

CASE STUDY:
Insertion of branches using Hot Tapping Service



Alstern Technologies is a renowned pipeline solutions provider. We provide one-stop cost-effective pipeline solutions to our customers with the objective of optimizing their assets while minimizing operational downtime.

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 Unit 2, 26/F, Global Gateway Tower
63 Wing Hong Street, Cheung Sha Wan, H.K.
 enquiry@alstern-technologies.com.hk
 <https://alstern-technologies.com.hk>
 (852) 2647 8163



Case Study: Insertion of branches using Hot Tapping Service

Background information:

One building of University, in Hong Kong, are ongoing the building extension project. To add up one new chiller to existing A/C system, creating branches without interruption of existing operation is the critical step for the extension.

Considering that the air condition system is always in functional, the branches must be same size as main pipe, Hot tapping is the best and feasible method that could create the branch insertion work without affecting the existing system operation.

Evaluation & Propose Solution:

Alstern Technologies conducted an on-site survey first. Our specialists fixed the hot tapping area and measure all dimension data such as the work spacing, pipe thickness and pipe circumference.... etc at first.

Another critical issue is new branches are also 600mm pipe which is "Size-To Size Hot Tapping". As one responsible Pipeline Solution Company, Alstern Technologies proposed to customize two "Full Encirclement Hot Tap Saddle/Fitting" welding on each pipe first, which help to maintain the integrity of pipe, after "Size-To Size Hot Tapping".

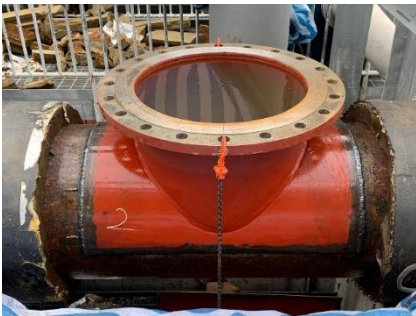
Site Operation:

Firstly, our specialists arrived to site in advance for monitoring all delivery routing in safety priority. As we know, all gate valves, accessories and hot tap machine are bulky, so we need lifting machine to transport from ground floor to the rooftop of the building.

For the hot tapping works, we first cleaning up the pipe surface and welding the full encirclement hot tap fittings. The fittings will full coverage the pipe in 360 degree and the welding work must be carried out by professional welder and weld in correct sequence, right alignment. Otherwise, hot tap may be failed.

After all, our specialists performed the water pressure test on the Hot Tap Fitting. While pass the pressure test, we place the hot tapping machine on the top of gate valve, then open gate valve and start coring process.

While finished the coring process with calculation, retract cutting assembly from pipe and closed the gate valve. Finally, took out the coupon retained in our machine, and the hot tap work are then completed.



Weld up encirclement hot tap fittings



Installing the gate valve on the fittings



Conduct the pressure test



Install Hot tapping machine to coring



Retain coupons with smooth cutting edge from pipe