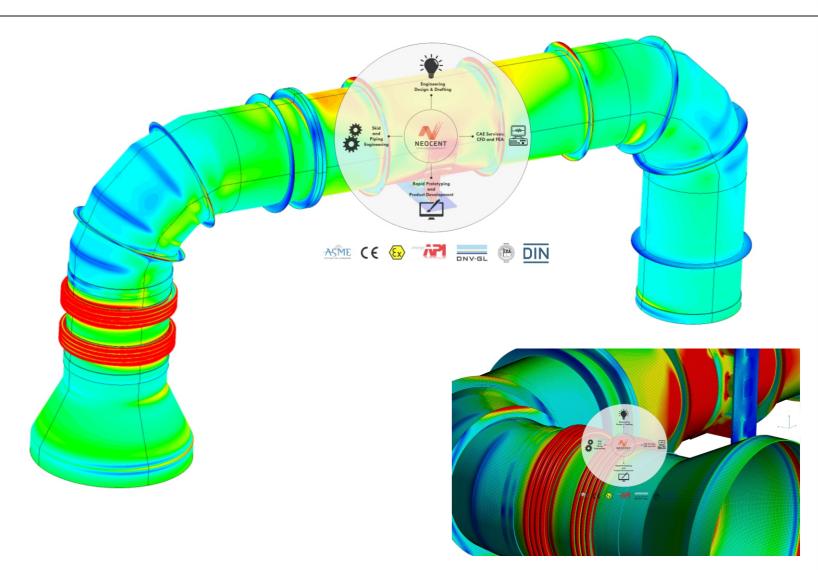


| Detail Design calculation, FEA Thermal Stress Analysis and Detail fabrication Drawing for Turbine - Condenser Duct |                                                                                                                                                                                                           |
|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| THE CLIENT                                                                                                         | A US-based client offering an array of customized solutions to chemical ,pharmaceutical, petrochemical, oil refinery, power generation and waste treatment.                                               |
| THE BUSINESS NEED                                                                                                  | Our client was seeking engineering design assistance for a Condenser - Turbine Duct pipe arrangements (ASME U-stamp) design. Client wanted Thermal Stress simulation on duct along with expansion bellow. |
| NEOCENT SOLUTION<br>&<br>DELIVERABLE                                                                               | <b>Detail Engineering</b> : Mechanical detail design on turbine-condenser duct, Duct Spring Support Design and Specifications, Expansion bellows Design and Specifications.                               |
|                                                                                                                    | <b>CAD Detailing</b> : G.A. Drawing , Details fabrication drawing ,3D plant Modeling, Pipe Isometric drawing, Piping Support fabrication Drawing, Lifting and Erection Drawing.                           |
|                                                                                                                    | Analysis: Piping Stress Analysis, Expansion below FEA as per EJMA (Code: ASME Sec VIII Div 2).                                                                                                            |



Thermal Stress FEA Simulation Duct Pipe along with Expansion Bellow



Neocent Engineering Services is a multi-discipline engineering services company. Established in 2015, we offer high-quality engineering support solutions to global EPC organizations across some of the industries listed: Automotive, Aerospace, Turbo machinery, Heavy engineering, HVAC, Oil & Gas, Material handling and Process industry.

Neocent provides detailed engineering services to EPC, EPCM, OEM, and PMC as long-term turnkey projects. Our EPCM services include Project Management, Feasibility Studies, Conceptual & Basic Engineering, Detailed Design, Procurement, Construction Management, Commissioning & Start-up, and Operations & Maintenance.

## Neocent Engineering's service offering, include;

- Engineering and Stress Analysis Services
- Details Engineering
- 3D Modelling and 2D CAD Services
- Statutory Approvals

Neocent Engineering specializes in "design-by-analysis" pressure vessel work following ASME Section VIII, Div. 2 (BPVC).

We also offer the ability to perform standard ASME Section VIII, Division 1 Rules for the Construction of Pressure Vessels.

Our FEA BPVC consultants have completed a broad range of analysis work on hundreds of pressure vessels. Within this body of work, we have applied the following codes

-ASME BPVC Section VIII, Divison 2 (Alternative Rules or "Design-by-Analysis")
-ASME BPVC Section VIII, Division 1 (Rules for the Construction of Pressure Vessels)
-ASME Pressure Vessels for Human Occupancy (PVHO)
-ASCE 4-98 and ASCE 7-02

These FEA pressure vessel consulting projects cover a wide variety of analyses, from differential thermal-stress analysis of heat exchangers utilizing mixed materials, to stress and fatigue analysis of large-diameter vessels, to analyses of vessels with complex internal structures subjected to sloshing, seismic and added-mass effects or lifting and transportation analyses and transient thermal-fatigue of thick-walled tanks.

In brief, clients come to us when they need high-quality work executed and documented to withstand the most rigorous reviews.

Email : <u>sales@neocentengineering.com</u>

Website : <u>www.neocentengineering.com</u>

## **Contact Details**

ASME BPVC Pressure Vessel Consulting Services

Linked in : https://www.linkedin.com/company/neocent-engineering

India Contact : +91- 8000 860 806

Canada Contact : +1 (226)961-5067

Disclaimer :

All Content/Information present here is the exclusive property of Neocent Engineering Pvt. Ltd (NEPL). The Content/Information herein merely represents and highlights the nature of work and projects successfully undertaken by NEPL and is not intended to be advisory in nature. No representation or warranty, express or implied is made with regards to the contents of the said Document, and the recipients of this Document should not place undue reliance on this Document and should use their own independent prudent judgment while entering into a contractual relationship with NEPL based on the information contained in this Document. The contents of this document, addite to tarcors beyond NEPL's control. All opinions expressed by any Third Party that form part of the contents of this document are such Third Party's own independent opinions and NEPL assumes no responsibility for the same. That except for entering into a business relationship with NEPL, no material from here may be copied, modified, reproduced, republished, uploaded, transmitted, posted or distributed, or used for any commercial purpose whatsoever, without the express written consent of NEPL. All content/Information provided herein is protected by stringent contracts, statutes and applicable Intellectual Property Laws. Unauthorized use of the content/information appearing here may violate copyright, trademark and other applicable laws, and could result in criminal or civil penalties.