

CASE STUDY

BDP Solutions plays a key role in the BAKU success story

There are few firms in the world that can boast of installing four x 20ft ETV projects over an 18-month period, but BDP has done it!

Today, the two Baku Cargo Terminals (BCT1 & 2) at Heydar Aliyev International Airport in the CIS state of Azerbaijan are a shining example of building a substantial cargo handling infrastructure first – then going out and attracting the cargo traffic to fill its newly built capacity. That strategy has paid off handsomely and led to the rapid growth of Baku as the biggest cargo handling operation of its kind in the Caucasus.

Challenge

Baku is a key import and export gateway for the region's rich veins of minerals and oil. Cargo operator, Silk Way Airlines together with Baku airport looked to use the model of Dubai International by developing substantial cargo handling facilities i.e. warehouse building to handle the cargo, apron area large enough to accommodate several 747 size aircraft and modern cargo handling equipment and systems to potentially manage the fast throughput of freight.

Silk Way and Baku buoyed by the success they have enjoyed with this strategy have grown at a rapid rate – just like Dubai - and needed a systems and equipment supplier to be there with them all of the way!

Background

Keith Damen, Director of BDP Systems, has been involved with Baku airport since the mid 90's and led the team that first installed a 20ft manned, single level transfer vehicle at BCT1. This system interfaced with 105 x 10ft storage locations, 4 x airside links and 4 x lowering workstations links.

He said: "That system didn't miss a beat for five years. When I got a call to go and see them it wasn't because they were unhappy with the system in place, but they were developing and expanding their cargo at a considerable rate and needed to go upwards. On inspection, we saw that BCT was literally heaving with freight and they wanted to triple their capacity!"



Issues

BDP were engaged to come up with a solution. They recognized that installing a new system altogether and taking away the older equipment would mean considerable downtime for weeks, if not months, which could hurt BCT's operation quite substantially. Besides, on inspection they found very little wrong with the existing storage decks, interfaces and workstations. Keith Damen and BDP Solutions' Technical Director, Steve Perry came up with a winning solution.

Solution

They designed and planned a phased approach so that 2/3rds of the operation carried on as normal while BDP's engineers and implementation team erected a 20ft ETV and 1/3rd of a 3-level storage system. Once the ETV and limited storage was available, BDP de-commissioned the middle third of the original system to erect a 2nd ETV and more 3-level storage. Then, with two ETV's and 2/3rds of the total storage systems fully operational, the company's technical staff and engineers completed the balance of the storage area. The on-site work took just 10 weeks.

As a result, storage capacity was tripled with an increase from $105 \times 10ft$ positions to $327 \times 10ft$ positions. What's more, the two new ETV's interface seamlessly with the, five year old, original control system. Not just saving Silk Way money, by utilizing previous electronic controls and equipment, but significantly increasing throughput speeds.

No resting on their laurels

No sooner had the system been completed, than Silk Way were plotting an additional new cargo warehouse, BCT 2 on a site adjacent to BCT 1. This time, BDP took to the task of planning a different strategy – an entirely new system for an entirely new building. It brought all of BDP's design, project management, installation, commissioning and training skills into play.

Such was the success of the previous project, BDP were trusted to design the new system with two more 20ft ETV's, but with consideration of the requirements to handle and store perishable goods. The ETV's would interface with -18°C freezer rooms for the storage of up to 16 x 10ft frozen pallets. This has not only doubled Baku's capacity but extended it's ability to deal with perishable items.

This was another feather in Baku's cap and one that was further recognized with a presidential topping out ceremony.





Highlights

First of all tripling the storage of BCT1 – then doubling BCT1 with a mirror facility in BCT2, but this time including a cold storage facility for perishable goods.

As well as being the biggest cargo handling operation of its kind in the Caucasus, Baku is the most technically advanced cargo handling operation in the CIS - and that includes Moscow.

BCT1 and BCT2 can handle the rapid turnaround of import and exports from up to four Boeing 747 size of aircraft at a time, occupying some 163,000 $^{\rm m2}$ of apron and 12,000? $^{\rm m2}$ of terminal.

Very few firms in the world that can boast of installing four x 20ft ETV projects over an 18 month period, but BDP has done it.

Silk Way Airlines and Baku's strategy of following in the footsteps of Dubai – by creating the infrastructure to attract substantial freight and turn Baku into a Gateway for the Caucuses - has paid off!

