

**COMBIT**  
**Oil-gas projects reference list.**

*Technologies and automation for oil terminals*  
*Loading / unloading tank car racks*  
*Automation of tank fields and storage facilities*  
*Design and capital development of oil-gas objects*  
*Custody transfer and operative gas metering units*  
*Process control*  
*Blending systems*

There are only samples of Combit's objects below. Full reference list is available on request.

*Technologies and automation for oil-loading terminals:*

- Turnkey automation of oil terminal JSC «ROSNEFT» - Nahodkanefteproduct» (project is in progress).
- Development of information-control system at JSC «ROSNEFT» - Nahodkanefteproduct» (project is in progress).
- Automation of petroleum unloading technological system, loading into tank storage and loading into tankers at JSC «ROSNEFT» - Nahodkanefteproduct» (project is in progress).
- Automation of heavy fuel oil pumping at JSC «ROSNEFT» - Nahodkanefteproduct» (project is in progress).
- Automation of fire extinguishing system pump station at JSC «ROSNEFT» - Nahodkanefteproduct» (project is in progress).
- New piping from "Ventspils Nafta" tank farm to jetties.
- Automation of tank farm (150 tanks), automation of custody transfer system; reconstruction, calibration and commissioning of crude oil custody metering skid for loading operations from oil-trunk pipeline; setup of number of flowmeters for oil & oil product flow control at the one of the biggest oil terminal in Europe: "Ventspils Nafta", Latvia.
- Automation and design project of "Ventamoniak" terminal.
- Design project of universal mineral fertilizer transportation complex at port "St.Petersburg".
- Detailed design for modernization project of auxiliary production facilities ACS TP, Contract design for modernization project, conception and technical requirements development for technological process control system at terminal AO "Eurodek Kopli Services", Tallinn city.
- Terminal "NAFTAS SERVISS": preliminary design of construction (volume of reloading - 2,7 mln.tn. /year and 8 mln.tn. /year), contract design, construction-and-assembling operations at the parts of automation, fire extinguishing system, power system, communication. Overall tracking and object commissioning.

## *Automation of tank fields and storage facilities:*

- Turnkey automation of tank farm at "Petrokazakhstan nefteproduct" Refinery Shimkent city, Kazakhstan (project is in progress, finish at the end of 2005)
- Automation of tank farm (63 tanks), automation of jetty custody transfer operations at Arhangelsk tank farm JSC "ROSNEFT – Arhangelsknefteproduct";
- Automation of tank farm (15 tanks), automation of custody transfer operations at JSC "ROSNEFT - Tuapsenefteproduct";
- Automation of tank farm (150 tanks), automation of custody transfer operations, reconstruction, calibration and commissioning of crude oil custody metering skid for loading operations from oil-trunk pipeline; setup of number of flowmeters for oil & oil product flow control at "Ventspils Nafta", Latvia.
- Automation of tank farm (14 tanks), automation of custody transfer operations at Turkmenbushy Refinery (Turkmenbushy city, Turkmenia)
- Automation of tank farm and custody transfer operations at four tank farms: "Radionovskaya", "Zarechie", "Tihoretskaya" and "Grushovaya" of JSC "Chernomortransneft", component of SC "Transneft" (112 tanks).
- Automation of tank farm "CBCN" (31 tanks) and custody transfer operations, development of reserve volume-balance based custody transfer system at JSC "Privolzhsknefteprovod", component of SC "Transneft".
- Automation of tank farm and custody transfer operations at five tank farms "Yuzhny Balyk", "Karkateevo", "Konda", "Vagai", "Targili" of JSC "Sibnefteprovod", component of SC "Transneft" (90 tanks).
- Automation of tank farm (83 tanks) and development of custody transfer automatic metering system for loading processes from pipeline "Druzhba" at Refinery "Mazheky Nafta", Lithuania.
- Automation of tank farm (26 tanks commissioned, 120 in progress at the moment), and custody transfer operations at Refinery of "Angarsk petrochemical company", Angarsk city.
- Automation of tank farm (24 tanks) and custody transfer operations at Perm Refinery "Lukoil - Permnefteorgsintez", Perm city.

Integrally, during 12 years of work Combit has developed custody transfer systems of level gauge and balance for more then 2500 tanks on the territory of Russia and CIS.

## *Loading / unloading tank car racks:*

- Turnkey project (development of: technologic project, automation project, fire extinguishing system project, buying and delivering of equipment, montage and contract supervision works, commissioning, certification) of construction two-way tank car rack at JSC «ROSNEFT» - Nahodkanefteproduct» (project is in progress).
- Turnkey project (development of: technologic project, automation project, fire extinguishing system project, buying and delivering of equipment, montage and contract supervision works, commissioning, certification) of construction two-way loading-unloading railway tank car rack at AO "Vanspils Nafta".
- Turnkey design and construction project of two loading-unloading heavy fuel oil tank car racks at "Vent Bunker" company (projects are at the final stage).
- Designing of loading-unloading heavy fuel oil tank car rack at "Vanspils Nafta" (design project is at the stage of working project development).

## *Design works for reconstruction of compressor stations and piping of main lines at JSC "Gasprom":*

- Projects on compressor stations reconstruction for JSC "Gasprom" (are at the stage of design project):
  - Reconstruction of CS-12 "Mikun".
  - Reconstruction of CS-17 "Gryazovec" OPKS of main pipeline Uhta-Torzhok.
  - Reconstruction of CS-18 "Myshkin" of main pipeline Uhta-Torzhok.
- Designing of line pipes for JSC "Gasprom" (are at the stage of design project).

## *Custody transfer and operative gas metering units:*

- Turnkey project: design and construction of Custody Transfer Gas Metering Unit, reconstruction of compressor station #1 Inchukalns Gas Underground storage at Latvijas G\_ze company (project is in progress).

## *Process control:*

- Design and development of distributed control system for aggregate #24/7 at JSC "Ryazan Refinery". Facilities: Centum CS 1000 Yokogawa, Japan.
- Design and development of information system for aggregate # \_-37/3 plant 4 at JSC "Ryazan Refinery". Facilities: system "Darwin" Yokogawa, Japan.
- Information system implementation for aggregate # 29/3 plant 8 at JSC "Ryazan Refinery". Facilities: system "Darwin" Yokogawa, Japan.
- Design and development of control system for admixture input skid Fairy LDL3 at product line of cleaning agent "Fairy" JSC "Novomoskovskbythym". Facilities: PLCs SLC 500 Allen-Bradley, USA.
- Overall automation of plant #11 at JSC "Ryazan Refinery". Facilities: PLC 5 Allen-Bradley, USA
- Design and development of ACS TP for desalinization skid at ZAO "Promyshlennye katalizatory". Facilities: Centum CS 1000 Yokogawa, Japan.
- Design and development of distributed control system for automatic fire extinguishing LPDS "Ryazan" at JSC "Ryzantransnefteproduct". Facilities: Centum CS 1000 Yokogawa, Japan.
- Design and development of gas detection and analysis system at AK "Transneft". More than 90 compressor stations are equipped and supported by systems from company "CPM".
- Montage, tracking and commissioning of ACS for two pipeline compressor stations at AK "Transneft". Facilities: "Schneider Electric", PLCs – MODICON.
- Level gauging automatic system for tank farm "Tihoretskaya" at JSC "Chernomortransneft", component of SC "Transneft".

*Blending systems (realized in partnership with “DOMEN” company):*

- Oil blending system at JSC “Yaroslavl Refinery” (at the stage of design project).
- Gasoline blending system at JSC “Ryazan Refinery”.
- Oil blending system at JSC “Ryazan Refinery”.
- Diesel oil blending system at JSC “Ryazan Refinery”.
- Heavy fuel oil blending system at JSC “Ryazan Refinery”.
- Kerosene blending system at JSC “Ryazan Refinery”.
- Oil blending system on the basis of KM-3 aggregate at “Volgograd Refinery”.
- Polialfaolefine oil blending system at KOU factory AO “Angarsk petrochemical company”.
- Oil blending system at Refinery AO “Angarsk petrochemical company”.
- Gasoline blending system at GPP AO “Angarsk petrochemical company”.
- Gasoline blending system AO “Kremenchugnefteorgsintez”.
- Oil blending system at AO “Kremenchugnefteorgsintez”.
- Oil blending system on regeneration aggregate for waste oil at AO “Kremenchugnefteorgsintez”.
- Oil blending system (on the basis of KM-2) at PO “Yaroslavnefteorgsintez”.
- Gasoline blending system at PO “Novopolotsknefteorgsintez”.