



## About Us

C2C Engineering is a multi disciplinary engineering consulting firm providing concept to commissioning services for various industrial sectors. We provide Detailed Engineering Services in Civil, Structural, Mechanical, Piping, Electrical & Instrumentation disciplines, Procurement Assistance, Construction Supervision and Project Management Services

C2C is a registered SME (Small & Medium Scale Enterprise) operating out of Chennai, the capital city of Tamil Nadu, India. C2C primarily caters to providing services to small & medium sized projects whose project outlay ranges from 20 Million INR to 1000 Million INR.

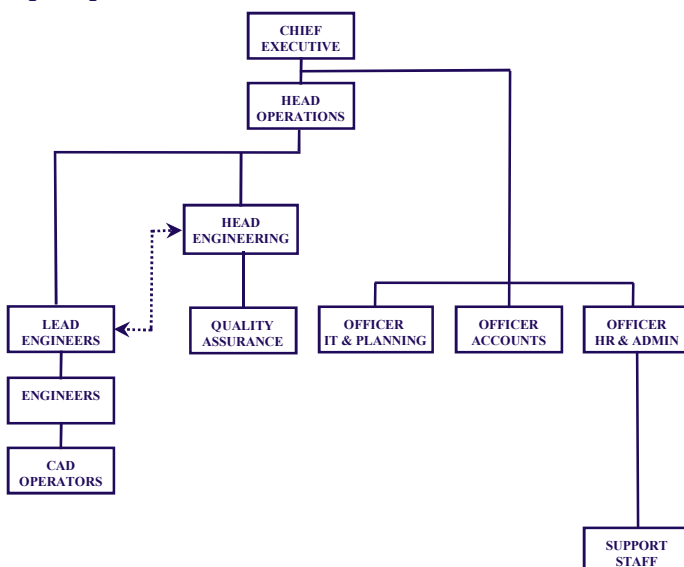
C2C commenced operations on the 1st of January 2006 with initial staff strength of 5 which today has moved up to 50. Of this, 44 have a technical background.

## The Team

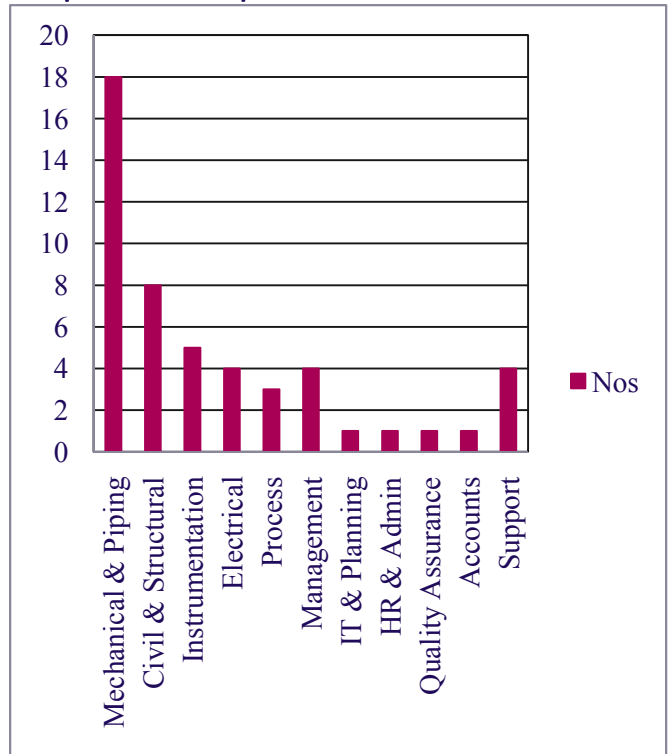
The team has been carefully built over the years and what C2C has today is a young and highly motivated team of engineers capable of delivering high quality & time bound services to our clients.

The senior employees of C2C bring with them their experience in having worked in their individual capacities in large multi disciplinary engineering consulting firms where they have worked in petrochemicals, oil & gas, pharmaceuticals (bulk drugs & formulations), agro chemicals & engineering projects. This experience has enabled C2C to build a team capable of understanding the multidisciplinary requirements of projects, thus ensuring smooth integration of scope of services provided by C2C to their clients with the rest of project scope.

## Organogram



## Manpower Break Up



## Infrastructure

The annual engineering man hour presently available with C2C is 1,00,000. C2C has the ability to scale up to 1,25,000 man hours in a span of 2-3 months.

C2C has invested in only branded hardware products, thereby ensuring higher reliability & after sales support. At present C2C uses software such as AutoCAD PID, AutoCAD Mechanical, AutoCAD Electrical, AutoCAD, MS Office for their deliveries, Apart from this, we also make use of the following software's;

- **STAADPRO** for structural analysis and design
- **CADEM** for mechanical design of process equipment
- **IDO (Instrument Design Office)** for creating and managing instrumentation design and documentation including instrument datasheets, loop diagrams, hookup drawings, I/O lists, instrument index and cable schedules
- **MS PROJECTS** for project scheduling & monitoring

C2C is willing to invest in high end detailed engineering software for their deliveries should their prospective clients require so.

## Quality

C2C is an ISO 9001:2008 Certified Company by BSI (British Standards Institution) India

## Services offered

- Concept Engineering & Cost Estimate
- Detailed Engineering
- Procurement Assistance
- Inspection and Expediting
- Construction Supervision
- Project Management

## Concept Engineering & Cost Estimate

- Preliminary PID's based on process inputs provided by Client
- Equipment List
- Equipment Layouts
- Plan, Elevation & Section drawings for buildings.
- Plot Plan
- Electrical Single Line Diagram
- Automation Philosophy
- Project Costing

## Detailed Engineering

### Civil/Structural

- Design and prepare detailed drawings for RCC structures.
- Design and prepare basic drawings for structural steel structures.
- Design and prepare RCC/structural drawings for pipe & cable racks as required.
- Design and prepare RCC foundation drawings for equipment, motors, pumps and storage tanks.
- Finalize the detailed specifications & determine the bill of quantities for civil construction works.
- Check and approve the detailed fabrication drawings for structural members prepared by contractors in compliance with code, design basis, etc.

### Mechanical/Piping

- Prepare PID's
- Prepare data sheet for equipment such as reactors, heat exchangers, tanks & vessels, utilities & pumps.
- Prepare piping & valve material specifications
- Prepare equipment layout drawings
- Prepare piping layout drawings
- Prepare isometric drawings for line sizes 2" & above.
- Prepare material take off for piping, valves, fittings etc with brief specifications
- Prepare mechanical / piping / insulation schedule of quantities for respective erection works

### Electrical

- Prepare overall single line diagram
- Prepare single line diagram for PCC, MCC's, PDB, MLDB & DB's
- Prepare data sheets for electrical equipment such as HT Switchgear, Transformer , DG Set, PCC & MCC Panels
- Prepare substation & DG Room layout drawings
- Prepare cable tray routing drawings
- Prepare earthing layout drawings

- Prepare lighting layout drawings
- Prepare lightning protection layout drawing
- Prepare schedule of quantities for electrical erection works which would include all electrical items such as cables, lighting fixtures, fittings, luminaries, push button stations etc. with necessary specifications as these would be included in electrical contractor's scope of supply.

## Instrumentation

- Prepare Instrument Index
- Prepare I/O List
- Prepare Instrument Data Sheets
- Prepare Cable tray routing, JB & AH layout drawing
- Prepare JB, AH & cable schedules
- Prepare hook up drawings
- Prepare cause & effect / logic diagrams
- Prepare loop schematics/ loop diagrams
- Prepare schedule of quantities for Instrument installation Works

## Procurement Assistance

- Prepare vendor list for all equipment & accessories that would need to be procured for the project
- Obtain offers from minimum of three vendors wherever feasible
- Carryout technical bid analysis & prepare technical bid analysis statement
- Obtain final price bid & prepare commercial bid analysis statement
- Organize for commercial discussions with vendors
- Vendor drawing review & approval

## Inspection & Expediting( Indigenous equipment)

- Carryout inspection & expediting for fabricated machineries
- Carryout final inspection of standard machineries

## Construction Supervision

- Depute construction engineers to oversee construction is carried out as per approved drawings & agreed time schedule
- Planning & Coordination
- Inspection, quality & safety
- Certify contractor's bills

## Project Management

- Develop & monitor project schedule
- Prepare fortnightly progress reports
- Co-ordinate with client / vendors / contractors

## Projects by Industry

S No	Project	Client	C2C's Scope of Services	Status
<b>Pharmaceuticals</b>				
1	Formulations Tablet Manufacturing	Granules India Ltd Hyderabad	Design & Detailed Engineering (P)	Completed
2	Bulk Drugs Solvent Recovery	Granules India Ltd Hyderabad	Design & Detailed Engineering (P)	Completed
3	Formulations Revamp	Phaarmasia Ltd Hyderabad	Design, Detailed Engineering (C,S,P,E & HVAC) & Project Management	Completed
4	Fine Chemicals Expansion	Amrutanjan Ltd Chennai	Concept Engineering & Cost Estimate	Completed
5	Bulk Drug Greenfield – Phase I	Natco Organics Ltd Chennai	Concept Engineering & Cost Estimate ,Design & Detailed Engineering(S,M,P,E & I) & PA	Completed
6	Formulations QA & Export Block	The Himalaya Drug Company Bangalore	Design & Detailed Engineering (P)	Completed
7	Formulations Oncology Block	Natco Pharma Ltd Hyderabad	Design & Detailed Engineering (P)	Completed
8	Bulk Drug H Block	Dr.Reddy's Laboratories Ltd CTO-1, Bollaram	Design & Detailed Engineering (C,S,M,HVAC,P,E & I)	In Progress
9	Bulk Drug E Block	Dr.Reddy's Laboratories Ltd CTO-5, Mriyalaguda	Design & Detailed Engineering (C,S,M,HVAC,P,E & I)	In Progress
<b>Paints</b>				
1	Capacity Augmentation 15 ML to 22 ML	ICI India Ltd Hyderabad	Design & Detailed Engineering (C,S,P,E & I)	Completed
2	Capacity Enhancement 25 ML to 37 ML	ICI India Ltd Mumbai	Design & Detailed Engineering (C,S,P,E & I)	Completed
3	Capacity Augmentation 50 to 100 ML	Asian Paints Ltd Sriperumbudur	Design & Detailed Engineering (M,P,E & I)	Completed
4	Finished Product Warehouse	ICI India Ltd Hyderabad	Design & Detailed Engineering (C,S,FHS & E)	Completed
5	Capacity Enhancement 37 ML to 51 ML	ICI India Ltd Mumbai	Design & Detailed Engineering (C,S, M,P,E & I)	Completed
6	Polymer Expansion	Asian Paints Ltd Sriperumbudur	Design & Detailed Engineering (M,P,E & I)	Completed
7	Short Term Primer Expansion	Asian PPG Industries Ltd Sriperumbudur	Design & Detailed Engineering (M,P,E & I)	Completed
8	Long Term Primer Expansion	Asian PPG Industries Ltd Sriperumbudur	Design & Detailed Engineering (M,P,E & I)	In Progress
<b>Chemicals</b>				
1	Rubber Chemicals	Lanxess India Pvt Ltd Madurai	Design & Detailed Engineering (C,S,P,E & I)	Completed
2	Adhesive Manufacturing	Anabond Ltd Chennai	Concept Engineering & Cost Estimate	Completed
3	Incinerator System	Taoka Chemical Co. Ltd Chennai	Procurement Assistance, Detailed Engg. & Project Management Services	Completed
4	Capacity Expansion Agro Chemicals	Tagros Chemicals India Ltd Chennai	Design & Detailed Engineering (C,S,M,P,E & I)	Completed
5	Greenfield Agro Chemicals	Deccan Fine Chemicals Pvt Ltd Tuni	Design & Detailed Engineering (M,P,E & I)	In Progress
6	Capacity Expansion Speciality Chemicals	Lanxess India Private Ltd Madurai	Design & Detailed Engineering (C,S,M,P,E & I)	Completed
<b>Petrochemicals</b>				
1	Lube Oil - Capacity Augmentation	Castrol India Ltd Patalganga	Design & Detailed Engineering (C,S,M,P,E & I)	Completed
<b>Tyre</b>				
1	Greenfield PCR/TBR Tyre	Apollo Tyres Ltd. Sriperumbudur	Design & Detailed Engineering (M,P, FFS & I)	In Progress

**C-Civil, S-Structural, M-Mechanical, P-Piping, E-Electrical, I-Instrumentation, FFS-Fire Fighting System**

C2C

# C2C Engineering

Value Added Engineering

## Strengths

- Good data base available for carrying out utility engineering for all types of projects,
- Good data base available for executing batch plant projects pertaining to the chemicals, pharmaceuticals & paints sectors.
- Excellent CAD skills of CAD Operators as well as that of most engineers along with good exposure of engineers to design and site construction activities.
- Strong employer employee relationship and good working culture.
- Repeat orders from Asian Paints, ICI-Hyderabad, ICI-Mumbai, Asian PPG, Natco, Granules & Lanxess.
- Young committed team.

## Memberships

- Member of Consulting Engineers Association of India
- Member of Confederation of Indian Industry
- Member of National Safety Council

## Turnkey Solutions

C2C Engineering has an associate company C2C Projects based at Hyderabad, Andhra Pradesh through which turnkey solutions can be offered in the areas of process & utility piping and process automation.

## Projects executed as Turnkey Solutions

- Automation System for Bulk Drug Facility for Granules India Ltd, Hyderabad
- Process & Utility Piping System for Solvent Recovery Unit for Granules India Ltd, Hyderabad
- Utility Piping System for Formulations Plant of Granules India Ltd Hyderabad
- Utility Piping System for Formulations Plant of The Himalaya Drug Company, Bangalore

## Contact

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