

UREA PLANTS

Equipment & Description of the Job	Client / Plant	Period
<p>REACTOR</p> <ul style="list-style-type: none"> ➤ Relining between tray #14 and bottom tangent line ➤ Replacement of nozzle N1 <p>CARBAMATE SEPARATOR</p> <ul style="list-style-type: none"> ➤ Rehabilitation <p>HP PIPING</p> <ul style="list-style-type: none"> ➤ Repair and modification 	<p>GPIC Gulf Petrochemical Industries Co. Al-Manama BAHRAIN</p>	<p>April 2018</p>
<p>REACTOR</p> <ul style="list-style-type: none"> ➤ Relining of top dome ➤ Relining of 8.2 meters of cylindrical area ➤ Repair of liner 	<p>BRANCH OF PETROVIETNAMFERTILIZER AND CHEMICAL CORPORATION Phu My – Vung Tau VIETNAM</p>	<p>November / December 2017</p>
<p>BIMETALLIC HP STRIPPER</p> <ul style="list-style-type: none"> ➤ <u>Shortening in-situ (without removing the stripper from its position)</u> ➤ <u>Modification of the protrusion of tubes on the bottom tubesheet from 5mm to 18mm</u> ➤ <u>Remaking of all bottom tube to tubesheet welds</u> 	<p>KRIBHCO FERTILIZERS LTD. PIPROLA, Shahajahnpur, UP INDIA</p>	<p>September / October 2017</p>
<p>BIMETALLIC HP STRIPPER</p> <ul style="list-style-type: none"> ➤ <u>Shortening in-situ (without removing the stripper from its position)</u> ➤ <u>Modification of the protrusion of tubes on the bottom tubesheet from 5mm to 18mm</u> ➤ <u>Remaking of all bottom tube to tubesheet welds</u> 	<p>IFFCO Indian Farmers Fertilizer Co. AONLA Unit Bareilly, UP INDIA</p>	<p>July/August 2017</p>
<p>BIMETALLIC HP STRIPPER</p> <ul style="list-style-type: none"> ➤ <u>Shortening in-situ (without removing the stripper from its position)</u> ➤ <u>Modification of the protrusion of tubes on the bottom tubesheet from 5mm to 18mm</u> ➤ <u>Remaking of all bottom tube to tubesheet welds</u> 	<p>IFFCO Indian Farmers Fertilizer Co. AONLA Unit Bareilly, UP INDIA</p>	<p>June / July 2016</p>
<p>REACTOR</p> <ul style="list-style-type: none"> ➤ Removal and replacement of No. 1 liner course ➤ Modification of carbamate inlet and solution outlet lines 	<p>YARA ITALIA SPA At YARA ITALIA urea plant FERRARA, Italy</p>	<p>May / June 2016</p>
<p>SOLID 25.22.2 HP STRIPPER</p> <ul style="list-style-type: none"> ➤ Machining of the stripper tubes top end ➤ Modification of the stripper ferrules ➤ Design and fabrication of new grid 	<p>YARA ITALIA SPA At YARA ITALIA urea plant FERRARA, Italy</p>	<p>September / November 2015</p>
<p>REACTOR</p> <ul style="list-style-type: none"> ➤ Second phase of relining <p>SOLID 25.22.2 HP STRIPPER</p> <ul style="list-style-type: none"> ➤ Supply of ferrules for Urea Stripper 	<p>YARA ITALIA SPA At YARA ITALIA urea plant FERRARA, Italy</p>	<p>September / November 2015</p>
<p>REACTOR</p> <ul style="list-style-type: none"> ➤ Repair, modification and relining <p>HP PIPING</p> <ul style="list-style-type: none"> ➤ Modification 	<p>Petronas Fertilizer (Kedah) SDN BHD Gurun. Kedah Malaysia</p>	<p>May / June 2015</p>

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<p><u>REACTOR</u> ➤ Relining of 10.6m of cylindrical area.</p> <p><u>CARBAMATE SEPARATOR</u> ➤ Rehabilitation</p> <p><u>HP PIPING</u> ➤ Repair and modification</p>	<p>GPIC Gulf Petrochemical Industries Co. Al-Manama BAHRAIN</p>	<p>April 2015</p>
<p><u>REACTOR</u> Repair of titanium liner</p>	<p>CHITTAGONG UREA FERTILIZER LTD. Chittagong, Bangladesh.</p>	<p>November / December 2014</p>
<p><u>REACTOR</u> Urea Reactor R501-2: Replacement of all tray supports Installation of new trays Repair of liner welds Relining of top dome</p>	<p>STATE COMPANY OF SOUTHERN FERTILIZERS – SCF Khor Al Zubair IRAQ</p>	<p>September / October 2014</p>
<p><u>REACTOR</u> Second phase of relining – relining of lower half and bottom dome.</p>	<p>Bangladesh Chemical Industries Corporation At Jamuna Fertilizer Company LTD Tarakandi, Jamalpur BANGLADESH</p>	<p>June / July 2014</p>
<p><u>REACTOR</u> Urea Reactor R501-1: Replacement of all tray supports Installation of new trays Repair of liner welds Relining of top dome</p>	<p>STATE COMPANY OF SOUTHERN FERTILIZERS – SCF Khor Al Zubair IRAQ</p>	<p>May 2014</p>
<p><u>SOLID 25.22.2 HP STRIPPER</u> Emergency repair</p>	<p>Koch Fertilizer Canada, ULC. Brandon (MB) CANADA</p>	<p>December 2013</p>
<p><u>CARBAMATE CONDENSER</u> Emergency repair</p>	<p>Petronas Chemical Fertilizer (Kedah) SDN BHD Gurun. Kedah Malaysia</p>	<p>October 2013</p>
<p><u>TITANIUM HP STRIPPER</u> Replacement of top channel of titanium HP Urea Stripper Modification of HP piping</p>	<p>SABIC Saudi Basic Industries Co. At: SAFCO Ibn Al Baytar Plant Al Jubail KINGDOM OF SAUDI ARABIA</p>	<p>April 2013</p>
<p><u>REACTOR</u> Relining of 10.6m of reactor cylindrical area. Replacement of reactor-o-stripper and carbamate separator-to-reactor HP pipe line</p>	<p>GPIC Gulf Petrochemical Industries Co. Al-Manama BAHRAIN</p>	<p>November 2012</p>

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<u>REACTOR</u> Relining of 8m of urea reactor cylindrical area and modification of urea high pressure piping.	Petronas Fertilizer (Kedah) SDN BHD Gurun. Kedah Malaysia	September 2012
<u>TITANIUM HP STRIPPER</u> Emergency repair of Urea Stripper titanium liner	SABIC Saudi Basic Industries Co. At: SAFCO Ibn Al Baytar Plant Al Jubail KINGDOM OF SAUDI ARABIA	January / February 2012
<u>REACTOR</u> Relining of urea reactor top dome and 8m of cylindrical portion	YARA ITALIA SPA At YARA ITALIA urea plant FERRARA, Italy	May / June 2011
<u>TITANIUM HP STRIPPER</u> Relining of titanium stripper top channel	SABIC Saudi Basic Industries Co. At: SAFCO Ibn Al Baytar Plant Al Jubail KINGDOM OF SAUDI ARABIA	April / May 2011
<u>REACTOR</u> Replacement of top manway liner and gasket seating ring	SABIC Saudi Basic Industries Co. At: SAFCO Ibn Al Baytar Plant Al Jubail KINGDOM OF SAUDI ARABIA	April 2011
<u>ZIRCONIUM HP STRIPPER</u> Inspection and repair of zirconium urea stripper.	PROFERTIL Bahia Blanca ARGENTINA	September 2010
<u>REACTOR</u> Relining of Urea Total Recycle Secondary Reactor.	Koch Fertilizer Canada, ULC. Brandon (MB) CANADA	June / July 2010
<u>REACTOR</u> <ul style="list-style-type: none"> • Relining of top dome and of 22.5 meters of the cylindrical portion of Urea Reactor. • Supply of bolts, nuts and washers for Urea Reactor sieve trays. 	Bangladesh Chemical Industries Corporation At Jamuna Fertilizer Company LTD Tarakandi, Jamalpur BANGLADESH	April / May 2010

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<p><u>REACTOR</u></p> <ul style="list-style-type: none"> Relining of the area included between tray #1 and tray #5. Repair of liner welds. <p><u>HP PIPING</u></p> <ul style="list-style-type: none"> Modification of high pressure piping for the installation of a new stripper. <p><u>BIMETALLIC HP STRIPPER</u></p> <ul style="list-style-type: none"> Repair of the tube-to-tubesheet welds and the channel liner of the existing bimetallic stripper 	<p>GPIC Gulf Petrochemical Industries Co. Al-Manama BAHRAIN</p>	<p>February / March 2010</p>
<p><u>TITANIUM HP STRIPPER</u></p> <p>Repair of titanium stripper and replacement of cover strips.</p>	<p>Chongqing Jiangfeng Chemical Co., LTD. Baitao Town, Fuling District, Chongqing CHINA</p>	<p>November 2009</p>
<p><u>REACTOR</u></p> <ul style="list-style-type: none"> Supply and installation of top hoist. Repair of Urea Reactor liner welds. Supply and installation of No. 5 new sieve trays for. Supply of material for overflow pipe. 	<p>Petronas Fertilizer (Kedah) SDN BHD Gurun. Kedah Malaysia</p>	<p>August 2009</p>
<p><u>REACTOR</u></p> <p>Emergency repair of the liner welds.</p>	<p>Petronas Fertilizer (Kedah) SDN BHD Gurun. Kedah Malaysia</p>	<p>December 2007 / January 2008</p>
<p><u>REACTOR</u></p> <ul style="list-style-type: none"> Replacement of the gasket seating ring on the Urea Reactor manhole flange. Relining of the top dome and 1.5 meters of the cylindrical portion of Urea Reactor. Repair of Urea Reactor liner welds. Supply and installation of No. 9 new sieve trays for Urea Reactor. <p><u>BIMETALLIC HP STRIPPER</u></p> <ul style="list-style-type: none"> Repair of bimetallic stripper tube-to-tubesheet welds. 	<p>GPIC Gulf Petrochemical Industries Co. Al-Manama BAHRAIN</p>	<p>November 2007</p>
<p><u>REACTOR</u></p> <ul style="list-style-type: none"> Relining of 7.5 meters of the cylindrical portion of Urea Reactor (between tray #5 and tray #9). Supply and installation of load-limiting device for the reactor hoist. <p><u>TITANIUM HP STRIPPER</u></p> <ul style="list-style-type: none"> Relining of the titanium stripper top channel. 	<p>SABIC Saudi Basic Industries Co. At: SAFCO Ibn Al Baytar Plant Al Jubail KINGDOM OF SAUDI ARABIA</p>	<p>June 2007</p>

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<p><u>SOLID 25.22.2 HP STRIPPER</u></p> <ul style="list-style-type: none"> Modification of gasket type from Delta to Cam Profile, with replacement of the gasket seating ring, on the high pressure flanges. Supply of ferrules and ferrule stay grid for No. 2 strippers. <p><u>REACTOR</u></p> <ul style="list-style-type: none"> Modification of gasket type from Delta to Cam Profile, with replacement of the gasket seating ring, on the manhole flange. <p><u>AMMONIA REFORMER</u></p> <ul style="list-style-type: none"> Re-design and replacement of No. 1 complete coil; replacement of No. 2 headers and No. 1 row of finned tubes on a second coil, replacement of No. 1 header in a third coil. 	<p>YARA ITALIA SPA Ferrara ITALY</p>	<p>October 2006</p>
<p><u>REACTOR</u> Repair of reactor tray supports</p>	<p>Ferilizantes Nitrogenados de Venezuela (FERTINITRO) Barcelona, VENEZUELA</p>	<p>October 2005</p>
<p><u>REACTOR</u></p> <ul style="list-style-type: none"> Installation of load-limiting device in the reactor's top hoist. Installation of new liner strips over the existing liner at tray #13 and #14 elevation. Repair of reactor liner welds. Replacement of overflow pipe. Replacement of stub ends in the reactor and stripper high pressure piping. Repair of bimetallic stripper tube-to-tubesheet welds. 	<p>GPIC Gulf Petrochemical Industries Co. Al-Manama, BAHRAIN</p>	<p>June 2005</p>