



Customer Profile

Bahrain Petrochemicals Company is fully owned Petroleum Company by the Bahrain government. The current refining capacity of BAPCO is 250,000 barrels per day. Sasakura, Bahrain takes up Desalination / Reverse Osmosis Detail Engineering jobs in Bahrain.

Contact Details

Contact Name/Tel./ Email will be available on request.

Project Statement

BAPCO is in the process of capacity augmentation and modernization. As part of this upgrade, the Awali township potable water plant (two trains for Reverse Osmosis of capacity 800m3/day) is also being upgraded to 1,400 m3/day in this Phase III expansion. Sasakura, Bahrain, Engineering Contractors for Instrumentation, needed to translate all their Instrument Engineering Deliverables to INtools platform & hand-over “As-Built” INtools deliverables to BAPCO.

Rolta Solution

Rolta has provided the following solution.

1. Creation of the entire Instrumentation database on INtools version 6.0
2. Incorporating markups on deliverables
3. Incorporating final “As-Built” changes by deputing a resource at BAPCO for 4 weeks.

Loop Name	Tag Number	Service
247-A-106	247-AAH -106	ATMOSPHERE CHLORINE
247-A-101	247-AE -101	FILTERED WATER TURBIDIT.
247-A-102	247-AE -102	FILTERED WATER pH
247-A-103	247-AE -103	FILTERED WATER pH
247-A-104	247-AE -104	PRODUCT WATER pH
247-A-105	247-AE -105	PRODUCT WATER CHLORIN.
247-A-106	247-AE -106	ATMOSPHERE CHLORINE
247-A-107	247-AE -107	ATMOSPHERE CHLORINE
247-A-101	247-AI -101	FILTERED WATER TURBIDIT.

The Project

The Scope of Work included creation of INtools database for the Potable water Plant at Awali in INtools version 6.0 and extraction of Instrument Engineering deliverables in BAPCO formats with Customisation of Loop Drawings and Hook-ups in AutoCAD R14.

During execution, Rolta connected to the BAPCO server through remote connectivity (Citrix) using a dedicated bandwidth of 512 kbps.

Customer supplied the Instrument Index and Spec sheets in MS Excel format and marked copies of Hook-ups, loop drawings and PLC drawings as basic inputs for the creation of INtools Instrument Database.

Rolta completed the creation of 491 tags in Instrument Index, I/O list involving 225 tags and 311 specification sheets in Specification module of INtools. Rolta also Customized hook-ups and loop templates in AutoCAD and subsequent INtools database creations for 55 hook-up drawings and 179 loop drawings.

General	1	Proj. No.	247-P3-001		
	2	Service	PROFEC.P.W.I.#11SCH#1/E		
	3	Draw. No.	Sheet No.	247-A-106	01014
	4	IBID No.	ERD-07792-SHF-1		
	5	Control Panel (SFD)			
	6	Artificial Temperature Range			
	7	Ingress Protection Code	Feature:	Notes:	
Process Conditions	8	Process File	247-P3-001		
	9	Unit Name	247-A-106		
	10	Height	Pressure Side:	Unit	Opening
	11	Flow Pressure Side:	Unit	Opening	
	12	Temperature:	Unit	Opening	
	13	Associated Operating Condition	247-A-106		
	14	Concrete Constraints			
	15	Notes			

Deliverables Generated by Rolta

1. INtools database comprising
 - a. Instrument Index
 - b. I/O list
 - c. Specification Sheets
2. Hook-up Drawings
3. Loop Diagrams
4. AutoCAD R14 templates for Hook-ups & Loops

Benefits to Customer

The Project was completed on schedule with INtools deliverables and database ownership staying with BAPCO throughout the Project as mandated by BAPCO.

The INtools deliverables were “As-Built” rather than “As-designed”.

Potable water Instrumentation database was integrated with BAPCO’s “As-Built” INtools database of the entire refinery.