

Dust Catcher **dustcatcher**

Dustcatcher discharge control

One of the most critical and demanding applications for any bulk materials shut-off valves is within the main dust collection process line of a blast furnace.

The continuous nature of the blast furnace ironmaking process results in a constant supply of iron oxide dust



particles being delivered to the dust collection silo. Subsequent regular transfer of the dust from the silo for recycling is critical and is controlled by a **dustcatcher** discharge valve at the silo outlet.

Here, the valves ability to cope with this notoriously abrasive material, often at temperatures of up to 200°C, is paramount to the continuous efficiency of the iron-making process.

Despite the importance of this crucial valve, there are few suitable options on the market. Many steel producers simply opt for a standard slide or pinch valve and accept the penalty of very short service life and the need for frequent replacement.

Specialist control valve

The **dustcatcher** Dome Valve™ comes with the promise of long service life, exceptionally high resistance to abrasion and up to 480°C temperature rating. When open the valve provides an unobstructed full bore material flow. Designs are available for pressures of up to 30 bar. Valve sizes range from 200 to 500mm bore.

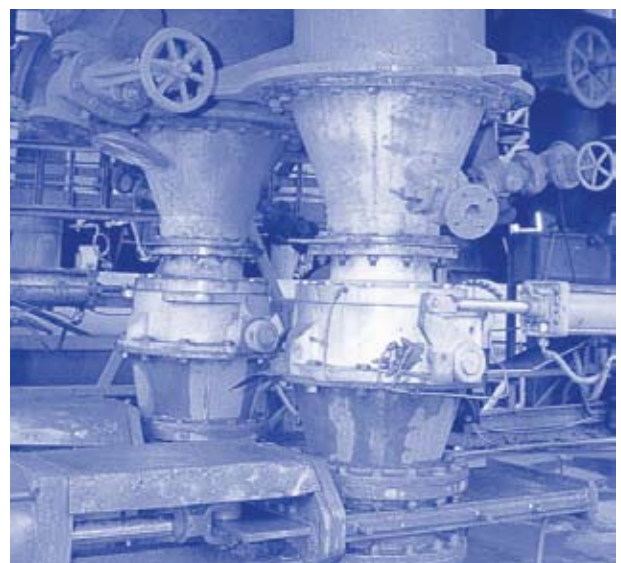
Corus plants at Llanwern, Redcar and Krupp- Hoesch, all acknowledge the exceptional performance characteristics of this unique product. Corus at Llanwern have been using 200mm **dustcatcher** Dome Valves™ for over five years on two blast furnace dust collection systems.

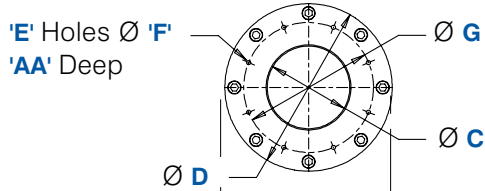
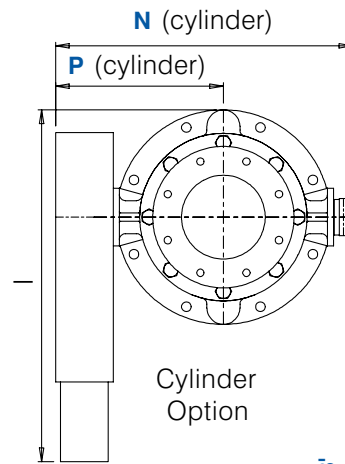
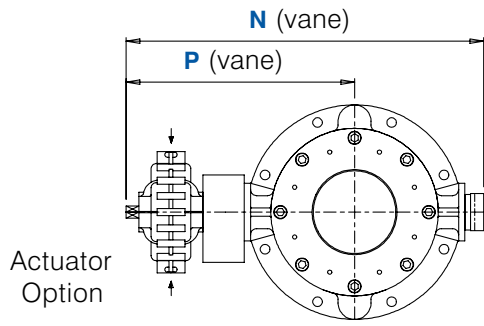
Corus Redcar have six 300mm **dustcatcher** Dome Valves™, working in three pairs, mounted on the outlet to the blast furnace dustcatcher silo and discharging to a tanker loading point.

Krupp-Hoesch fitted 400mm **dustcatcher** Dome Valves™ on their three blast furnaces.

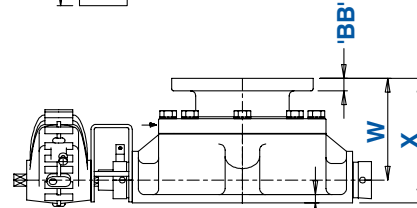
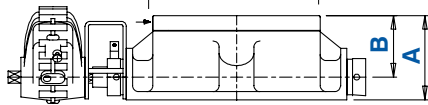
Purpose designed

In developing the **dustcatcher** valve design, Clyde recognises that competitors' products fail due to the extremely abrasive furnace dust quickly wearing away internal components. The dustcatcher solution includes the provision of a tough internal coating to components likely to come into contact with the iron oxide dust. This is combined with an inflatable seal arrangement which minimises wear, ensures maximum operating efficiency and prolongs service life.

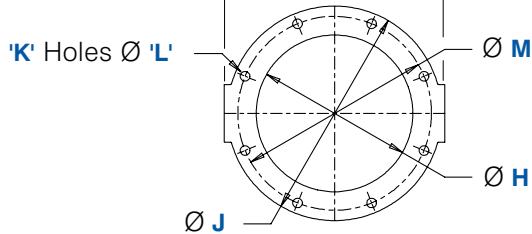




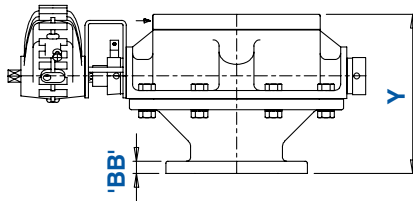
STANDARD BULKHEAD



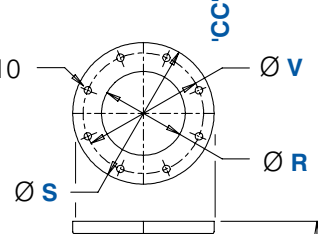
TOP ADAPTOR



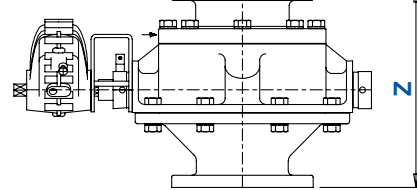
BOTTOM ADAPTOR



'T' Holes Ø 'U'
BS4504 Table 10



IN-LINE



DV	A	B	ØC	ØD	E	ØF	ØG	ØH	I	ØJ	K	ØL	ØM	N (rota)	N (vérin)	P (rota)	P (vérin)	ØR	ØS	T	ØU	ØV	W	X	Y	Z	AA	BB	CC
200	205	150	206	406	8	M12	315	390	928	520	8	22	470	870	683	555	368	203	343	8	22	295	247	302	388	485	16	30	20
250	249	189	260	390	6	M12	350	480	1212	620	8	26	560	1121	863	725	470	254	407	12	22	350	267	327	487	565	18	32	25
300	283	218	306	460	6	M16	410	551	1242	690	12	26	630	1212	963	763	514	305	483	12	22	400	339	404	558	680	18	35	28
400	370	285	410	595	16	M16	545	739	1508	1000	12	38	870	1613	1378	999	765	400	580	16	26	515	446	531	723	884	25	45	35

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