

PERDAC Ltd

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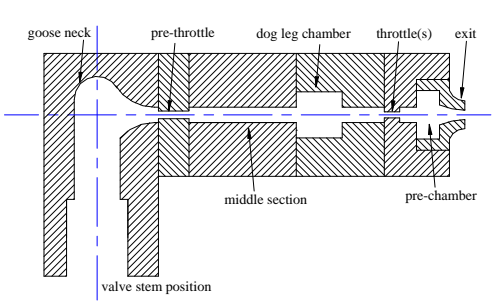
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► Expertise in aerosols and pump sprays design

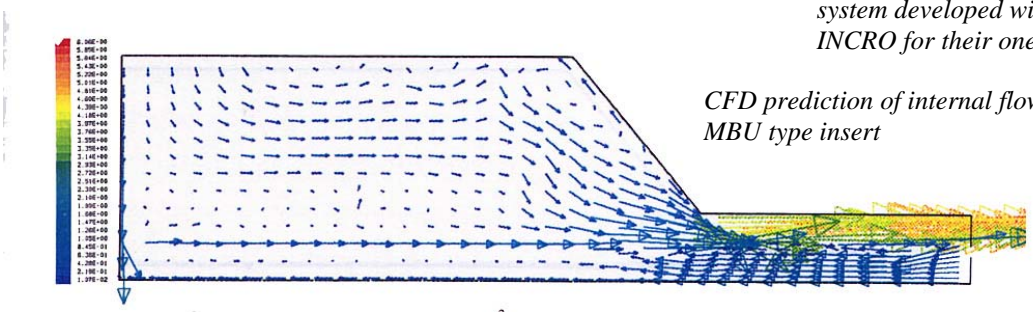
Our directors, Professor Andrew Yule and Dr Ghasem Nasr, have a total of 50 years experience in spray technology for many applications. In particular Professor Yule brings to Perdac more than 20 years of experience working on new and improved designs for consumer & industrial aerosols, pumps etc. with the typical formats shown on the right.



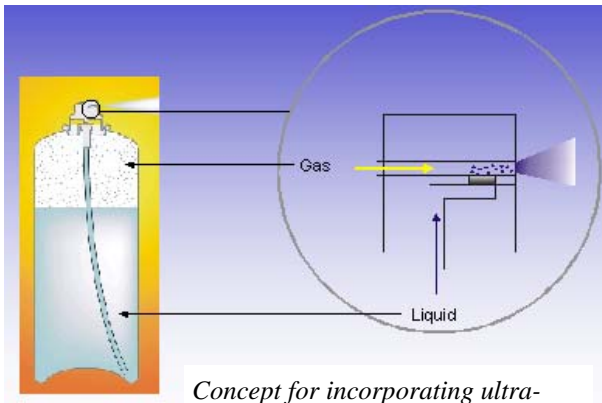
Our facilities in the Spray Research Group Laboratory (SRG) at Salford University allow understanding and developing improved and new actuator and nozzle insert designs: these include manufacturing methods for prototypes (right), a range of laser and high speed video instruments for analysing device performance and spray quality and also Computational Fluid Dynamics methods to predict internal flow and aid design of systems. (below).



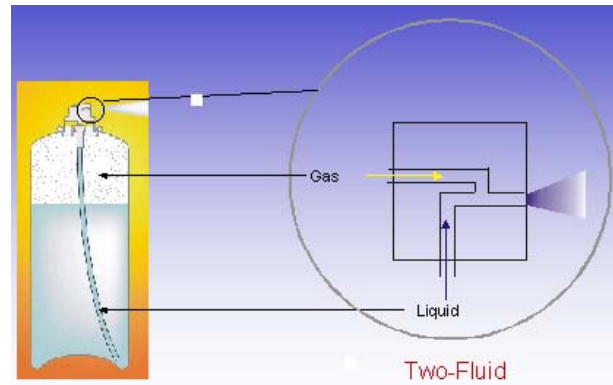
Multi-part prototype of patented actuator system developed with Lionstar Corp Ltd and INCRO for their one-piece split actuators



CFD prediction of internal flow in MBU type insert



Concept for incorporating ultrasonic atomization in actuator



Incorporation of compressed gas to aid atomization (conceptual view only)

- Our expertise is assisted by the experience of our team in many areas of Spray technology, from fuel injectors to medical devices and paint sprays.
- As indicated above we have background in transferring technology such as air assist atomization, to the compressed gas aerosol area, and also ultrasonic atomization as applied to portable devices.
- We can choose, improve, design or optimise inserts and can apply practical and theoretical principles of fluid dynamics to obtain desired spray performance.

The principal areas of interest to industry include:

- *Reducing can pressure/VOC content whilst maintaining spray quality*
- *Production of narrow drop size distributions.*
- *Reduction of inhalable fraction.*
- *Targetting certain drop sizes, spray patterns and penetration.*
- *Spraying difficult liquids*
- *Fine atomization with low energy utilisation.*



Advanced optical methods analyse break up into 50 micron drops near insert

Contact us via email, or fax in order to discuss how we might help you. Initial discussions are confidential and without charge. Perdac always works with its clients under conditions of strict commercial confidentiality and meets the client's requirements regarding IPR assignation.

Results of some of our past projects have been published following patent protection by our clients: please ask us via email if you are interested