

Water, Wastewater, Environmental & Fire Solutions

Company Profile



3W Systems (Pvt) Ltd.

(ISO 9001, 14001, 18001 Certified)



Mission



We are Professional Engineering Organization providing Solutions in Water, Wastewater & Fire System.

With our in-house expertise and state of the art software, we provide "Total System Solutions", that are Cost Effective, Technology Responsive and Tailored Made to our Environmental Matrix.



We aspire to become one of the Leading Engineering, Procurement and Construction (EPC) Company in our sector by providing environmental solutions sustainable for our clients.



WE are pooling our professional resources through strategic business alliances to provide comprehensive solutions to our valued customers. We gauge our success through customer delight, exponential growth and satisfied employees.

QHSE Policy

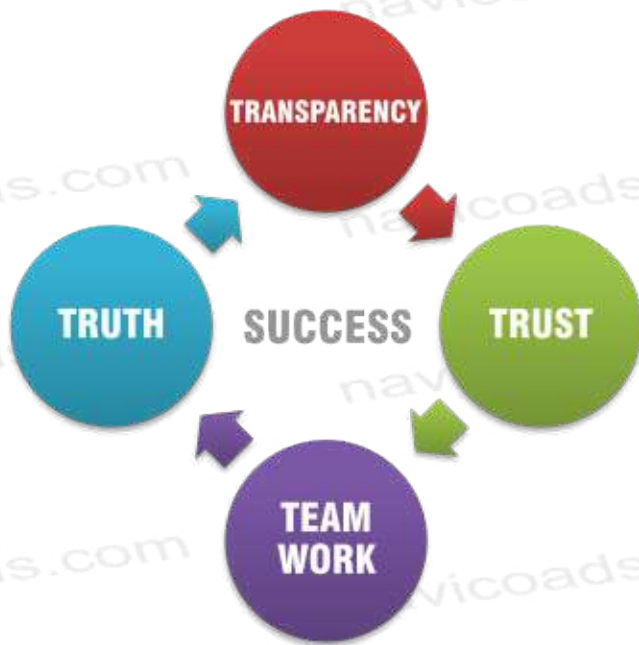
The Management, Employees & Stake Holders of 3W Systems are committed to provide value for money in the Design, Engineering, Product Manufacturing, Supplies and Services rendered to its customers.

The company realizes its obligation and moral responsibility in promoting culture of Safety, Health & Environment compliance within the company as well as at customer's premises. The management is fully committed to implement fool proof procedures and guidelines to ensure compliance of QHSE standards at all level in the company.

The successful implementation of QHSE Policy shall be judged from accreditation and certification from international agencies.



Values – 4T's



Create an atmosphere of harmony, trust and teamwork within the organization.

To promote leadership through empowerment and accountability system.

Follow merit in all decision making, processes and promote justice in all sphere of activities.

Provide equal opportunity to all employees irrespective of their gender, cultural, religious or ethnic back ground.

Train people to accept reality, encouraging people to speak truth and promoting an environment of self respect.

Promote Culture of Health, Safety & Environmental awareness.



Top Management

Arshad Mehmood Awan - CEO

A Civil Engineer with 30 years of experience of working with multinational companies in the field of Water and Wastewater Engineering in Pakistan as well as abroad. He has participated in several local and international seminars, conferences and training programs.

His expertise includes General Management, Project Acquisition, Technical Sales and Marketing, Project Management, EPC Contract, Hydraulic Systems Design, Technical Procurement and Commercial Affairs.



Dr. Adnan Gaffar Lodhi – Director Technical



Dr. Adnan has done Ph.D. in Wastewater Engineering from Virginia Tech University, USA, Masters in Environmental Engineering & Bachelors in Mechanical Engineering and has a total of 20 years of experience in the field of Water and Wastewater Engineering in Pakistan as well as abroad. He has written more than 10 international research papers related to Wastewater Treatment Processes.

His expertise include Mechanical, Electrical, Automation & Design of Water and Wastewater Treatment Plants.

Business Divisions



3W Systems has core competency in following business divisions:

1. Engineering & Technology Division

3W Systems specialized in the field of Environmental Engineering and provide services related to design & manufacturing of Water and Wastewater Treatment Plants locally. We source the equipment to be installed in plants from Europe and US based principles as per client's requirement.



Water Treatment Plants

We can design, manufacture and supply Water Treatment Plant for use in municipal water filtration as well as industrial process water treatment. Following are list of treatment plants that can be provided:



Reverse Osmosis (RO) Plant
Micro Filtration (MF) Plant
Boiler Feed Water Treatment plants
Ultra Violet (UV) Water Disinfection
Ion Exchange Plant
Sand Filter

Ultra Filtration (UF) Plant
Desalination Systems
Water Softening
Demineralization
Multimedia Filters
Activated Carbon Filter

Business Divisions

Wastewater Treatment Plants

We have capabilities to design and perform detailed engineering for the construction of various types of wastewater treatment plants on the basis of treatability study. Depending on client's requirement and reuse of treated effluent, following treatment plants can be provided

- | | |
|--|-------------------------------|
| Conventional Activated Sludge (CAS) | Moving Bed Bioreactor (MBBR) |
| Sequencing Batch Reactor (SBR) | Membrane Bioreactor (MBR) |
| Upflow Anaerobic Sludge Blanket (UASB) | Dissolved Air Flotation (DAF) |
| Anoxic & Anaerobic Systems | Extended Aeration |

We also offer sludge thickening and dewatering systems like:

- | | |
|---------------------------|--------------------|
| Belt / Screw Filter Press | Anaerobic Digester |
|---------------------------|--------------------|

We can also design and install odor control system for treating malodorous gases produced during the wastewater treatment.



Business Divisions



Water Supply and Wastewater Collection System

We provide services for planning, development, supply & delivery of drinking water distribution system and wastewater collection system including stormwater.

Planning - We provide the know-how to develop plans for serving future needs:

Water, Sewer, & Reuse System Master Plans
Infrastructure Placement & Routing Studies

Modeling-We use state-of-the-art modeling software to aid in planning services:

Disinfection By-Product & Hydraulic Residence Time Studies
Water Distribution & Sewer Collection Systems

Design - Our services cover

Hydraulic design of Water supply & distribution Systems
Leak Identification Systems
Drainage Network design
Reclaimed Water Reuse System
Wastewater Collection Systems

We also conduct energy audits in industries and municipal water supply systems to enhance wire to water efficiency

Business Divisions

Environmental Laboratory Services

With our in house fully equipped Environmental Laboratory we can conduct all type of Wastewater and Water Quality Parameters testing and Treatability Studies of industrial wastewater samples.



Solid Waste Management

We cater services evolving recycling of material, energy recovery, power-gen using biogas from organic waste & RDF, fertilizer from organic waste, heating system of houses, land fill for the left-over waste after treatment. Our specialized engineering technology implies efficient usage of Extruder Press, VM Press, Orex Press, OCC screens, amongst many others for the purpose of generation of significant amount energy from solid waste treatment.



Environmental Assessments

We have an experienced team of Environmental Impact Assessment (EIA) and Initial Environmental Examination (IEE) personals. We are proficient enough to conduct research and studies to minimize negative environmental impacts and in turn apply mitigation measures.



Business Divisions



O & M Services

We also do Operation & Maintenance (O&M) contracts for operation of pumping stations, water & wastewater treatment plants, retrofitting & upgradation of existing water and wastewater treatment plant.

Research & Development

3W Systems understands the importance of R&D for the development of client's specific and cost-effective water and wastewater treatment solutions. 3W has done researches in collaboration with national and international universities. We are offering research-based internships programs to environmental, mechanical, electrical and chemical engineering students.



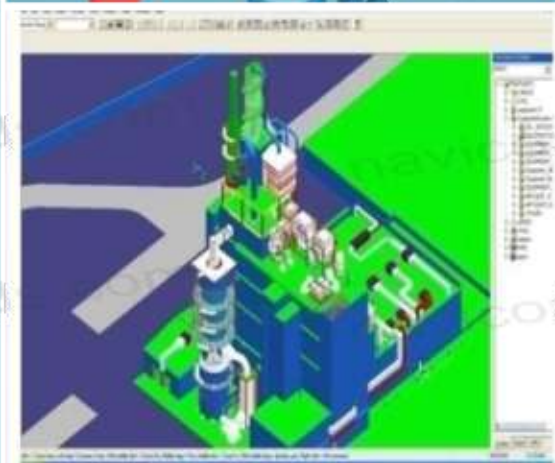
Software Skills

Water GEMS
AFT Impluse
Solid Works
Microsoft office
AFT Mercury

Water CAD
I View Opps
Indo Soft
Wpl Soft
EPA Net

Sewer CAD
Smart Plant 3D
ROSA 9.1
DOP Soft
Pipe Date Pro

Arc GIS
Staad Pro
AutoCAD
RSLOGIX

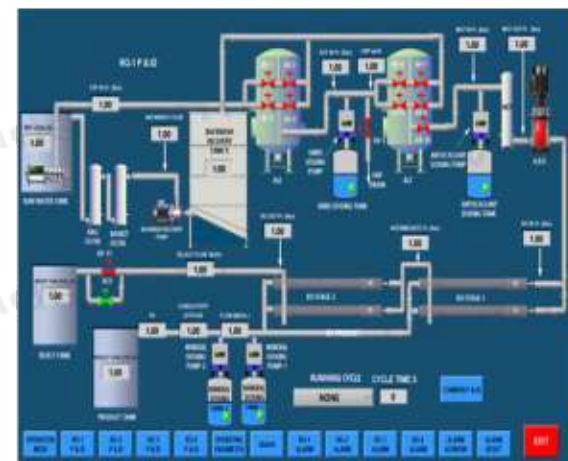


Business Divisions

2. Equipment Division

To improve the efficiency of our operations, we rely on high quality and renowned national / international equipment manufacturers of water and wastewater system like;

- Pumps
- Blowers
- Valves
- Instrumentation
- Bar Screens
- Penstocks
- Filter Press
- Piping & Fittings



Business Divisions

3. Fire Division

3W Systems provides complete design, supply, installation and commissioning services for Fire Detection and Fire Suppression Systems.



Fire Equipment	Finder, Viva
Fire Detection & Suppression	Multi-stage Alarm and smoke detection Systems, heat detectors etc.
Fire Indication	Fire control panel, Manual call points, Fire Alarms with and without sounders etc.
Fire Cables	Special heat resistant (up to 800 °C) cables for fire detection system
Fire Fighting	Water based systems (Nozzle, Hose Reel, Sprinklers) Gas based systems (FM 200, IG 55), Powder/chemical based systems

Key Projects - Wastewater Treatment

AB Mauri Pvt. Ltd., Lahore (2018-19) - Design, manufacture, supply, installation and commissioning of 5 m³/day Package type Domestic WWTP. Engineering, Procurement and Construction contractor for Industrial Wastewater Treatment Plant based on Membrane Separation Technology to treat very high COD of 30,000 mg/l to below detection level with Zero Liquid Discharge. The total flow of plant is 268 M³/Day.

United Detergent (Unilever), Sheikhpura (2016) - Design, manufacture, supply, installation and commissioning of 60 m³/day Package type Domestic Wastewater Treatment Plant.

Fauji Fresh n Freeze, Sahiwal (2014-15) - Design, supply, installation and commissioning of 421 m³/day Upflow Anaerobic Sludge Blanket (UASB) for fruits and vegetables processing plants.

Paradise Valley Housing Project, Faisalabad (2013) - Design, manufacture, supply, installation and commissioning of 200 m³/day Package type Domestic Wastewater Treatment Plant with recycling system.

Nestle, Sheikhpura (2011-12) - Design, supply, installation and commissioning of 5500 m³/day Dairy Wastewater Treatment Plant with 1200 m³/day water recycling using membrane filtration for horticulture and Cooling water application.



Key Projects - Wastewater Treatment



Benazir Bhutto International Airport, Islamabad (2011-12) - Design, supply, installation and commissioning of 6800 m³/day wastewater treatment plant based on ASP with 100% recycling by Rapid Sand Filtration System for horticultural use.

Metro Cash & Carry, Lahore, Karachi, Islamabad & Faisalabad (2010-11) - Design, manufacture, supply, installation and commissioning of 80 m³/day Package type Domestic Wastewater Treatment Plant at Lahore, Faisalabad, Karachi & Islamabad stores.



Minawa Construction, Islamabad (2011) - Design, supply, installation and commissioning of 400 m³/day Package Type Wastewater Treatment Plant with water recycling system.

Al-Mansoor International Co. LLC Oman (2011) - O & M of sewage treatment plant and SCADA System for pipelines operation.



Quaid-e-Azam International Hospital, Islamabad (2009-10) - Design, manufacture, supply, installation and commissioning of 300 m³/day Package Type Wastewater Treatment.

Nestle, Kabirwala (2009) - Supply and installation of Electro-Mechanical Equipment for Extension of Industrial Wastewater Treatment Plant.

Key Projects - Water Supply & Treatment

DG Cement, Karachi (2017) - Installation of Steel Reinforced HDPE Water Supply Line having Dia. 12" & 14" and a total length of 22 Kms.

Gharibwal Cement, Pind Dadan Khan (2016) - Installation of Steel Reinforced HDPE Water Supply Line having Dia. 12" & 14" and a total length of 18.6 Kms.

Makri Water Treatment Plant, Muzaffarabad (2015-16) - Supply and installation of 2 x 4 MGD Water Treatment Plant for Muzaffarabad City for drinking and portable utility water.

Unilever Pakistan, Lahore (2014) - Detailed Designing of Rainwater Harvesting System at Walls Ice Cream Factory, Lahore.

Punjab Industrial Estates, Lahore (2010) - Supply & Installation of Sewage Pumps at disposal station of Sundar Industrial Estate, Lahore.

Engro Fertilizers, Daharki (2009) - Supply & Installation of Pumping Systems For Engro "Offsite Facilities" For Water supply project of 10 MGD, Dharki Sindh.



Key Projects - Water Supply & Treatment



DESCON Engineering Ltd., Lahore (2008-09) - Supply, installation & testing and operation of more than 250 dewatering pumps for massive dewatering of TAUNSA BARRAGE & LOWARI TUNNEL Project with Sambu Construction Korea.

EMAAR Pakistan, Islamabad (2007) - Supply & Installation of 254 Nos. Booster Pumps For their Canyon Views Housing Project.

Habib Rafiq Limited, Lahore (2007 -10) - We have worked for Habib Rafiq Limited For their multiple projects related to Water Pumping systems, E&M Equipments for Water Supply & Treatment Plants. These projects includes;

- DHA Phase II, Islamabad
- Tariq Gardens, Lahore
- Bahria Town Islamabad
- Commoners Town, Islamabad
- Alhamra Hills & Avenue Projects, Islamabad



Interloop (Pvt.) Ltd. (2005) - Design, Testing & Commissioning Of Variable Speed Drive Pumping System For Feeding their 25 Dyeing Machines For Their Dyeing And Backwash Cycles Through Automatic Pressure Control Systems. (2005)

Oil & Gas Development Company Limited (OGDCL) (2007) - Design Review & Refurbishment Services for Gas Condensate & LPG Loading API Pumps for Fim-kasar Oil Field.

DHA Karachi (2005) - We have also provide consultancy services for the design review and supervision for 2 MGD sewage treatment plant for Creek City, Karachi.



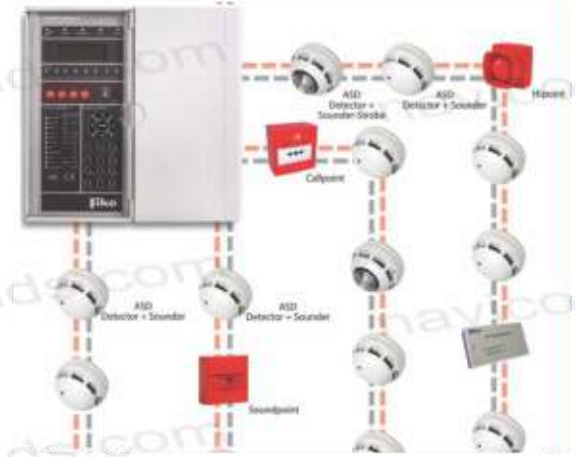
Key Projects - Fire

AB Mauri Pakistan, Lahore (2019) - Design, Supply & Installation of Conventional Fire Detection system of Fike, UK at wastewater treatment plant site.

Interloop (Pvt.) Ltd, Faisalabad (2008-12) - Design, Supply & Installation of Addressable Fire Alarm System of Fike Safety Technologies, UK at their Hosiery Units HD-I & II. The installed systems covers a total area of 3,000,000 ft².

Quaid-e-Azam International Hospital, Islamabad (2010) - Design, Supply, Installation & Commissioning of Complete Addressable Fire Alarm System from Fike safety Technologies UK & Firefighting System for 11 stories hospital building. The system is running efficiently for last 9 Years.

Attock Refinery limited, Rawalpindi (2010) - GAP Analysis of Complete Fire Hydrant Network of refinery.



Key Projects - Fire



Fatima Fertilizer, Rahim Yar Khan (2009) - Supply & Installation of Industrial Fire Pumping System for fertilizer plant comprising of Motor Driven and Diesel Engine Driven large pumps of 2000 Gallon/Min.

Marriot Hotel, Islamabad (2008) - Supply & installation of Diesel Engine Drive Fire Pump for 1000 Gallons/Min.

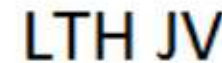


Amson Pharmaceutical, Rawalpindi (2008) - Design, Supply & Installation of complete Fire Alarm & Firefighting System for pharmaceutical factory.

We have Supplied & installed Fire Alarm & Firefighting system for multiple public sector organizations as well as defence sector organizations throughout Pakistan from 2005 til date



Major Clients





Head Office Location:

37-GCP Employees Cooperative Housing Society,
Near Johar Town, Lahore, Pakistan.

Tel: +92-42-35956267, +92-42-35956268

Fax: +92-42-35956269

Email : arshad@3wsystems.com

Web: www.3wsystems.com