



#### **REFERENCE LIST**

Some of our Landmark Projects





# **56 YEARS**OF EXPERTISE

We have worked with some of the best consultants and construction companies in the World on landmark construction projects.

Our excellence is reflected through hundreds of successfully performing projects Worldwide.















# CONTENT

>	TUNNEL - METRO PROJECTS	1
>	TUNNEL - SEWAGE, STORM WATER PROJECTS	4
>	TUNNEL - RAIL, ROAD PROJECTS & UNDERGROUND CAVERNS	5
>	INFRASTRUCTURE - EXISTING BUILDINGS, BRIDGES & TUNNELS	8
>	HIGH-RISE BUILDINGS, DEEP EXCAVATIONS, FOUNDATIONS	_ 10
>	HISTORICAL MONUMENTS	_ 14
>	BRIDGES, HIGHWAYS & RAILWAYS	_ 15
>	DAMS AND HYDROELECTRIC PROJECTS	_ 18
	> India and neighboring countries	_ 18
	> Worldwide	_ 23
>	MINE, NUCLEAR POWER PLANT, LNG TANK PROJECTS	_ 25
>	LANDSLIDE, SOIL CONSOLIDATION & GROUND IMPROVEMENT PROJECTS	_ 26
>	AUTOMATIC WATER LEVEL/GROUNDWATER MONITORING	28



#### TUNNEL - METRO PROJECTS

Pı	roject	Contractor/Client	Scope of works
Los Angeles Metro, USA	TBM Launch Shaft monitoring, Deep excavation monitoring	Analysis and Solutions Consultants, Los Angeles	Supply of Instrumentation
	Tunnel Purple Line EXT 2, Utility Monitoring	Analysis and Solutions Consultants, Los Angeles	Supply of Instrumentation
Copenhagen Metro, Denmark	~15.5 km long, route proceeds through two parallel tunnel tubes, M3 and M4, including Sydhavn Metro Line	Through Marketing Associate SMT Denmark ApS	Supply of Instrumentation
Grand Paris Metro, France	Line 16 and Charles De Gaulle Express metro tunnels	Through Marketing Associate	Supply of Instrumentation
Lima Metro	Tunnel monitoring	Through Marketing Associate Ofiteco	Supply of Instrumentation
	Gold Line ~13.5 km tunnel with 10 underground stations	ALYSJ JV	Web base data monitoring of TBM tunnels, underground stations, NATM cross passages, station entrance emergency exits and structures within the zone of influence  Pre and post-construction building condition survey
Doha Metro, Qatar	Green Line ~16.6 km tunnel with 8 underground stations	VMT-Noack-MTEC JV	Monitoring of TBM tunnels, station boxes, trough structures  Pre and post-construction building condition survey
	Major stations	SOQ JV	Web base data monitoring of Msheireb & Education City underground stations Pre and post-construction building condition survey
D I : M I UAF	Red Line ~ 5 km underground tunnel and 4 stations	Obayashi-Kajima-Yapi Merkezi JV (JTMJV)	Supply, Installation and Monitoring
Dubai Metro, UAE	Green Line ~ 5 km underground tunnel and 4 stations	Obayashi-Kajima-Yapi Merkezi JV (JTMJV)	Supply, Installation and Monitoring
Expolink Route 2020 Metro Rail Project, UAE	Dubai Metro extension	ExpoLink (Acciona, Gulermak, Alstom)	Web base data monitoring Supply, Installation, manual monitoring, online monitoring Pre-construction building condition survey
Oslo Metro. Norway	Pre-works for Metro	Through Marketing Associate	Supply of Instrumentation



Project		Contractor/Client	Scope of works
	Package UG-1	Coastal TTS JV	Supply, Installation and Monitoring
Bangalore Metro, India	Package UG-2	CEC-Soma-CICI JV	Supply, Installation and Monitoring Pre and post-construction building condition survey (in few of them)
	Majestic station	Coastal TTS JV	Supply, Installation and Monitoring
	Phase III - (Various sections)	Pratibha, JK Infra, L&T, Valecha, Era, HCC	Supply, Installation and Monitoring Pre and post-construction building condition survey (in few of them)
Delhi Metro, India	Phase II - 20 km (Lines BC15- BC24)	L&T, Senbo, ITD CEC-Soma, MTG	Supply, Installation and Monitoring
Delli Metro, Ilidia	Phase II - 15 km (Lines C1-C7)	Senbo Engineering, Afcons, L&T, Alpine Samsung, Alpine HCC	Supply, Installation and Monitoring Pre and post-construction building condition survey (in few of them)
	Phase I - 14 km (Lines MC1A & MC1B)	International Metro Civil Contractors (IMCC) and KSHI	Supply, Installation and Monitoring
	Package UAA-01	Afcons TTA JV	Supply, installation
Channei Matra India	Package UAA-02, UAA-03	Gammon OJSC Mosmetrostroy JV	Pre and post-construction building condition survey
Chennai Metro, India	Package UAA-04	L&T-ECC-SUCG JV	Supply, installation
	Package UAA-05	Afcons TTA JV	Pre and post-construction building condition survey
	Package UG-1	Afcons TTA JV	Supply, installation
Kolkata Metro, India	Package UG-2	ITD-ITD Cementation JV	Pre and post-construction building condition survey
	Package UGC-01	L&T-STEC JV	Supply, installation and monitoring Pre-construction survey
	Package UGC-02	HCC-MMS JV	Supply of instrumentation Pre-construction survey
	Package UGC-03	Dogus-Soma JV	Pre-construction survey
Mumbai Metro, India	Package UGC-04	CEC-ITD-TPL JV	Supply, installation and monitoring Pre-construction survey
	Package UGC-05	J Kumar Infra - CRTG JV	Web base data monitoring for Vakola Flyover at Santacruz Supply, installation
	Package UGC-07	L&T-STEC JV	Web base data monitoring Supply, installation Pre-construction survey



Project		Contractor/Client	Scope of works
Lucknow Metro, India	Underground Tunnel sections – 3 km	Tata –Gulermak JV	Supply and installation
Pune Metro, India		Gulermak-TPL Jv	Supply of instrumentation
KBB Underground Station Project, Kolkata Metro, India	Station Yard	KMRC-ITD	Supply, installation and monitoring
Jaipur Metro, India		ITD-ITD Cementation JV	Supply and installation
Izmir Metro, Turkey		EGE Temel	Supply of instruments
Barcelona – El Prat Airport T1 Rail Access Tunnel, Spain	Construction of a 3,385 m long TBM tunnel, running below the C-31 Highway, the airport Terminal 2 building and the airport airstrips	Through Marketing Associate	Supply of instruments
Singapore metro  Downtown Line Stage 2  & 3, Singapore	Eleven LTA contracts	Through Tritech	Supply of instruments
Scotts Tower Condominium	North South Line MRT Tunnels between Newton and Orchard MRT Station	Through Tritech	Supply of instruments
Ankara-Sivas High Speed	Railway Project, Turkey	MBEC-Cengiz-Limak- Mapa-Kolin JV	Supply of instruments
Ankara-Istanbul High Spe	ed Train Project, Turkey	CIB-Cengiz -Ictas-Belen JV	Supply of instruments
Bucharest Metro, Romani	a	Through Marketing Associate	Supply of instruments
Torino Metro, Italy		Through Marketing Associates	Supply of instruments
Athens Metro, Greece		Through Marketing Associates	Supply of instruments
London Metro, England		Through Marketing Associates	Supply of instruments
Santiago Metro, Chile		Through Marketing Associates	Supply of instruments
Ankara Metro, Turkey		Through Marketing Associates	Supply of instruments
Istanbul Metro, Turkey		Through Marketing Associates	Supply of instruments
Taiwan Metro, Taiwan		Through Marketing Associates	Supply of instruments
Hong Kong Metro		Through Marketing Associates	Supply of instruments



## TUNNEL - SEWAGE, STORM WATER PROJECTS

Project		Contractor/Client	Scope of works
North East Boundary Tunnel, USA	Combined Sewer Overflows (CSO) Tunnel	Entech, USA	Supply of Instrumentation
Muharraq STP Project, Bahrain	16 km sewer tunnel with 50 main shafts; micro-tunneling project	Samsung Engineering Co. Ltd.	Supply, Installation and Monitoring
	Contract T01: 13 km main sewer deep gravity tunnel	Samsung C&T Corporation, Korea	Supply, Installation and Monitoring
	Contracts T02 & T03: 25.5 km main sewer deep gravity tunnel	Impregilo, Italy	Supply & Installation
Strategic Tunnel Enhancement Programme (STEP) Project, UAE	Contracts LS01 and LS02: 40 km link sewer deep gravity tunnels	Zublin, Germany	Supply, Installation and Monitoring
	Contract PS01: 100 m deep x 55 m dia underground Pump Station  One of the deepest and largest underground pump station.	Odebrecht, Brazil	Supply, Installation and Monitoring
Inner Doha Re-sewerage Implementation Strategy (IDRIS), Qatar	Main Trunk Sewer Tunnel - Contract MTS-01, MTS-02 & MTS-03	ACTS, Doha	Supply, Installation and Monitoring
Deep Tunnel Storm Water Terminal Pumping Station and Sea outfall, UAE	Contract DS-233/1	Archirodon	Supply, Installation and Monitoring
Musaimeer Pumping UMPING Station & Outfall, Qatar	Pumping station & Sewerage tunnel under sea	AUCC	Supply, Installation and Monitoring PPCCS
Project DS 197/1(Al-Kharafi)	Sewerage system for interconnecting developed communities in Jebel Ali Area to DM Networks	Dubai Municipality	Supply, Installation and Monitoring



## TUNNEL - RAIL, ROAD PROJECTS & UNDERGROUND CAVERNS

Р	roject	Contractor/Client	Scope of works
Baltimore Light Rail Tunnel, USA	Culvert monitoring	Foundation Test Group, USA	Web base online monitoring; Supply and automatic monitoring
I-75 Tunnel, USA	Highway construction	NTH, USA	Web base online monitoring; Supply and automatic monitoring
Sheikh Zayed (Al Salam) Street Tunnel Project, UAE	4-lane road tunnel – cut and cover, 3 km long; 4 interchange underpasses, each 1 km long	Samsung – Saif Bin Darwish Joint Venture/Parsons	Supply, installation, drilling, surveying and data monitoring Pre-construction building/ structure condition survey
NDM tunneling for storm water pipeline under Corniche road, UAE	56 m tunnel,1.8 m dia, 4 m below GL in silty soil, under busy Corniche Road	Samsung – Saif Bin Darwish Joint Venture	Supply, Installation and Monitoring
Al Rayyan Road Project 7 Contract 2, Qatar	West of Olympic Roundabout to West of New Rayyan Roundabout. Construction and Upgrade of Road	Doğuş-Onur JV	Supply, Installation and Monitoring
Gruškovje tunnel, Slovenia	Motorway	Through Marketing Associate	Supply of instruments
Chenani-Nashri Road Tunnel Project, India	~ 9 km two lane tunnel T74R, T77B, T-77C, T49B tunnels	Leighton	Supply and Installation
Banihal- Qazigund Road Tunnel Project, India	~ 9 km four lane tunnel	Navyug	Supply of Instruments
NDRC, 132/11 kV Substation and Associated Works	Cross Road		
Rohtang Road Tunnel, India	~ 8.8. km, one of the longest road tunnel in India	Strabag-Afcons JV/BRO	Supply of Instruments; Carrying out tests by TSP System of Amberg
Sivok-Rangpo Rail Line Project, India	14 tunnels with total length 38.5 km, monitoring of T8, T9, T10 tunnels	Apco Infra, ITD/IRCON	Supply, Installation and Monitoring
Kiratpur-Ner Chowk Site, India	~ 5 km, 5 road tunnels	HP/IL&FS Engineering	Supply and Installation
Gulbarga Rail Line Project, India	~1.7 km tunnel at Margutti	Bidar Gulbarga, SC Railways	Supply and Installation
Pir Panjal Railway Tunnel Project, India	~ 11.5 km Zone-V; Laole- Qazikund section and Zone-III Khari section, T-73, T-80 & T69 tunnels	HCC/Ircon International Limited	Supply, Installation and Monitoring



P	roject	Contractor/Client	Scope of works
	~ 90 km Srinagar - Baramulla Rail Link Project (Konkan Banihal) – T1-T47 tunnels	Konkan Railway Corporation Limited	Supply, Installation and monitoring
	~8.5 km Zone-IV A & IV in Dharam-Qazigund section	HCC/Ircon International Limited	Supply, Installation and monitoring
Udhampur- Srinagar- Baramulla Rail Link Project, India	~116.6 km to 125 km on Katra Banihal section, T-74R, T-77B,T-77C	HCC/Ircon International Limited	Supply, Installation and monitoring
	~ 13 km tunnel in Riyasi, T-13 and Part T-14 tunnels,	HCC/Konkan Railway Corporation Limited	Supply, Installation and monitoring
	~8 km T49B tunnel, ~8.5 km T-74 tunnel in Khari	Afcons/Ircon International Limited	Supply, Installation and monitoring
	Tunnels: Jiribam-Tupul, Imphal – 5 tunnels	NFR	Supply, Installation and Monitoring
Northeast Frontier Railway, India	Contract I6057: T-1 to T-9 & I6066_T-12 for tunnels	Geoconsult India Pvt. Ltd.	Supply, Installation and Monitoring
	I6072_Lumding-Silchar	Geoconsult -Rites JV	Supply, Installation and Monitoring
Dohazari to Cox's Bazar Via Ramu Project, Bangladesh	102 km New Duel single railway line, through 184 bridges, 9 station buildings, platforms and sheds.	Raybon Toma Constructions	Supply and Installation
Mumbai Mono Rail, India	Pile Load Testing and Bridge Instrumentation	L&T-SCOMI JV/ MMRDA	Supply of Instruments
Lyon-Turin Rail Tunnel, France	~57 km long base tunnel	Through marketing associate	Supply of Instruments
East West Highway Project, Algeria	~5.6 km long tunnel	Taesei Corporation, Japan; Cojaal (c/o Itochu Corporation) Consultant	Supply of Instruments
Brenner Base Tunnel (Italy to Austria)	~ 55 km long tunnel	Through marketing associate	Supply of Instruments
Platamonas tunnel, Greece	Tunnel sections	Through marketing associate	Supply of Instruments
Egnatia Motorway, Greece	~ 680 km long – Anilio and Anthochori tunnels	Through marketing associate	Supply of Instruments
CCSA Subway Tunnel Line H Project, Argentina	Tunnel sections	Through marketing associate	Supply of Instruments
Istanbul Strait Road Tube Crossing Project, Turkey	~ 5 km Eurasia tunnel	Yapi Merkezi Insaat ve Sanayi A.S. and SK Engineering & Construction Co.Ltd. JV	Supply of Instruments



Project		Contractor/Client	Scope of works
Marmaray CR1 Project, Turkey	Rail/Road Tunnel and Underground Caverns Project	Dogus Insaat	Supply of Instruments
Express Railway Contract XRL820 & 821	3 km long bore tunnel, part of Hong Kong Section of Guangzhou-Shenzhen-Hong Kong Express Rail Link	Through VSL, Thailand	Supply of Instruments
Tuen Mun - Chek Lap Kok Northern Subsea Connection	Dual 2-lane sub-sea tunnel, reclamation at Tuen Mun Area 40 for the northern landfall of the tunnel	Through VSL, Thailand	Supply of Instruments
Liangtang Site Formation and Infrastructure Works	11 km long dual-2 lane trunk road with about 5.7 km of TBM Tunnel connecting the new Boundary Control Point	Through VSL, Thailand	Supply of Instruments
Vizag Cavern Project, India	~ 3.3 km length, ~30 m height, ~22 m width	HCC/EIL-Sweco, ISPRL	Supply, Installation and Monitoring
Padur Cavern Project, Mangalore, India	~ 2.7 km running length, ~ 31.5. m (h), ~ 20 m (w)	HCC/EIL/ISPRL	Supply, Installation and Monitoring



# INFRASTRUCTURE - EXISTING BUILDINGS, BRIDGES & TUNNELS

F	Project	Contractor/Client	Scope of works
Harry Nice Bridge, USA	Existing bridge monitoring	Foundation Test Group, USA	Web base data monitoring Supply and automatic monitoring
I-78 Easton Road, USA	Bridge abutment, Slope monitoring of existing bridge	AGES, USA	Web base data monitoring Supply, Installation and Automatic Monitoring
Malcolm X Bridge, USA	Existing bridge monitoring	Foundation Test Group, USA	Web base data monitoring Supply and automatic monitoring
Delaware Bridge, USA	Bridge replacement	Wang Tech, USA	Supply of instrumentation
Deira Waterfront Development, Plot 11 Contract, UAE	Monitoring existing Red Line tunnel and shoring works during Multi Level Car Park construction in vicinity	Al Futtaim Carillion, Dubai	Web base data monitoring Supply, installation, automatic monitoring, automatic survey
Deira Waterfront Development, Plot 13 Contract, UAE	Monitoring of existing Green Line tunnel, Shindagha tunnel and shoring works during Multi Level Car Park construction in vicinity	ICD, Dubai Civil Engineering LLC	Web base data monitoring Supply, installation, automatic monitoring, automatic survey
Deira Waterfront Development, Plot 11B Contract, UAE	Monitoring of existing Green Line tunnel and shoring works during construction of retail/hotel (B+G+4F) project in close vicinity	ICD, Dubai Civil Engineering LLC	Web base data monitoring Supply, installation, automatic monitoring, automatic survey
Deira Waterfront Development, Plot 2 Contract, UAE	Monitoring of existing Green Line tunnel and shoring works during construction of Mixed use development project above the metro line	ICD, HSSG	Web base data monitoring Supply, installation, automatic monitoring, automatic survey
Deira Waterfront Development, Plot 4 Contract, UAE	Monitoring of existing Green Line Metro tunnel & Palm Deira station, shoring works during construction of Bus terminal, hotel, office tower above metro station	Ithra, ALEC	Web base data monitoring Supply, installation, automatic monitoring, automatic survey
Masra Al Seef Project, UAE	Monitoring of existing Red Line Metro Tunnel and adjacent ground surface during heavy construction activities in close vicinity	Dutco Balfour Beatty/WS Atkins/Halcrow	Web base data monitoring Supply, installation, automatic monitoring, automatic survey
One Za'abeel ICD Headquarters, UAE	Monitoring of existing Al Saa'da Bridge and shoring works during construction of two towers on either side of Bridge	ICD, APCC Piling & Contracting L.L.C.	Web base data monitoring Supply, installation, manual + automatic monitoring, automatic survey



P	roject	Contractor/Client	Scope of works
Dubai Water Canal Infrastructure, UAE	Monitoring of existing metro line piers during Package-3 Canal and Coastal Works (R999/3) construction in close vicinity	Belhasa Six Construct L.L.C (Besix)/RTA	Web base data monitoring Supply, installation, manual + automatic monitoring, automatic survey
Improvement of AI Shindagha Corridor - Sana Junction, UAE	Monitoring of existing Red Line Metro piers and adjacent ground surface Underpass structures construction in close vicinity	Wade Adams Contracting LLC/RTA	Web base data monitoring Supply, installation, automatic monitoring, automatic survey
Langham Place, UAE	Monitoring of MSE wall for Hotel and Service Apartments	Omniyat Properties Ten Limited	Web base data monitoring Supply, installation, automatic monitoring, geodetic survey
Al Garhoud Maintenance Facility Package-1, UAE	Monitoring of existing bridge piers during construction of Marine Works - quay wall	Dutco Balfour Beatty	Web base data monitoring Supply, installation, automatic monitoring, automatic survey
Mediclinic Healthcare City Project, UAE	Monitoring of existing metro station and shaft during construction works of the project	Kele Contracting	Supply, installation and monitoring
Plot-1240953, UAE	Monitoring for running metro tunnel during construction of mixed use development project (G+M+3P+7+2R) in close vicinity	National Piling Company	Web base data monitoring  Supply, installation, monitoring + geodetic survey
Bromma Piloten Airport Project, Sweden	Existing bridge safety monitoring during construction of new tramway between Broma Airport and Helenelund	Through Marketing Associate in Sweden	Supply of instruments
M1009/B1- Routine Maintenance Of Bridge Structures, UAE	Pier monitoring during bridge maintenance work	Waagner Biro Gulf L.L.C.	Web base data monitoring Supply, installation, automatic monitoring, automatic survey
EXW-P007-Al Bustan Street South, Qatar	Monitoring of existing sewage tunnel during construction of flyover over it.	Hyundai Engineering & Construction Co Ltd- Qatar.	Web based online monitoring Supply, installation and monitoring



## HIGH-RISE BUILDINGS, DEEP EXCAVATIONS, FOUNDATIONS

Pr	oject	Contractor/Client	Scope of works
One Za'abeel ICD Headquarters, UAE	Foundation works, the two towers (during construction) & existing highway bridge between the towers	ICD, APCC Piling & Contracting L.L.C.	Web base data monitoring Supply, installation, manual + automatic monitoring, automatic survey
Marina Bay Sands-Hotel Towers, Singapore	Three 57 storey hotel towers, ~ 200 m tall	Syseng, Singapore	Web based online monitoring of foundation and the curved structure during construction.
Kifaf Development Plot-5, UAE	Tower verticality and 3D deformation monitoring	AL Kifaf Real Estate Development LLC, UAE	Supply, Installation and Monitoring
Jumeirah Gate Tower JBR, UAE	Tower verticality and 3D deformation monitoring, has World's highest swimming pool (Infinity pool)	Al Aseed Investments, UAE	Supply, Installation and Monitoring
Adventure Center at Jebel Jais, UAE	Structure at one of the highest cliff	Ras Al Khaimah Tourism Development Authority	Supply, Installation and Monitoring
Vida Dubai Mall, UAE	Tower verticality and 3D deformation monitoring	Shapoorji Pallonji Mideast LLC, UAE	Supply, Installation and Monitoring
ICD Brookfield Place, UAE	Deep Foundation, Raft Monitoring, shoring works, Settlement and building movements during construction	Brookfield Multiplex Ssangyong Joint Venture	Web base data monitoring Supply, Installation and Monitoring + geodetic survey
Deira Waterfront Development, Plot 03 Contract, UAE	Shoring works/deep excavation; Hotel construction	Al Futtaim Carillion, Dubai	Web base online monitoring; Supply and Installation
Deira Waterfront Development, Plot 01 Contract, UAE	Monitoring of shoring works during Mixed use development project construction in vicinity	China State Construction Engrg.Corp (Middle East LLC)	Supply, Installation and Monitoring
Moxy Hotel, Austin Texas, USA	Deep excavation monitoring	IGS, USA	Web base online monitoring; Supply, Installation and Automatic Monitoring
36 East 61th Street, USA	Building tilt monitoring	IGS, USA	Web base online monitoring; Supply, Installation and Automatic Monitoring
Governor Mansion, USA	Building construction monitoring	IGS, USA	Web base online monitoring; Supply and Automatic Monitoring
Shell Cracker Plant, USA	Industrial plant construction monitoring	Fugro, USA	Supply of instruments
B4 Residential Tower, UAE	Structural monitoring works.  Monitoring the lateral and vertical movements of the B4 tower	Emaar Development PJSC	Supply, Installation and Monitoring



Pr	oject	Contractor/Client	Scope of works
Project E323, UAE	Proposed comm/res building (2b+G+M+Tech Fl+4+Roof). Monitor ground conditions during deep excavation	Mr. Saeed Mohd Ahmad Al Tayer	Supply, Installation and Monitoring
Plot No. PJTRH04G at Palm Jumeirah, UAE	Res building (2B+G+11).  Monitor ground conditions, shoring and existing building during deep excavation	Alpago Investment And Holding Limited	Supply, Installation and Monitoring
Shindagha Site Bur Dubai, UAE	Deformation monitoring for the structure	SRG Global, UAE	Supply, Installation and Monitoring
Lodha World One Residential Tower, India	117 storey tallest residential tower in the World; Foundation monitoring	Lodha Developers/ Langan International	Supply of instruments
Yas Mall, UAE	Apple enabling works	AL Tayer Stocks LLC, UAE	Web base online monitoring Supply, Installation and Monitoring
Sky Venture, UAE	Secant piles and soil monitoring	Zublin Construction L.L.C	Web base data monitoring Supply, installation, automatic monitoring and geodetic survey
AGMC BMW Showroom, UAE	Commercial building (2B+G+M+2 Floor), foundation	Dubai Civil Engineering	Supply, Installation and Monitoring
STEP Odour Control Facilities, UAE	Diaphragm wall and soil to provide settlement, deflection and deformation data	ADSSC, Kharafi National	Supply, installation, monitoring and geodetic survey
Burj Khalifa, UAE	818 m tallest building in the world; Foundation monitoring	Bodycote	Supply of instruments
Corniche Hotel Project, UAE	Foundation/D-wall monitoring	Soil Foundation Technology	Supply, Installation and Monitoring
City Seasons Hotel Project, UAE	Foundation/D-wall monitoring	Saile Foundations L.L.C.	Supply, Installation and Monitoring
UMM Al Quwain Independent water 150 MIGD Project, UAE	Foundation/D-wall monitoring	China Railway 18th Bureau Group LLC	Supply, Installation and Monitoring
Jumeirah Village Project, UAE	Foundation/D-wall monitoring	Pilex	Supply, Installation and Monitoring
Meena tower, UAE	Foundation/D-wall monitoring	Arabian Construction Company	Supply, Installation and Monitoring
Al Zaabi Tower, UAE	Foundation/D-wall monitoring	Middle East Foundation Group LLC	Supply, Installation and Monitoring
Trident Hotel, UAE	Foundation/D-wall monitoring	Afcons	Supply, Installation and Monitoring
Masdar City, UAE	Foundation monitoring, pile testing	Arabian Foundation Engineering LLC	Supply, Installation and Monitoring
	Foundation monitoring, pile	Arabian Foundation	



oply, Installation and Monitoring
oply, Installation and Monitoring
oply, Installation and Monitoring
odetic survey
oply, Installation and Monitoring
pply, Installation and Monitoring
oply, Installation and Monitoring
oply, Installation and Monitoring
oply, Installation and Monitoring
ration monitoring
ration monitoring
oply of instruments
oply of instruments
oply and Installation
oply, Installation and Monitoring
oply of instruments
oply of instruments
oply and Installation of truments for Raft



Pr	oject	Contractor/Client	Scope of works
Project Wallich at Tanjong Pagar, Singapore	Proposed mixed use development at Peck Seah Street/Choon Guan	Through Tritech	Supply of instruments
Project Duo Mixed Development, Singapore	Mixed development at Ophir/Beach/Rochor Road (Bugis MRT Station and Tunnels)	Through Tritech	Supply of instruments
Resort World, Singapore	Project at Sentosa Crane Dance, Structural foundation stability and structural dynamics measurements	Through Tritech	Supply of instruments
Suites@Orchard, Singapore	Proposed Erection of a Housing Development at 20 Handy Road (NEL MRT Tunnels at Dhoby Ghaut)	Through Tritech	Supply of instruments
National Heart Centre, Singapore	Proposed erection of the NHC Singapore on Lot 00467K TS22 at Hospital Drive	Through Tritech	Supply of instruments
Market Street Tower Project	Proposed 36 Storey Commercial Building with offices, 5 basement carparks with ancillary services at Market Street	Through Tritech	Supply of instruments
Changi General Hospital	Proposed development of a 8 storey integrated building with 2 basements carpark	Through Tritech	Supply of instruments
Tuen Mun - Chek Lap Kok Toll Plaza, Thailand	Part of the Tuen Mun – Chek Lap Kok link with 17 tool booths, associated approach roads, buildings and facilities	Through VSL, Thailand	Supply of instruments
Grain Godown Building, India	Pile testing for foundation	NIT Trichy under civil suppliers corporation of Tamil Nadu	Supply, installation, monitoring and training
Pasir Panjang Expressway, Singapore	Pile testing	SysEng, Singapore	Supply of Instrumentation
New Phosphate Rock Terminal, Jordan	Pile testing	Through Marketing Associate	Supply and Installation
KPIZ Project, UAE	Pile testing	Through Marketing Associate	Supply of Instrumentation
Hotel Site at Khalifa City, UAE	Pile testing	Baynunah Laboratories	Supply of Instrumentation



#### HISTORICAL MONUMENTS

Pr	oject	Contractor/Client	Scope of works
Mirani Fort, Muscat, Oman	200 years old Historical fort on hill top beside sea; slope monitoring for restoration works	Al-Manar International	Web based online monitoring system for slope monitoring
Cabo Fort, Governor's Bunglow, Goa	1 <sup>st</sup> & 2 <sup>nd</sup> phase; Historical fort beside sea; structure stability monitoring	ITD Cementation/ GSI/WRD	Web based online monitoring system for the fort
Expansion of the Al Masjide Al Haram, Saudi Arabia	Foundation/raft	Through marketing associate	Supply of Instruments
Basilica of S. Maria Assunta Carignano, Italy	Structure monitoring for restorations works	G.D. Test	Web based online monitoring system
Qasr Al Hosn CFB and Master Plan Main Works Package-5, Abu Dhabi	Cultural Heritage structure	Zublin Construction LLC	Pre-condition and Architectural survey



## BRIDGES, HIGHWAYS & RAILWAYS

	Project	Contractor/Client	Scope of works
	Package 2D, C0308	China Railway Construction Corporation Ltd. (CRCC)- Abu Dhabi	Supply, Installation and monitoring
	Package 2D, Stage 2, Subcontract no. I027 - TBMS - MR-NPC-20-05-0167-AUTOBOT-217000	National Projects & Construction LLC (NPC) - Infra	Supply, Installation and monitoring
	Package 2D	CRCC - NPC JV	Supply, Installation and monitoring
Etihad Rail Project, UAE	Project stage 2, Contract C0303 Package A	China State - SK Engineering and Construction - JV	Supply, Installation and monitoring
	Stage 2, Package 2C	China Railway & Gantoot Trans JV, (CRCC-GTGC JV)	Supply, Installation and monitoring
	Package 2C, Stage 2, Subcontract no. C0306-CGT-SCS-CC-00010	China Railway & Gantoot Trans JV, (CRCC-GTGC JV)	Supply, Installation and monitoring
	Stage 2 & 3 Project D0203 – Package 2F2 Freight Facilities	L&T Power -China Railway JV	Supply, Installation and monitoring
Bogibeel Bridge, Assam	Rail-Cum-Road Bridge, load testing monitoring	HCC/NFR	Supply, Installation and monitoring
Harry Nice Bridge, USA	Existing bridge monitoring	Foundation Test Group, USA	Web base data monitoring Supply and automatic monitoring
I-78 Easton Road, USA	Bridge abutment, Slope monitoring of existing bridge	AGES, USA	Web base data monitoring Supply, Installation and Automatic Monitoring
Malcolm X Bridge, USA	Existing bridge monitoring	Foundation Test Group, USA	Web base data monitoring Supply and automatic monitoring
Delaware Bridge, USA	Bridge replacement	Wang Tech, USA	Supply of instrumentation
East Midtown Greenway, USA	Highway construction	Wang Tech, USA	Supply of Instrumentation
S7 Expressway, Poland	Expressway	Through Marketing Associate	Supply of Instrumentation
Al Saa'da Bridge, part of One Za'abeel Project, UAE	Monitoring of existing highway bridge during construction of two towers on either side of Bridge	ICD, APCC Piling & Contracting L.L.C.	Web base data monitoring Supply, installation, manual + automatic monitoring, automatic survey
2nd Bridge on Narmada river (NH-8)	Balanced cantilever type bridge	L&T-ECC/Dar Consultants, UK	Supply and Installation



	Project	Contractor/Client	Scope of works
Chiraiyatand Bridge, Patna	4 lane cable stayed bridge	BBR/IRCON	Supply and Installation
Naini Bridge, Allahabad	Cable stayed bridge	Kowi-Span/NHAI	Supply and Installation
Second Vivekananda Bridge Toll way Project, Kolkata	Cable stayed bridge	L&T ECC Division	Supply, Installation and Monitoring
Allahabad Bypass Bridge Project (Ganga Bridge Project)	1 km long bridge	L&T ECC Division and The Freyssinet Pre-stressed Concrete Co. Ltd.	Supply and Installation
Izmit Bay Bridge, STFA, Turkey	Suspension Bridge	IHI	Supply of Instrumentation
Jaipur-Kishangarh Expressway, India	NH-8 Expressway Road Project	Jaipur Kishangarh with L&T/GVK Becom, French Engineering Consultants	Supply, Installation and Monitoring
Mapagunal, UAE	Gantry on Metro track for Bridge Construction	Mapa Gunal Construction Company	Supply, Installation and Monitoring
R1045 Improvement of Interchange Sheikh Zayed Road, UAE	Gantry on Metro track for Bridge Construction	Mapa Gunal Construction Company	Web base data monitoring Supply, installation, monitoring and geodetic survey
R921/1B Improvement of Al Wasl Road Phase-1 Interchange 2.5, UAE	Gantry on Metro track for Bridge Construction (Survey Gantry)	China State Construction Engrg.Corp (Middle East LLC)	Supply, Installation and Monitoring
Design & Build of Pedestrian Bridge, Qatar	Construction of piers and extension of pedestrian bridge; extension from existing Qatar Rail Bridge to Qatar Petroleum District, Qatar	Al Balagh - PORR JV	Supply, Installation and Monitoring PPCCS
Industrial Ring Road Cable Stayed Bridge, Bangkok, Thailand	2 cable stayed bridges, each with ~700 m main span over Chao Praya River	Through VSL, Thailand	Supply of instruments
Rach Mieu Cable Stayed Bridge, Tiền Giang, Vietnam	2 m wide deck, 270 m main span cable stayed bridge between Tiền Giang & Bến Tre, Vietnam	Through VSL, Thailand	Supply of instruments
Forth Replacement Crossing, Lothian, Scotland	650m main span cable stayed bridge between Lothian and Fife, Scotland	Through VSL, Thailand	Supply of instruments
Second Penang Cable Stayed Bridge, Penang, Malaysia	240 m main span cable stayed bridge between Batu Kawan and Seberang Perai, Malaysia	Through VSL, Thailand	Supply of instruments
Stonecutters Cable Stayed Bridge, Kwai Chung, Hong Kong	1018 m span length cable Stayed bridge between Kwai Chung and Tsing Yi, Hong Kong	Through VSL, Thailand	Supply of instruments



	Project	Contractor/Client	Scope of works
Hong Kong Link Road, Chek Lap Kok, Hong Kong	9.4 km in length viaduct connected between the Hong Kong Boundary Crossing Facilities and the Zhouhai Main Bridge, Hong Kong	Through VSL, Thailand	Supply of instruments
Aberdeen Channel railway bridge, MTR SIL903	2 km of wiaduct, a 115-m long Aberdeen Channel railway bridge	Through VSL, Thailand	Supply of instruments
South Beach Mixed Development	Beach Road	Through Tritech	Supply of instruments



#### DAMS AND HYDROELECTRIC PROJECTS

Р	roject	Contractor/Client	Scope of works
India and neigh	nboring countries		
Idukki Dam, India (DRIP)	Double Arch dam; Real time structural health monitoring & early warning system	KSEB	Web Based Data Monitoring Supply, Installation
DRIP-Kerala Irrigation, India	Real time structural health monitoring of <b>16 dam</b> s	Kerala Irrigation	Web Based Data Monitoring Supply, Installation (under execution)
DRIP – Pollachi, India	Real time structural health monitoring of <b>17 dams</b>	TNWRD	Web Based Data Monitoring Supply, Installation (under execution)
DRIP - TANGEDCO I and II, India	Real time structural health monitoring of <b>24 dams</b>	TANGEDCO	Web Based Data Monitoring Supply, Installation (under execution)
Tala Hydroelectric Project, Bhutan	Concrete gravity dam	HCC/THPA/ WAPCOS	Supply, Installation and Monitoring
Chukkha Hydro Power Corporation (CHPCL) Bhutan	Underground power house and surge shaft	CHPCL/WAPCOS	Supply and Installation
Dagachhu Hydro Power Project, Bhutan	Concrete gravity dam, power house, diversion weir, desilter, HRT, surge tank, pressure shaft & transformer cavern	HCC/DHPC/Druk Green Power Corporation	Supply, Installation and Monitoring
Punatsagchhu-I Hydroelectric Project,	Underground structures of Power house	HCC/PHPA/ WAPCOS	Supply, Installation and Monitoring
Bhutan	Slope stability monitoring	L&T/PHPA	Supply, Installation and Monitoring
Punatsagchhu-II Hydroelectric Project, Bhutan	Underground structures of Power house	Jaiprakash/PHPA-II/WAPCOS	Supply, Installation and Monitoring
Mangdechhu – I Hydroelectric Project, Bhutan	Concrete gravity dam, HRT and power house	Jaiprakash/NHPC	Supply, Installation and Monitoring
Middle Marsyangdi Hydroelectric Project, Nepal	Earth & rockfill dam, surge shaft, pressure shaft, concrete spillway, tunnels, power house	Dywidag - Dragados - CWE/Fichtner Consultants, Germany/NEA	Supply and Installation
Tehri Hydroelectric Project,	Earth and rockfill dam, power house & tunnels	THDC	Supply and Installation
India	Spillways	THDC	Supply, Installation and Monitoring



Р	roject	Contractor/Client	Scope of works
Shapurkandi Project, India	Concrete gravity dam	Soma	Web Based Data Monitoring Supply, Installation
Koldam Hydroelectric Power Project, India	Earth and rockfill dam & Spillways	ITD/NTPC	Supply, Installation and Monitoring
	Teesta VI: Barrage, HRT & power house	HCC/Lanco	Supply and Installation
	Teesta V: Concrete gravity dam, power house, HRT, desilting chamber & surge shaft	Jaiprakash/NHPC	Supply, Installation, Monitoring and AMC
TEESTA Hydroelectric Project, India	Teesta Low Dam-IV: RCC dam, power house, HRT & desilting chamber	HCC/NHPC	Supply, Installation and AMC
	Teesta Low Dam-III: Barrage, slope & abutment	Patel-Simplex/ NHPC	Supply, Installation and AMC
	Teesta III: Dam, power house & HRT	Abir Infratech	Supply, Installation and Monitoring
Tapovan Vishnugad	Penstock, Power house & butterfly valve chambers	Patel/NTPC	Supply, Installation and Monitoring
Hydroelectric Power Project, India	Barrage	Rithwik/NTPC	Supply, Installation and Monitoring
	HRT	L&T-AM JV/NTPC	Supply and Installation
Lower Subansiri Hydroelectric Project,	Concrete gravity dam	Soma/NHPC	Supply, Installation and Monitoring
Assam, India	Underground works	L&T/NHPC	Supply, Installation and Monitoring
Shongtong Karcham	Diversion barrage (Sloping Glacis type)	Patel/WAPCOS	Supply, Installation and Monitoring
Hydroelectric Project, India	Slope monitoring	HPPCL/WAPCOS	Supply, Installation and Monitoring
Pattissery Dam Project, India	Earth dam	Kerala Irrigation/ Paulose George Construction	Supply, Installation and Monitoring
Kundah HEP, India	Head race tunnel, surge Chamber, power house,	Patel Engineering	Supply, Installation and Monitoring
JSW Steel Project, India	Earth dam	JSW Steel	Web based online monitoring Supply, Installation
Kaleswaram-Sundella Barrage, India	Concrete Barrage	Navyuga Engineering	Supply and Installation
Kaleswaram-Medigadda Barrage, India	Concrete Barrage	L&T/TS Irrigation	Supply and Installation
Kaleswaram- Thukulagudem Barrage, India	Concrete barrage	Rithwik/TS Irrigation	Supply and Installation



Р	roject	Contractor/Client	Scope of works
Polavaram Dam, India	Concrete gravity dam	MEIL/Navyuga engineering Limited/AP Irrigation/CWPRS	Supply and Installation
Yargol dam, India	Concrete gravity dam	Vaveda Infra, KUWS & DB	Supply and Installation
Parnai Hydroelectric Project, India	Barrage, Head race tunnel	Patel/NHPC	Supply and Installation
Chaudhary Charan Singh Lachura Dam Irrigation Project, India	Concrete & masonry dam	Irrigation Department/ Engineer Project Limited	Supply, Installation and Monitoring
Uri Hydroelectric Project, India	Concrete gravity dam, HRT & Power House	HCC/NHPC	Supply, Installation and Monitoring
Indira Sagar Project, India	Concrete gravity dam & Power House	NHDC	Supply, Installation and Monitoring
Kishan Ganga Hydroelectric Project, India	Concrete face rockfill dam	NHPC HCC-Halcrow JV / NHPC	Supply, Installation and Monitoring
Akash Ganga Project, India	Dam	TTD	Supply, Installation and Monitoring
Ujh Dam, India	Barrage	CWC Jammu	Supply, Installation and Monitoring
A.V. Koil Dam, India	Masonry dam	Gammons/NHPC	Supply and Installation
Baghlihar Hydroelectric Project, India	Concrete gravity dam & Power house	Jaiprakash	Supply and Installation
Bajoli Holi Hydroelectric Project, India	Concrete gravity dam	Gammon/GMR	Supply and Installation
Bhilangana Hydroelectric Project, India	Concrete gravity dam	Bhilangana Hydro Power Limited	Supply and Installation
Budhil Hydroelectric Project, India	Concrete dam	Lanco Infratech	Supply and Installation
Chagallu Barrage Project Stage-II, India	Earth dam & spillways	Navyuga Transtroy JV /AP Irrigation	Supply and Installation
Chamera II Hydroelectric Project, India	Concrete gravity dam & penstock	Jaiprakash/NHPC	Supply and Installation
Toject, mula	Power station	NHPC	Supply and Installation
Chamera III Hydroelectric Project, India	Concrete gravity dam, HRT & power house	HCC/NHPC	Supply and Installation
Chutak Hydroelectric Project, India	Barrage, HRT & power house	HCC / NHPC	Supply and Installation
Dhauliganga Hydroelectric Project, India	Concrete faced rockfill dam, spillways & power house	KDJV/HCC/NHPC	Supply and Installation
i roject, iriula	Pressure tunnel	Samsung Korea	Supply and Installation
Doyang Hydroelectric Project, India	Earth & rockfill dam	SEW & Gammon/ NEEPCO	Supply and Installation



Р	roject	Contractor/Client	Scope of works
Gerusoppa Project, India	Dam	KPCL	Supply and Installation
Ghatghar Lower and Upper Dam, India	Roller-compacted concrete dam	Patel/TCE/WRD	Supply, Installation& AMC
GNSS Pydipalem Project, India	Earth dam	HES Infra/AP Irrigation	Supply and Installation
Gollapalli Earth Dam, India	Earth dam	AP irrigation	Supply and Installation
Gosi Khurd Irrigation Project, India	Earth dam	HCC/VIDC	Supply and Installation
Alaknanda Hydro Power Corpn, India	Power house	GVK	Supply and Installation
Jeedipalli Reservoir Project, India	Earth dam	BNR Constructions/ AP Irrigation	Supply and Installation
Kalpong project, Andaman	Concrete dam	NHPC	Supply and Installation
	Bichom dam	Patel/NEEPCO	Supply and Installation
Kameng Hydroelectric	Tenga dam	Patel/NEEPCO	Supply and Installation
Project Package I,II,III, India	Kimi power house – slope monitoring	Patel/NEEPCO	Supply and Installation
Karbi Langpi Hydroelectric Project, India	Dam	Assam Power Generation Corporation Ltd.	Supply and Installation
Khuga Irrigation Dam Project, India	Earth and rockfill dam	Irrigation & Flood Control Department	Supply and Installation
Komaram Bheem Project, India	Earth dam & spillways	Navyuga engineering Limited/AP irrigation	Supply and Installation
Koyna Dam, India	Concrete spillway strengthening	Devgiri Engineering/ Soma/ Maharashtra Irrigation	Supply and Installation
Koyna Stage IV Hydroelectric Project, India	Head race tunnel	Patel	Supply and Installation
Loharinagpala Hydroelectric Power Project, India	Barrage & Desilting Chambers	HCC/NTPC	Supply and Installation.
Lower Goi Irrigation Project, India	Earthen dam	AKR Constructions	Supply and Installation
Mawphlang Project, Shillong, India	Concrete gravity dam	Patel/Public Health Engineering Department	Supply and Installation
Middle Vaitarna Dam, India	Roller compact concrete dam	L&T/Soma/BMC	Supply and Installation
Musurumilli Reservoir Project, India	Earth dam & spillway	Srinivasa Civil Works Ltd/AP Irrigation	Supply and Installation
Nimoo-Bazgo Hydroelectric Project, India	Concrete gravity dam, HRT & power house	HCC/NHPC	Supply and Installation



Р	roject	Contractor/Client	Scope of works
OWK Resovior, India	Three earth dams	Deepika Constructions/AP Irrigation	Supply and Installation
Parbati II Hydroelectric Project, India	Concrete gravity dam, power house, HRT, pressure & surge shafts	Patel Engineering/NHPC	Supply and Installation
Pench Diversion Irrigation Project, India	Composite dam (earth dam, concrete dam)	WRD, Chhindwara	Supply and Installation
Phata Byug Hydroelectric Project, India	Diversion dam	Lanco Infratech	Supply and Installation
Pranahita Chevella Lift Irrigation Scheme, India	Barrage Tunnel	Mega Engineering/TS irrigation  Prathima Infra/ TS irrigation	Supply and Installation Supply and Installation
Pulichintala Hydroelectric Project, India	Spillway	Aarvee Associates /AP Irrigation	Supply and Installation
Purulia Pumped Storage	Rockfill upper dam	Taisei Corporation, Japan/WAPCOS	Supply and Installation
Project, India	Rockfill lower dam, power house & penstock	HCC – L&T JV/ Taisei Corp, Japan/ WAPCOS	Supply and Installation
Ranganadi Hydroelectric Project, India	Dam	HCC/NEEPCO	Supply and Installation
Rammam Hydroelectric Project, Stage-III, Darjeeling, India	Barrage and part of HRT, 3x40 MW, run of the river scheme on the Rammam River	Simplex Infrastructures Limited/NTPC	Supply, Installation and Monitoring
Sewa-II Hydroelectric Project, India	Concrete gravity dam, power house, HRT & desilting chambers	Gammons/NHPC	Supply and Installation
Sripadasagar Project, India	Earth dam & concrete spillways	ITD Cementation/AP Irrigation	Supply and Installation
Sripada Yellampalli Irrigation Project	Dam	TSID/Bippl Sublime	Supply and Installation
Srisailam Hydroelectric	Concrete gravity dam	AP irrigation	Supply and Installation
Project, India	Power house	AP GENCO	Supply and Installation
Thoubal Irrigation Dam Project, India	Earth & rockfill dam	Irrigation & Flood Control Department	Supply and Installation
Turial Hydroelectric Project, India	Dam & power house	Patel/ NEEPCO	Supply and Installation
Vamsadhara Project Phase-II, India	Earth dam & spillway	Soma-Patel-ASI JV/AP irrigation	Supply and Installation
Varahi HEP, India	Penstock	KPCL / Indian Hume Pipes	Supply and Installation
Veligonda Reservoir Project, India	Concrete gravity dam	BSCPL-SCL JV/AP irrigation	Supply and Installation
Vishnuprayag Hydroelectric Project, India	Barrage & power house	Jaiprakash	Supply and Installation



Pı	roject	Contractor/Client	Scope of works
Vishnugad Pipalkoti, India	Dam & underground power house cavern	HCC/SMEC	Supply and Installation
Vyasi Hydroelectric Project	Dam	Gammon/UJVNL	Supply and Installation
Nira Deoghar dam, Nasik, India	Earth dam	Maharashtra Research Engineering Institute (MERI)/CDO	Supply of Instruments
Gadnadi dam	Earth dam	Maharashtra Research Engineering Institute (MERI)/CDO	Supply of Instruments
Tarali Dam, India	Concrete gravity dam	Devgiri Engineering/ MKVDC	Supply of Instruments
Worldwide			
Khiss Dam Project, Morocco	Earth dam	Sixense, Morocco	Supply of instruments
Hatta Pump Storage Hydro Power Plant Project, UAE	Earth dam	Strabag-Ozkar Joint Venture	Supply, Installation and Monitoring
Salma Dam Project, Afghanistan	Earth dam	Angelique International Limited/WAPCOS	Supply, Installation and Monitoring
Upper Kotmale Hydropower Project, Sri Lanka	Concrete gravity dam & power house	Maeda Nishimatsu JV, Japan	Supply and Installation
Koprubasi Hydroelectric Power Project, Turkey	Clay cored rockfill dam & power house	Yuksel Enerji	Supply of instruments
Nam Pha Gnai Hydropower Project, Laos	Dam	Nam Pha Gnai Hydropower Project Co., Ltd	Supply and Installation
Shenzhen river project-Stage III, Hong Kong	River regulation project	Though Marketing Associates	Supply of monitoring instruments
Livada Dam, Greece	Earth dam	Though Marketing Associates	Supply of monitoring instruments
Kastoria Earth Dam, Greece	Earth dam	Though Marketing Associates	Supply of monitoring instruments
Lechago (Jiloca river) Dam, Spain	Earth dam	Though Marketing Associates	Supply of monitoring instruments
Xacbal Delta Dam, Guatemala, Spain	Concrete gravity dam	Though Marketing Associates	Supply of monitoring instruments
Pinalto Dam, Dominican Republic	Earth dam	Though Marketing Associates	Supply of monitoring instruments
Gibe III, Ethiopia	Earth dam	Though Marketing Associates	Supply of monitoring instruments
San Martin-Contratistas Generales S.A., Peru	Dam	Though Marketing Associates	Supply of monitoring instruments



	Project	Contractor/Client	Scope of works
Ingenieria Y Construcion Cosapi S.A., Peru	Dam	Though Marketing Associates	Supply of monitoring instruments
Constructora Queiroz Galvao S.A., Peru	Dam	Though Marketing Associates	Supply of monitoring instruments
Geotecnia Peruana S.R.L., Peru	Dam	Though Marketing Associates	Supply of monitoring instruments
Consorcio Cosapi-SSK, Peru	Dam	Though Marketing Associates	Supply of monitoring instruments
Traverse Olmos Project, Peru	Irrigation project	Though Marketing Associates	Supply of monitoring instruments
Cincoop, Belo Horizonte, Brazil	Trial embankment on gold mine tailings	Though Marketing Associates	Supply of monitoring instruments
Cat Leo Project, Brazil	Broken canoe dam	Though Marketing Associates	Supply of monitoring instruments
Canoa Quebrara Dam, Brazil	Dam	Though Marketing Associates	Supply of monitoring instruments
Achiras dam, Argentina	Dam	Though Marketing Associates	Supply of monitoring instruments



#### MINE, NUCLEAR POWER PLANT, LNG TANK PROJECTS

Project		Contractor/Client	Scope of works
Southern Peru Copper Corporation, Peru	Mine monitoring	Logos, Peru	Supply of Instrumentation
Cia. Minera Antamina S.A., Peru	Mine monitoring	Logos, Peru	Supply of Instrumentation
CSN Casa De Pedra Mine, Brazil	Mine monitoring	Terratek, Brazil	Supply of Instrumentation
RPM Mine Project, Brazil	Mine monitoring	Terratek, Brazil	Supply of Instrumentation
Copper Mine Bor, Serbia	Mine monitoring	Terratek, Brazil	Supply of Instrumentation
Sepetiba Harbour Stock Piles, Brazil	Stockpile monitoring	Terratek, Brazil	Supply of Instrumentation
Boa Hora Landfill project, Brazil	Landfill monitoring	Terratek, Brazil	Supply of Instrumentation
ThyssenKrupp CSA Siderurgica do Atlantico Project, Brazil	Automated monitoring of ore yards and piles (largest automated instrumentation project in Latin America)	Terratek, Brazil	Supply and Installation
Nuclear Power Corporation Of India Ltd.(NPCIL), Tarapur, India	Stressing of cable strands in reactor building	L&T, ECC	Supply of Instrumentation
Nuclear Power Corporation Of India Ltd.(NPCIL), Kaiga, India	Stressing of cable strands in reactor building	Gammon, Freyssinet	Supply of Instrumentation
Kettaneh Construction W.L.L., Qatar	LNG tank settlement monitoring	Ishikawajima-Harima Industries Co. Ltd. (IHI), Japan	Supply and Installation
Al-Zour refinery Project NRP/EPC - 0048 - Van Oord, Kuwait	LNG tank settlement monitoring	Kuwait National Petroleum and Refinery	Supply of Instrumentation
Garudeshwar Weir Project	Weir project	Coastal Projects Ltd.	Supply of Instrumentation
Sea Water Intake Project-3 (SWI-3) in Ruwais, UAE	Vibration monitoring	Abu Dhabi Oil Refining Company (TAKREER)	Vibration monitoring
Bogazici University Kilyos Saritepe Campus Wind Turbine Project, Turkey	Wind Energy Project	Geogrup, Turkey	Supply of Instrumentation



# LANDSLIDE, SOIL CONSOLIDATION & GROUND IMPROVEMENT PROJECTS

Proje	ct	Contractor/Client	Scope of works
Narendra Nagar Project, India	Landslide monitoring	DRDO	Web based online monitoring Supply, Installation and Monitoring
Nilgiri Hills Project, India	Pore pressure monitoring in hills	VIT Vellore	Supply, Installation and Monitoring
Kandla Port Trust (8 <sup>th</sup> berth), India	Soil consolidation	Afcons/STUP/KPTL	Supply, Installation and Monitoring
Kandla Port Trust (9 <sup>th</sup> berth), India	Soil consolidation	Shantilal B Patel/KPTL	Supply, Installation and Monitoring
DP World - JNPT container Terminal	Soil consolidation	ITD Cementation / DP World	Supply, Installation and Monitoring
Juinagar-Uran Rail Project	MTP (Metropolitan Transport)	МТР	Supply & Installation
Vishakhapatnam sea port project, India	Ground improvement	Skanska	Supply and Installation
Runway Ground Improvement, Vizag Airport, India	Ground improvement	Sohams/Airport Authority of India	Supply and Installation
Vallarpadam Port, India	Ground improvement	Soma/NHAI	Supply and Installation
Gujarat Adani Port, Mundra, India	Tie rod monitoring (Bulk Terminal)	L&T-ECC/Adani group	Supply and Installation
Dry dock GRSE, Kolkata, India	Ground improvement	ITD	Supply, Installation and Monitoring
Borusan Gemlik Port Soil Improvement Project, Turkey	Ground improvement	Borusan Logistic	Supply of Instrumentation
Sea Port, UAE	Container terminal; soil improvement, track settlement monitoring	Dutco Balfour Beatty	Supply, Installation and Monitoring
Dubai Airport, UAE	Ground improvement	Al Bayan	Supply of Instrumentation
Container Terminal 4 (CT-04), Jebel Ali, UAE	400 m bridge, reclaimed 2.2 km quay wall with an alongside depth of 18 m	DP World/Dutco Balfour Beatty LLC	Supply, installation, monitoring + geodetic survey
Al Raha Beach Development, UAE	Ground improvement	Zetas Zemin Teknolojisi A.S.	Supply of Instrumentation
Khalifa Port and Industrial Zone Project, UAE	Ground improvement	Gulf Laboratories	Supply of Instrumentation



Proje	ct	Contractor/Client	Scope of works
Al Suwwah Island Development Work, UAE	Ground improvement	Terrasearch Gulf	Supply and Installation
Arabian Canal Project, UAE	Ground improvement	Arab Centre for Engineering Studies (ACES)	Supply of Instrumentation
Sub base Tambaram- Somangalam Road Km 2/4-2/8 & 4/8-5/8, India	Bituminon pavement monitoring	Highway Research Department.	Web based online monitoring Supply, Installation
IOC, Cochin	JPG Terminal, Indian Oil Corporation	Keller India	Supply & Installation



## AUTOMATIC WATER LEVEL/GROUNDWATER MONITORING

Client	Scope of works
Ground Water Department (GWD), Lucknow, UP	Online monitoring through cloud based web server (2116 systems)
State Water Investigation Directorate (SWID), Kolkata, WB	Online monitoring through cloud based web server (1200 systems)
Water Resource Investigation Division, Punjab	Online monitoring through cloud based web server (721 systems)
Directorate of Ground Water Development, Odisha	Online monitoring through cloud based web server (536 systems)
Central Ground Water Board (CGWB), Faridabad	Online monitoring through cloud based web server (529 systems)
Ground Water Directorate, Bangalore (Karnataka)	Online monitoring through cloud based web server (445 systems)
Ground Water Directorate, Madhya Pradesh	Online monitoring through cloud based web server (410 systems)
PWD Government of Tamil Nadu, Tamil Nadu	Online monitoring through cloud based web server (386 systems)
Ground Water Directorate, Andhra Pradesh	Online monitoring through cloud based web server (350 systems)
Telangana State Ground Water Department, Telangana	Online monitoring through cloud based web server (240 systems)
Chennai Metropolitan Water Supply and Sewerage Board, Tamil Nadu	Online monitoring through cloud based web server (225 systems)
Directorate of Agriculture, Government of Assam	Online monitoring through cloud based web server (193 systems)
Ground Water Directorate, Kerala	Online monitoring through cloud based web server (150 systems)
Water Resources Department, Raipur	Online monitoring through cloud based web server (137 systems)
Department of Water Resources, Jharkhand	Online monitoring through cloud based web server (117 systems)
Rajasthan Agricultural Competitiveness Project (RACP), Jaipur	Online monitoring through cloud based web server (100 systems)
Ground Water Department, Jodhpur	Online monitoring through cloud based web server (77 systems)
Irrigation Research Institute, Roorkee	Online monitoring through cloud based web server (66 systems)
Water Resources Department, Goa	Online monitoring through cloud based web server (60 systems)
Water Resources Department, Chhatisgarh	Online monitoring through cloud based web server (53 systems)
Irrigation & Flood Control Department, Delhi	Online monitoring through cloud based web server (20 systems)
Doha Metro Gold Line Project - ALYSJ JV, Qatar	Online monitoring through cloud based web server (60 systems)
State Hydrology Organization, Puducherry	Online monitoring through cloud based web server (33 systems)
Andhra Pradesh Water Sector Improvement Project, AP & Telangana	Online monitoring through cloud based web server (25 systems)
Varun Beverages Group (different locations in UP)	Online monitoring through cloud based web server (9 systems)



Client	Scope of works
South Eastern Coald Fields Ltd., Korba (C.G.)	Online monitoring through cloud based web server (7 systems)
Naini Papers Limited, Kashipur (U.K.)	Supply and Installation (62 systems)
Kandhari Beverages Pvt Ltd.	Supply and Installation (62 systems)
TWAD Board, Chennai, TN	Supply and Installation (66 systems)
Aditya Birla Chemicals (India) Limited, Chemical Division, Sonbhadra, UP	Online monitoring through cloud based web server
Amrit Bottlers Pvt. Ltd, Faizabad, UP	Online monitoring through cloud based web server
AOV Exports Pvt. Ltd, Unnao, UP	Online monitoring through cloud based web server
Central Ground Water Board, Lucknow, UP	Online monitoring through cloud based web server
Diamond Beverages (P) Ltd., Kolkata, WB	Online monitoring through cloud based web server
Gallant Ispat Limited, Gorakhpur, UP	Online monitoring through cloud based web server
IIT Chennai, TN	Online monitoring through cloud based web server
Indagro Foods, Unnao, UP	Online monitoring through cloud based web server
Lanco Anpara Power Ltd, Anpara Sonbhadra, UP	Online monitoring through cloud based web server
Pachaimuthu & Company, Parambikulam Dam, TN	Online monitoring through cloud based web server
Subros Limited, Noida, UP	Online monitoring through cloud based web server
Trichy Corporation, TN	Online monitoring through cloud based web server
Uttar Pradesh Water Restructuring Project , Lucknow, UP	Online monitoring through cloud based web server
WAPCOS Limited, New Delhi	Supply and Installation (42 systems)
NEER, Ghajiabad	Supply and Installation (23 systems)
Advance Construction Technology Limited (ACTS), Doha, Qatar	Supply and Installation (16 systems)
Shiv Drillers, Kolkata, WB	Supply and Installation (15 systems)
Chetinad Cement, Chennai, TN	Supply and Installation (14 systems)
Balrampur Chini Mills Group (different locations in UP)	Supply and Installation (27 systems)
Gouthami Mines And Minerals, Madinaguda, Hyderabad	Supply and Installation (21 systems)
TDI INFRACORP (INDIA) LTD., Haryana	Supply and Installation (13 systems)
Ultratech Cement Limited	Supply and Installation (12 systems)
YKK India Pvt Ltd, Rewari	Supply and Installation (11 systems)
Shriram Pistons & Rings Limited, Ghaziabad, UP	Supply and Installation (10 systems)
DABS Automation, Delhi	Supply and Installation (10 systems)



	Scope of works
Mars Turbo India Pvt. Ltd., Sangareddy	Supply and Installation (10 systems)
Madhepura Electric Locomotive Pvt Ltd	Supply and Installation (10 systems)
Tata Steel Limited	Supply and Installation (10 systems)
The Odisha Mining Corporation Limited	Supply and Installation (10 systems)
National Center for Earth Science Studies, Kerala	Supply and Installation (10 systems)
Nuvoco Vistas, Aresmeta Plant	Supply and Installation (10 systems)
N. T. Bloomfield Enterprises, New Delhi	Supply and Installation (9 systems)
Eastern Automation System, Cuttuck	Supply and Installation (9 systems)
Indian Metals & Ferro Alloys Ltd., Odisha	Supply and Installation (9 systems)
Lafarge India Pvt. Ltd Arasmeta Cement Plant, Champa, CG	Supply and Installation (8 systems)
Mogli Labs (India) Pvt Ltd	Supply and Installation (8 systems)
Rotex Controls, Lucknow	Supply and Installation (8 systems)
Bangalore International Airport Limited, Bangalore	Supply and Installation (7 systems)
National Enviro Engineering, New Delhi (Lalitpur Power Generation company Ltd.)	Supply and Installation (7 systems)
Radico Khaitan Limited, Rampur, UP	Supply and Installation (7 systems)
India Glycols Limited, Gorakhpur, UP, selaqui, Dehradun, Kashipur Chemical Plant	Supply and Installation (7 systems)
Rajapalayam Mills Ltd., Fabrics Division, Virudhunagar Dt.	Supply and Installation (7 systems)
L&T Mumbai Coastal Road - Package-IV	Supply and Installation (7 systems)
Madras Cement Group, Chennai, TN	Supply and Installation (6 systems)
Shree Cement Ltd., Sriganganagar, Rajasthan	Supply and Installation (6 systems)
Shree Raipur Cements Ltd, Baloda Bazar, Chattisgarh	Supply and Installation (6 systems)
Hindustan Coca-Cola, Chennai	Supply and Installation (6 systems)
Essel Mining & Industries Ltd	Supply and Installation (6 systems)
Sona Sati Organics Pvt Ltd.	Supply and Installation (5 systems)
CGWB	Supply and Installation (5 systems)
Emprire Tubewell, New Delhi	Supply and Installation (5 systems)
Aryan Mining and trading corporation pvt ltd	Supply and Installation (4 systems)
Avadh Sugar & Energy Ltd., Sitapur, UP	Supply and Installation (4 systems)



Client	Scope of works
Emami Cement, Baloda Bazar, CG	Supply and Installation (4 systems)
Hindalco Industries Chatisgarh	Supply and Installation (4 systems)
Shiv Shakti Traders, Korba, CG (Ambuja Cement)	Supply and Installation (4 systems)
Shivam Solution, Nagpur	Supply and Installation (4 systems)
Tiruchirappalli City Corporation, TN	Supply and Installation (4 systems)
Vishnu Sugar Mills Limited, Gopalganj Bihar	Supply and Installation (4 systems)
Annamalai University, Department of Earth Science, Chidambaram, TN	Supply and Installation (3 systems)
FourITS Pvt. Ltd., New Delhi	Supply and Installation (3 systems)
Hindustan Copper Limited, Ghatsila, Singhbhum	Supply and Installation (3 systems)
HPCL Biofuels Limted, Patna	Supply and Installation (3 systems)
Kanpur Edibles Pvt. Ltd., Kanpur	Supply and Installation (3 systems)
Khatema Fibers Limited, Udham Singh Nagar, UK	Supply and Installation (3 systems)
Mother Dairy Fruit & Vegetable Pvt. Ltd., N. Delhi	Supply and Installation (3 systems)
Ramco Cement Group, Chennai, TN	Supply and Installation (3 systems)
The India Cements Limited, Ariyalur Distt, TN	Supply and Installation (3 systems)
Triveni Earthmovers Private Limited	Supply and Installation (3 systems)
Perfect Sales and service, Hajipur vaishali	Supply and Installation (3 systems)
Triveni Engineering & Industries Limited, Muzaffarnagar, Bulandshehr	Supply and Installation (3 systems)
Infrastructure & Freight Terminal Rajasthan	Supply and Installation (2 systems)
International Tractors Limited, Hoshiyarpur, Punjab	Supply and Installation (2 systems)
Jindal Pipes Limited, Gurgaon	Supply and Installation (2 systems)
Majhaulia Sugar Industries Pvt.Ltd., Dist-West Champaran (Bihar)	Supply and Installation (2 systems)
Paradeep Phospates Limited, Orissa	Supply and Installation (2 systems)
Radisson Blu Agra Taj East Gate	Supply and Installation (2 systems)
Sravanthi Energy Pvt. Ltd., Gurgaon	Supply and Installation (2 systems)
The Ramco Cements Limited.	Supply and Installation (2 systems)
United Spirits, Shahjahanpur, UP	Supply and Installation (2 systems)