days)	365	365
10	Cost per Unit (Rs./ kWh)	7.5	7.5
11	Savings due to reduction in Total Lighting Load (Rs.)		440190
12	Cost per Lamp (Rs.)	370	0
13	Average Economic Life per Lamp (Hrs.) *	10000	50000
14	Number of Lamps replaced per year	10	0
15	Cost of Lamp Replacement per year (Rs.)	3700	0
16	Cost of Maintenance (Assuming 10% failure @ 200 per point, Including Ballast)	2000	Nil
17	Savings due to reduction in Lamp Replacement Cost (Rs.)		3700
18	Savings due to reduction in Maintenance Cost (Rs.)		2000
19	Total Savings per year (Rs.) Total Extra Investment Required		445890
20	Cost of Luminaire	8890	15000
21	No. of Luminaires	100 889000	100 1500000
22	Total Extra Investment (Rs.)		611000
23	Payback (Years)		1.4





Path Lighting Way of lights

Path lighting is critical for safe movement of people and vehicles around the plant. Typically poles of 9 meters are mounted along the pathways either in staggered or parallel arrangement. Uniformity and desirable lighting levels plays an important role.

EDGE

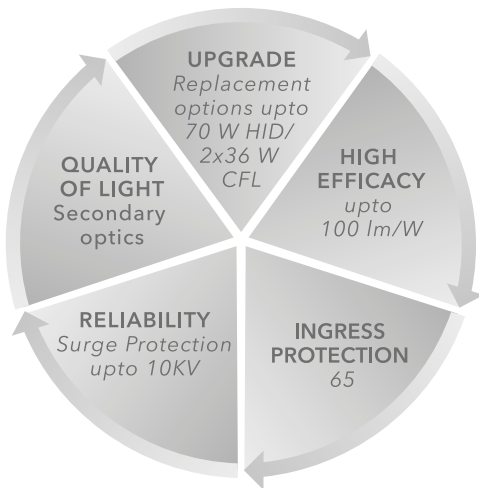
Edge series is the best running product amongst all categories in Bajaj luminaires. Its specially designed secondary optics provides optimum level of throw and spread of lights on and across the path. The reliability of Edge has been further improved by providing additional surge protection device so as to avoid failure due to voltage surges. Its top openable feature makes it more user friendly in terms of maintenance.

Wattages- 38W, 45W, 60W, 72W, 90W, 100W, 120W, 135W and 210W.



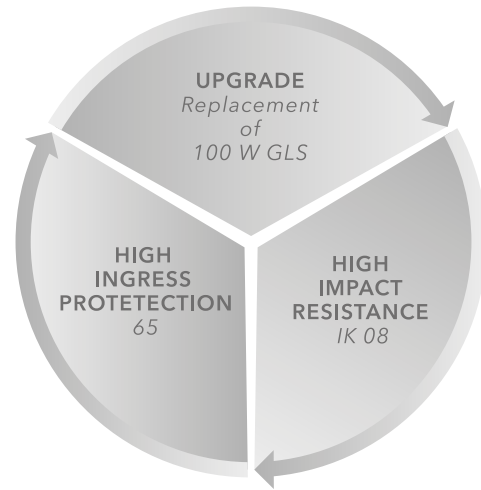
CUB

The paths within the factory campus can be made more appealing with the help of aesthetic yet energy efficient streetlights. Cub is a sleek and beautiful range of lower wattage streetlight which can provide adequate lighting levels during the evening time and makes the street light poles look appealing during the day time. Wattages- 15W, 18W, 20W, 25W and 30W.



WEE PLUS

Wee Plus is a highly durable product which can be used in testing outdoor conditions. The housing is made of pressure die cast aluminium with IP 65 protection. Its completely prewired and supplied to minimise installation time. The UV stabilised cover along with impact resistance rating of IK 08 ensures that the product can be used in indoor as well as outdoor. Wattage- 10W.





EDGE

for upgrade solution - Payback period

Objective: Upgrade 100 nos. of 150 W SV Street light to 72 W LED streetlight

Sr. No.	Description	150 W SV	Edge 72 W LED
1	Number of Luminaires	100	100
2	Type of Lamp	SV	LED
3	Type of Ballast	HID ballast	Electronic driver
4	Power Consumption per lamp including ballast loss (W)	175	90
5	Energy Saving per lamp point (W)	---	85
6	Total Lighting Load (kW)	17.5	9
7	Reduction in Total Lighting Load (kW)	---	8.5
8	Usage per Day (Hrs.)	12	12
9	Usage per Year (Days)	365	365
10	Cost per Unit (Rs./ kWh)	7.5	7.5
11	Savings due to reduction in Total Lighting Load (Rs.)		279225
12	Cost per Lamp (Rs.)	330	0
13	Average Economic Life per Lamp (Hrs.) *	10000	50000
14	Number of Lamps replaced per year	10	0
15	Cost of Lamp Replacement per year (Rs.)	3300	0
16	Cost of Maintenance (Assuming 10% failure @ 200 per point, Including Ballast)	2000	Nil
17	Savings due to reduction in Lamp Replacement Cost (Rs.)		3300
18	Savings due to reduction in Maintenance Cost (Rs.)		2000
19	Total Savings per year (Rs.) Total Extra Investment Required		284525
20	Cost of Luminaire	6580	10800
21	No. of Luminaires	100 658000	100 1080000
22	Total Extra Investment (Rs.)		422000
23	Payback (Years)		1.5

Sun Pharmaceutical Industries Ltd.

Sun House, Plot No. 201 B/1
Western Express Highway, Goregaon (E),
Mumbai - 400 063, Maharashtra, INDIA.
Tel. : (91-22) 4324 4324
Fax : (91-22) 4324 4343
www.sunpharma.com
CIN: L24230GJ1993PLC019050



Kind Attn: Mr Kailash Narayan

Date- 29/02/2016

CERTIFICATE OF APPRECIATION

This acknowledges that

BAJAJ ELECTRICALS LIMITED- LUMINAIRES TEAM

For their excellent project delivery skills & commitments towards quality during their engagement at various projects across SUNPHARMA locations.

We have used Bajaj Electricals LED luminaires for lighting requirements in our manufacturing plants and the performance is found satisfactory.

For **Sun Pharmaceutical Industries Ltd**

A handwritten signature in blue ink, appearing to read 'Arvind Jungade', written over a horizontal line.

Arvind Jungade
Sr. Manager - Projects



Date: 25/04/2016

To

Bajaj Electricals Limited
Luminares BU

Sub: Appreciation

Dear Sir,

We will like to thank Bajaj Electricals for the Technical & Lighting Design support offered prior to the supply of LED Luminaires for our Plant at Gurgaon (Haryana).

We also appreciate the excellent project delivery skills & commitment towards Quality, exhibited by Bajaj Luminaires Team during their engagement. And for after sale support as well.

We look forward to similar timely response from them for our future requirements and wish Bajaj Electricals Ltd. – Luminares BU, the very best for their future projects.

Thanking You,

Yours Truly,

For Suzuki Motorcycle India Private Ltd.


DIVYA GUPTA
DM (Proj. & Uty.)

Suzuki Motorcycle India Private Limited

Regd. Office:

Sales & Marketing office:

11nd Floor, Plot No.1, Nelson Mandela Road

Vasant Kunj, New Delhi – 110 070 (India)

Tel: 011-43127000, Fax: 011-46075418

Gurgaon Plant:

Village Kherki Dhoola, Bhadshahapur, N 11

Link Road, Gurgaon, Haryana – 122004, (In

Tel: 91 124 4170 700, Fax: 91 124 4170 70



Direct Project Organization
ITC Limited
No. 16, Basement Main Road
Marolli Nagar, Rajar,
Bangalore - 560 083, India
Telephone : 91 80 2298 2291 (5 Lines)
Fax : 91 80 2298 2295 / 2298 2296

Date: 10.05.2016

To,
Bajaj Electricals Ltd.
Kolkata
Kind Attention: Mrs. Sucharita Saha

Subject: Letter of Appreciation

We are using Bajaj Luminaires in our various projects. During the course of the project, the design & technical support extended to us is well appreciated and has made our work smooth and easy.

It is worth mentioning that Bajaj Design Team was present with us in every situation whenever pre-order support was required for our projects.

We look forward to continuous support and relation as business partners for many more projects in future with their improved post delivery service.

We wish them all the very best in their future ventures.

Thanking you,
For ITC Limited

Ashay Mandal



Date - 28.05.2016

To

Siddharth Mathur

M/s Bajaj Electricals Ltd

Luminaires Division

M I Road Jaipur

Letter of Appreciation

We at Ultratech cement Ltd kharia khangar, have been using bajaj luminaires regularly and have installed the same at our factories in Rajasthan we are very much happy with the product quality timely support & after sales service.

We appreciate the services offered by m/s Bajaj Electricals Ltd, Luminaires BU right from design stage, which has always been professional.

From our experience over these ten years, we have no hesitation in recommending Bajaj Electricals Ltd- Luminaires team for any office/modern workspace lighting projects

We look forward for long term association with Bajaj Electricals Ltd.

Thanking You

For Ultratech cement Ltd

Unit : Birla White

N K AGARWAL

Manager (purchase)

For ULTRATECH CEMENT LTD
(Unit : Birla White)

N K Agarwal
Manager (Purchase)
Authorized Signatory



ULTRATECH CEMENT LTD. Unit : Birla White
Office: D-7, Shakti Nagar, Jaipur - 342003
Works: Rajasthan Nagar
P.O. Kharia Khangar - 342106 Dist: Jaipur (Raj)

Telephone: Office: +91 201 2430760/2431715
Works: +91 07920 262362/264040
Fax: Office: +91 201 - 2431844
Works: +91 2070 - 264244/264222

Website: www.birlacement.com

Registered Office: 'B' Wing, 2nd Floor, Anza Centre, Mahatma Jyoti Bapu, Anchari (East), Mumbai - 400093, India

Sr No.	Area	Average Illumination Lux
1	Factory Outdoor Areas Stockyards, main entrances, exit roads, car parks, internal factory roads	20
2	Aircraft Factories and Maintenance Hangers Stock parts production Drilling, riveting, screw fastening, template work, wing sections, cowling welding, sub assembly, final assembly, inspection maintenance & repairs	450 300 300
3	Assembly Shops Rough work for example Frame assembly, assembly of heavy machinery Medium work for example machined parts, engine assembly, vehicle body assembly Fine work for example radio and telephone equipment and office machinery assembly Very fine work for example assembly of small precision mechanisms, instruments	150 300 700 1500
4	Boiler Houses Coal and ash handling Boiler rooms: Boiler fronts and operating areas other areas Outdoor plants: Catwalks Platforms	100 100 25 20 50
5	Breweries and Distilleries General working areas Brewhouse, bottling and canning plants	150 200
6	Canning and preserving factories Inspection of beans, rice, braley etc Preperation: Kettle areas, mechanical cleaning, trimming Canned and bottled goods High speed labeling lines Can inspection	450 300 200 300 450
7	Carpet Factories Winding, beaming Designing, cutting, setting pattern, fringing Weaving, mending, inspection	200 450 450
8	Chemical Works Hand furnaces, boiling tanks, stationary driers, mechanical driers, filtration plants, bleaching, extractors Controls Gauges, Values etc	150
9	Chocolate and Confectionery Factories Mixing, blending, boiling Chocolate husking, winnowing, fat extraction, crushing and refining, feeding, bean cleaning, sorting, milling cream making, Inspection, wrapping, packing	150 200 300

Sr No.	Area	Average Illumination Lux
10	Collieries Working areas other areas Picking belts Winding houses Lamp rooms: Main areas Repair sections Weigh cabins Fan houses	150 100 300 150 100 150 150 100
11	Electricity Generating Stations: Indoor Locations Turbine halls Auxillary equipment: battery rooms, blowers auxillary generators, switchgear and transformer chambers Boiler house and turbine house, coal conveyors, pulvertizers, feeders, precipitators, soot and slag blowers Conveyor houses, conveyor gentries, junction towers Control rooms: Vertical control panels Control desks Rear control panels Switch houses	200 100 70 to 100 70 to 100 200 to 300 300 150 150
12	Electricity Generating Stations: Outdoor Locations Coal unloading areas Coal storage areas Conveyors	20 20 50
13	Forges	150
14	Foundries Charging floors, tumbling cleaning, pouring, shaking out, rough moulding and rough core making Fine moulding and core making inspection	150 300
15	Gas Works Retort houses, oil gas plants, water gas plants, purifiers, coke screening and coke handling palnts Compressor, booster and exauster houses	30 to 50 100
16	Steel Metal works Benchwork, scribing, pressing, punching, shearing, stamping, spinning, folding	200
17	Rubber processing Fabric preperation creels Dipping, Moulding, compunding calendars tyre and tube making	200 150 200

Sr No.	Area	Average Illumination Lux
18	Soap Factories Kettle houses and ancillaries, glycerine evaporation and distillation: General working areas Control Panels Batch or continuous soap cooling, cutting, drying, soap milling, plodding: General working areas Control Panels Edible products processing and packing	 150 200 to 300 150 200 to 300 200
19	Structural steel fabrication plants General working areas Marking Off	 150 300
20	Textile Mills Soaking, fugitive tinting conditioning or setting of twist Spinning winding, twisting, rewinding, quilting, slashing Warping Heralding Weaving Inspection	 200 450 200 300 700 700 1000
21	Printing Works Printing plants: Machine composition, imposing stones presses Composing rooms Proof reading Electrotyping Block making, electroplating, washing, cacking moulding, finishing, routing Colour Printing: Inspection area	 200 300 450 300 200 300 700
22	Paint shops and spraying booths Dipping, firing, rough spraying Rubbing, ordinary painting, spraying and finishing fine painting, spraying and finishing retouching and matching	 150 300 450 700
23	Paper Works Paper and board making: Machine houses, calendering, pulp mills, preparation plants, cutting, finishing, trimming Inspection and sorting Paper converting processes Corrugated board, cartons, containers and paper sack manufacture, coating and lamination processes Associated printing	 200 300 200 300
24	Pharmaceutical and fine chemical works Raw material storage Control labs and testing Pharmaceuticals manufacturing, grinding, granulating, mixing and drying, tableting, sterilising capping, catoning and weapping, inspection. Fine chemical manufacture: Plant processing Fine chemical finishing	 200 300 300 200 300
25	Plastic works Manufacture Processing: Calendering, extrusion Moulding- compression, injection Sheet fabrication: Shaping Trimming, machining, polishing Cementing	 300 200 200 300 200



BRANCH OFFICES

NORTH REGION

Chandigarh Tel.: 0172-5234600

Delhi (Gulmohar): Tel.: 011-26549100

Jaipur Tel.: 0141-2377364, 2369541, 2369542

Lucknow Tel.: 0522-4938900-30

Noida Tel.: 0120-4040400.

EAST REGION

Bhubaneswar Tel.: 0674-2390697, 2396980, 2394052

Guwahati Tel.: 0361-2346497, 2346498, 2346499

Kolkata Tel.: 033-22622685

Patna Tel.: 0612-2220155, 22231427

CENTRAL REGION

Indore Tel.: 0731-2548909/10/18

Raipur Tel.: 0771-2263976, 2263986, 4060166

Nagpur Tel.: 0712-2440318, 2440319

WEST REGION

Ahmedabad Tel.: 079-27543964, 27543967

Mumbai Tel.: 022-22193000

Pune Tel.: 020-26302000

SOUTH REGION

Bengaluru Tel.: 080-42662222

Chennai Tel.: 044-30662200

Cochin Tel.: 0484-2391119, 2392039

Hyderabad Tel.: 040-23442932, 23442933

Visakhapatnam Mob.: 8008709998



Bajaj Electricals Ltd.

Inspiring Trust

LUMINAIRES BUSINESS UNIT

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