



OVERDRIVE ENGINEERING PVT LTD

Driven by Innovation.....

COMPANY PROFILE



MISSION

*O*ur mission is to be

*V*igilant about Environment & reduce consumption of

*E*nergy and promote use of

*R*enewable natural resources. The company is

*D*riven and motivated by the

*R*esponsibility to

*I*nnovate and provide

*V*ariety of services in the field of

*E*ngineering & Design of Sustainable HVAC systems

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OBJECTIVES

OVERDRIVE believes that the various challenges that the world is facing today is giving rise to prospects to modify and innovate: which will always bring forth the vital changes to make our Earth a better place for all.

Keeping the above in mind, **OVERDRIVE** is driven and motivated by the responsibility to innovate and provide variety of consulting services in the field of Engineering & Design of Sustainable HVAC systems with emphasis on **Passive Cooling**.

The promoter, Richie Mittal has vast experience of over 28 years in this Industry.

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WHY OVERDRIVE?

The Indian air conditioning industry is witnessing a transformation in terms of meeting Energy Efficient norms and fulfilling customers' requirement for added features. While the norms of Energy Efficiency have become more stringent, the raw material prices have increased significantly. Also the higher demand and reduced supply, energy wastage is becoming a much greater concern in our society.

By providing the optimal services using PASSIVE COOLING TECHNOLOGIES, **OVERDRIVE** contributes in preserving the environment. By deciding to engage **OVERDRIVE** for any of its services, you are taking a step towards being sustainable and environmentally friendly company, making it more desirable to consumers and / or users.

Richie Mittal

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Board of Directors

Richie Mittal



QUALIFICATION:

- Bachelors in Mechanical Engineering in 1983 from Birla Institute of Technology, Mesra, Ranchi,
- Masters in Thermal Engineering from Delhi College of Engineering in 1984.

Technical Background:

- From the year 1984 to 1987, Richie gained experience while working with Voltas, Blue Star and Utility Engineer's India Limited in Production, Sales, Planning and Projects for a short period of 3 years. Headed Designing Department for Utility Engineers with its new venture for manufacturing of HVAC equipment's of TRANE INC, USA in India.
- In the year 1988 Richie joined ROOTS AIR SYSTEMS Pvt. Ltd. as Director. Subsequently, from 1995 to 2012, he was 50% stakeholder in the company. During this period, he expanded the company to its present status where he made a mark for the company as leaders in Air Cooling, Air Conditioning and Ventilation in the country. This was a result of diversifying from trading and contracting to engineering, manufacturing and collaborating with International companies.
- In the year 2012, Richie decided to move on and independently started **OVERDRIVE** Engineering Private Limited to serve the industry.
- Richie was privileged to be one of the few Indians to be in Board of Directors of ASHRAE from 2008 - 2011.
- He also had an opportunity to be in Board of Directors of ISHRAE.

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- He has conducted various Technical workshops on Industrial Ventilation with ISHRAE Institute of Excellence. He has written numerous articles on the same and a specific one on Gas Turbine Intake Evaporative Cooling system for ISHRAE Journals
- He visits esteemed Engineering Colleges like IIT's and Delhi College of Engineering as a Guest lecturer and External Examiner.

Memberships:

- ASHRAE - American Society of Heating, Refrigeration and Air conditioning Engineers.
- ISHRAE - Indian Society of Heating, Refrigeration and Air conditioning Engineers.
- ASHRAE Technical Committees
 - T-TAC-TC01.10 COGENERATION SYSTEMS
 - T-TAC-TC05.08 KITCHEN VENTILATION
 - T-TAC-TC05.07 EVAPORATIVE COOLING
- BITOSA Alumni - Birla Institute of Technology Old Student Association.
- DCE Alumni - Delhi College of Engineering Old Student Association.
- Indian Chapter IGSHPA - International Ground Source Heat Pump Asso.

Mohit Mittal

Qualification - B.E. (IIT, Roorkee) in 1986

He is an entrepreneur working the area of Lighting and is Director.

D N Mittal

Qualification - B.E. (University of Delhi) in 1958 currently, he is Director with Overdrive. He retired as Chief Engineer from UP State Electricity Board in year 1992

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ASSOCIATED CONSULTANT

Ashu Gupta, IGBC AP, PQP



Qualifications: - A Bachelor of Engineering, Mechanical. Currently, he works as a principal consultant for OVERDRIVE. He has gained credibility in the green energy field by attaining certifications like IGBC AP and PQP from Abu Dhabi. He is also a President, of ISHRAE Jaipur Chapter and ECBC trainer.

Technical Background:

- Mr. Gupta's experience includes performing new building commissioning and retro-commissioning services, managing onsite energy system audits, leading energy efficiency analysis and modeling teams and performing building commissioning tests
- Mr. Gupta has professional experience with performing energy audits for energy efficiency and cost payback analysis. He has conducted ASHRAE Level I and Level II energy audits for energy conservation opportunities in HVAC, lighting, building envelope and controls. He has experience in performing energy analysis for whole building using EQUEST. He has managed LEED projects for new construction and existing buildings. He has contributed towards early design decision using tools such as Ecotect and Dialux.
- Mr. Gupta has also done onsite work on a project in San-Francisco, California, USA. He was done several energy modeling jobs for projects around the world

Memberships:

- ASHRAE - American Society of Heating, Refrigeration and Air conditioning Engineers.
- ISHRAE - Indian Society of Heating, Refrigeration and Air conditioning Engineers.
- IAEMP- Indian Association of Energy Management Professionals

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Kushagra Juneja, LEED GA, IGBC AP



Qualifications: - He has done Bachelor of Engineering (Mechanical) from VIT.

He is a principal consultant for Overdrive. He has earned various credentials such as GRIHA trainer and evaluator, IGBC AP and LEED Green Associate.

Technical Background:

Mr. Juneja's experience includes performing new building commissioning and retro-commissioning services, managing onsite energy system audits, leading energy efficiency analysis and modeling teams and performing building commissioning tests. His exposure to Solar PV industry as a system designer and material selector and then diversifying into the green building sector has added many portfolios to his profile. The experience in energy sector includes construction advisory and implementation, simulation services, energy audit and system commissioning, indoor air quality advisory and envelope optimization. Having represented on several national and international forums, a rich experience is what has come of it. Air conditioning has been a subject of interest and the latest addition has been the design of earth air tunnel systems and chilled beams.

COMPANY PROFILE



SERVICES

AREAS OF CONSULTANCY

OVERDRIVE provides consultancy in the following areas of HVAC:

- Conceptual Planning
- Preliminary Design Report with Financial plan
- Comprehensive Design and Engineering
- Floating Tender and award of Contract
- Demand based Site Supervision
- Assessment of the Installed systems

- INDUSTRIAL VENTILATION
- INDUSTRIAL PRESSURIZATION:.
- INDUSTRIAL EVAPORATIVE COOLING
- DIRECT INDIRECT COOLING
- NATURAL VENTILATION
- MULTI-STAGE FILTRATION
- INDUSTRIAL EXHAUST

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- **KITCHEN VENTILATION**
- **BASEMENT VENTILATION**
- **COGENRATION**
- **CLEAN AIR**
- **SPOT COOLING**
- **DILUATION VENTILATION**
- **POWER HOUSE VENTILATION**
- **COOLING SCHOOLS:**
- **DG ROOM VENTILATION:**
- **GAS TRUBINES INTAKE COOLING:**
- **MUTI STAGE COOLING:**
- **INDUSTRIAL PROCESS AIR CONDITIONING:**
- **INDUSTRIAL AIR CONDITIONING:**
- **ROOF COOLING**
- **PRE COOLING FOR AIR COOLED CHILLER**
- **TRIGENERATION**
- **TESTING ADJUSTING BALANCING**

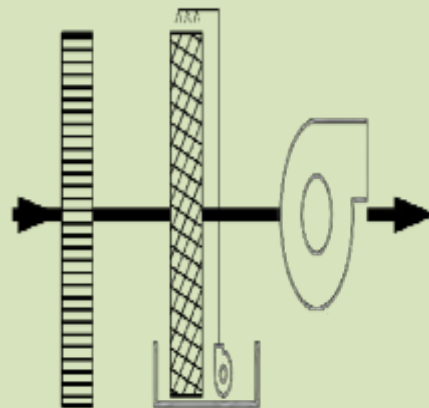
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Green Building Services

- **IGBC/GRIHA/USGBC Certification**
- **Building Simulation Services**
- **Building Commissioning (Third Party)**
- **Energy Audit**
- **Mechanical Design**
- **Solar Design and Verification**
- **Rainwater Harvesting**
- **Green Education**
- **Indoor Air Quality Consulting**



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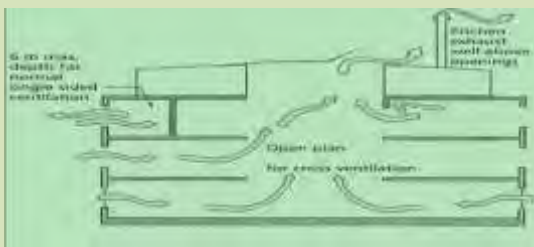
EXPERTISE



- Geothermal Cooling and Heating
- Solar Air-conditioning
- Passive Cooling Design and Products
- Building Simulation
- Green Building Facilitation
- Third Party Commissioning

PASSIVE COOLING

Industries need to have these systems as it works with minimal power and water requirements. As the cost of Power is increasing and water level is depleting every day and we are becoming cautious of environment, this is the only solution. The concept has to be incorporated from the drawing stage of the buildings to get the best. However the same can be incorporated in the existing as well.



Energy Audit

The demand of energy audit in industries helps in reducing the power and water consumption. The various technologies are available to achieve this with payback period of less than six months depending on the usages and energy wastage.

Retainer-ship

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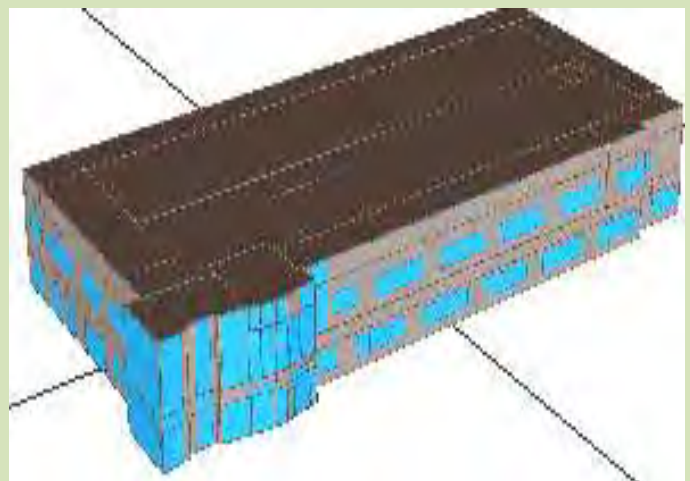


Green Certification Facilitation

- Indian rating system – GRIHA, IGBC Green Factory, Green Homes,
- USGBC LEED – New Constructions, Core and Shell, Commercial Interiors, Operations and Maintenance, Homes, Schools, Healthcare are the major rating portfolios where we offer complete certification services.
- China and the Middle East have their own rating systems – Qatar Sustainability Assessment System (QSAS), China 3 Star, and UAE – ESTIDAMA.
- Indian rating system – GRIHA, IGBC
- Singapore rating system – Green mark, are also assisted with

Building Simulation Services

Energy Simulation – The science of estimating energy performance of the building. The complete building is erected in 3-d modelling software (eQuest, Visual DOE, TRANE TRACE, Energy Plus, Ecotect). The choice of software is based on the level of complexity of the project.



COMPANY PROFILE



Daylight Simulation – The harvesting

of daylight is an important feature in the green building. Daylight modelling is done in two ways, unit by unit or by the whole



building approach. Depending on complexity of design the same is achievable. The software may be chosen amongst Ecotect with Radiance, TRNSYS and Dialux, all of which are established tools for the purpose.

Building System Commissioning & Measurement

& Verification

- Post installation verification and design intent compliance is the major service on offer.
- Systems including lighting systems, HVAC systems i.e. chillers, boilers, pumps, heat exchangers, motors, duct work, fans and sensors, BMS systems, and overall performance are the points of verification.
- The intent is to conform to the owner's project requirements, the basis of design and the design brief shared at the time of initial design.



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Testing, Adjusting and Balancing- TAB

HVAC system testing, adjusting and balancing is essential for efficient system operation, essential for cost-effective energy conservation management, and essential for tenant comfort.

Our experienced TAB (Testing and Balancing) technologists can, through systematic testing procedures, adjust and balance to correct flows in all new and existing HVAC systems.

Test results are documented and compiled in report form that will enable your own engineering staff or consultant to evaluate the actual performance of the installed system. Reports are compiled in our in-house custom-made software, and system schematics are drafted using industry current AutoCAD software.

We are equipped with all desired instruments of high standard such as Duct Hood with data logger, Anemometer, Tachometer, Psychrometer, Sound meter, Ultrasonic Meter, Clamp meter, Dual Port Manometer, Vibration meter, CO detector, Thermocouple, superheat/Sub-cooling meter.



Following services are offered by us under TAB:

- HVAC System survey
- Performance Testing
- Air & Hydronic Systems Balancing
- Fume Hood Testing & Certification
- Fire Damper Testing
- Clean Room System Balancing

OVERDRIVE ENGINEERING PVT LTD



OUR SELECT CLIENTS FOR HVAC SERVICES

- **SAMSUNG Electronics India, Noida**
- **HONDA Scooter & Motorcycle I Pvt Ltd.**
- **HONDA Car India Limited, Noida**
- **VE Commercial Vehicle(Volvo & Eicher JV)**
- **ULTIMATE Flexipack Limited, Haridwar**
- **Cadbury India Ltd. Malanpur & Warna**
- **COGNIZANT Technical Solutions, Kolkata**
- **Sanden Vikas India Ltd.. Faridabad**

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- **Hella Automotive India Pvt Ltd., Gurgaon**
- **Britannia India Limited. Gujrat**
- **SAMSUNG Heavy Industries, Noida**
- **DANBLOCK BRAKES India P. Ltd. Sonapat**
- **Montage Enterprises Pvt. Ltd. Haridwar**
- **Lotus Herbal – Kanidi Biotech P Ltd, Noida**
- **HDFC Limited, Kolkata**
- **J B Mangharam Foods Pvt Ltd. Gwalior**
- **ALLOY CAST. Faridabad**
- **A J INDUSTRIES, Faridabad**
- **GALLAY India, Sohna**

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- **KNY Projects Pvt. Ltd. Gurgaon**
- **Vadodara Medical College., Vadodara**
- **Gas Authority of India Limited. (GAIL)**
- **Hariwill Electronics Pvt. Ltd. Lucknow**
- **Power Grid India Ltd (PGIL), Vadodara**
- **Airport Authority of India, New Delhi**
- **Sanden Vikas Precision Parts, Neemrana**
- **Ladygoshan – MRPL Hospital (Mangalore)**
- **Vadodara Multi Super-Specialty Hospital**
- **KERRY India, Bawal**
- **Yazaki India, Ruderpur**

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- **Albatross Inlands, Noida**
- **ROULUNDS Braking, Sonapat**
- **Nandigram Rural Hospital, East Mehdipur**
- **Debra Rural Hospital, Kolkata**
- **Shopping Malls (05/10A/E3. E5), NOIDA**
- **SR Distilleries, Odisha**
- **Montage Global, Silvassa**
- **Minda Lighting, Manesar**
- **Makino Auto, Noida**

>>>>>AND ADDING!!!!

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OUR SELECT CLIENTS FOR GREEN / GHRIHA SERVICES

- **Airport Authority of India, New Delhi**
- **Lotus Herbal – Kanidi Biotech P Ltd, Noida**
- **IOCL, Hyderabad**
- **APAS Valmark Mall, Bangalore**
- **FACET Diamond Factory, Surat**
- **GIHED Corporate Office, Ahmedabad**
- **Office Building (Dinesh Hall), Ahmedabad**
- **PGIL, Vadodara**

>>>>>AND ADDING!!!!

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CONTACT DETAILS

Corresponding Office:

SDF E -24, NSEZ, Phase – II

NOIDA – 201305,

Uttar Pradesh, INDIA

T - +91 120 3023234

F- +91 120 3023235

Mobile - +91 8744 0000 65

Email – info@overdriveengineering.com

URL – www.overdriveengineering.com

Branch Office:

169, Sector –39. (HUDA),

GURGAON – 122 001 (Haryana)

Registered Office:

1621, Sector – C1, Vasant Kunj,

New Delhi – 110070 (India)

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