



A fully automated manner for more effective guidance of aircrafts after landing.

The suggested system assumes the use of dockable trolleys moving along the rails built into the tarmac. The rail system aims at servicing all the most important points of an airport.

Main features of the Aircraft Hauling System:

- Automated – it requires only minimum surveillance from traffic supervision and technical crew (approx. 10 people),
- Fuel-saving – the use of the system would allow for saving even up to 1200 litres of used fuel for one circulation on the tarmac,
- Non-collision – the system analysis location, direction and speed of any trolley in real time and informs the aircraft crew on any possible collisions,
- Effective – the use of the rail system allows for significant acceleration of aircraft delivery to the gates and thus increase the throughput of an airport by even 30%,
- Environment-friendly – limitation of fuel consumption decreases gases emission to the environment and affects the air quality in an airport's surrounding,
- Cost-saving – because of the automation process, the increase of throughput of an airport and decrease of emission costs to the environment, an airport may count on significant savings.

Attaching and detaching an aircraft to a trolley is faster and is performed with a minimum help of a man. The most important asset of the underground trolleys' is their capacity for working independently from weather conditions: conventional systems using surface transportation trolleys are dependent from weather conditions and do not affect the decrease of greenhouse gases emission.



Rail technology allows almost entire coverage of transportation trolleys. They are made of high quality materials resistant to unfavourable weather conditions. Their installation is very fast – during an 8-hour pause in an airport's functioning, 250 metres of rails may be built.