## A solution to rapid changes of nozzle size in bottom pour applications



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When using stopper and nozzle technologies for bottom pouring applications it may be desirable to change nozzle diameters between fills of the ladle or even between castings. In normal circumstances this would not be possible as it would require removing and replacing the nozzle and stopper.

Foseco VAPEX FOSFLOW is a new system that allows for changes in nozzle diameter, even in a full ladle.

VAPEX FOSFLOW alumina graphite nozzles use both carbon and ceramic bond technology. The combination of the two bonding systems provide unique beneficial properties for steel foundry ladle applications.

The system contains a BASE NOZZLE which remains in the refractory bottom of the ladle and an interchangeable POURING NOZZLE with possible different inner diameters. This POURING NOZZLE can be replaced quickly even within a ladle cycle.

Foseco provides 4 different VAPEX FOSFLOW series > 45, 65, 100 and 100 extended for large ladles. The VAPEX FOSFLOW nozzle should be used in conjunction with VISO monobloc stopper technology that also allows multiple uses of the stopper.

Benefits are mostly found in steel foundry applications:

- The pouring nozzle can be changed quickly
- Multiple use of the stopper & nozzle system resulting in labour cost reduction
- No cooldown of the ladle resulting in energy savings and increased ladle lining performance

Application for use of the VAPEX FOSFLOW concept, the nozzle needs to have a different fixing system (see illustration). FOSECO can provide all the necessary metal parts which makes it easy to modify the nozzle ladle mechanism.





**Contact:** If you have any further questions about the VAPEX FOSFLOW SYSTEM, please contact your local Foseco team:

Watch our video to learn more about VAPEX FOSFLOW

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