

Company Introduction & Profile

Atwaar Al Handasia Est. is a power electrical engineering services provider bringing over 30 years of experience in the field of medium and high voltage power systems specializing in testing, commissioning, installation, maintenance with the capability of providing turnkey solutions. We also facilitate complete transformer repair and maintenance services. In 2010 we began conducting relay coordination studies with a focus on relay testing and commissioning and protection scheme verification.

Range of Services:

- *Testing & Commissioning of MV Transformers*
- *Testing & Commissioning of MV Ring Main Unit (RMU)*
- *Testing & Commissioning of MV Switchgears*
- *Testing & Commissioning of MV Compact Substations*
- *Testing & Commissioning of MV Cables*
- *Cable laying of MV & LV Cables*
- *Testing & Commissioning of Breakers*
- *MV Cable termination and jointing*
- *Cable Fault Location*
- *Transformer oil treatment*
- *Relay Coordination study*
- *Protection Relay testing, calibration and programming*
- *CT & PT testing*
- *Installation of Ring Main Unit (RMU)*
- *Installation of Switchgear*
- *Installation of Transformers*



Our Company is registered with the following esteemed companies in Kingdom of Saudi Arabia:

- ***Saudi Aramco - Vendor # 10036069***
- ***Saudi Electric Company - Registration # 60633***
- ***MARAFIQ - Vendor # 3444***
- ***ABB Group - Vendor # 12721***



List of some of Our Major Projects



S/n	Project	Client	Work Description	Year
1	Saudi Electric Company Power Plant - Taif	Adwan Marketing	Busbar Repair & testing	2006
2	Saudi Electric Company Power Plant - Yanbu	Adwan Marketing	Busbar Repair & testing	2006
3	Saudi Electric Company Power Plant no 9 - Riyadh	Adwan Marketing	Busbar Repair & testing	2008
4	Saudi Electric Company Power Plant - Makkah	Adwan Marketing	Busbar Repair & testing	2007
5	Saudi Electric Company Power Plant 2 - Shuaibah	Sim Young Co	Cable Laying	2013
5	Al Rajhi Steel Factory	Aresco/Daniel Steel Italy	Installation of up to 33 KV, Termination for 13.8 KV & 33 KV Cables, DC Hipot Testing for 13.8 KV & 33 KV for Panels & Cables	2006
6	Al Mada Factory	Al Muruj Electromechanical Co	Installation of 9 Switchgears 33 KV, termination of 9 cables 33 KV, and DC Hipot testing 33 KV.	2006



7	Petro Rabigh (Aramco)	Tekfen Construction	Termination of Cables 4.16 KV, 13.8 KV, and 33 KV DC Hipot Testing for Cables. Transformer Oil Circulation, Dehydration & Refilling, 10800 kg oil weight 34.5 KV/ 13.8 KV	2007 & 2008
8	King Abdullah University for Technology (ARAMCO)	Nesma & Partners	225 Package Substation, LV MCCs' and LV Distribution Boards in all buildings Testing. Termination and cable Testing for 70 Cables.	2008
9	MOI Prison Phase II in Riyadh	Ministry of Interior	Installation and Testing of 44 Nos. Switchgear Installation and Testing of 50 Nos. Package Substations. +Termination	2009
10	North Park Office Complex Dhahran (ARAMCO)	Techno	Installation of Switchgear, Termination & DC Hipot Testing of 222 Nos. MV Cables	2010
11	Khobar Lakes Develepment	Suwaiket Co	Installation & Testing of 14 Nos. Installation and Testing of 120 Minipillars. Termination and Testing of MV & LV Cables	2010-2011
12	King Saudi University - Riyadh	Advanced Vision	Installation & Testing of 30 Nos. Package Substations Termination & DC Hipot Testing for 315 Nos. MV 13.8 KV	2010 -2011
13	Jubail Commercial Port	Al Saad Cont	Installation of Switchgear. Installation & Testing of 3 Transformer. Termination & Testing of MV Cables	2010



14	RC Jubail	Al Fanar Services	Installation & Testing of 21 Nos. 36 KV Cables .Testing & Commissioning of 36 KV Switchgear	2011
15	Najran Airport	Al Mabani Co	Installation & Testing 13 Nos. Switchgears & 18 Nos. Substation	2011
16	Riyadh Refinery, Abqaiq Refinery, Ras Tanura & Safaniyah Refinery (Aramco)	Nesma & Partners	Testing & Commissioning of Oil Transformers, LV Breakers, MV Termination	2011
17	Riyadh Refinery, Abqaiq Refinery, Ras Tanura	Nesma & Trading	Testing of Dry Type Transformers, LV Breakers	2011
18	MARAFIQ Yanbu - Sewage Treatment Plant Royal Commission	SETE	Relay Coordination Study, Protection scheme testing, commissioning, verification and implementation	2012
19	MARAFIQ Jubail IWTP-II	SETE	Relay Coordination Study, Protection scheme testing, commissioning, verification and implementation	2011
20	King Fahad University - Dhahran	COSMA - Issam Kabbani	Testing of 8 Nos. Package Substations, Termination & Testing of 18 Nos. MV Cables. Termination & Testing of 110 Nos. LV Cables	2012
21	Dammam Port	International Port Services	Testing of 2 Nos. Package Substations, Installation and testing of 4 Nos. RMU, Laying of 1000 mtrs MV Cables, Termination & Testing of 8 Nos. MV Cables. Jointing and Testing 4 Nos. Joints	2012



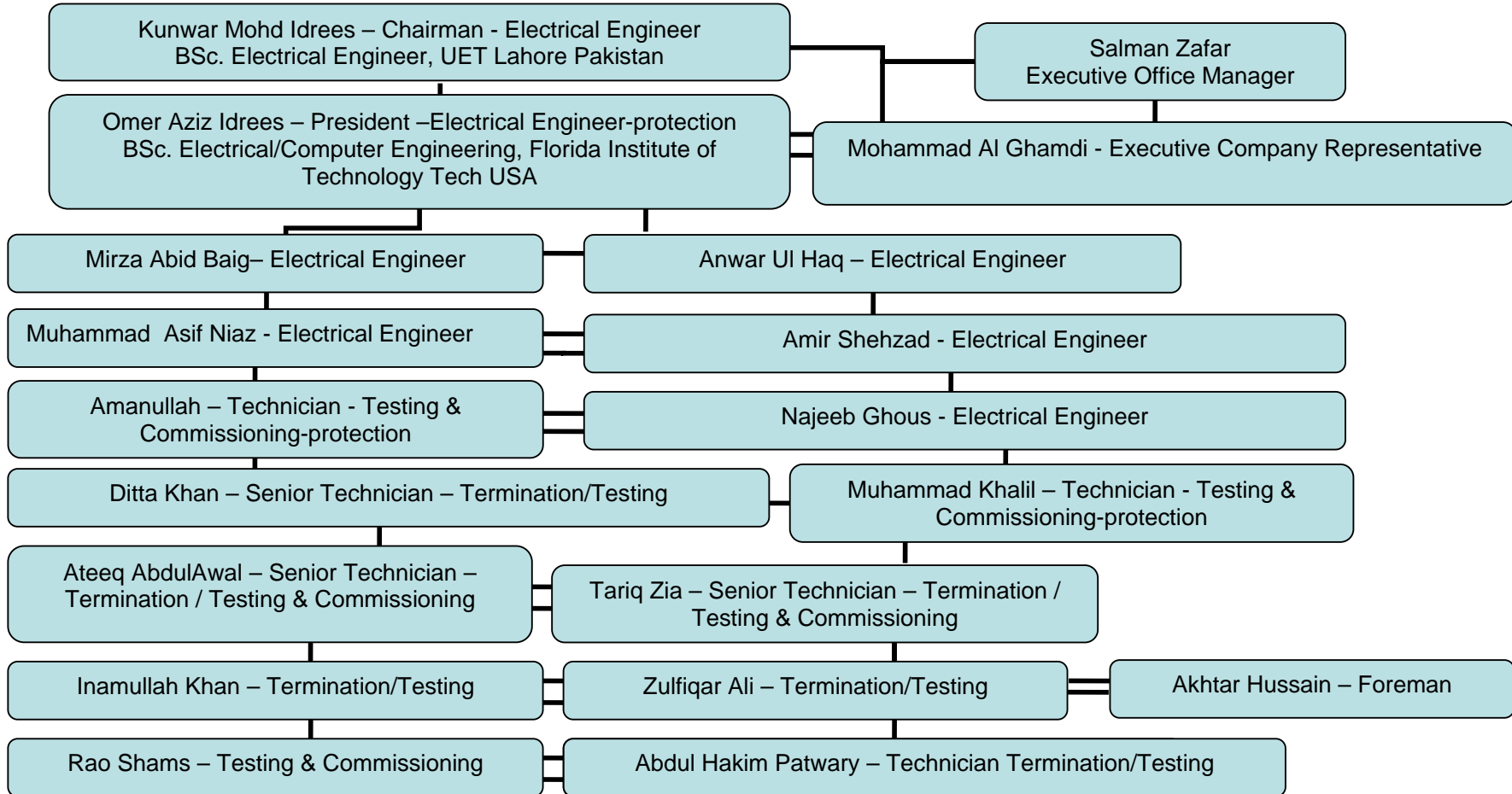
22	King Fahad Industrial Port in Jubail-KFIP	Khalid Al Boayez Co.	Laying of 12000 mtrs. MV cables, Installation and testing of 4 Nos. RMU including relay setting, termination and Hi-Pot test for 11 Nos. Jointing and Hi-Pot test for 21 Nos., Test 2 Nos. 34.5KV ABB Breakers	2012
23	Jabal Omar Project Makkah	Nessma & Partners	Testing including relay setting for 6 Nos. RMU, termination and Hi-Pot test for 135 Nos. (single core)	2012
24	Jubail Commercial Port	Port Authority	Laying of MV Cables, MV Termination, MV Jointing, HI-Pot test	2012
25	King Fahad Industrial Port-KFIP	I-MAN CO.	100 Nos. 34.5 KV Joints, 100 Nos. 34.5 KV HI-POT test, Cable Identification	2012
26	Ministry of Defence MODA	Al Yamama CO.	Testing of 48 Package Substations including Testing of LV Breakers up to 2500 Amps	2013
27	King Fahad Medical Complex in Riyadh	I-Manco	Laying of MV Cables, Testing of 4 Nos. Transformers, Testing of 2 Nos. RMU, and 10 Nos. Terminations, Testing of MV Cables	2013
28	Saudi Electric Company Power Plant 3 Jeddah	Al Fanar Services	Testing of Relays and MV Breakers	2013



29	King Fahad Industrial Port in Jubail	IMANCO.	Termination and Jointing of about 350 nos. for 13.8 KV and 34.5 KV	2013
30	Aramco Jeddah Plant	Nessma & Partner	Testing and Commissioning of 130 Breakers	2013
31	KA Financial District in Riyadh	Nessma & Partners	Testing and Commissioning of 18 Nos. Package Substation including all LV Breakers and RMU's Relays	2013
32	Taif Project	ABB Co	Installation, Testing, and Commissioning Panels	2013



Organization Chart



List of Owned Electrical Instruments

S/No	Type	Capacity	Model	Current Value	Manufacturer
1	AC Hipot	50KV	650-2P	-	Phenix
2	VLF- Ac hipot	60KV	-	-	Violo-Baur
3	DC Hipot	100KV	4100-10	-	Phenix
4	Biddle DC Hipot	70KV	220123-47	-	Megger Biddle
5	Megger	5KV	Mit520/2	-	Megger
6	Megger	5KV	BM21	-	Megger
7	DLRO	10AMP	DLRO 10x	-	Megger
8	TTR	-	330	-	Megger
9	Transformer Ohmeter	10Amp	MTO210	-	Megger
10	Oil Dielectric	60KV	OTS 60AF/2	-	Megger
11	Yokogawa Double Bridge	-	-	-	Yokogawa
12	Relay Tester VIP 35	-	-	-	Marline Gerline
13	Megger Current Injection	2000Amp	PCITS 2000/2	2000	Megger
14	Oden Current Injection	10,000Amp	Programma Oden	-	Programma
15	Secondary Injection 3-phase	30 Amp	MPRT 8430	-	Megger
16	Secondary Injection single-phase	100Amp	Saverker	-	Programma
17	Cable Fault Locator	-	40PFL	-	Megger
18	Cable Locator	-	-	-	Megger
19	Multimeter	600 Voltage	-	10Amp	Fluke
20	Voltage Regulator	-	-	-	-
21	Secondary Injection LV breaker	-	-	-	GE
22	Secondary Injection LV breaker	-	-	-	ABB
23	Secondary Injection LV breaker	-	-	-	Merline Gerline
24	Secondary Injection LV breaker	-	-	-	Cutler Hammer
25	MV Breaker Analyzer	-	-	-	Megger
26	Earth tester	-	-	-	Fluke
27	Tan Delta	-	-	-	Megger
28	Oil treatment Machine	3000ltr/hr	-	-	-
29	CT Analyzer	-	MCT1600B	-	Megger

Planning to Purchase:

1. Omicron Relay testing set
2. Omicron 100 CPC