



PARADIGM[®]
Managing Quality



a detailed profile



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Overview

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Food Technical & Regulatory

Operational Excellence

Training Materials

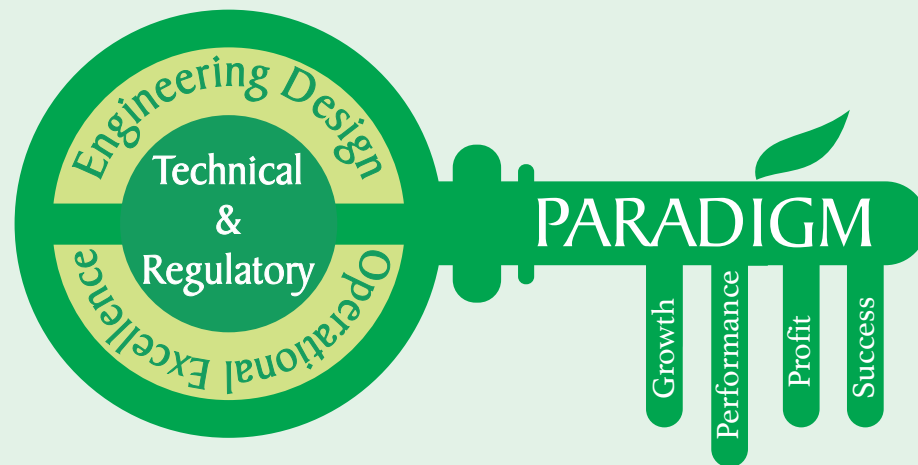
Notices

Satisfied Clients

Credentials

Paradigm and Zen are sister companies with over twenty years of rich experience, offering unmatched expertise aiding in transforming ideas into tangible realities. Their ability extends to provide engineering expertise in establishing robust plant infrastructure and ensuring adherence to statutory and regulatory standards. Our strength lies in understanding the customer needs in Global perspective and the ability to provide single source multi-discipline services of true value to our Customers.

Catering to diverse sectors including FMCG, Food Processing, Pharma, Ayurveda, Chemical, and related domains. Both the firms have dedicated themselves to provide customers with exceptional workmanship and professional.



Values

- To continually demonstrate technical excellence by applying our expertise.
- Exceeding to clients' requirements in every aspect of our relationship.
- Encouraging innovation in every aspect of business.
- To be responsible through proactive resourcing, cumulative execution efficiencies and serving as a building block in our relationship with client.
- Delivering service on time.
- Maintain strict confidentiality of sensitive information of clients.
- Encourage teamwork and a sense of pride and belonging.



Mission

To add value to the Food, Pharma projects by our experience, expertise, skilled-manpower & give expert advice to the client.

Every employee individually and collectively, dedicate themselves to provide customers with exceptional workmanship and professional integrity.

Our Strength

- Design and scale up from pilot plant data.
- Defining of process scheme, material balance, cycle time & utility estimations.
- Conceptualizing efficient layout schemes with our expertise in similar industries.
- Conceptualization of solvent recovery scheme, effluent streams segregation, scrubbing system as required.
- Hands on experience in defining and detailing of specific unit operations like recipe automation, mixers, grinders, freezing, heating etc.
- Thorough understanding of the process engineering & requirements resulting in efficient utilities & instrumentation designs.
- Understand client's requirements beyond the stated brief.
- Expertise in the area of operation.
- Good Professional Experience.
- Emphasis on design and delivery.
- Co-ordination between various disciplines.
- Uncompromising Integrity.

Why Us ?



Quick understanding user requirements and Conceptualization



Value addition by previous knowledge and experience to suit your day-to day needs.



A team of experienced engineers of various disciplines under one roof.



Good exposure towards regulatory standards and statutory requirements.



Good understanding on process unit operations, safety is considered in basic engineering by default



Better coordination among inter disciplines



All Services in-house & under one roof

Food Tech. and Chemical Engg:

Understand user requirement and Technology & International Standards



Mechanical Engg:

Design of efficient Utility Systems and Piping Engineering



Civil / Structural and Architects:

Understand structural requirements and finishes required



HVAC Engg:

Design of HVAC systems catering to the latest GMP and FDA requirements



Electrical Engg:

Understand safety zoning requirements and efficient design of electrical distribution systems



Instrumentation Engg:

Design and detailing of controls / Automation based on process needs.

This helps in making a efficient infrastructure with proper engineering and timely completion.

What we do...

- Plant Engineering Design
- Food **Technical** & Regulatory Advisory
- **Operational** Excellence



Food Technical & Regulatory

- Process automation for products, achieving better hygiene, higher volumes & productivity
- Vetting of the plant infra, process, equipment's as per standards and regulations
- Manning, training, competence development for technical & soft skills.
- Laying systems and processes, its robust-implementation for Quality, Food safety, EHS, Social accountability in line with international standards, codes & best practices. This includes meeting requirements for:



Technical support

Approved trainings

- Global **food safety** standards
- Risk Assessment and HACCP
- HARPC - hazard analysis & **risk based preventive controls**, (FSMA, USA)
- Product **safety culture**
- **Gluten-free** Certification
- Effective **allergen** Management
- **Root cause** Analysis
- Effective **environmental monitoring**
- Vulnerability assessment for **food fraud**

Media design & visual aids

- Label design
- Signages
- Graphical SOP's



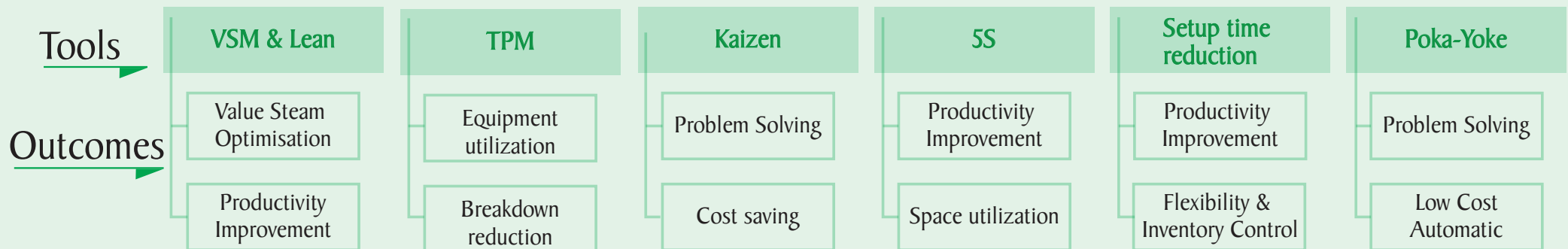
Associates / Approvals:

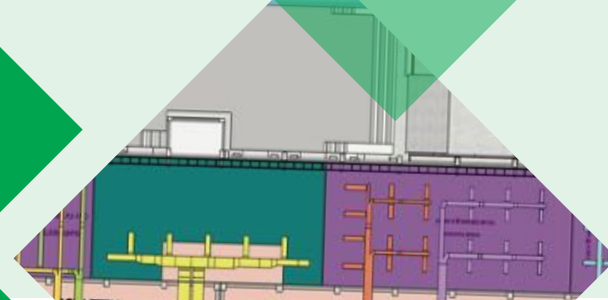


Operational Excellence Support

Based on operational issues experienced in the industry we have devised models for application of various world class manufacturing (WCM) tools and techniques for process streamlining, problem solving, improving productivity.

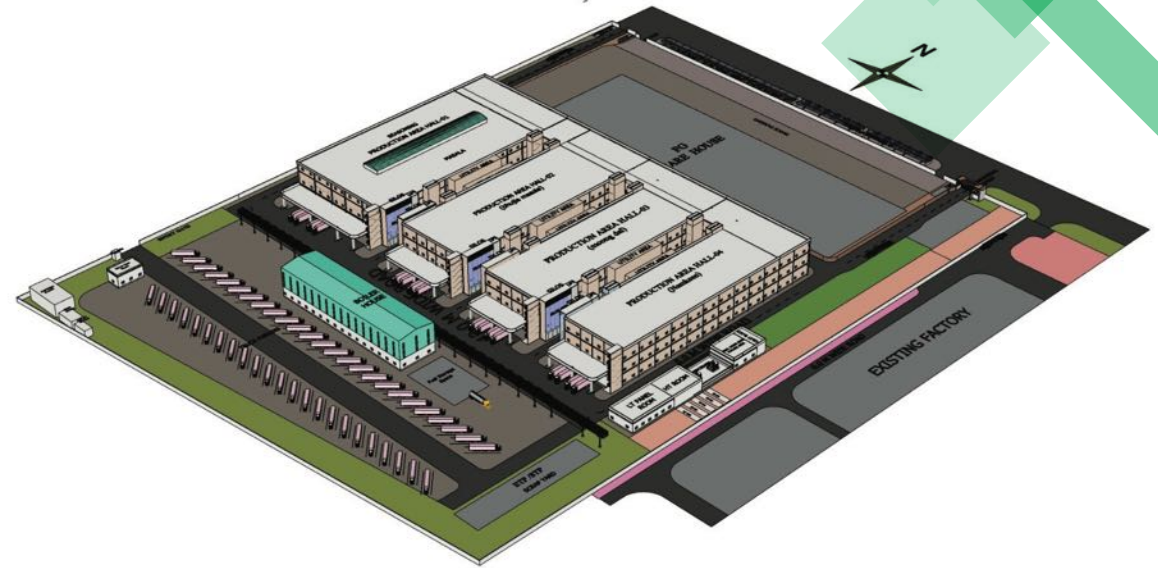
Following are some of them featured below with their outcomes.



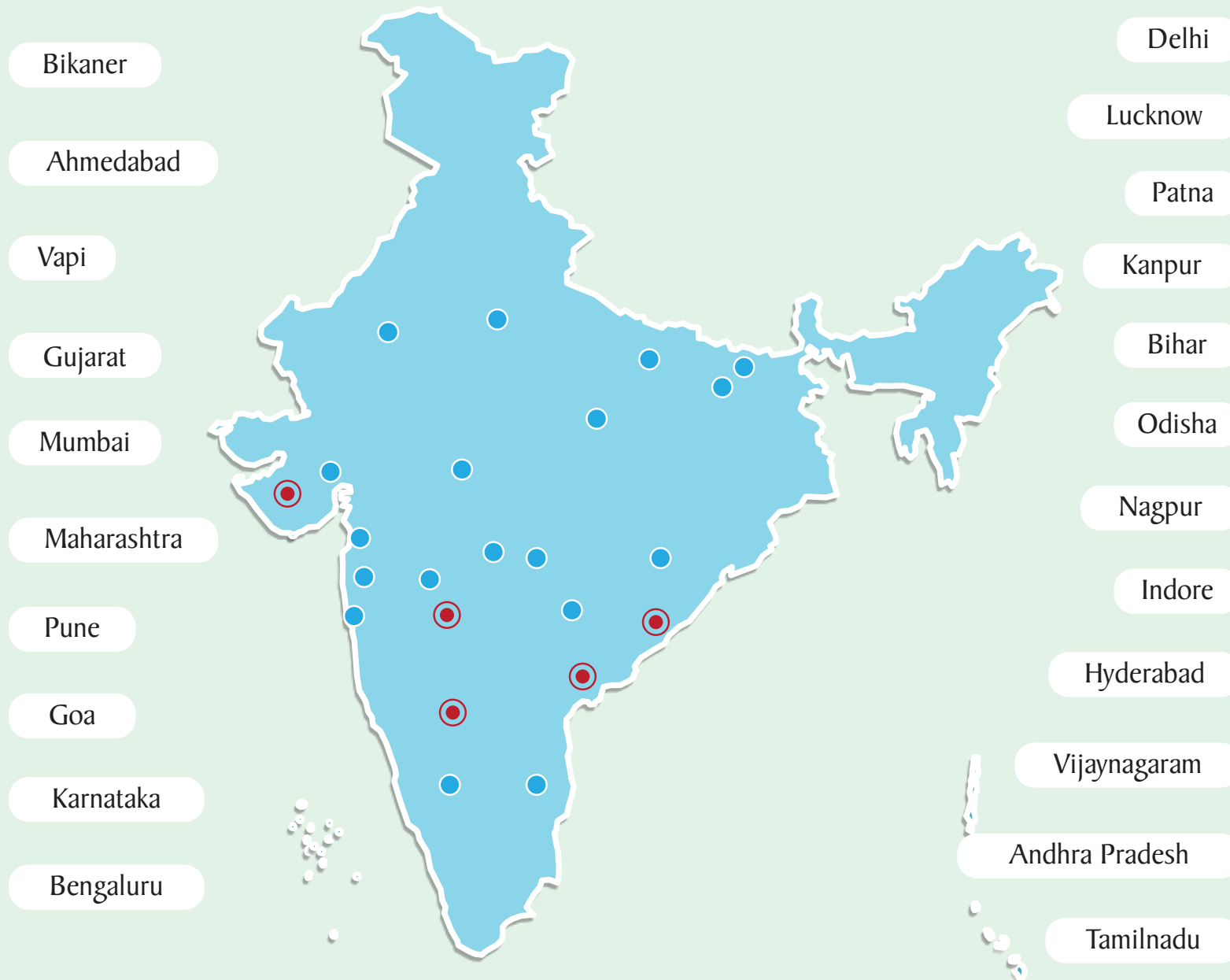


Engineering Design

- Factory infrastructure designing from concept to as built.
- Process engineering and automation
- Technology, vendors identification and assessment
- International food safety standards and Global best practices
- Project Management services (PMC)
- Undertake basic & detailed Engineering design services form concept to as-built Civil/structural, Architectural, electrical & HVAC design and implementation



Pan India & Globally



Worked in Russia, Thailand, Phillipines, Middle East...

Sectors Worked for...

Food manufacturing

- Biscuits / Confectionery
- Milk and milk products
- Indian sweets and savories
- RTS - Retort, Frozen
- Bakery
- RTC – Instant mixes, Pastes
- Pickles / Chutneys
- Spices / Seasonings
- Meat / Poultry
- Food Ingredients Sugar / Tea
- Beverages – Fruit / CSDs
- Milling – Wheat / Besan / Rice

Warehousing

- Warehousing / Cold storage

Packaging

- Plastics / laminates / Paper

Food Services

- Hotels / Restaurants / Cafeterias

Chemical

- API bulk drugs
- Ayurveda
- BioTech/ Natural Extracts
- Inorganic / Agro Chemicals
- Cosmetics

Founders & Directors



N. S. Walimbe

Director at
Paradigm Services Pvt Ltd
&
Managing Director at Zen

- 40 years experience in Pharmaceutical industry in design and commissioning of heat & mass transfer systems
- Has independently handled projects from conceptualization till commissioning.
- ZHands-on experience in a wide variety of unit processes and unit operations.
- Started ZEN in 1996
- Direct experience in design and commissioning of large, ultra-modern API & formulation plants, both sterile and non-sterile as per FDA norms.
- Associated with APIs/Intermediates manufacturing companies as an expert in chemical engineering.

✓ nsw@zengroupindia.com



Atul Ganediwala

Managing Director at
Paradigm Services Pvt Ltd
&
Director at Zen

- Atul is a Master in Technology – Food Engineering , IIT Kharagpur with 23 years of experience.
- He is recognized Approved Training Provider (ATP) for BRCGS Standard for food Safety, NABET(QCI) accredited HACCP/FSMS Principle Consultant.
- He is a Lead instructor for FSPCA Preventive Control for Human Food, FSPCA, FSMA, US
- Worked for over 600 sites in food, pharma, packaging sectors for various initiatives from process engineering, technology sourcing, setting up of plants from concept to as built, quality / food safety systems, operational excellence management

✓ atul@paradigm.co.in



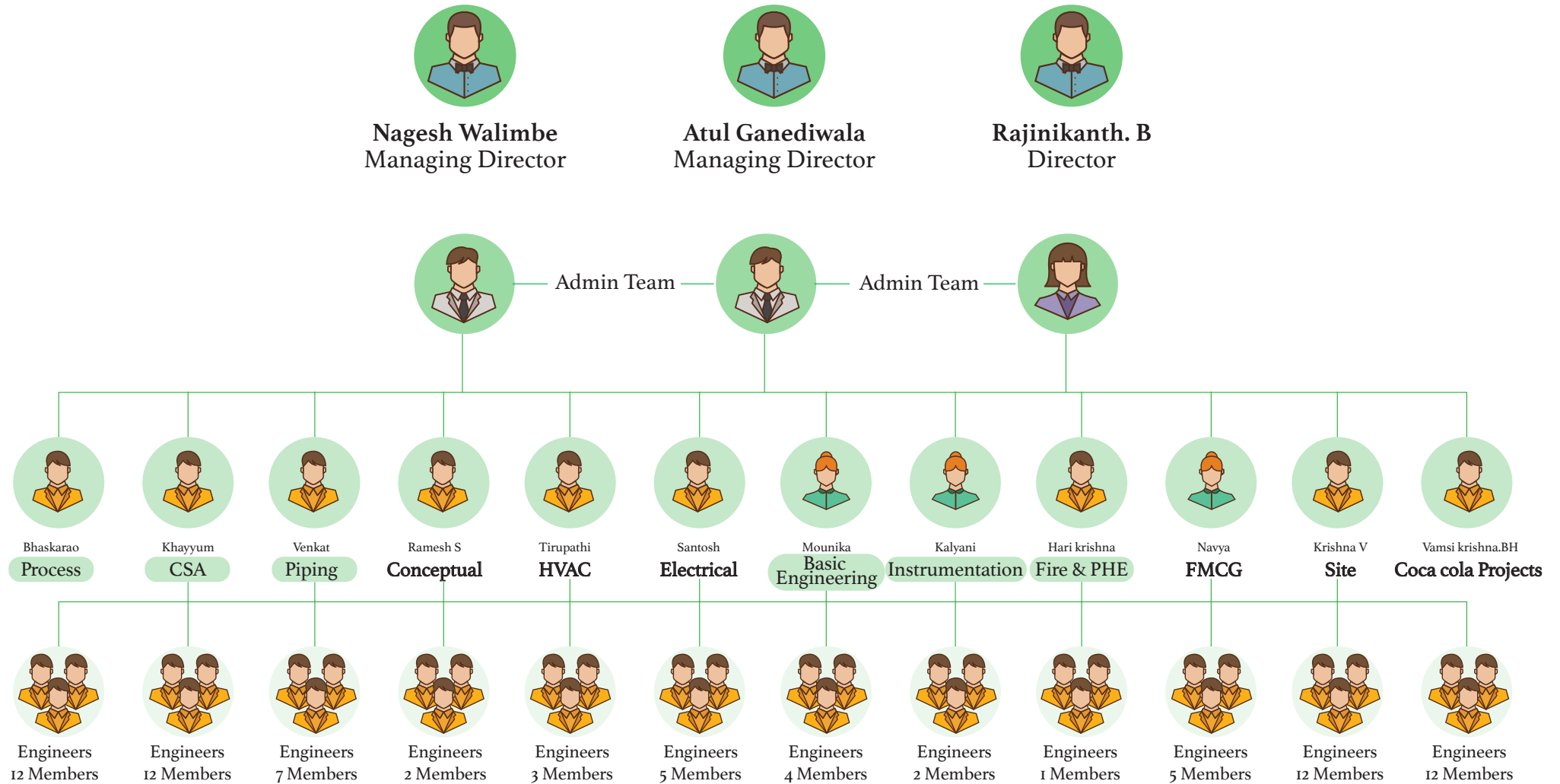
Rajnikanth Bathula

Director - Projects at
Paradigm Services Pvt Ltd
&
Zen

- Experience in design and consultancy, construction, project management and implementation of projects in Pharmaceuticals, Food, Biotech, oncology and natural extracts.
- Floating Tender Documents and Negotiations with Vendors/Contractor & Awarding the Project
- Involved in planning and execution of more than 400 projects worth of 25,000 crores.
- Overall project delivery responsibility
- Coordination with clients
- Trouble shooting.

✓ rk@zengroupindia.com

Operational Chart



Total Strength - 100+ Members

Credentials

- Quality Council of India
- APEDA (Agricultural and Processed Food Products Export Development Authority)
- FSSAI (Food Safety and Standards Authority of India)
- National Accreditation board for Education & Training (NABET)
- BRCGS – Approved trainer
- Lead Instructor – US FDA - FSMA
- Participating and contributing in events, seminars, meeting and regulatory committees with NDDB,



AGRICULTURAL AND PROCESSED FOOD PRODUCTS EXPORT DEVELOPMENT AUTHORITY
(MINISTRY OF COMMERCE AND INDUSTRY, GOVERNMENT OF INDIA)

RECOGNITION OF HACCP IMPLEMENTATION & CERTIFICATION AGENCY

This is to certify that the HACCP Implementation/ certification agency described below has been recognised by APEDA and considered to be competent to meet the required levels.

1. Recognition No. : QMC/HACCP/13
2. Date of recognition : 01.09.2022
3. Name of agency : Paradigm Services Pvt. Ltd.
4. Recognition validity upto : 30.08.2025
5. Recognition awarded for : HACCP Implementation
6. List of authorised auditor(s) : As per enclosure
7. Terms and Conditions of recognition : As per enclosure

Place : New Delhi
Date : 26.06.2023

For and on behalf of APEDA

Saswati Bose
26.06.2023
Dr. Saswati Bose
(General Manager)

3rd FLOOR, NCUI BUILDING 3, SIRI INSTITUTIONAL AREA, AUGUST KRANTI MARG, OPP. ASIAD
VILLAGE, NEW DELHI, DELHI 110016

FSPCA
FOOD SAFETY PREVENTIVE CONTROLS ALLIANCE
CERTIFICATE OF TRAINING

Is awarded to

Atul Ganediwala

in recognition for having successfully completed
the Food Safety Preventive Controls Alliance course:
Lead Instructor Training for FSPCA Preventive Controls for Human Food

delivered by Lead Instructor
MANPREET SINGH

completed on
05/17/2019

Robert Brackert
Robert Brackert, VP and Director
Institute for Food Safety and Health



Gerald Wojcik
Gerald Wojcik, Executive Director
International Food Protection Training Institute



Steve Mendenhall
Steve Mendenhall, Executive Director
Association of Food and Drug Officials



NABET
National Accreditation Board for Education and Training
(Certificate of Accreditation)

Paradigm Services Pvt. Ltd., Mumbai
307, Center Point, Andheri - Kurla Rd, Andheri East, Mumbai- 400059

has fulfilled requirements of NABET Accreditation Scheme for Hazard
Analysis Critical Control Point (HACCP) & Food Safety Management
System (FSMS) Consultant Organizations

The scope of accreditation covers consultancy services for Food Safety
Management System.

Certificate No.
FCO1922 04

Valid upto*
May 25, 2022

(*subject to satisfactory surveillance assessment and
compliance to the condition of accreditation)

Naresh
Chief Executive Officer
National Accreditation Board of Education & Training

Issue date
October 16, 2019

BRCS | Food
Safety

**Certificate of
Achievement**

This is to certify
Atul Ganediwala

Has completed and passed
**Global Standard for Food
Safety Issue 8 to 9: Train the
Trainer Conversion**

Certificate date
19-Oct-2022

Michelle Tindale
Michelle Tindale
Director of Performance
Enhancement

John Kukely
John Kukely
BRCS Director

Project Profile

Everest Spices - Umergaon

2nd plant at Umergaon, Gujarat

2.5 L sq. ft. plant, being designed for up to 400 MT/Day blended spices built in 15 months.

Involved in designing, technology selection, Engineering – MEP and project management

Objective is higher production with a major reduction in man power.

Grinding lines further automated to reduce manpower and cost

ASRS for RM (2k pallet locations) and FG+PM (18k pallet locations) .



Laxmi Snacks, Nadiad

Project Brief: Expansion of phase 3 & 4 for additional product capacity and combine storage

Total No. of phases : 1 & 2 existing, 3, 4 & FG added

Area in acre: 18 / Start year: Aug -2018/ overall estimated project cost: 150cr

Phase- 4 – Built-up 1.9 Lakh sft / year from Aug 2018 - Ongoing / No. of blocks - 4

FG – Built-up 61k sft / Year from Sept 2019 – Ongoing/ No. of blocks - 1

Phase- 3 – Built-up 84.5k sft / year from Aug 2018 - Ongoing / No. of blocks -1



Haldirams Nagpur

Hariomkar - snack factory of 3.5 L sq.ft.

14 snacks lines with throughput planned for around 400 TPD

Involved in process engineering, automation, plant utility engineering

1.5 Cr. Kcal thermic fluid heaters,

4.5 Mw installed power



Capital Foods, Vapi, Gujarat

Project Brief: Masala & Noodles Plant

Total No. of phases : 2 phases (Phase 1 and RM & FG extension)

Area in acre: 6/ Start year: Mar -2019/ overall estimated project cost: 45cr

Phase- 1 – Built-up 16.5k sft / year from Mar 2019 - Ongoing / No. of blocks -1 Production Block and 5 Ancillary Blocks

Phase- 2 (RM & FG extension)



Chitale Foods, Maharashtra

Total Site Area – 6 Acers

Built up area – 48000 sq.m

state of the art powder mixing plant with latest componentor system from Germany.

Build in hygienic design & allergen / product contamination controls.

Built faster using pre-cast technology.



Organic India - Lucknow

Project Brief: Greenfield Project with LEED Certification

Total No. of phases : 1 & 2

Area in acre: 4.2 / Start year: Aug -2017-2019/ overall estimated project cost: 86cr

Phase- 1 – Built-up 1.9 Lakh sft / year from Aug 2017 -2019 / No. of blocks - 4

Phase- 2 – Built-up 84.5k sft / year from Aug 2021 - Ongoing / No. of blocks -1



Project Profile

Concord, Limbasi

Project Brief: India's Biggest Fermentation Unit - Green Field Project

Total No. of phases : 2 phases(Present & Future Expansion)

Area in acre: 150 / Start year: Sep -2017/ overall estimated project cost: 210cr

Phase- 1 – Built-up 22 Lakh sft / year from Sep 2017 - Jul 2020 / No. of blocks - 53

Phase- 2 – Future



Patanjali, Nagpur

Project Brief: Green Field Project : Ayurved, Food and Cosmetics

Total No. of phases : 1 & 2

Area in acre: Sez 100 & Non Sez 200 / Start year: Jan -2017/ overall estimated project cost: 350cr

Phase: 1 – Built-up 2.6 Lakh sft / year from Jan 2017 – On hold (due to funds) / No. of blocks - 45

Phase: 2 – Built-up 1.58 Lakh sft / year - On hold (due to funds) / No. of blocks - 8



DP Chocolates, Sullurpeta

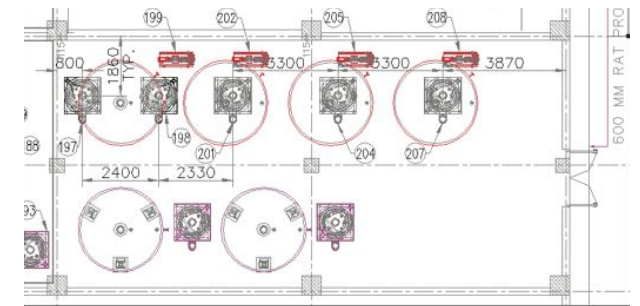
Project Brief: Chocolates Manufacturing Unit

Total No. of phases : 3 phases

Area in acre: 4 / Start year: Apr -2019/ overall estimated project cost: 10cr

Phase- 1 – Built-up 80K sft / year from Apr 2019 - Jun 2021 / No. of blocks - 1 Production Block and 5 Ancillary Blocks

Phase- 2 & 3 – Future



Apex Packing, Goa

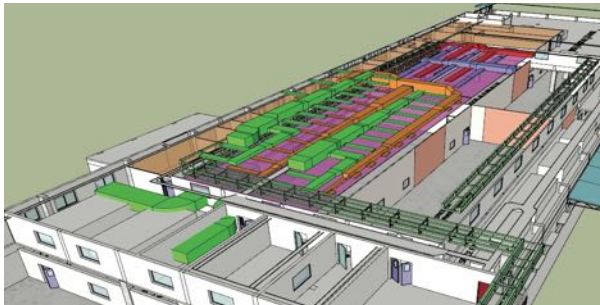
Project Brief: Packing block constructed on Hilly area

Total No. of phases : 3 Phases

Area in acre: 5.2 / Start year: Nov -2017/ overall estimated project cost: 20cr

Phase- 1 – Built-up 1.18 Lakh sft / year from Nov 2017 - Ongoing / No. of blocks - 1 Production Block and 9 Ancillary Blocks

Phase- 2 & 3 – Future



Bikaji Foods, Bikaner

Snack factory of 5.5 Lakh sq.ft.

16 snacks lines with throughput around 480 TPD

Involved in layouting, process engineering, plant utility equipment engineering and assisting in testing and commissioning

Plant designed to meet USFDA and BRC Standard

1 Cr. Kcal thermic fluid heaters, 4 Mw installed power, 100% DG backup

HVAC – 1000 TR of air conditioning with RH control in packaging areas, 2 stage cooling (over 2 L CFM) systems rest of the areas.



Everest Spices Mumbai

Capacity - 100 MT/Day Blended Spices Plant

State-of-the-art infrastructure – Grinding, Blending equipped and automatic recipe management

Involved in technology selection, plant engineering and project management

3 H-H lines / 2 H-UM - of around 1.5 TPH each. Blending from AZO, GmbH.

Facility made to comply with international standards & productivity

Constant upgradation – high speed packaging machines, cryogenic grinding of key spices



Project Profile

INTAS Pharmaceuticals

Project Brief: API Block

Total No. of phases : 3

Area in acre: 35 / Start year: Nov -2017/ overall estimated project cost: 150cr

Phase: 1 – Built-up 3.3 Lakh sft / year from Nov 2017 - Ongoing / No. of blocks - 19

Phase: 2 – Built-up 1.7 Lakh sft / year from Nov 2017 - Ongoing / No. of blocks - 7

Phase: 3 – 9.0 Lakh sft built up area (Future Expansion)



Dr. Reddy's

Project – 21706 – Dr. Reddy's Laboratories
Pydibhimavaram – 150 acres

Worked for over 40 plants for various products. &

plant upgration as per USFDA Pharma approvals.



Sai Science Limited, Bidar

Project cost-80 Crs (appx)

Total Area-6400 Sq mtr

Project Duration- 2 Years

Products



Dr. Reddy's Laboratories Ltd., Vijayanagaram

Project cost-80Cr\$ (appx)

Total Area-2700 Sq mtr

Project Duration- 2 Years

API Clean Room



Desano Pharmaceutical, Bangalore (Ongoing)

Project Brief: API

Location: Bangalore

Total No. of phases: 2

Area in acres: 23 (95,944.3 sq m)

Total construction in Phase I - 30% (2 lakh SFT)

overall estimated project cost: 200 Cr

Phase -I: 4 Production Blocks and complete amenities

SCOPE: Architectural, structural, process and MEP



Cdymax (India) Pharma, Bangalore (Ongoing)

Project Brief: Oncology & API

Location: Bangalore

Total No. of phases: 2

Area in acres: 34.9

Total const. in Phase I – Approx. 30% (2.2 lakh SFT)

Overall estimated project cost: 300 Cr

Phase -I: 4 Production Blocks and complete amenities

SCOPE: Architectural, structural, process and MEP



Energy Optimization in Projects

- Set up LEED compliant facilities.
- Methane gas - Electrical Production
- Solar thermal power from dish
- HVAC System optimization (in running lost)
- VFDS planning for AHUS
- Chilled & Hot Water bypass valves with actuators
- System which operate under low power – Like hot water instead of heaters, water cooled chiller instead of DX units/Air cooled
- Circulation cost optimization
- Steam / Condensate recovery
- Wastewater treatment & Water Recovery (ZLD /RO etc.)
- Utility - Conventional (vs) Single Fluid
- Energy Saving by producing chilled water from Waste fumes from fries. (VAM)
- Thermic fluid systems: Two pipe system, P&ID available
- Electrical Light fixtures Selection / models
- Fuel Cost Analysis & Selection: Coal | PNG | Husk | FO etc.
- Right Selection of Vacuum System & Blower's



Benefits to Clients

- **Capex estimation close to reality** for overall project – better panning, over runs control
- Evaluation of **vendor inputs and assigning** them in a right manner
- Assessing for selection of efficient machinery in view of **increasing the productivity & reduce the running cost**
- Conceptualize **layouts in 3D** and involve client's team for review, their by **reduction of rework** in construction stage
- Assessment of **timelines to the realistic possible** and inform client incase if the resources are inadequate
- Planning of **layout to suit process flow** their by achieving **lean management**
- Selection of **right utilities** for current requirements and to extent as needed
- **Planning of required infrastructure** lighting, finishing, HVAC, etc., to suit process demands & other requirements.
- Built in regulatory, **food safety standards** in plant design
- Having worked in various industries through out pan India, **statutory norm** are very well aware the same inputs will be **incorporated in plant design**



Process and utility automation undertaken

Food

- Recipe management – spices, powders
- Powder handling – IBCs, Containers, auto-dozing
- Bulk powder handling – storages silos, bulk containers
- Process automation – examples dal washing, coated nuts, liquid dispensing system etc.
- Componenter systems, Blender
- Sorting, auto palletization, ASRS, dispatch automation

Pharma

- Batch process related automation
- Continuous distillation columns automation
- Nitrogen blanketing & venting system
- Solvent dispensing automation
- Control for Exothermic and hazardous reactions etc.

Utilities

- Data acquisition systems
- Utility circulation (pumping system operation)
- Heating & cooling controls
- Compressed air systems
- Selection of boilers
- Steam systems
- HVAC and refrigeration systems

EMS:

- Monitoring system for Environment

BMS:

- HVAC automation



Our Valued Customers





Tyche Industries Limited



SUN
PHARMA



UNITED SPIRITS



TATA CHEMICALS LIMITED



Paradigm Services Pvt Ltd. : 307, Center Point, Andheri - Kurla Rd, Andheri East, Mumbai, Maharashtra 400059
Zen Chemiconsultech Pvt. Ltd: Zen House, Plot No.35, Swamy Ayyappa Society, Madhapur, Hyderabad 500081
Contact: +91 (0)22 28395651/52 office@paradigm.co.in www.paradigm.co.in