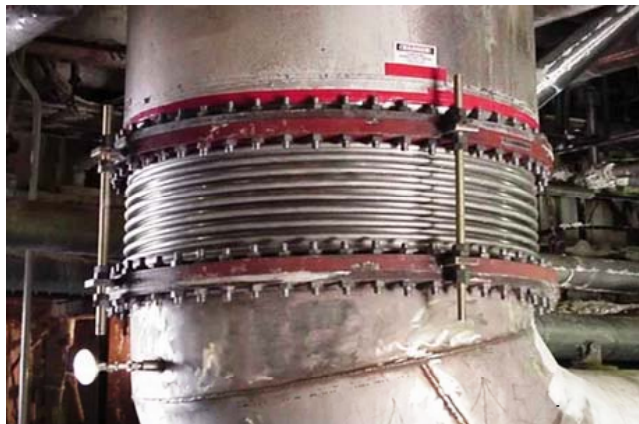


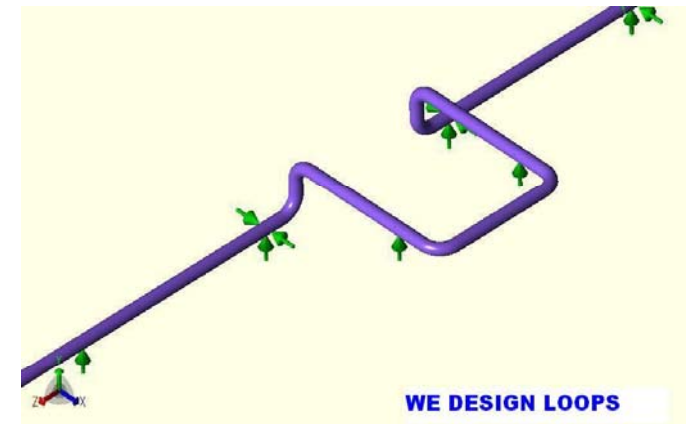
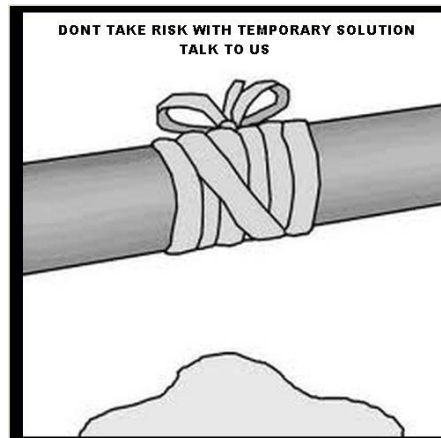


COMPANY PROFILE

June 2018



WE HELP IN SELECTING THE RIGHT EXPANSION JOINT



ND Engineering Services

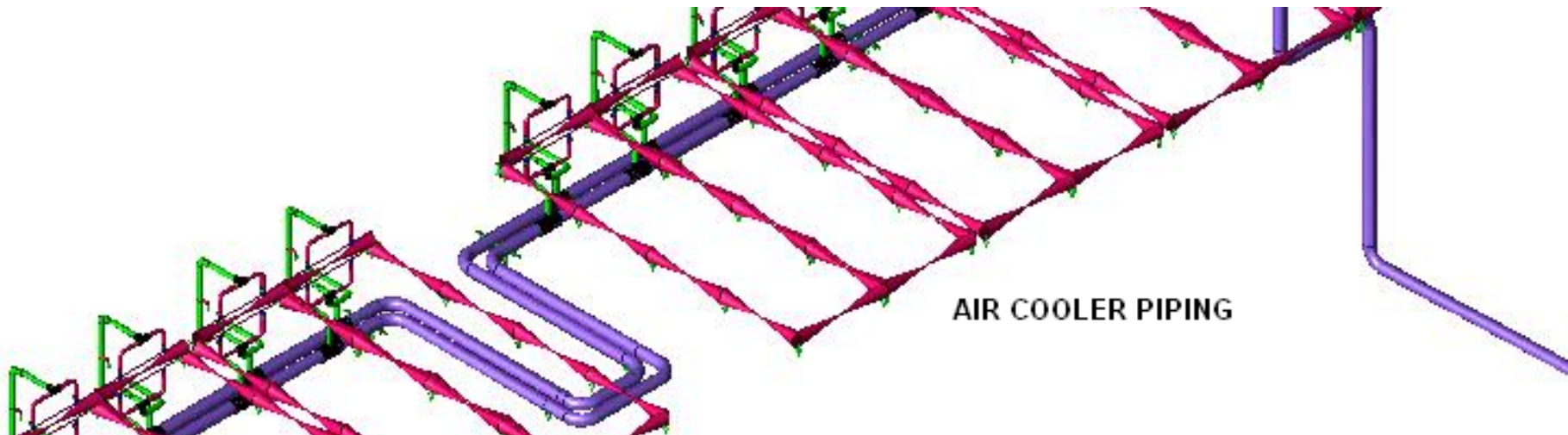
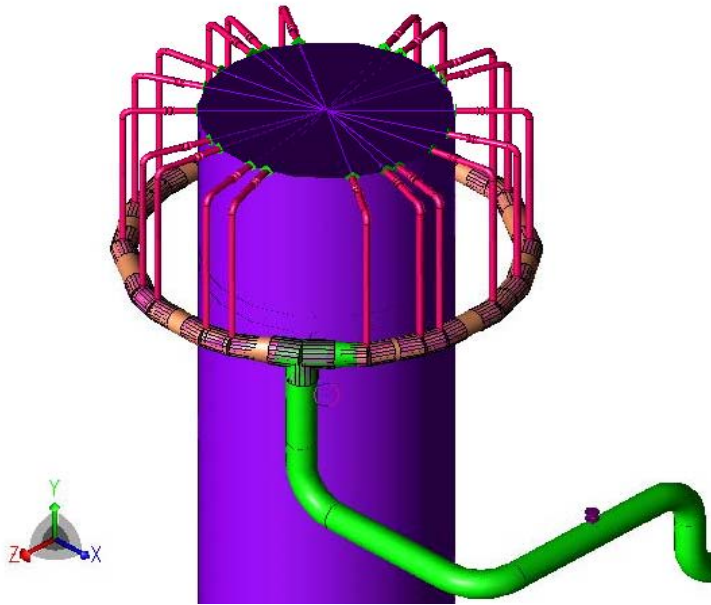
(The pipe stress engineers)

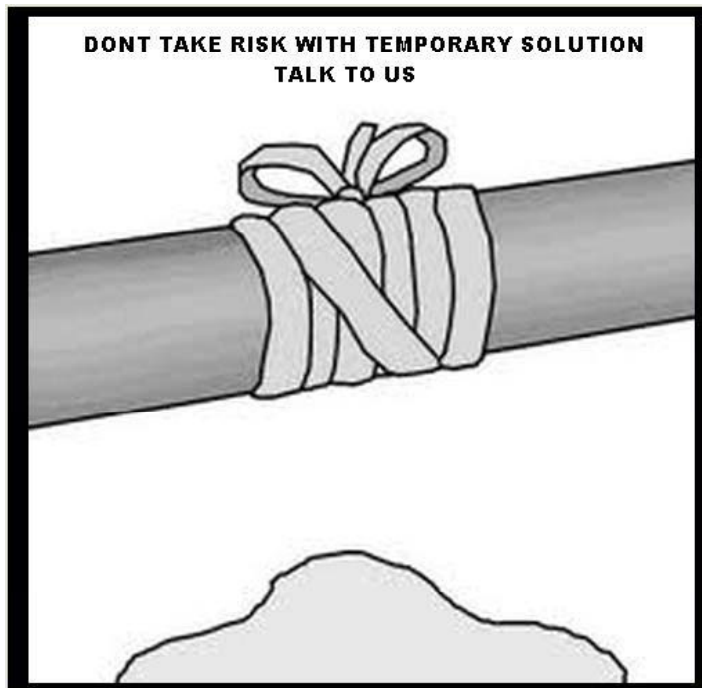
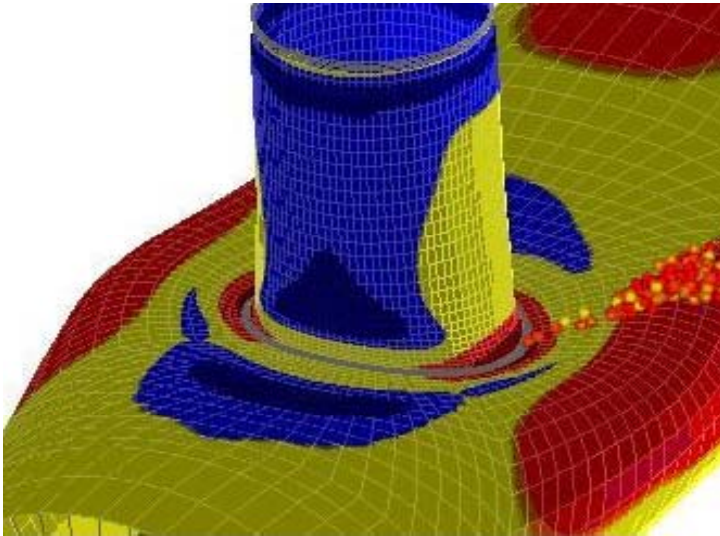
Palava, Dombivli (East) 421204,India,

Ph. +91 9819291967, email : ashokg@ndengg.co.in www.ndengg.co.in

INTRODUCTION

- ❑ ND Engineering is one of the fast growing piping engineering consulting firms offering engineering solutions to various renowned Engineering & EPC MNC's and manufacturers in petrochemical, refinery, oil and gas industry.
- ❑ We offer high level of expertise in piping stress analysis of high temp lines as per ASME B31.3 / 31.1 (using CAESAR II and FEA) , analysis of IBR steam lines (Steam Lines as per Indian Boiler Regulation) , FRP/GRP lines as per ISO 14692, detection of causes of leakage and vibrations in existing piping systems. We also provide training services in piping stress analysis to corporate.
- ❑ With our major thrust on exports, we export our engineering services to countries like US, Canada, Gulf Countries, Europe, Singapore. Our quality and on schedule delivery, has resulted in repeat orders from our overseas clients. We are assigned an import export code number from ministry of commerce of Government of India





SERVICES OFFERED

- ❑ Pipe stress analysis (Piping Stress Analysis, Piping flexibility Analysis) using CAESAR II.
- ❑ Stress analysis of IBR Steam lines. (Steam Lines under Indian Boiler Regulation for chemical and power plants) , Pipe stress calculation for IBR submission.
- ❑ Stress analysis of GRP/FRP Lines
- ❑ Special support detailing using AUTO CAD
- ❑ Duct Design.
- ❑ Analysis for attachments to pressure vessels.
- ❑ Troubleshooting in existing plants for
 - Vessel to nozzle joint failure,
 - Piping and flange leakages / Elbow Failure, Trunnion Joint Failure
 - Expansion joint failure (Over Elongation and Over compression)
 - Spring failure,
 - Piping Vibration, Pump Vibration, Turbine Vibration
 - Pipe support failure
 - Failure at attachments to vessel and column.
 - Frequent bearings failure
 - Frequent failure of seals of pumps
 - High misalignment during pump starting
 - Noisy pump operation,
 - Line movement due to wind pressure.
 and other problems related to high temp piping.
- ❑ Deputation of skilled manpower on Hourly Basis.
- ❑ Third party services for checking calculations done by vendors and engineering consultants
- ❑ Training Services in piping layout and piping stress analysis for mechanical engineers in consulting engineering companies and engineering / plant maintenance engineers of existing plants..

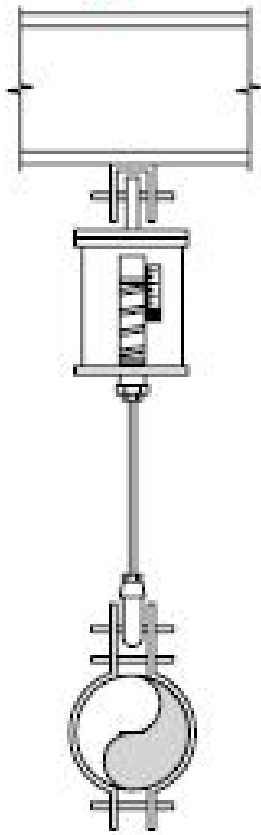


Serving Clients within following industry:

- ❑ Engineering Consultants in Oil, Gas, Refinery and Fertilizers & Petrochemical Industry.
- ❑ Skid mounted process system manufacturers and suppliers of turnkey plants like Cogen. Power plants, Refrigeration plants, Ethanol plants, fatty acid plants etc.
- ❑ Petrochemical, chemical, power and refinery plants for various modifications in existing units and trouble shooting in existing piping.
- ❑ GRP/FRP piping manufacturers (Completed three large projects with FRP lines)
- ❑ Analysis of IBR steam lines for various applications like thermal power plants, waste heat recovery units, Solar thermal power plants, .

Type of projects executed:

- ❑ Stress Analysis of lines for refinery, petrochemical, fertilizer, power, Chemical, Alumina Slurry , Polyester plants.
- ❑ Stress Analysis and support fabrication drawing preparation of Ammonia Plant compressor house, five numbers, for two projects.
- ❑ Analysis of a complete coal based power plant lines from two steam boilers to Turbine and distribution of HP and MP steam with tie-ins to existing process units. Total length of distribution of steam involved 2 Km piping , Max Line pressure 104 Bar and Steam Temp. 537 Deg C. All lines approval by IBR.
- ❑ Analysis of about twelve thermal power plants consisting of lines from boiler to turbine and steam distribution. All lines approved by IBR.
- ❑ Analysis of lines in heating systems consisting of thermic fluid pumps, Thermic fluid boilers and distribution network.
- ❑ Thermal solar power plants, 2 Nos.
- ❑ Analysis of critical lines for Gas processing plant connected to aluminum heat exchangers, regeneration system, Air coolers, Vessels, columns, heaters and Heat Exchangers
- ❑ Successfully solved problems related to mechanical failures analysis like:- Expansion joint / bellow elongation and failure, Steam / Thermic fluid lines falling off the structure, Support failures, Flange Leakage, Frequent pump bearing failure, Line vibration, Pump Seal failures, pump shaft misalignment.
- ❑ Analysis of FRP / GRP line for around 11 projects for overseas companies, Largest project executed :- 700 Lines. Code used ISO 14692
- ❑ Training in pipe stress analysis and CAESAR use:-These courses are conducted at client office. For more detail please email query at ashokg@ndengg.co.in



Our Clients (To name a few out of 60 clients)

- ❑ Technip India Limited
- ❑ Petrofac Engineering India Pvt. Ltd.
- ❑ Chemtex Global Engineers limited
- ❑ Essar Oil Limited
- ❑ Kvaerner Powergas India Ltd
- ❑ Monsanto DMCC Enviro Tech, Mumbai
- ❑ Dresser Rand India Pvt Ltd
- ❑ UHDE India Limited
- ❑ Toyo Engineering India
- ❑ Reliance Industries Limited
- ❑ SNC Lavalin Engineering India
- ❑ Gharda Chemicals Limited
- ❑ Indo Gulf Fertilizers
- ❑ FRP/GRP piping analysis as per ISO 14692. Completed three large projects with approval from Technip and other reputed MNC's
- ❑ Training in various MNC companies: - Provided training services in piping stress analysis and supporting to top MNC consulting engineers in India and some state owned companies in UAE. For list of clients and more information please email at ashokg@ndengg.co.in (For more information on type of projects please visit www.ndengg.co.in)

Software's and facilities :

PC's	8 nos,
Office Area	900 Sq Ft
CAESAR II :-	Pipe stress analysis software, flange leakage analysis, WRC 107 analysis,
NaviesWorks Roamer	3D Model Review Package
Paulin Research Lab FEA software	Analysis of nozzle/cleat/lug/saddle etc attachments to shell and dish.
Printer and scanner	1 Nos (A3/A4)

