

Icelandair's new aircraft hangar at Keflavík Airport

IAV commenced work on underground piping and casting of foundations for this new aircraft service hangar at Keflavík Airport in September 2016. The project consisted of a total building mass of 10.700 m² footprint, of which 6.750 m² house the main service area for up to two medium sized long range aircrafts, type Boeing 767-300 or Boeing 737-Max. Attached to the service hall is a 2.700 m² footprint warehouse, partially on two storeys and a 1.100 m² footprint service building housing offices, specialized repair workshops, and employee amenities on three storeys.

IAV's main scope of work for this highly specialized facility was:

- All concrete casting and concrete treatment of the foundations, underground technical service rooms, and floor slabs on all elevations.
- All piping works, installation, testing and commissioning, including the following systems, some of which are highly special for this kind of facilities:
 - Waste water system
 - Drainage system
 - Snow melting system both indoors and outdoors
 - Heating system, including specialized radiant ceiling panel heaters in the main service hall (15,5 m elevation) and the warehouse (9,5 m elevation)
 - Pressurized air systems, including working air for hand tools and "start air" for the jet engines from a central fixed compressor (Atlas Copco)
 - Sprinkler and other water filled firefighting systems
 - A specialized high expansion foam, automatic, fire suppression system for the main service hall. The system has capacity to fill the hangar with high expansion foam up to 5,0 m elevation in less than three minutes through foam generators in the ceiling. Manufacturer of the equipment is "TYCO Fire Protection Products"
 - Cooling system
 - Potable water distribution system
 - Sanitary water distribution system
- Installation of all electrical sub systems, including testing and commissioning of some:
 - Earthing system both concrete embedded, buried in the ground and other
 - 3x400V, 2.000A Main distribution board
 - All 3x400V sub distribution panels
 - Feeders from MV distribution station operated by the Power Utility of the local municipality
 - 400V, 400A power distribution trunking systems
 - Cable ladders and all other cable routing systems
 - All 230/400 V power distribution
 - DALI controlled lighting systems, including programming and commissioning
 - LAN-system including panels, socket outlets, Fiberoptic and Cat.6 cables
 - Fire detection system (commissioned by the system operator)
 - Security and access control system (commissioned by the system operator)
 - HVAC control system cabling (programming, testing and commissioning by the control system suppliers)