Corporate Office

Design & Supervision Consultancy

Industrial Utilities

Modernisation & Automation

River Protection

Urban Infrastructure
Air Port Surveys

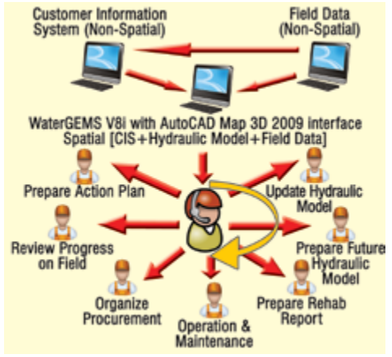
Pumping System

Public Private Partnerships

HARNESSING THE WATER ENERGY NEXUS
नीरजा

Water & Energy Efficiency Projects

Water Sector Management Consultancy

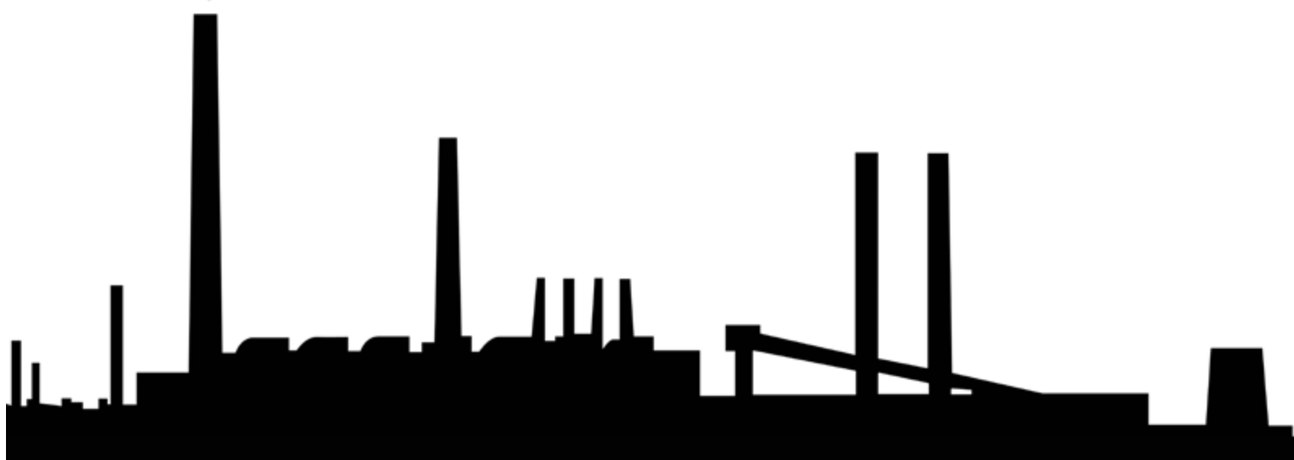


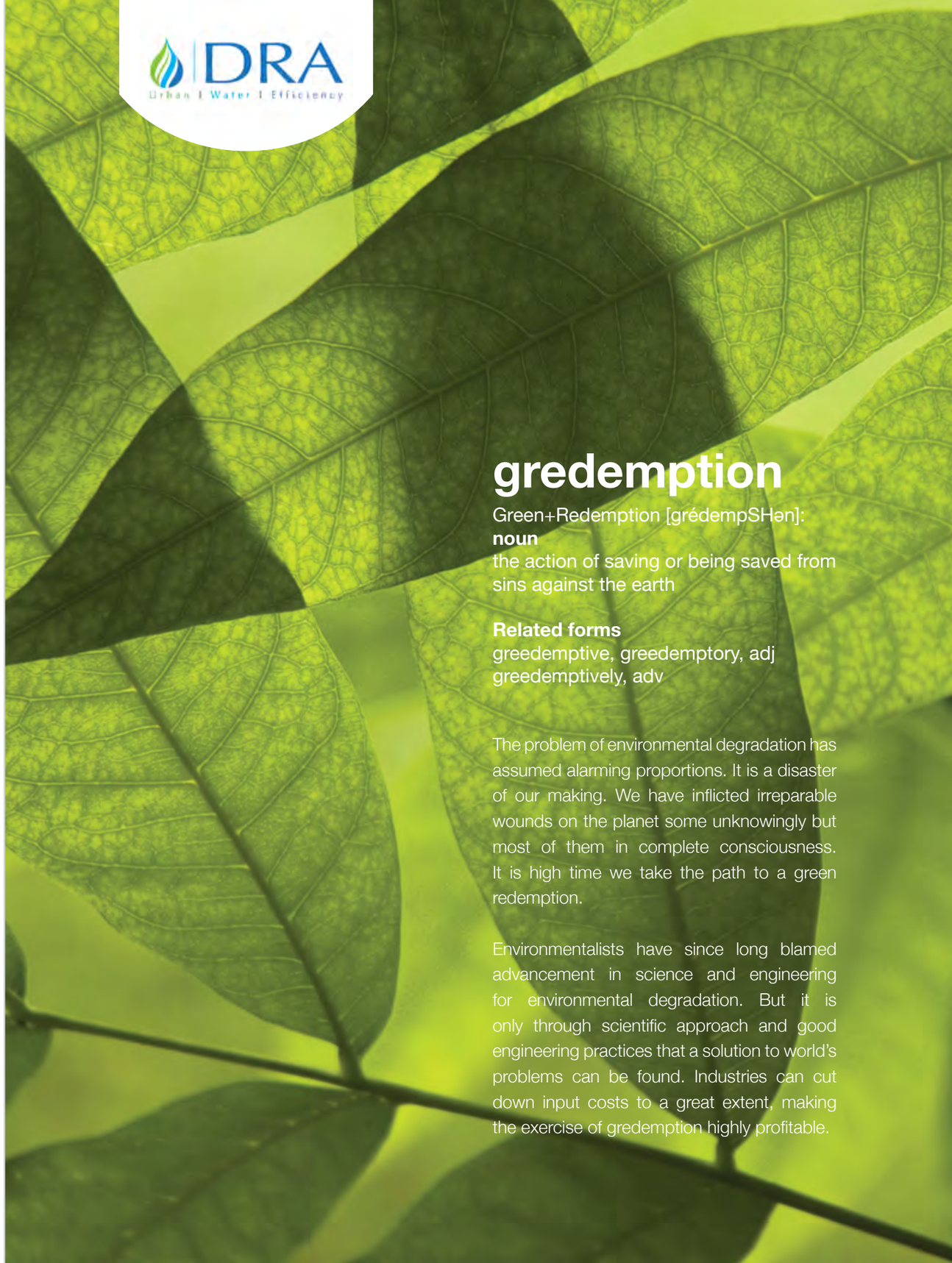
PMC for 24x7 Water Supply Projects

DRA CONSULTANTS PVT. LTD.
58, Ingole Nagar, Opp. Airport, Behind Hotel Pride, Wardha Road, Nagpur-440 005 (M.S.) India.
P : +91-712-3027575 | F : +91-712-3027527 | M : +91-9922954932
e : dra.nagpur@gmail.com | business.development@dra.net.in | www.dineshrathi.com
PUNE NAGPUR DELHI

DRA
Urban | Water | Efficiency

gredemption





gredemption

Green+Redemption [grédempSHən]:
noun
the action of saving or being saved from sins against the earth

Related forms
greedemptive, greedemptory, adj
greedemptively, adv

The problem of environmental degradation has assumed alarming proportions. It is a disaster of our making. We have inflicted irreparable wounds on the planet some unknowingly but most of them in complete consciousness. It is high time we take the path to a green redemption.

Environmentalists have since long blamed advancement in science and engineering for environmental degradation. But it is only through scientific approach and good engineering practices that a solution to world's problems can be found. Industries can cut down input costs to a great extent, making the exercise of gredemption highly profitable.

Solving the toughest challenges, helping you perform better

Industrialisation in the recent past has witnessed an unprecedented boom. This has lead to an increase in input costs as well reduced profit margin of business houses. In the present circumstances little attention has been paid towards the key aspects that lead to cost escalation.

As observed the focus of this cost reduction exercise has not been on industrial utilities that constitute for almost 30 per cent of cost in all major industries. It is industrial utilities that can, not only improve power and water efficiency, but can reduce the labour input to a great extent.

DRA Pvt. Ltd. formerly known as Dinesh Rathi Associates is an engineering consultancy enterprise that has emerged as one the most renowned names in Industrial utility systems across the country. With services including Compressed Air, Pressurisation & Ventilation, Cooling Water, Raw Water, Blower Air System, Sewage, Energy Audit and Fuel Oil systems, etc DRA has completed a number of projects for major industrial groups in India.

DRA
Urban | Water | Efficiency

What we do

Water Management

- Raw water/Cooling water/Process water/ Fire water/Potable and non-Potable water systems
- Water audit, rationalisation & upgradation
- Water conservation/Energy efficiency
- Source investigation
- Holistic system design (source, treatment, transmission, recycle & reuse)
- Detailed piping drawings
- Bills of material & specifications
- Project management consultancy

Effluent System

- Assessment of capacity of system
- Topographical survey
- Design concept
- Hydraulic statement
- Design of STP/Effluent treatment
- Recycle & reuse
- Tender document
- Project management consultancy

Compressed Air Systems

- Compressed air audit & rationalisation
- Leak detection and reduction
- Energy efficiency
- Improved reliability of compressed air system
- Reduced number of equipment
- Assessment of quality and quantity of water
- Design concept
- Process & instrumentation diagram
- Equipment sizing
- Compressor house design
- Detailed piping drawings
- Bills of material & specifications
- Project management consultancy

Pressurisation and Ventilation System

- Assessment of quality and quantity of dust free air
- Design concept
- Equipment sizing
- General arrangement of P & V systems
- Detailed duct fabrication drawings
- Bills of material & specifications
- Project management consultancy

Fuel Oil System

- Assessment of class and quantity of fuel oil
- Storage tank, fabrication drawings
- Design concept
- Process & instrumentation diagram
- Equipment sizing
- General arrangement of tank farm area
- Detailed piping drawings
- Bills of material & specifications
- Approval from CCE
- Project management consultancy

Designing cost effective solutions for sustainable growth and a greener tomorrow

Cost efficiency

Systematic development of industrial utilities can successfully bring down input costs to a great extent. The savings through DRA systems is such that 100 per cent of the project cost can be recovered within a couple of years of commencement of new systems. A number of industries that DRA has worked with have not only recovered the investments made for rehabilitation of old systems but have achieved major cost savings thus improving profitability. Savings in cost range from 15-40% based on old installed system.

Environmental protection

DRA being a company devoted to the cause of environmental conservation has changed the way industries work today. Setting an example in the nation, DRA's initiatives have re-defined conservation of energy. DRA's enterprise working in different spheres has been recognised and awarded for contribution to energy, water conservation and environmental protection. Having completed projects in several different states in India, DRA has achieved fame for competence in reduction and optimisation of energy usage and water input.

Zero discharge programme

DRA's zero discharge program running successfully in a number of industrial colonies has sketched a picture for the future. Excellent results of the program initiated by DRA have forced municipal corporations and state governments to contemplate adopting this model. As part of this ambitious program DRA established systems in which water supplied to residential areas is utilised for domestic purposes and then channelised towards the industrial area. Afterwards, effluents from the industrial water are treated and used for agricultural and other purposes, doing away with wastage of water completely. The program working at Awarpur Cement plant and Maratha Cement plant have become models for future.

Helping companies embrace the future

Paper Less office, the way ahead

The paperless concept is implemented through the Online Information System. With the help of this system the engineering database is converted into digital format by effective scanning method. The equipment for this had been procured by DRA from foreign suppliers and was the first of its kind to be introduced in India. Engineers can view, edit, update, print and mail the data online, reducing the data searching time as well as wastage of papers used for printing etc.

Features

- Large format scanning from A0 to A4 with state of the art technology and software.
- Specially designed software for easy retrieval, access of drawings, manuals with a click.
- This database is linked to the server and allows access to multiple users from various locations.
- Animated department wise flow sheets for unambiguous representation of plant and equipment.
- Paperless drawing office with less human intervention.
- Online data allows the software to work 24x7.
- Data addition/iteration within seconds

Benefits

- Reduced searching time for drawings & manuals.
- Searching time is reduced considerably thus increasing productivity.
- Drawing and plant data easily available during shutdown period.
- Digital data with enhanced security.
- Standard format and report generation.

Paperless drawing office system has been developed and installed at various cement and automotive industries including

- UltraTech Cement Plants, Gujarat Cement Works (GCW)
- UltraTech Cement Plants, Hirmi Cement Works (HCW)
- UltraTech Cement Plants, Jharsuguda Cement Works (JCW)
- UltraTech Cement Plants, West Bengal Cement Works (WBCW)
- Binani Cement Plant, Sirohi, Rajastan
- Ashok Leyland Limited, Truck Division, Bhandara

Setting benchmarks in the field, with results that go beyond expectations

Past performance

DRA has started energy audits with Save Energy Program of MEDA for Awarpur Cement Works, UltraTech Cement Plant in 1990.
Results of this audit proved to be remarkable. Owing to huge energy savings in utilities with improved reliability in compressed air & water systems, even UltraTech and Ambuja Group implemented the energy efficient design in all the new plants constructed in last 12 years.

Originally 2 MTA plant in Awarpur Cement Works was installed with 55 nos. compressors with connected load of 3605 KW (before implementation of energy audit suggestions) now new plant constructed by Ambuja at Gadchandur (Maharashtra) has only 10 nos. compressors with connected load of 760 KW (designed by Dinesh Rathi & Associates)

M/s DRA provided utility services in following cement industries:

- UltraTech Cements Limited
- Awarpur Cement Works (ACW), Maharashtra
- Gujarat Cement Works (GCW), Gujarat
- Hirmi Cement Works (HCW), Chhattisgarh
- Narmada Cement Company Limited (NCCL), Gujarat
- Jharsuguda Cement Works (JCW), Orrisa
- West Bengal Cement Works (WBCW), West Bengal
- Andhra Pradesh Cement Works (APCW), Andhra Pradesh
- Ambuja Cements, Bhatapara-Chhattisgarh, Ropar-Punjab, Bhatinda-Punjab, Darlaghat-Himachal Pradesh, Pali-Rajasthan, Kodinar-Gujarat, Sankrail-West Bengal, Rauri-Himachal Pradesh
- Maratha Cement, Maharashtra
- Grasim Cement Limited, Dadri-Uttarpradesh, Panipat-Haryana, Ginegeria-Karnataka, Kotputali-Rajastan
- Aditya Cement, Rajasthan
- Manikgarth Cement, Gadchandur-Maharashtra
- Lafarge Cement, Gopalnagar-Chhattisgarh
- Prism Cement, Satna-Madhya Pradesh
- ACC Limited, Wadi-Karnataka, Bellari-Karnataka, Kolar-Karnataka
- Kuwait Cement Company (Kuwait)
- Ras Al Khaimah (U.A.E.)
- Mysore Cement Ltd. Karnataka
- Dalmia Cement, Kadappa, Andhra pradesh
- Orrisa Cement Limited
- Rajgangpur, Orisa
- Trumboo Cements Pvt. Ltd.