Establishing the Steam Network System from Waste Heat Recovery in Industrial Waste Complex

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This is aim to use and recycle the wasted heat from the dispose process of the incineration plant facility in Daegu. Furthermore, the saturated vapor is to be supplied for the Industrial Complex as energy resource.

It is to receive the superheated steam that shows 250°C temperature and 18kg/cm\(^2\) steam pressure from the Boiler system of the incineration plant facility. This condition is not suitable for end-users’ specification of the manufacturing process. The Desuperheater is to be researched and developed for controlling high temperature and steam pressure. It is necessary to calculate condition of product vapor for establishing the steam network with water cooling and condensate system. The Heat Reclaiming Steam Arising System is to reduce the temperature to 220°C and increase the pressure to 22kg/cm\(^2\) at the final point of product supply line.

It is expected Environmental and Economical effects with establishing optimum network for the use of waste heated vapor. Environmentally, it could reduce the Global Warming Potential, use fossil fuel and Green-house gases. Economically, it will bring down the production cost of end-users by using the wasted heated vapor.

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