

Selected References

## Biturox® Bitumen Processing Units



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## Selected References

### Biturox Licenses since 2005

Client	Place	Country	Start	End
Project description	Services and supplies by Pörner	Remark	Project / Scope	
<b>Guro Gobind Singh Refinery</b> <i>Biturox® Bathinda</i> Installation of a Biturox® bitumen processing plant for production of industrial and road grade bitumen	<b>Bathinda</b>  License, basic design, procurement and supply of proprietary equipment, site supervision, start-up, training and documentation of process unit	<b>India</b>  <i>500.000 TPA VG 10/30/40</i>	<b>2015</b>  Brown field <i>EPCM</i>	<b>2017</b>
<b>SOCAR (State Oil Company of Azerbaijan Republic)</b> <i>Biturox® Baku</i> Installation of a Biturox® bitumen processing plant for production of industrial and road grade bitumen	<b>Baku</b>  License, basic design, procurement and supply of proprietary equipment, site supervision, start-up, training and documentation of process unit	<b>Azerbaijan</b>  <i>400.000 TPA Pen/Pen 40/60</i>	<b>2015</b>  Brown field <i>EPCM</i>	<b>2017</b>
<b>Saudi Aramco</b> <i>Biturox® Ras Tanura</i> Installation of a new Biturox® bitumen processing plant for production of road grade bitumen	<b>Ras Tanura</b>  License, basic engineering, pilot tests, procurement and supply of proprietary equipment, start-up assistance, documentation	<b>Saudi Arabia</b>  <i>3.200 TPD A-970, Road grade</i>	<b>2014</b>  Brown field <i>EPCM</i>	<b>2017</b>
<b>ORPIC Oman Oil Refineries and Petroleum Ind. Co.</b> <i>Biturox® Sohar</i> Construction of a Biturox plant in an existing refinery with two reactors	<b>Sohar</b>  License, basic engineering, pilot tests, procurement and supply of proprietary equipment, start-up assistance, training	<b>Oman</b>  <i>2 x 516 TPD RG: PEN 60-70</i>	<b>2014</b>  Brown field <i>EPCM</i>	<b>2016</b>
<b>Al-Wataniya Group for Oil&amp;Gas</b> <i>Biturox® Baiji (Turn-key)</i> Installation of a bitumen production complex including a biturox plant	<b>Baiji</b>  License, basic engineering, detailed engineering, procurement and supply of process unit, site supervision, start-up assistance and documentation (turn-key)	<b>Iraq</b>  <i>2 x 250.000TPA Road Grade 40/50, 60/70</i>	<b>2013</b>  Green field <i>EPCM</i>	<b>2017</b>

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<b>IOCL Indian Oil</b> <i>Biturox® Barauni</i> Installation of a new Biturox® bitumen processing plant for production of special road grade bitumen	<b>Barauni</b>  License, basic engineering, detailed engineering, procurement and supply of key equipment, start-up assistance, documentation	<b>India</b>  <i>450 TPD VG 10, VG 20, VG 30, VG 40 Road grade</i>	<b>2012</b>	<b>2013</b>
<b>OJSC Novoshakhtinskij Zavod Nefteproduktov</b> <i>Biturox® Rostov</i> Installation of a grass root Biturox® bitumen plant including storage tanks as well as truck and rail loading stations	<b>Novoshakhtinsk</b>  License, basic engineering, detailed engineering, procurement and supply of equipment, site supervision, start-up assistance, documentation	<b>Russia</b>  <i>2 x 330.000TPA; 2.200 TPD - BND 60/90, BND 40/60; BND 90/130, Road Grade</i>	<b>2011</b>	<b>2014</b>
<b>SCOP State Company for Oil Projects</b> <i>Biturox® Nassiriya</i> Installation of a grassroot refinery, including a Biturox® bitumen plant with off gas treatment & heat recovery	<b>Nassiriya</b>  License, basic engineering, procurement and supply of proprietary equipment, site supervision, start-up assistance	<b>Iraq</b>  <i>330.000TPA Road Grade 40/50, 60/70, 80/90; Industrial Grade 20/30</i>	<b>2011</b>	<b>2012</b>
<b>SRC South Refineries Company</b> <i>Biturox® Maissan</i> Installation of a new Biturox® bitumen processing plant for production of road and industrial grade bitumen	<b>Maissan</b>  License, basic engineering, start-up assistance, documentation	<b>Iraq</b>  <i>153.000TPA 220 TPD - Pen 40-50, Pen 60-70, Pen 80-100, Road Grade - 245 TPD, SP/Pen 115/10, SP/Pen 105/20</i>	<b>2011</b>	<b>2012</b>
<b>NRC North Refineries Company</b> <i>Biturox® Kirkuk</i> Installation of a Biturox® bitumen plant with off gas treatment & heat recovery; product storage and truck loading area within a new grassroot refinery	<b>Kirkuk</b>  License, basic engineering, site supervision, commissioning support and documentation	<b>Iraq</b>  <i>153.000TPA 220 TPD - Pen 40-50, Pen 60-70, Pen 80-100, Road Grade - 245 TPD, SP/Pen 115/10, SP/Pen 105/20</i>	<b>2010</b>	<b>2012</b>

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<b>ESSAR OIL Ltd</b> <i>Biturox® ESSAR</i> Installation of a Biturox® bitumen oxidation plant for production of industrial and road grade bitumen	<b>Gujarat</b>  License, basic engineering	<b>India</b>  72.000 TPA	<b>2010</b>	<b>2011</b>  Brown field E
<b>State Company for Oil Projects (SCOP)</b> <i>Biturox® Kerbala</i> Installation of a Biturox® Bitumen plant within a grass-root refinery; site constructions to be expected in 2014	<b>Karbala</b>  License, basic engineering, start-up assistance, documentation	<b>Iraq</b>  72.000 TPA 200 TPD; Road Grade 30/40, 60/70, 80/100	<b>2009</b>	<b>2017</b>  Green Field ECM
<b>CEPSA Compañía Española de Petróleos</b> <i>Biturox® CEPSA</i> Installation of a Biturox® bitumen processing plant for production of special road grade bitumen	<b>La Rabida</b>  License, basic and detailed engineering, procurement and supply process equipment, commissioning, start-up assistance and documentation	<b>Spain</b>  390.000 TPA 1.150 TPD; Road Grade 50/70, 70/100, 30/45	<b>2009</b>	<b>2011</b>  Brown field EP
<b>SAMIR Oil Refinery</b> <i>Biturox® SAMIR</i> Turn-key installation of a Biturox® bitumen oxidation plant including storage tanks and HGV filling station	<b>Mohammedia</b>  Turn-key: license, financial support, project management, basic and detail engineering, purchase and supply of process unit, construction, site supervision, commissioning and documentation	<b>Morocco</b>  290.000 TPA Road Grade 40/50, 60/70, 80/100; Industrial Grade 90/25	<b>2009</b>	<b>2011</b>  Brown field EPC
<b>Pak-Arab Refinery Ltd (PARCO)</b> <i>Biturox® PARCO</i> Installation of a Biturox® bitumen oxidation plant for production of industrial and road grade bitumen	<b>Qasba Gujrat</b>  License, basic engineering, detailed engineering, procurement and supply of proprietary equipment, site supervision, start-up assistance, training and documentation	<b>Pakistan</b>  180.000 TPA Pen 80-100, Pen 60-70, Pen 30-40, Pen 10-20, Road Grade	<b>2008</b>	<b>2012</b>  Brown field ECM

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Client	Place	Country	Start	End
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<b>Qatar Petroleum</b> <i>Biturox® Qatar</i> Installation of a bitumen oxidation plant according to the Biturox® technology	<b>Al Shaheen Refinery</b>  License, basic engineering	<b>Qatar</b>  <i>100.000 TPA</i>	<b>2008</b>  Brown field <i>E</i>	<b>2008</b>
<b>Jey Oil</b> <i>Biturox® Jey Oil</i> Revamp of the incinerator section of an existing Biturox® plant	<b>Isfahan</b>  License, basic engineering, detail engineering, purchase and supply of key equipment, commissioning and start-up	<b>Iran</b>  <i>Revamp</i>	<b>2007</b>  Modernisation <i>EPCM</i>	<b>2008</b>
<b>Soroush Oil Refinery</b> <i>Biturox® Meerat</i> Basic engineering for a vacuum distillation plant / atmospheric distillation based on Biturox-® plus technology inclusive process simulation and equipment specifications	<b>Qeshm</b>  License. basic engineering including process, machinery/apparatus, piping layout, electric-instrumentation-automation and civil engineering	<b>Iran</b>  <i>300 TPD</i>	<b>2007</b>  Modernisation <i>E</i>	<b>2007</b>
<b>Bharat Petroleum Kochi Refinery</b> <i>Biturox® Kochi</i> Installation of a new bitumen plant incl. off gas treatment according to the Biturox® technology	<b>Cochin</b>  License, basic engineering, supply of key equipment and off gas treatment system, site supervision, commissioning, training and documentation	<b>India</b>  <i>1.135 TPD VG 10, VG20, VG30, VG 40, Road Grade</i>	<b>2006</b>  Brown field <i>EPCM</i>	<b>2007</b>
<b>Indian Oil Corporation Ltd., Mathura Refinery</b> <i>Biturox® Mathura</i> Revamp of an existing bitumen plant on basis of the Biturox® process for production of special road grade bitumen	<b>Mathura</b>  License, basic engineering, detailed engineering, supply of key equipment, site supervision, start-up, training and documentation	<b>India</b>  <i>2.250 TPD 700.000 TPA S35, S65, S90 Road Grade</i>	<b>2006</b>  Brown field <i>EPCM</i>	<b>2007</b>

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<b>JSC "TAIF-NK"</b> <i>Biturox® Nizhnekamsk</i> Installation of a Biturox® plant	<b>Nizhnekamsk</b>  Feasibility study, license, basic engineering for the process unit, detailed engineering, procurement and supply of the process unit, site supervision, start-up assistance and documentation	<b>Russia</b>  <i>2 x 720 TPD R+B: 44-48 °C, PEN 60-70, Road Grade</i>	<b>2005</b>	<b>2007</b>  Brown Field <i>EPCM</i>
<b>OMV AG</b> <i>Biturox® OMV</i> Installation of a Biturox® Bitumen plant for production of special road paving bitumen	<b>Schwechat</b>  License, basic design, detail engineering, procurement and supply of the process unit, site supervision, start-up assistance, training and documentation	<b>Austria</b>  <i>240 TPD R+B: 80-90 °C, PEN 10-20 Road Grade</i>	<b>2005</b>	<b>2006</b>  Brown field <i>EPCM</i>
<b>Paramo A.S.</b> <i>Biturox® Paramo</i> Installation of a Biturox® plant for the production of industrial and road grade bitumen	<b>Pardubice</b>  License, basic design for the process unit, detailed engineering, procurement and supply of the process unit, site supervision, start-up assistance, training and documentation	<b>Czech Republic</b>  <i>1.300 TPD 2150, Pen 50-70, Pen 30-50, Pen 20-30, Pen 10-25, Pen 5-30</i>	<b>2005</b>	<b>2006</b>  Brown field <i>EPCM</i>