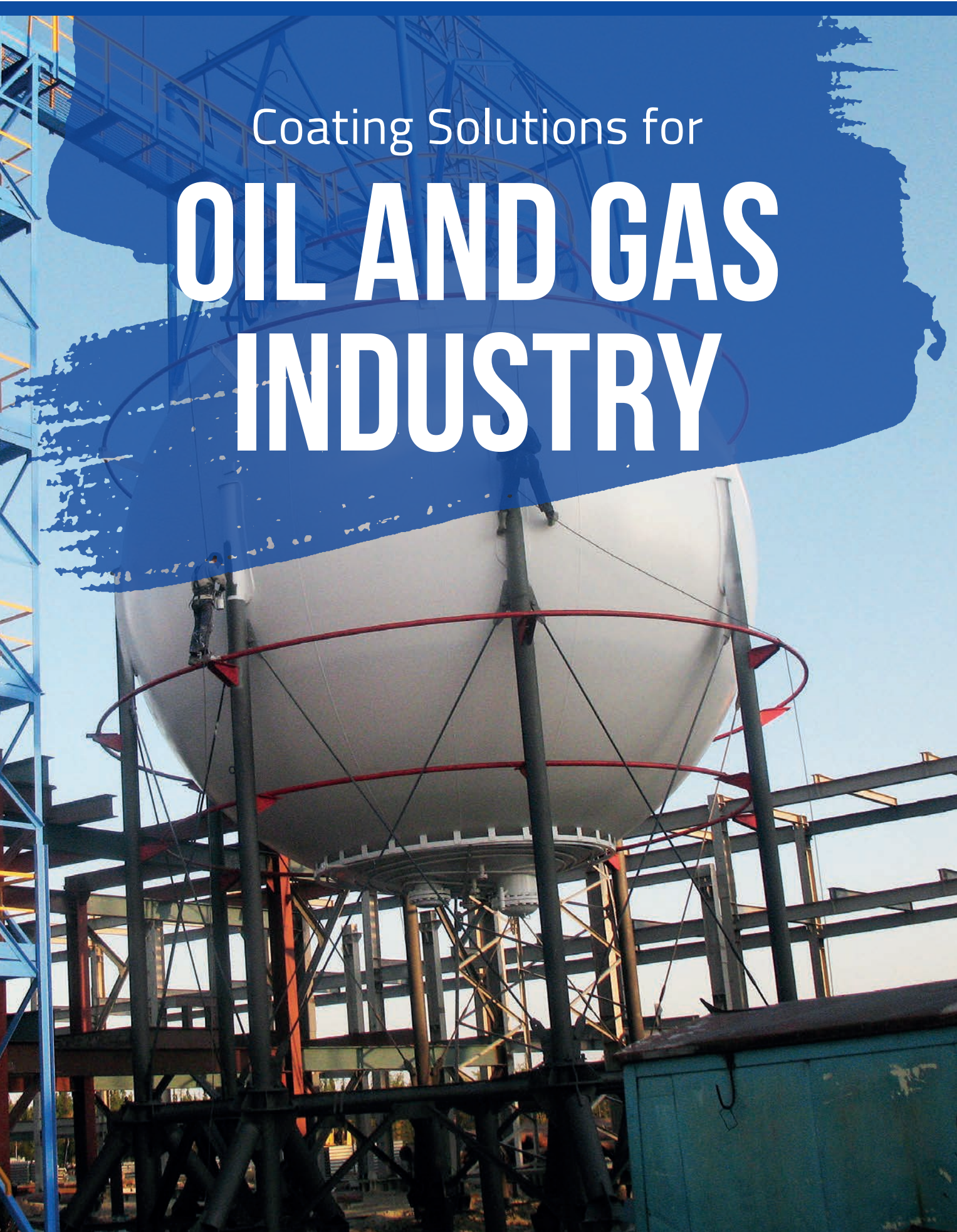


Coating Solutions for

# OIL AND GAS INDUSTRY





# PRODUCTIVITY IN THE PIPELINE

Oil and gas industries feature a wide variety of production stages and equipment. Tough operating conditions and extreme safety requirements are the common denominators.

A certain amount of risk is always present throughout the production chain in oil and gas industries. Keeping the equipment in the best possible shape at all stages can substantially reduce this risk, thus contributing to both operational reliability and the safety of personnel.

### Extreme conditions set extreme requirements

The field equipment, such as drills, pumps and valves, are commonly located either offshore or at an extremely hot, desert-type location. While the weather conditions create exposure to corrosion, heat, UV radiation and abrasion, the unavoidable oil and chemical spillages set their own requirements to how the equipment should be protected. The pipelines that transfer oil and gas for example from the drilling site to refinery are exposed to all that as well. On top of it, the transfer process creates plenty of friction inside the pipes. To keep the pipes from breaking, special friction reduction solutions are needed. Things do not get any easier at the refining and purifying plants or at the storage tanks. While the challenges caused by extreme weather prevail, the role of chemical stress caused by spillages, fumes and the immersion inside the

tanks and pipes becomes even more significant. Also, as plants are looking for ways to make their operations more cost-effective, issues such as heat-reflective properties in various surfaces to create solar heat are constantly considered.

### State-of-the-art portfolio of protective solutions

Teknos develops and manufactures special paints and powder coatings to meet the strict, versatile needs of oil and gas industry. Utilizing our comprehensive experience and physical presence on all our key markets we have managed to put together a state-of-the-art portfolio of solutions to keep the entire production line protected. While this helps you maintain your equipment properly and extend their lifetime, it enhances operational safety and provides opportunities to further improve the efficiency of your process.

## TEKNOS COATING SOLUTIONS FOR OIL & GAS INDUSTRY

### UPSTREAM

AREA: Oil and gas field equipment (drills, pumps, valves etc.)

- Exposure / Teknos solutions against:
- UV radiation
  - Abrasion (ie. sand storms in desert)
  - Oil / chemical spillages
  - Heat
  - Corrosion and chemical exposure

Teknos solutions to protect against all these both in onshore and offshore.

### DOWNSTREAM

AREA: Pipelines

- Exposure / Teknos solutions against:
- UV radiation
  - Heat
  - Abrasion
  - Friction reduction solutions (flowcoat solutions to reduce friction inside pipe-lines)
  - Corrosion

### DOWNSTREAM

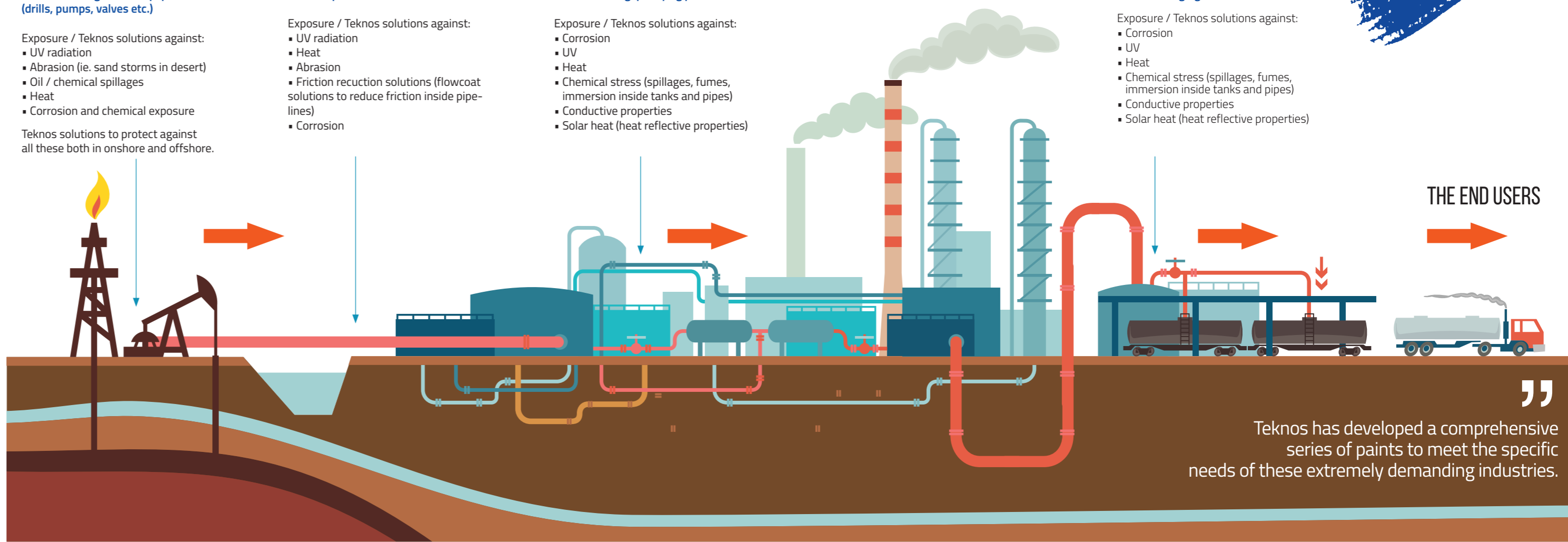
AREA: Refining, purifying plants

- Exposure / Teknos solutions against:
- Corrosion
  - UV
  - Heat
  - Chemical stress (spillages, fumes, immersion inside tanks and pipes)
  - Conductive properties
  - Solar heat (heat reflective properties)

### DOWNSTREAM

AREA: Storing tanks (reservoirs)

- Exposure / Teknos solutions against:
- Corrosion
  - UV
  - Heat
  - Chemical stress (spillages, fumes, immersion inside tanks and pipes)
  - Conductive properties
  - Solar heat (heat reflective properties)



Teknos has developed a comprehensive series of paints to meet the specific needs of these extremely demanding industries.

### REFERENCE: PKN ORLEN

PKN Orlen is one of Europe's largest fuel distributors. While having to meet the strict safety requirements, the overall appearance of fuel storages is important. A high-quality coating keeps the surfaces in good shape for a long time. That is also a sign of reliability and control over things – a message any company operating in this field finds essential to deliver. Along with safety issues, PKN Orlen wanted to ensure the investment's cost-efficiency and pay attention to positive corporate image. That is why it chose Teknos paint systems for both the tanks and steel constructions. After more than 20 years of existence, the co-operation can be safely declared successful.



### REFERENCE: NESTE OIL

Neste Oil utilizes Teknos coating solutions to uplift the image and appearance of gas stations. In a heavily competitive line of business, it is essential to attract drivers to stop at the right station. A modern appearance that can be easily noticed and recognized from the road is required, but in the tough Nordic climate conditions this cannot happen at the cost of product quality. The coatings have to be extremely durable and able to withstand all kinds of weather, including supreme cold. Teknos powder coatings meet all these requirements. Powder coatings are recyclable, completely solvent-free, and they do not contain volatile organic compounds (VOC). This makes them an economical and environmentally friendly choice.



# TEKNOS PAINT SYSTEMS

## OIL AND CHEMICAL RESISTANT COATINGS FOR IMMERSION STRESS

- INERTA 270 epoxy paint
- INERTA 280 epoxy phenol novolac coating
- TEKNOZINC SS zinc silicate paint

## ANTISTATIC SOLUTIONS

- INERTA 266, oil and chemical resistant, conductive epoxy coating
- INFRALIT EP/PE 8092, conductive powder coating

## COATING SOLUTIONS FOR PIPELINES

- TEKNOPOX 3296 epoxy coating (flowcoat with friction reduction properties)
- INFRALIT EP 8054, INFRALIT EP 8074 and INFRALIT EP 8064 FBE powder coatings for pipelines

## HEAT RESISTANT COATINGS

- INERTA 300 epoxy phenol novolac paint
- TEKNOHEAT 500 silicone paint
- TEKNOZINC SS zinc silicate paint

## ANTICORROSIVE SOLUTIONS AGAINST FUMES, OIL AND CHEMICAL SPILLAGES

### Primers

- TEKNOPLAST series
- INERTA Mastic (MIOX) series
- INERTA 300 epoxy phenol novolac paint
- INFRALIT EP 8026-05 /INFRALIT PE 8316-05 powder coatings

### Topcoats

- TEKNODUR series
- TEKNODUR COMBI series
- TEKNOLAC series
- INFRALIT PE 8350 powder coatings

## REFERENCES



MÜLHEIM PIPECOATINGS GMBH



WEHOCOAT JOINT SYSTEM



GAZPROM



UNITED PIPELINES SERVICES AS



NESTE

Photographs by Mühlheim Pipecoatings GmbH, Gazprom, United Pipeline Services, Neste

# WE MAKE THE WORLD LAST LONGER

Teknos is a global coatings company with operations in more than 20 countries in Europe, Asia, and the USA. Teknos is one of the leading suppliers of industrial coatings with a strong position in retail and architectural coatings.

Teknos wants to make the world last longer by providing smart, technically advanced paint and coating solutions to protect and prolong. Teknos always works in close cooperation with its customers. Teknos was established in 1948 and is one of Finland's largest family-owned businesses.  
For further information, visit [www.teknos.com](https://www.teknos.com).

<https://www.teknos.com/oil-gas>

