## **CASE STUDY**

# SGS IN AZERBAIJAN: CONSTRUCTION SERVICES FOR SOCAR MANAGEMENT OFFICES

### **ISSUED – JANUARY 2013**

In January 2013, SGS was awarded a contract to provide independent third-party inspection, non-destructive testing (NDT) and quality supervision services for the construction of the new State Oil Company of the Azerbaijan Republic (SOCAR) management headquarter offices by Tekfen Construction and Installation Co. Inc. In January 2013, Tekfen Construction and Installation Co. Inc. selected SGS Azeri LTD to provide independent third-party inspection, non-destructive testing (NDT) and quality supervision services for the construction of the new State Oil Company of the Azerbaijan Republic (SOCAR) management headquarter offices at the impressive SOCAR Tower.

Located on Heydar Aliyev Avenue, the main road leading from Baku



International Airport to the city centre, SOCAR Tower is the tallest building in Baku and in the whole of the Caucasus.

The building design was based on a composite of steel construction with reinforced concrete walls. It has been built to withstand wind speeds of 190 kilometres per hour and a Richter scale magnitude nine earthquake.

#### **SOCAR TOWER**

The building which stands 209 metres tall is made up of:

- 42 floors
- an area of 12,000 square metres
- 100,000 square metres of usage space
- office space
- conference and sports facilities
- a hotel
- retail spaces
- food outlets

# TEKFEN: A WORLD LEADER AMONG CONTRACTORS

Rooted in an engineering consulting company established in 1956, Tekfen Construction and Installation Co. Inc. is one of today's leaders in the challenging field of contracting services. Strong commitment to environmental issues, unwavering dedication to global quality standards and consistent professional business conduct underscore Tekfen's continual growth and stability spanning five decades.





### ENSURING INTEGRITY AND COMPLIANCE ACCORDING TO INTERNATIONAL QUALITY STANDARDS

According to the contract dated January 2013, SGS controlled the erection of the steel structures, inspected welds and conducted non-destructive testing. SGS NDT services ensured the safe and efficient operation of equipment and assets in Azerbaijan by detecting defects early in order to avoid severe damage and assuring quality compliance with international standards.

SGS brought its respected worldwide reputation and proven track record as the complete and global NDT provider to the Tekfen project. The SGS NDT network across forty countries delivered world-class NDT expertise locally, close to Tekfen operations wherever and whenever needed.

### **SGS SERVICES AT A GLANCE**

Over the last year, SGS non-destructive testing technicians and quality assurance and control inspectors were brought on board to ensure the integrity of all steel structures were complaint with international quality standards. NDT experts at SOCAR Tower inspected welding seams, supervised works, conducted testing and monitored installation.



#### NDT METHODS USED

Non-destructive testing methods implemented during the construction of the SOCAR Tower in Azerbaijan included:

- magnetic particle inspection (MPI)
- ultrasonic testing (UT)
- dye penetrant (DP) for welding seams
- wet film thickness (WFT)

Welds were monitored by SGS specialists certified under CSWIP 3.2 in order to ensure the safe and reliable operation of structural elements. SGS non-destructive testing saved time and money through the fast and effective testing of primary and secondary elements during assembly, installation and operation. Due to the extensive SGS experience and competence in projects of this kind, SGS minimised risk and maximised quality at the Tekfen project. SGS services positively impacted the sustainability, reliability and functionality of the new SOCAR Tower structure to ultimately reduce costs and raise asset value.

As a result of the successful partnership in the SOCAR Tower project, Tekfen has once again chosen SGS Azeri to assist with NDT technicians performing non-destructive testing for steel structures and inspectors supervising paint works for its construction of the Baku Olympic Stadium project in Azerbaijan.

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SGS IS THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

