

Local cooling

Local cooling is the most common cooling system globally. The local cooling system provides cooling for a single building, for example a hotel, conference center, sports center, hospital, or an office block. The chiller plant and the storage facility are located inside each building, the cooling source usually being a chiller. Depending on availability some sort of free cooling might be used, alone or in combination with the chiller. The cold from the source water is transferred to the building's internal cooling system through a plate heat exchanger. OLA (Optimization Liquid Air), Alfa Lava's new special software, will let you calculate an optimized combination of two heat exchangers, for example a dry liquid cooler and a plate heat exchanger. This optimized package will make your system work at just the right capacity. A fine-tuned system will run smoother and minimize maintenance. It will also enable you to choose the most economical cooling source solution for each season, for example free cooling in the wintertime. Another application is installing plate heat exchangers at different stories in tall buildings to solve the cooling system's pressure problems. These heat exchangers act as pressure interceptors, transferring the cold between the separate zones, and also protecting the air handling units and other equipment from excessive pressure.

