



Pressure Injection 1

Location	Ukraine (Installation: May 2021)	Hydra-Cell model	4 off G25XKCTHFEHH + Oil Cooler
Type of application	Pressure Injection	Flow rate	0 to 16m3/hr
Liquid	Hot Water	Pressure	20 barg
Application details	A power station in the North of Kiev needed to increase their steam generation process capacity; this increase in capacity needed to be adjustable and deliver from 0 to 100% and capacities in between,		

depending on the constant but variable demand.

The hot water feed pumps needed to be able to feed the steam generator with the same wide range of flow rates. The demand changes from minute to minute so the flexibility and accurate control of the hot water feed pumps was critical.

Multistage centrifugal pumps were considered but due to the wide range of demand of the injected hot water, and the design complexity of multistage centrifugal pumps that would have been needed to achieve this, the Hydra-Cell pump was chosen for its simple system design to achieve the wide range of operation.

Advantages of Hydra-Cell pump on this application

Hydra-Cell pumps were chosen for the following reasons:

- · Ability to run from 0 to max rpm at full rated discharge pressure giving a wide range of adjustable flow rate by simply controlling the pump rpm and hence flow rate with an inverter.
- · A true positive displacement pump means that the flow rate is independent of discharge pressure making the installation design very simply to achieve this.

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