

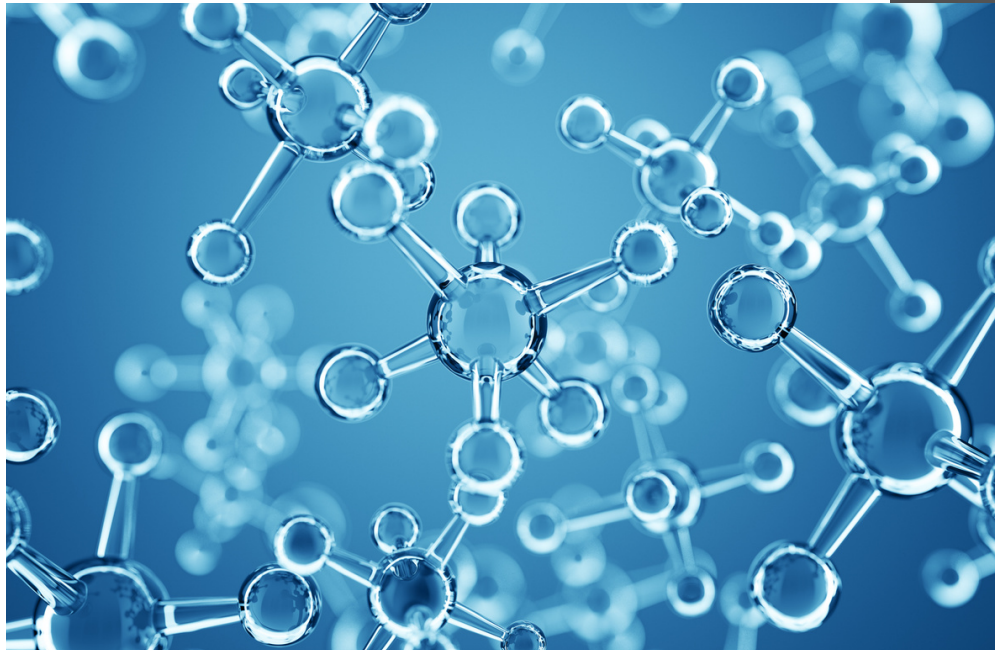


# nanotech EXTRACTION<sup>®</sup>

*The evolution in oil exploration*



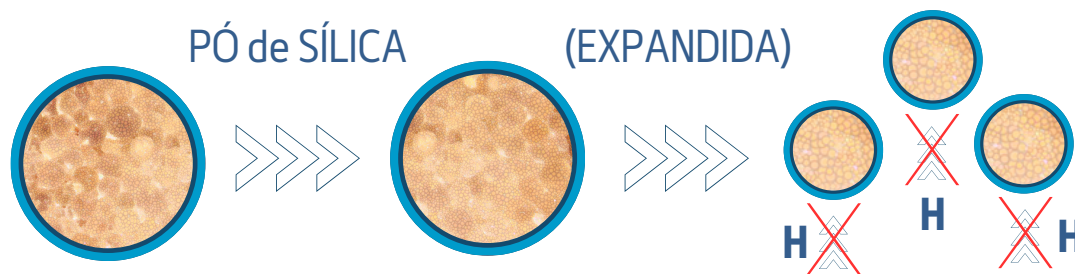
# The great advantage of nanotechnology



Nanotech Extraction® is a revolution in the steam injection process in recovery wells!

The use of nanotechnology in pipe insulation maintains its insulating characteristics for more than 10 years, unlike the VIT usually used, which lose efficiency between 4 to 5 years, with its annular space (vacuum) contaminated by hydrogen (H) from the base inner tube. The result is **superior durability** (10 years) and **constancy in thermal efficiency**, also for **10 YEARS**

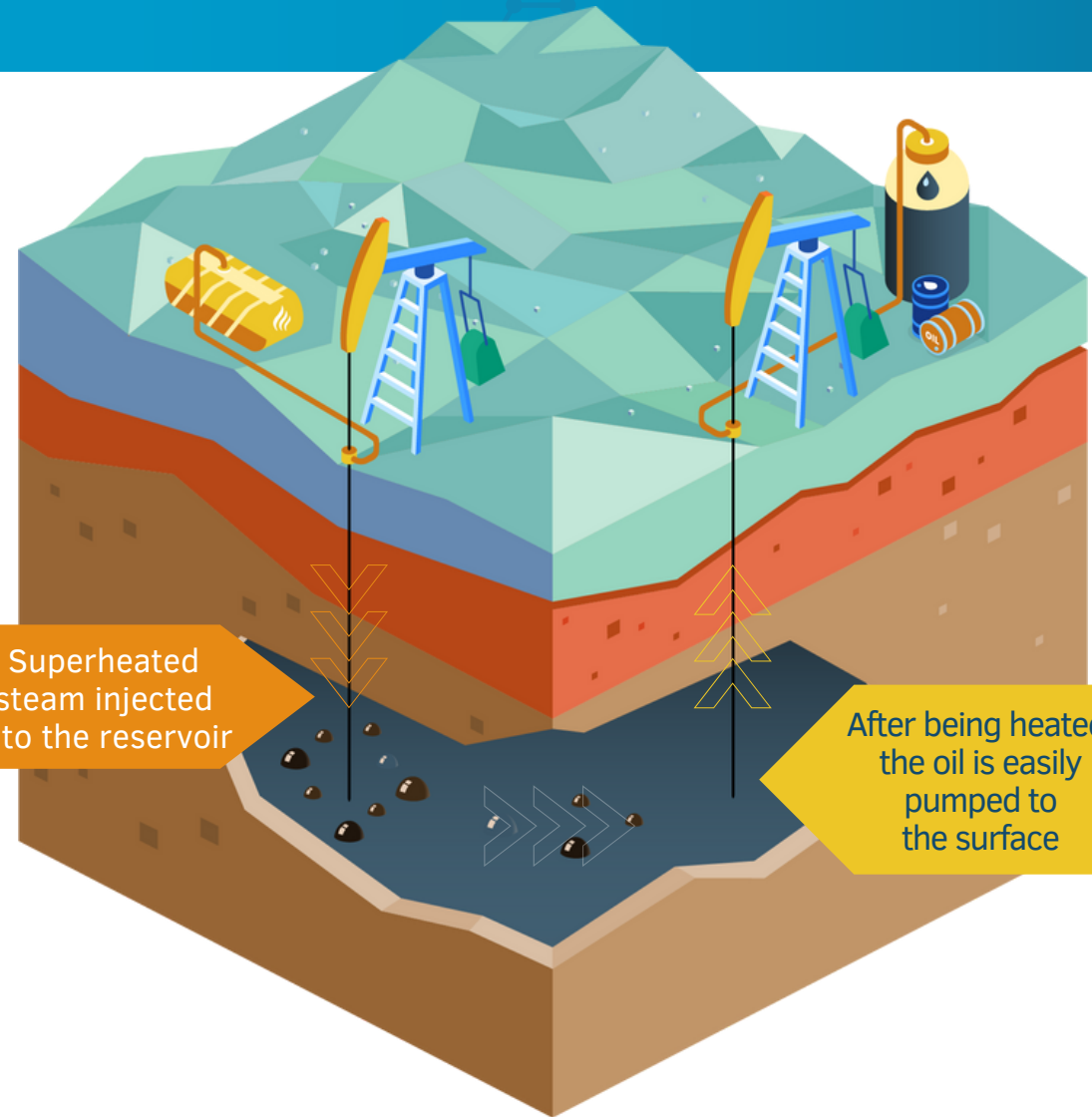
## The nanotechnological isolation process



Acts as a **high performance insulator** maintaining its characteristics for **over 10 years**



# Operational Process of Steam Injection & Petroleum Extraction

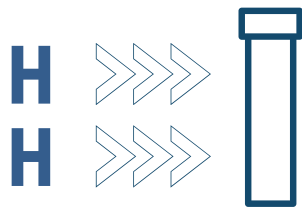




# Market practice



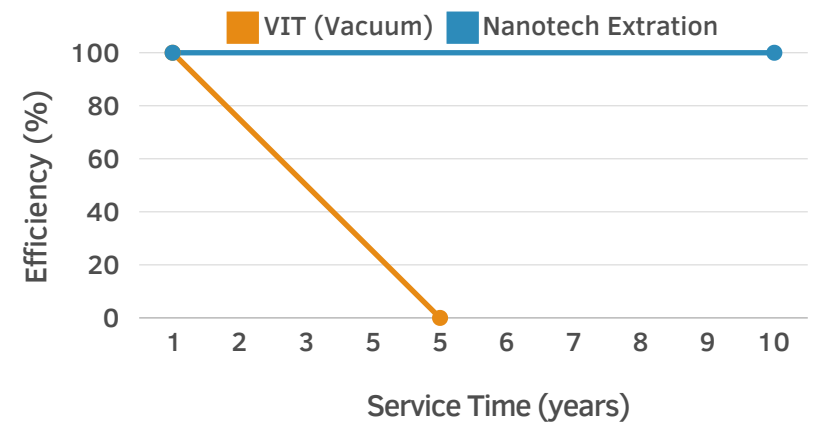
Vacuum Insulated Tubing  
**VIT**



The hydrogen (H) existing in the walls of laminated tubes penetrates the annular space containing vacuum, causing a partial to total loss of it, despite containing getters (gas absorbers)



We guarantee the efficiency of your project for 10 years

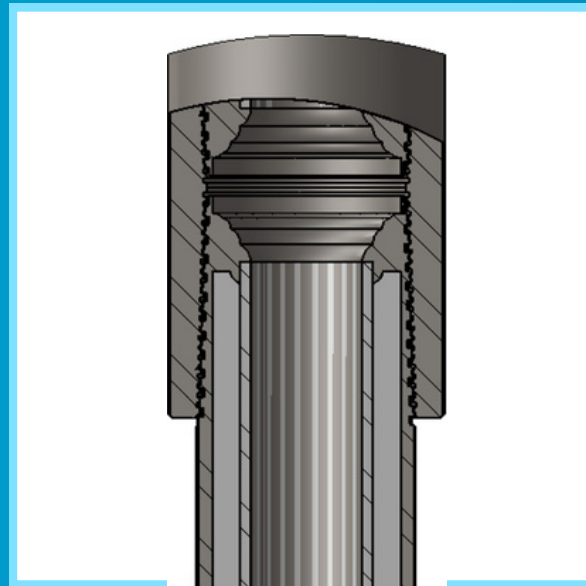


# Our PRODUCT



Our tubes also have state-of-the-art technology in the **welding process**. The addition of alloying elements increases the elastic limit of the welded joint, thus **protecting against rupture or fatigue cracking**. This guarantees a longer useful life for our insulated piping, manufactured using a proprietary technique called the Super Thermal Insulation System – **STIS**

Save energy. Increase your profits!



Steam inside  
the pipe



Increased  
elastic limit of  
the welded joint



Inner pipe:  
up to 360°C / 680 °F  
Outer pipe:  
down to 80°C / 176 °F



Nanotechnology  
embedded in the tube