

# “Employee Friendly Time & Attendance System”

**■ Location :**

S-OIL Refinery – Ulsan, Korea

**■ Products Used :**

iTDC Access Control Panels  
LX505 T&A / Access Controllers  
RF30 125KHz Proximity Readers  
RF245 2.45GHz Long Range Readers  
IDA245 2.45GHz Active Cards

**■ Application :**

T&A with Vehicle Access Control



## S-OIL Ulsan Refinery

S-OIL is one of the most competitive oil refining companies in Korea, specializing in productions of petroleum and lubricant products. S-OIL is principally engaged in the refining of crude oil and production and making of petroleum products, lube products, petrochemical products (i.e. diesel, gasoline) and etc. The company's one of three refineries, Ulsan refinery is one of Korea's largest oil refineries with a processing capacity in excess of 29 million tons per annum, over 580,000 barrels per day.

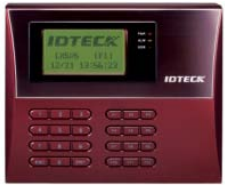
## Project Requirement

Since the refinery is located in the remote area away from the rural area, commuting has been a complex issue for the employees at the S-OIL Ulsan refinery. Even though the employees used the company operated commuter buses to travel the long distance to work and to avoid being late for work, the commuter bus itself could not avoid the traffic congestion of the morning rush hours. There were several cases of tardiness on daily basis due to commuting issues and this has incurred many concerns and complains amongst the employees. HR department of S-OIL refinery was in desperate need for adequate time & attendance system that will suit their unique work environment. In addition, due to the vast size of the refinery site, it was practically impossible to install time & attendance device in every office or facility.

## The Solution

Based upon 22 years of knowhow and knowledge in the security business, IDTECK proposed custom system to meet the needs of the S-OIL refinery. The professional system integrators at IDTECK suggested a vehicle access control system incorporated with time & attendance system. Employees no longer have to search for time & attendance device as their time & attendance data is recorded as they enter or exit the gate.

Issues with the commuter bus were solved by installing a time & attendance device inside the bus, so that employees can punch-in when they board the bus. Since their attendance time is recorded as they get on the bus, the



## LX505

- Proximity / PIN T&A / Access Controller
- 12 Function Keys for Various T&A Modes
- Automatic System Reset via Self-Diagnosis (Watchdog Function)



## RF30

- 125KHz Proximity Reader
- User Defined Format Available
- Available for Outdoor Installation (Epoxy Molding / IP66)



## RF245

- 2.45GHz Long Range Reader
- Read Range up to 10M (3M, 5M, 10M)
- Multiple Tags Identification (30 Tags/sec)

employees not longer have to worry about being late or being stuck in the traffic. IDTECK's LX505 Proximity / PIN Standalone Controller has been deployed inside the commuter bus to gather time & attendance data of the employees. Once the commuter bus enters the company premises, the AP antenna collects the time & attendance data from the LX505 via the wireless NETeye converter. Then the data is stored in HR department's DB server for monitoring and management of employee T&A.

For the employees who are driving themselves to work, they can use their personal identification cards at the entrance drive way to gain access to the site as well as punch-in for their attendance. The entrance drive way check point is equipped with three RF30 proximity readers integrated with iTDC controllers, which are positioned in three different height levels to cope with different heights of the vehicles.

For added convenience, IDA245 Active Cards were attached to the windshield of the vehicles for executive board members or VIPs as the long range reader, RF245, recognizes the Active Card from ten meter distance and opens the bar gate for access. Long range vehicle access control system prohibited unauthorized vehicles from entering the refinery facilities.

## After Successful Implementation

HR representative from S-OIL Refinery has stated that the disputes and complaints regarding the time and attendance issues amongst the employees have decreased dramatically after the implementation of IDTECK time & attendance system. With the automated time & attendance system, the HR representatives no longer have to worry about manual T&A data entries and payroll processing. Not to mention the increased security level of the refinery facility as unauthorized vehicles are prohibited from entering the site. IDTECK system definitely made HR management easier.

## About IDTECK

Long experience in biometric access control and time & attendance field, IDTECK products assure the most reliable technology out in the security market. IDTECK offers wide range of security products, to provide the best security solution to suit your needs. All of IDTECK products are certified by UL, CE, FCC, MIC, and RoHS to satisfy the standards for international exports.