

Quadro® Comil®

DRY GRANULATION SIZING (FROM FLUID BED DRYER)

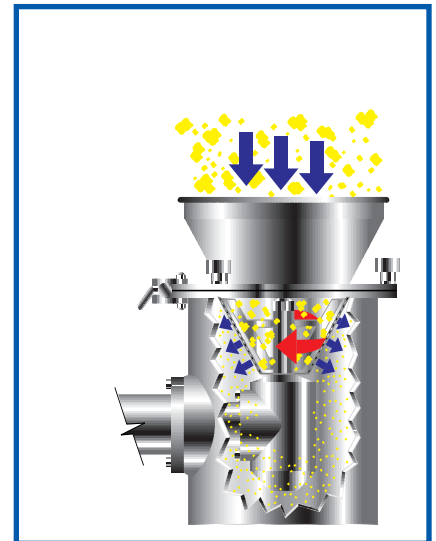
BACKGROUND/REQUIREMENT

In the wet tablet manufacturing method, the dry ingredients are wetted down and mixed in a mixer. The wet mass is then size reduced (see Quadro bulletin AP04R1) and transferred to a fluid bed dryer for drying. The dried granules are then size reduced to a specified particle size distribution prior to the tableting process. A multinational pharmaceutical company was using an oscillating granulator. They were searching for a replacement mill that could provide the tight particle size distribution required and eliminate metal contamination which resulted from regular screen breakage.

COMIL® PERFORMANCE

Due to the Comil®'s gentle grinding action and quick discharge of already properly sized particles, a tight particle size distribution was easily obtained. The conical shape of the Comil® screen provides the necessary structural integrity for the screen to keep a tight gap between the screen and impeller without any metal to metal contact, thus eliminating metal contamination. The customer was also pleasantly surprised by the extremely high capacity of the Comil® and the ease of screen change which further reduced the process batch time.

Quadro also suggested that the customer use a Quadro Vac® for conveying the sized dry granules directly from the Fluid Bed dryer bowl, through the Comil® to their IBC (dust free one step milling/conveying process). The operator uses a pick-up wand that is attached to the inlet of the Comil®, to vacuum up product from the fluid bed dryer bowl. The product then travels through the Comil® and into the Quadro Vac® receiver located above the IBC which was in another room.



EQUIPMENT RECOMMENDATIONS

ALL MODELS "CHOKE/FLOOD" FED

MODEL	SCREEN	IMPELLER	RPM	HP	CAPACITY	
					LB/HR	KG/HR
197S	2A062R	2A1601	2400	1&2	800	360
194S	2C062R	2C1601	1400	5	3900	1750
196S	2F062R	2F1601	900	10	7800	3500
U10	7A062R	7A1601	2400	1&2	850	390
U20	7C062R	7C1601	1400	5	4250	1950
U30	7F062R	7F1601	900	10	8500	3900

SUMMARY

This customer has since purchased five Comil® U20/Quadro Vac® 820 systems. The Comil®s were on adjustable height stands, complete with vacuum attachments for connection to the Quadro Vac®. The Comil® has become an integral step between the customer's drying and tableting operations.