

EXPERIENCE IN IMPLEMENTATION OF ISOMALK-2 PROCESS OVER SI-2 CATALYST

Seq. №	Year of implementation	Company	Country	Unit capacity	Description of works
1.	2003 2008 2012	Bashneft-Ufaneftekhim	Russia	300 KTA 500 KTA 500 KTA	Conversion of reforming unit L-35-5 to the isomerization process based on Isomalk-2 technology, development of Design Basis for unit reconstruction, SI-2 catalyst supply, rendering technical services at the site.
2.	2005	PJSC LINIK	Ukraine	400 KTA	Conversion of CKS ISOM unit to the isomerization process based on Isomalk-2 technology, SI-2 catalyst supply. In 2012, development of Design Basis for isomerization unit reconstruction to the process based on DIP+DIH scheme.
3.	2005	KINEF, Ltd.	Russia	500 KTA	Conversion of reforming unit L-35-11/300 to the isomerization process based on Isomalk-2 technology, development of Design Basis for reconstruction, SI-2 catalyst supply, rendering technical services at the site.
4.	2005	JSC Ryazan Oil Refining Company (RORC)	Russia	450 KTA	Conversion of the isomerization unit from zeolite catalyst to SI-2 catalyst and Isomalk-2 technology, SI-2 catalyst supply, rendering technical services at the site.
5.	2006	S.C. Petrotel-Lukoil S.A.	Romania	180 KTA	Conversion of the isomerization unit based on ParIsom process from LPI-100 catalyst to SI-2 catalyst, SI-2 catalyst supply, rendering technical services at the site.
6.	2008	Bashneft – Ufa Refinery	Russia	400 KTA	Reloading of pentane-hexane fraction isomerization unit from zeolite catalyst to SI-2 catalyst, rendering technical services at the site.
7.	2009	Bashneft – NOVOIL	Russia	500 KTA	Reloading of pentane-hexane fraction isomerization unit from zeolite catalyst IS-632 (Axens) to SI-2 catalyst, rendering technical services at the site.
8.	2010	JSC Gazpromneft-Omsk Refinery	Russia	800 KTA	Development of Design Basis, support of detailed engineering of the new unit Isomalk-2, catalyst supply.
9.	2010	Purneftepererabotka, LLC	Russia	29 KTA	Basic Engineering Design was developed.
10.	2011	JSC Slavneft-YANOS	Russia	720 KTA	Development of Design Basis, support of detailed engineering of the new unit Isomalk-2, SI-2 catalyst supply, rendering technical services at the site.
11.	2011	LUKOIL-Volgograd neftepererabotka, Ltd.	Russia	300 KTA	Basic Engineering Design of catalytic reforming unit conversion to Isomalk-2 process was developed.
12.	2013	PJSC Saratov Refinery	Russia	400 KTA	Development of Design Basis, support of detailed engineering of the new unit based on Isomalk-2 technology, SI-2 catalyst supply, rendering technical services at the site.
13.	2014	Business unit Uraineftegaz	Russia	12 KTA	Development of Basic Engineering Design, support of detailed engineering of the new small-scale unit Isomalk-2.
14.	2014	Severny Kuzbass Refinery, Ltd.	Russia	152.4 KTA	Basic Engineering Design of the new pentane-hexane fraction isomerization unit based on Isomalk-2 technology was developed.
15.	2015	JSC Orsknefteorgsintez	Russia	300 KTA	Development of Design Basis, support of detailed engineering of the new isomerization unit based on Isomalk-2 technology, SI-2 catalyst supply, rendering technical services at the site.

16.	2015	JSC Ryazan Oil Refining Company (RORC)	Russia	800 KTA	Development of Design Basis, support of detailed engineering of the new unit, SI-2 catalyst supply, rendering technical services at the site.
17.	2015	Client in the Middle East	Lebanon	100 KTA	Conversion of the isomerization unit based on Penex technology to Isomalk-2 technology, SI-2 catalyst supply, rendering technical services at the site.
18.	2015	Hengli Petrochemical Co., Ltd.	China	2,400 KTA	Development of Basic Engineering Design of the new C ₅ -C ₆ fraction isomerization unit based on Isomalk-2 technology, in cooperation with GTC Technology.
19.	2016	Business unit Kogalymneftegaz	Russia	15 KTA	Development of Basic Engineering Design, support of detailed engineering of the new small-scale isomerization unit based on Isomalk-2 technology, SI-2 catalyst supply, rendering technical services at the site.
20.	2017	JSC TANECO	Russia	420 KTA	Development of Basic Engineering Design, support of detailed engineering of the new isomerization unit based on Isomalk-2 technology, SI-2 catalyst supply, rendering technical services at the site.
21.	2017	Bharat Petroleum Corporation Ltd. Mumbai Refinery	India	680 KTA	Conversion of catalytic reforming unit to isomerization process based on Isomalk-2 technology, development of Basic Engineering Design in cooperation with GTC Technology, SI-2 catalyst supply, rendering technical services at the site.
22.	2017	JSC Ryazan Oil Refining Company (RORC)	Russia	-	SI-2 catalyst supply, rendering technical services at the site.
23.	2018	GALP ENERGIA SCPS, S.A.	Portugal	12.5 KBD	Development of Basic Engineering Design of Isomalk-2 unit, support of detailed engineering of the new unit in cooperation with GTC Technology, SI-2 catalyst supply, rendering technical services at the site.
24.	2018	Al Barham Group	Iraq	29.5 TPH	Development of Basic Engineering Design of Isomalk-2 unit, support of detailed engineering of the new unit in cooperation with GTC Technology, SI-2 catalyst supply, rendering technical services at the site.
25.	2018	Shandong Lifengda Biological Technology Co., Ltd.	China	80 KTA	Development of Basic Engineering Design in cooperation with GTC Technology, support of detailed engineering of the new unit.
26.	2018	Zibo Ruilin Chemical Co., Ltd	China	80 KTA	Development of Basic Engineering Design of Isomalk-2 unit, support of detailed engineering of the new unit in cooperation with GTC Technology, SI-2 catalyst supply, rendering technical services at the site.
27.	2018	Shandong Sincier Petrochemical Co., Ltd	China	416.9 KTA	Development of Basic Engineering Design of Isomalk-2 unit, support of detailed engineering of the new unit in cooperation with GTC Technology, SI-2 catalyst supply, rendering technical services at the site.
28.	2018	Shandong Dongfang Hualong Industry Trade Group Co., Ltd	China	330 KTA	Development of Design Basis, support of detailed engineering of the new unit, SI-2 catalyst supply, rendering technical services at the site.
29.	2019	KINEF, Ltd.	Russia	500 KTA	Development of Design Basis, support of detailed engineering of the new unit, SI-2 catalyst supply, rendering technical services at the site.
30.	2020	JSC TANECO	Russia	300 KTA	Development of Design Basis, support of detailed engineering of the new unit, SI-2 catalyst supply, rendering technical services at the site.