



REFERENCE INFORMATION NOTE;

OKNAL AIR SEPERATION PLANT WITH WATER TREATMENT PLANT

Product Capacity : THE PRODUCTION OF 4000 NM³/H LIQUID OXYGEN, 1000 NM³/H LIQUID NITROGEN AND 130 NM³/H LIQUID ARGON

SASPG (SICHUAN A.S.P GROUP CO.LTD.) (The Construction of Turnkey)

Water Circulation Rate : 1365 m³/h (The Construction of Turnkey)

Date : 2015/2017



Air Separation Plant Area General Appearance



Air Separation Plant Area Excavation



Air Separation Plant Basic Concrete



Product Storage Tank Anchors



Product Storage Tank Embedded Plates and Anchors



Molecular Sieve Tanks Production (SASPG ASU Co.)



Cold Box Inside Production (SASPG ASU Co.)



Air Cooling Tower Production (SASPG ASU Co.)



Water Cooling Tower Production (SASPG ASU Co.)



Cold Box Production (SASPG ASU Co.)



Kick Off Meeting



Product Storage Tank Embedded Plates and Anchors



Product Shipments



Air Separation Plant General Appearance



Water Cooling Tower Water Basin and Transformer Room Concrete



Air Separation Plant General Appearance



Air Separation Plant General Appearance



Pipe and Cable Galery



Product Storage Tank Shipment



Cold Box Inside Appearance



Main Heat Exchanger Intallation



Cold Box Underside Installation



Cold Box Upperside Installation



Cold Box Upperside Installation



Cold Box Upperside Installation



Cold Box Upperside Installation



Cold Box Underside and Upperside Margin Appearance



Cold Box Upperside Horizontal and Vertical Adjustments



Cold Box Stairs Installation



Air and Water Cooling Tower, Main Heater, Molecular Sieve Installation



Pipe Cleaning with Special Chemicals



Molecular Sieve Valve Skid and Pipes Installation



Molecular Sieve Piping Installation



Piping ,Pipe Rack, Supporting Installation



Piping ,Pipe Rack, Supporting Installation



Valve Skid and Valve Installation



Exhaust and Silencer Installation



Piping ,Pipe Rack, Supporting Installation



Water and Air Cooling Tower Pipeline Installation



Air and Water Cooling Tower Insulation Installation



Molecular Sieve and Pipeline Insulation Installation



Molecular Sieve and Pipeline Insulation Installation



Insulation Installation



Argon Pumps Installation



Product Analysis Measurement Pipelines



Instrument Air Pipelines Installation



Coldbox Instrument Air Pipelines



Product Calibration Gases Room Installation



Molecular Sieve Element Filling



First Start Instrument Air Installation



Main Heater Area General Appearance



Main Heater Area General Appearance



Storage Tank Installation



Storage Tank Installation



Storage Tank and Stainless Steel Product Pipeline Installation



Storage Tank Filling and Shipment Pipeline Installation



Pipeline Vacuum Insulation Installation



Pipeline Vacuum Insulation Installation



Pipeline Vacuum Insulation Installation



Product Pipeline ,Vacum Insulation Installation



Product Pipeline , Vacum Insulation Installation



Air Separation Plant General Appearance



Air Separation Plant General Appearance



Air Separation Plant General Appearance



Compressor Base Concrete and Vibration Insulation



Turbine and Compressors Base Concrete , Pipeline And Electrical Cable Galery



Main Turbine Installation



Main Turbine Installation



Main Turbine Heat Exchangers and Pipeline Installation



Main Turbine Heat Exchangers and Pipeline Installation



Compressor Installation



Compressor Installation



Compressor Installation



Booster Compressor Installation



Booster Compressor Main Heat Exchanger and Pipeline ,Supports Installation



Turbine, Booster Compressor , Main Compressor Installation



Main and Booster Compressor Air and Water Pipeline Installation



Main Compressor Air and Water Pipeline Installation



Booster Compressor Air and Water Pipeline Installation



Air and Water Cooling Tower Pumps and Pipeline Installation



Main Compressor Water Pipeline, and Slicer Installation



Main Compressor and Booster Compressor Commissioning with Supervisor



Main Compressor and Booster Compressor Commissioning with Supervisor



Türbine Commissioning with Supervisor



Main Türbine Commissioning with Supervisor



Main Heat Exchanger and Coldbox , Explosion and Filling to Perlite



Cooling Towers Residential Area



Cooling Tower Construction FRP Materials



Cooling Tower FRP Construction Installation



Cooling Tower FRP Carcass For Fans Installation



Cooling Tower Fans Installation



Cooling Tower Inlet Pipeline and Fans Installation



Cooling Tower Commissioning



Cooling Tower Water Basin , Pump Suction Embedded Plates and Connection



Circulation Pump Suction Pipeline Installation



Water Basin Circulation Pump Suction Strainer Filter Installation



Circulation Pump Anchor Bolts and Electric Conduits



Circulation Pump Pipeline Installation



Circulation Pump Pipeline Installation



Make Up Water Pumps and Reverse Osmosis System Installation



Reverse Osmosis Feeding Pumps , High Pressure Pumps and Reverse Osmosis System Installation



Reverse Osmosis Membrane Filter Installation



Make Up Pumps and Raw Water Tanks Installation



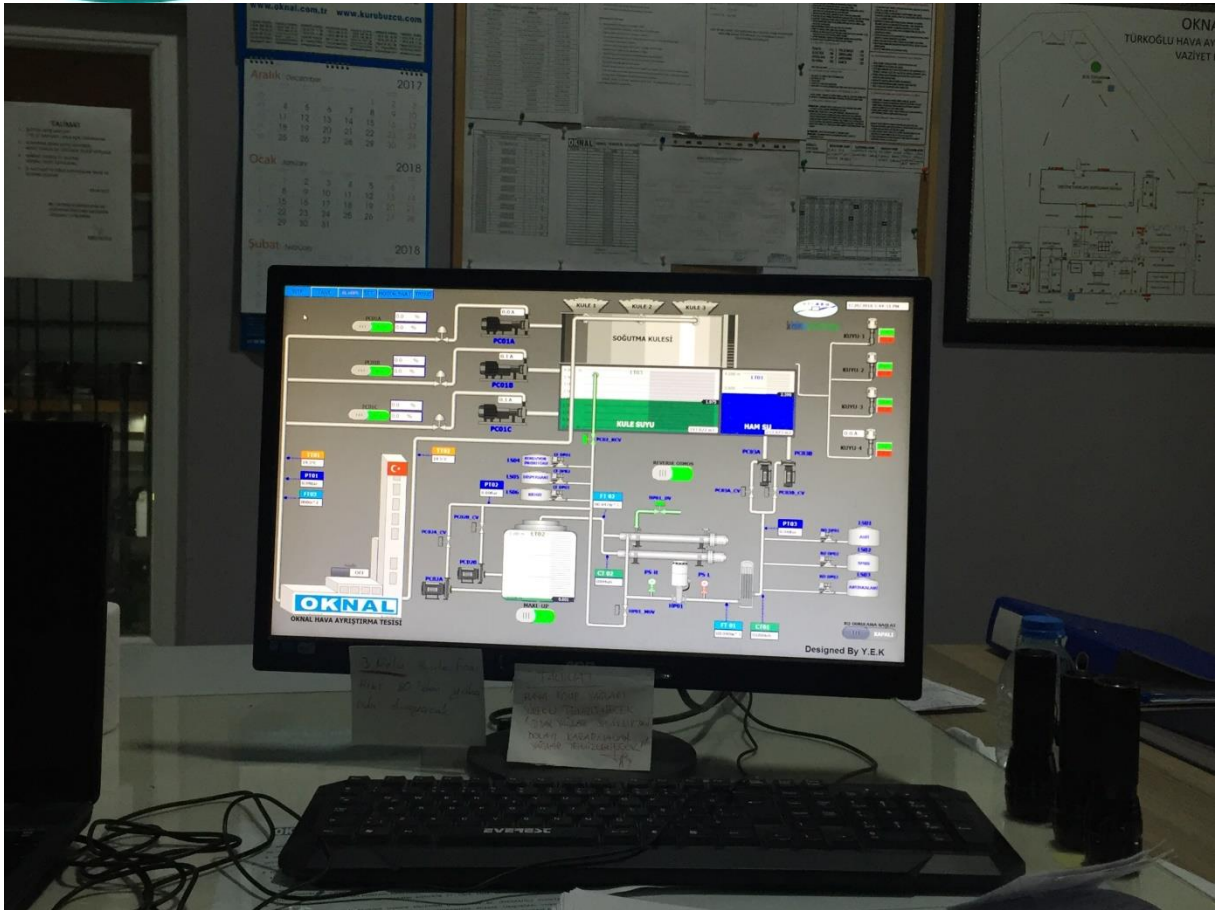
Water Treatment Plant Area Electric Box Cable Connection



Circulation Pumps, Cable , Cable Trays and Pipeline Installation



Circulation Pumps Commissioning



Water Treatmet Plant Control Panel



Cable Tray Installation to Cable Galery



Cable Tray Installation to Instruments



Cable Tray Installation to Cable Galery



Cable Tray Installation to Cable Gallery



Cable Pull to Cable Tray



Main Transformer , Distribution Transformer Installation



Main Transformer , Distribution Transformer Base Installation



Electricity Main High Voltage Input Cells and Base Installation



Electricity Main Low Voltage Panel Cells and Base Installation



Electricity Main Low Voltage Panel Cells and Base Installation



Electricity MCC/ DCS / PLC Panels



Electricity High Voltage Room



Main Transformer , Distribution Transformer Cable Connection



Main Transformer , Distribution Transformer Installation



Main Input Stem Cell Cable Connection



Instrument and Control Panels Cable Connection



Instrument and Control Panels Cable Connection



Booster Compressor Control Panel Cable Connection



Instrument Cable Connection, I/O Tests



I/O Tests



Air Separation Plant Control Room



MCC/DCS/PLC Cabinet Room



Electric Automation Commissioning

Best Regards
Kemal BOLAT
Project Manager
www.etrasu.com