For most people, Matthew Algie is a name that readily springs to mind but their high-class products, tilldate the taste buds of 5 million of us every week. DMN UK Ltd are delighted that one of their DMN WESTINGHOUSE model M-TDV Multi-Port Diverter Valves was chosen by the UK’s top independent coffee roaster as the ‘Clapham Junction’ for their coffee bean distribution system. This distribution system forms a key part of a £1 million factory refurbishment. Since its installation in November last year, the M-TDV has handled roasted coffee beans at the rate of 2.5 tonnes an hour, switching destinations a minimum of 20 times a day, without missing a beat.

Matthew Algie supply coffee as both roasted beans for espresso bars and restaurants, and as roast and ground filter coffee for the hotel sector, as well as a broad range of other customers. The freshness of the coffee makes a real difference to the quality in the final cup. Accordingly, roasted coffee beans are vacuum conveyed from the roaster, through a metal detector and then, via the M-TDV to any of the 3 bean packing machines or either of the 2 cryogenic coffee grinding plants – as required. Because the M-TDV is such a vital component in the production process, its reliability is essential.

Mr Matthew Algie founded the company as a tea blender service, upgrade and repair, and for which they offer user training too. The vacuum conveying distribution system, in which the M-TDV is such a key component, uses nitrogen as the conveying medium. This nitrogen is continuously filtered and recycled requiring only nominal topping up from time to time. The M-TDV fits into a very restricted space and is vertically oriented such that the inlet is at the top and the 6 outlets are at the bottom – of which 5 are currently in use. The 6th outlet offers the opportunity for future expansion.

The layout for the Matthew Algie factory refurbishment was designed by Peter McGadie and his team. All production, handling and packaging equipment was specified, installed and trained by them. As Mr McGadie confirms, “When we realised that we needed a ‘Clapham Junction’ within our nitrogen rich vacuum distribution system, we turned to the M-TDV to any of the 3 destinations (converging). It can be mounted vertically or horizontally and will handle anything that can be conveyed either under pressure (up to 1 bar) or vacuum - from the finest of powders, through pellets, tobacco and beans, to small plastic components such as finished bodies. Depending on the maximum size, the M-TDV can be furnished with a maximum of 15 ports. M-TDVs have contact area for route beans to the packing machines or to the cryogenic coffee grinders, we acquired the technical magazines and the world wide web. DMN were the only company we came across offering just what we wanted.” Mr McGadie continues, “DMN’s service has been excellent. They are ably supported by Jim Inglis, their Scottish Representative, who assisted us to commission the M-TDV. The valve is well engineered and is trouble free.”

The DMN-WESTINGHOUSE M-TDV is designed to divert pneumatically conveyed products from one to multiple destinations (diverging) or from multiple sources to one destination (converging). It can be mounted vertically or horizontally and will handle anything that can be conveyed either under pressure (up to 1 bar) or vacuum - from the finest of powders, through pellets, tobacco and beans, to small plastic components such as finished bodies. Depending on the maximum size, the M-TDV can be furnished with a maximum of 15 ports. M-TDVs have contact area for route beans to the packing machines or to the cryogenic coffee grinders, we acquired the technical magazines and the world wide web. DMN were the only company we came across offering just what we wanted.” Mr McGadie continues, “DMN’s service has been excellent. They are ably supported by Jim Inglis, their Scottish Representative, who assisted us to commission the M-TDV. The valve is well engineered and is trouble free.”