Welcome to Wipro Technologies’s new age facility in Hinjewadi near Pune. Vibrancy and dynamics is key to a creative mind, and the new facility is a testimony of this concept. The campus, has state of the art lighting systems and effectively combines the latest Energy Management Systems (EMS).

Cutting energy costs is no longer the sole reason for installing lighting control in software development centers and call centers. Compliance with current and future legislation must be considered. There is a growing realization that people work more productively in a comfortable, correctly lit environment. So, Wipro Lighting’s latest intelligent lighting automatically provides the most suitable lighting conditions as well as the assurance that energy costs are kept to the minimum.

Intelligent lighting control proven in software development centers & call centers

Wipro Lighting has made such a positive impression that its sophisticated, high-performance MLS Managed Lighting System has been installed throughout the new facilities of Wipro Spectramind and Wipro Technologies.

The MLS has been installed in all open plan offices. Equipped with communicating detectors that share information about whether office areas are occupied or not, Wipro Lighting’s MLS delivers cost-effective lighting when and where it is required at the exact lux levels needed.

Wipro Lighting MLS brings three major benefits to the users where energy efficiency and quality of lighting are important factors. Lights switch on and off, or dim and brighten, according to occupancy and natural levels of daylight, always ensuring optimum levels of light which help increase employee productivity, and meet all relevant international standards on lighting.

Intelligent Lighting and Lighting Management techniques are capable of responding to the dynamic changes in the environment, in terms of occupancy detection, availability of daylight etc. This helps in making the lighting system more intelligent and also helps in saving precious power, when the system is actually not in use.

Intelligent Lighting Management System does this automatically, without manual help and without causing hindrance or disturbance to the occupants of the building. The enhanced performance of the system is made possible by using communicating detectors. Information on the current state of occupancy within the building runs through the low voltage bus network. In this system, physical barriers such as walls and partitions do not impede process of presence detection.

The most significant benefits of MLS are derived from the ability of detectors to communicate with each other. This ensures that lighting is provided to occupants in comfortable, convenient zones and the lights are held on automatically in key circulation areas.
Managed Lighting System with following components are used:

1. Softlite 2 WVP60236 DSI with digital dimmable electronic ballasts was chosen for its aesthetic looks and compliance to the latest CIBSE - LG3 2001 guidelines.
2. High performance, communicating Digital detectors type MLS 2000 DF
3. MLS bus power supply type RB 110
4. MLS programmer type HP2
5. Universal Hand-held controller type HC5

Wipro Lighting Digital detectors control group of luminaires it is connected to in its detection area. These detectors are located considering human movement in workstation areas. In case of occupancy detection in workstation areas, luminaires are kept on and if occupancy is not detected then lighting load is switched off or dimmed after the preset time delay. Also, through sensors, daylight regulation viz. adjusting the luminaire light output considering amount of ambient daylight available in the area is done.

Wipro MLS Bus power supply unit synchronises and powers MLS detectors.

Wipro MLS programmer is menu driven LCD programmer for MLS detectors with automatic equipment recognition and parameter download facilities. It also speeds up and simplifies the reprogramming of the system when changes are needed.

A Universal hand held controller is used to alter the lighting level as per user requirement for more Comfort (Dimming in case Lux levels are high and Increasing Intensity in case the occupant wants more lighting).

Brightness Management

In the MLS system, a cluster of six luminaries (Softlite 2-WVP 60236DSI) is provided with a presence detector at the center. This ensures that lights come on when software engineers or call center agents are present. A built in light level regulator automatically sets the brightness. These two benefits were of prime most importance to the design team and space planners.

In the open plan areas different lux levels were needed and this is catered by MLS's automatic dimming ability. MLS also ensures compliance with CIBSE Lighting Guide 3 (LG3) guidelines.

Uniquely, luminaries in the MLS system are interconnected so they can communicate with each other, describe their current status, and share information on occupancy throughout the building. From that information, intelligent and logical patterns are maintained and lighting can be provided in nominated unoccupied areas such as corridors and notional passages.

MLS system is extremely flexible and can adjust either individual luminaires, groups of luminaires or zones to meet with the user's requirements and quickly by using a handheld re-calibrator. Standard luminaires and systems would require an electrician to reconfigure lights and alter the hard wiring.