

Product Development – Hydraulics Spiral Hose Design Engineer

Your tasks

We are seeking a skilled **Product Development – Hydraulics Spiral Hose Design Engineer** to join our Fluid Handling Solutions team in Aguascalientes, Mexico. In this role, you will be responsible for the **design, development, and industrialization of high pressure spiral hydraulic hoses**, ensuring that hose construction, materials, processes, and fittings are translated into robust product performance that meets customer and industry requirements.

Key Responsibilities

- Lead the **design and development of spiral hydraulic hoses**, including reinforcement architecture, layer construction, and dimensional definition
 - Apply **spiral hose design principles** to meet pressure, impulse, fatigue, and durability requirements
 - Develop spiral designs to balance mechanical **performance, flexibility, and robustness** while considering operating conditions, customer requirements, and applicable industry standards
 - Translate spiral hose **design concepts into industrialized solutions**, ensuring manufacturability and process robustness for series manufacturing
 - Define and evaluate **material selections** (rubber compounds, reinforcements, wire, covers) and its influence on **process capability and product performance**
 - Interpret **FEA simulations** to support hose design and correlate simulation results with physical testing
 - Create and maintain **basic CAD designs** for hoses and fittings, including interfaces and assembly considerations that influences systems performances
 - Collaborate closely with manufacturing, process engineering, testing, and quality teams to ensure smooth **design-to-production transfer**
 - Translate hose design, manufacturing processes, and fitting concepts into **clear performance characteristics** such as pressure rating, impulse life, flexibility, and durability
 - Support product validation through testing analysis, failure investigations, and design optimization
 - **Support verification and validation activities**, including test definition, problem solving and design optimization for continuous improvement
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- Develop and maintain technical documentation, including **design guidelines, specifications**, and technical reports
 - Ensure compliance with applicable **industry standards and customer requirements** for hydraulic hose spiral products
 - Provide technical support to internal stakeholders and production teams during industrialization and series production
 - Provide technical support for spiral hoses process adaptation and



Job ID
REF93682A

Field of work
Research and Development

Location
Aguascalientes

Leadership level
Leading Self

Job flexibility
Onsite Job

Contact
Sergio Gonzalez

Legal Entity
ContiTech Mexicana, S. de R.L. de C.V.

ramp up

Your profile

- Bachelor's degree in Mechanical Engineering, Materials Engineering, Chemical Engineering, or a related field; Master's degree preferred
- 5 years or more of experience in **hydraulic spiral hose design and development and/or spiral hose processes**
- Strong understanding of **spiral reinforcement design principles** and high-pressure hydraulic hose performance
- Experience translating **hose designs into industrialized manufacturing solutions**
- Solid understanding of **material behavior** and its influence on hose processing and performance
- Experience in interpreting FEA simulation results to support hydraulic hose design decisions and correlate simulations with physical testing
- Basic proficiency in **CAD design** for hoses and fittings
- Knowledge of hydraulic hose standards, testing methods, and performance requirements
- Strong analytical and problem-solving skills with a structured, detail-oriented approach
- Ability to work effectively in cross-functional, international development teams
- Capability to manage multiple development topics in a fast-paced product development environment

Our offer

At Continental we are committed to building an inclusive and discrimination-free ecosystem in Mexico, these principles are rooted in our corporate philosophy and culture. Therefore, it is totally forbidden to request a pregnancy or HIV test as part of our selection processes.

#LI-SFGO

Ready to drive with Continental? Take the first step and fill in the online application.

About us

Continental develops pioneering technologies and services for sustainable and connected mobility of people and their goods. Founded in 1871, the technology company offers safe, efficient, intelligent and affordable solutions for vehicles, machines, traffic and transportation. In 2022, Continental generated sales of €39.4 billion and currently employs around 200,000 people in 57 countries and markets.