



## Kstovo, Russia



### Key facts about the plant

- LLC Lukoil refinery (NNOC)
- Owner: PJSC Lukoil
- Contractor: Kinetics Technology



### Key facts about the chimney

- Completed in 2019
- Double skin steel stack
- H 80m
- Inner Ø = 1,800mm
- Stainless steel liner
- Free standing

Since 1958, the Nizhny Novgorod refinery is located at Kstovo, Nizhny Novgorod Oblast, in central Russia, where Lukoil has been in operation since 2002. The region is home to LLC LUKOIL-Nizhegorodnefteorgsintez, one of the largest petroleum refineries in Russia, and to LLC LUKOIL-Nizhegorodniiproject, a design institute. It is also one of the biggest refineries of the Group and one of the biggest refineries in Russia.

In 2017, Lukoil took the final investment decision on the construction of a delayed coker complex with a feedstock capacity of 2.1 million tonnes per year at its Nizhny Novgorod Refinery.

Several EPC contracts were awarded in 2018, including KT Kinetics Technology, a subsidiary of Maire Tecnimont, who was awarded 2 EPC contracts for five refinery process units as part of the deep conversion complex project for the refinery.

FERBECK INTERNATIONAL SA has been awarded an EPC contract of an 80 meter-high-steel stack by KT.

The scope of work includes:

- anchor bolt for foundation
- platforms
- damper
- ladders
- electric system (lighting, power supply, aircraft warning lights...)
- lightning protection system





## Platforms

3 platforms are installed around the structure:

- damper platform at EL.+77.0m
- AWL platform at EL.+43.3m
- walkway platform at EL.+18.3m



## Damper

A liquid anti vibration damper is used to avoid resonance phenomena, as well as issues linked to fatigue. It is smartly designed to be used as a top platform of the structure.





## Overview

The complex will use heavy residuals from the refining process as feedstock, and produce mainly diesel fuel, straight-run gasoline, and gas fractions, as well as vacuum gas oil and coke.

