

The experience and production capacity of Vuototecnica has originated a division specially dedicated to the graphics and printing sector. A reference entity, ranging from engineering to services, that offers innovative and advantageous technical solutions under every point of view: performance, reliability, duration and operational economy. A significant demonstration of the Graphic Division specialisation is represented by the new range of products among which:

PNEUMATIC SUCTION AND BLOWING PUMPS

These state of the art multi-ejector (multi-stage) pumps are very versatile and can either suck or blow, according to the requirements, thus representing a true evolution compared to the traditional rotating vane pumps. These pumps feature state of the art ejectors and boast an exceptional ratio between the amount of consumed air and sucked (or generated) air, all to the benefit of operational consumption. Moreover, they adjust the vacuum (or pressure) level and capacity according to the air supply pressure. The state of the art hi-tech materials have considerably reduced the weight allowing them to be installed directly on the machine. The Vuototecnica research centre has focused its attention on noise reduction, with solutions that provide for full soundproofing and no moving parts, thus prolonging duration and eliminating any vibration. Furthermore, these pumps are based on the Venturi principle which exploits the compressed air kinetic energy via in-line ejectors and, therefore, do not develop heat. The excellent compressed air and sucked filtration allows blowing air free from oil vapours, water condensation and impurities, between the sheets of paper to be separated and in the work environment, causing no pollution. Other assets of this safe and competitive technology include a minimal maintenance, limited to a regular filtre cleaning operation, and a reliability with no comparison. The pneumatic suction and blowing pumps are described in the following pages.

VACUUM CYLINDERS

By assembling a vacuum cup onto their perforated stem and creating a vacuum, the cup will quickly come into contact with the sheet or the object to be handled and it will automatically lift it, holding it until the vacuum is excluded. For all these features, this range of cylinders combined with cups are particularly recommended for separating sheets of paper or plastic. The advantages include: high speed operation, automatic compensation of the height of the objects to be lifted, non-rotating stems and extremely easy fixing. These vacuum cylinders are described in the following pages.

CUPS

They come in a large variety of shapes and sizes, to guarantee a quick and safe grip and they can be provided in anti-abrasion natural para rubber, nitrile or oil-resistant rubber, silicon, Viton, polyurethane and other compounds, according to the requirements. Vacuum cups are described in detail in Chapter 1; this chapter, however, will focus on the disc cups only.



Low air consumption and limited weight.
Surprisingly silent operation and total absence of heat.
Great respect for the work environment and minimal maintenance.

TABLES FOR SUCTION PUMPS SELECTION

Max. suction capacity generated by a corresponding electric pump	Max. vacuum generated by a corresponding electric pump							
	-0.1 bar (g)	-0.2 bar (g)	-0.3 bar (g)	-0.4 bar (g)	-0.5 bar (g)	-0.6 bar (g)	-0.7 bar (g)	-0.8 bar (g)
	-10 KPa	-20 KPa	-30 KPa	-40 KPa	-50 KPa	-60 KPa	-70 KPa	-80 KPa
10 cum/h	PA 40	PA 40	PA 40	PA 40	PA 40	PA 40	PA 40	PA 40
15 cum/h	PA 40	PA 40	PA 40	PA 40	PA 40	PA 40	PA 40	PA 70
20 cum/h	PA 40	PA 40	PA 40	PA 40	PA 40	PA 40	PA 70	PA 70
25 cum/h	PA 40	PA 40	PA 40	PA 40	PA 40	PA 70	PA 70	PA 70
30 cum/h	PA 40	PA 40	PA 40	PA 40	PA 70	PA 70	PA 70	PA 100
40 cum/h	PA 40	PA 70	PA 70	PA 70	PA 70	PA 100	PA 100	PA 140
60 cum/h	PA 70	PA 70	PA 70	PA 70	PA 100	PA 140	PA 140	PA 170
80 cum/h	PA 100	PA 100	PA 100	PA 100	PA 140	PA 140	PA 170	PA 200
100 cum/h	PA 100	PA 100	PA 100	PA 100	PA 140	PA 170	PA 200	PA 250
120 cum/h	PA 140	PA 140	PA 140	PA 140	PA 170	PA 200	PA 250	PA 300
140 cum/h	PA 140	PA 140	PA 140	PA 140	PA 200	PA 250	PA 300	-- --
160 cum/h	PA 170	PA 170	PA 170	PA 200	PA 250	PA 300	-- --	-- --
180 cum/h	PA 170	PA 170	PA 200	PA 250	PA 300	-- --	-- --	-- --
200 cum/h	PA 200	PA 200	PA 200	PA 250	PA 300	-- --	-- --	-- --
250 cum/h	PA 250	PA 300	PA 300	PA 300	-- --	-- --	-- --	-- --
300 cum/h	PA 300	PA 300	PA 300	-- --	-- --	-- --	-- --	-- --

E.g.: To replace an electric pump with a capacity of 80 cum/h and a residual vacuum of 0.6 bar (g).

Cross the line "80 cum/h" with the column "0.6 bar (g)" column in the table. At the intersection point, you will find that PA 140 is the ideal pump for the replacement.

TABLES FOR BLOWING PUMPS SELECTION

Max. blowing capacity generated by a corresponding electric pump	Max. overpressure generated by a corresponding electric pump							
	+0.1 bar (g)	+0.2 bar (g)	+0.3 bar (g)	+0.4 bar (g)	+0.5 bar (g)	+0.6 bar (g)	+0.7 bar (g)	+0.8 bar (g)
	+10 KPa	+20 KPa	+30 KPa	+40 KPa	+50 KPa	+60 KPa	+70 KPa	+80 KPa
25 cum/h	PS 40	PS 40	PS 40	PS 40	PS 40	PS 40	PS 40	PS 40
30 cum/h	PS 40	PS 40	PS 40	PS 40	PS 40	PS 40	PS 40	PS 40
40 cum/h	PS 40	PS 40	PS 40	PS 40	PS 40	PS 40	PS 40	PS 40
60 cum/h	PS 70	PS 70	PS 70	PS 70	PS 70	PS 70	PS 70	PS 70
80 cum/h	PS 70	PS 70	PS 70	PS 70	PS 70	PS 70	PS 70	PS 70
100 cum/h	PS 70	PS 70	PS 70	PS 70	PS 70	PS 70	PS 100	PS 100
120 cum/h	PS 100	PS 100	PS 100	PS 100	PS 100	PS 100	PS 100	PS 100
140 cum/h	PS 100	PS 100	PS 100	PS 100	PS 100	PS 100	PS 100	PS 140
160 cum/h	PS 140	PS 140	PS 140	PS 140	PS 140	PS 140	PS 140	PS 140
180 cum/h	PS 140	PS 140	PS 140	PS 140	PS 140	PS 140	PS 140	PS 140
200 cum/h	PS 140	PS 140	PS 140	PS 140	PS 140	PS 140	PS 170	PS 170
250 cum/h	PS 200	PS 200	PS 200	PS 200	PS 200	PS 250	PS 250	PS 250
300 cum/h	PS 250	PS 250	PS 250	PS 250	PS 250	PS 300	PS 300	PS 300
350 cum/h	PS 300	PS 300	PS 300	PS 300	PS 300	PS 300	PS 300	PS 300
400 cum/h	PS 300	PS 300	PS 300	PS 300	PS 300	PS 300	-- --	-- --

E.g.: To replace an electric pump with a capacity of 80 cum/h and an overpressure of 0.6 bar (g).

Cross the line "80 cum/h" with the column "0.6 bar (g)" column in the table. At the intersection point, you will find that PS 70 is the ideal pump for the replacement.