

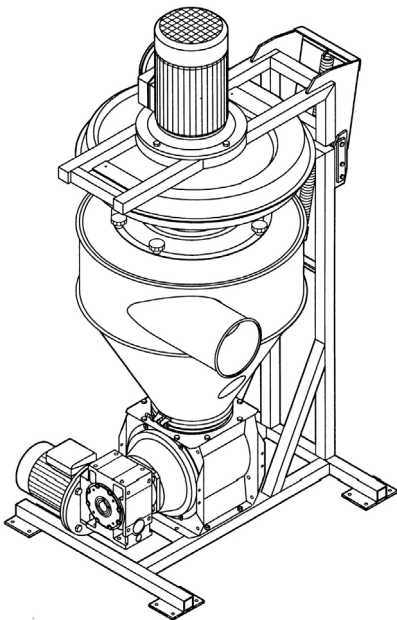
# Polyvac 30/50/100/150

## Data Sheet

The Kongskilde Polyvac is an integrated solution that is uniquely designed for high capacity vacuum conveying.

The Polyvac unit is a combined blower, rotary valve and cyclone package which is designed for conveying granular materials. The top part, containing the blower, can be opened for cleaning and easy changing of cyclone filter basket.

The Polyvac is suitable for conveying plastic pellets, granules, or reprocessed material. When handling materials containing high quantities of dust, it is recommended that the outlet of the Polyvac be connected to a dust collection system.



In combination with Kongskilde's OK160 pipe system, complete systems for pure vacuum or vacuum-pressure conveying can be tailor-made to meet most conveying demands from process to process, or to and from a storage facility. A Polyvac solution ensures a more uniform material feeding rate.

### Principle of Operation

The blower creates a strong vacuum necessary to pick up the material from point A and discharge it through the cyclone and a rotary valve to point B, either directly or through a pressure line.

No material passes through the fast moving blower rotor, thus no additional dust is created in the material and also no excessive wear and tear on the blower housing and rotor.

### Applications

A typical application for the Polyvac is conveying of pellets or regrind material.

The Polyvac is very suitable for bulk conveying of pellets and regrind material from a gaylord or granulator to a moulding machine or extruder. The Polyvac is unique for the continuous evacuation of reprocessed material from shredders and granulators. It creates a strong vacuum and thereby ensures sufficient airflow through the granulator for cooling.

When used in combination with the Kongskilde KIA Aspirator solutions, the Polyvac feeds plastic regrind material into the Aspirator, where the material is cleaned and ready for re-use.



## Technical Data

The Polyvac is designed for continuous flow of material through the attached RF 20 rotary valve. If the Polyvac is used as a vacuum unit, an RF 20 E-type should be

used. If the Polyvac is used as a vacuum-pressure unit, an RF 20 D-type should be used.

Type	30	50	100	150
Blower, hp	3	5	10	15
Rotary valve, hp	0.75	0.75	0.75	0.75
Electrical supply US/CND	3 x 460 V / 60 Hz / 3 x 575 V / 60 Hz			
Weight, lbs	100	168	240	345
Height with hinge for blower, in	n/a	n/a	14'2"	14'5"
CFM	1200	1200	2100	2500
Pipe diameter, mm	160	160	200	200

## Conveying Capacities

Capacities are based on plastic pellets or similar granular material with a bulk density of 35 lbs/cubic foot and a particle size of 1/8". Charts are based on a 160mm material conveying line with 2 elbows included. For each additional elbow add 16' to the chart's total pipe length.

Note: Indicated capacities listed below are based on conveying of plastic pellet material. To obtain the exact capacity of a given installation, Kongskilde offers to test the specific material which are to be conveyed.

### Polyvac 30

		lbs/hr									
Vertical height (ft)											
		20	40	60	80	100	120	140	160	180	200
50				2196	1995	1818	670	1531	1386	1272	1165
40			2635	2364	2148	1957	1802	1647	1491	1368	1255
30			2820	2529	2298	2094	1928	1762	1597	1486	1342
20	3360	3006	2697	2451	2232	2056	1880	1702	1561	1431	
10	3529	3192	2864	2601	2371	2184	1995	1807	1658	1520	

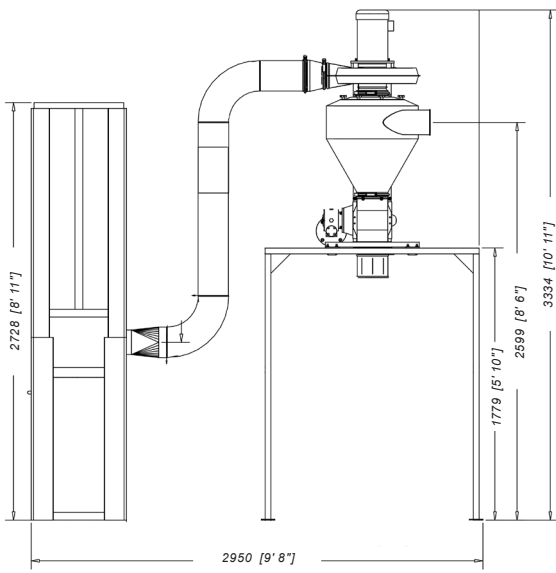
1. If the system is used to convey regrind material/ flake, factor the capacities by 0.8.

2. If system is used to convey material utilizing a 4" material line, factor capacities by 0.4.

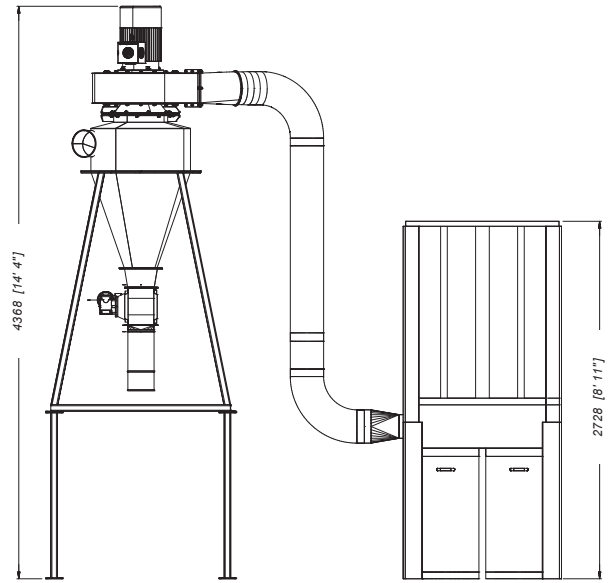
3. If capacities are required beyond the chart dimensions please consult with Kongskilde.

### Polyvac 50

		lbs/hr									
Vertical height (ft)											
		20	40	60	80	100	120	140	160	180	200
50				5490	4989	4545	4188	3828	3465	3180	2913
40			6588	5910	5370	4893	4506	4119	3729	3420	3138
30			7050	6234	5745	5235	4821	4407	3993	3715	3357
20	8400	7515	6744	6129	5580	5142	4701	4257	3903	3579	
10	8823	7980	7161	6504	5928	5460	4989	4518	4146	3801	



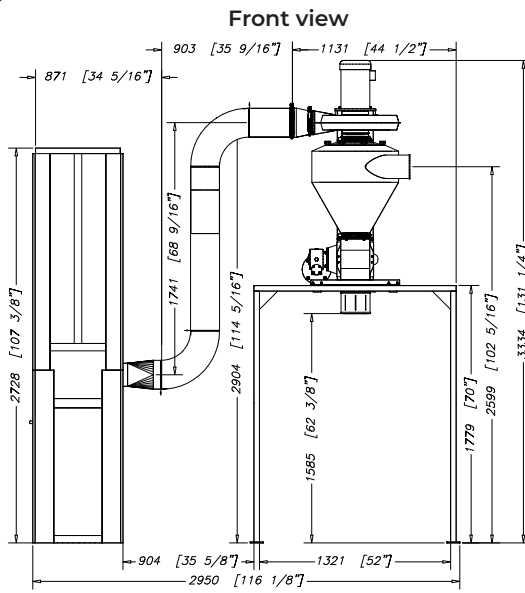
Polyvac 30/50 with gaylord height stand and K-200 series filter



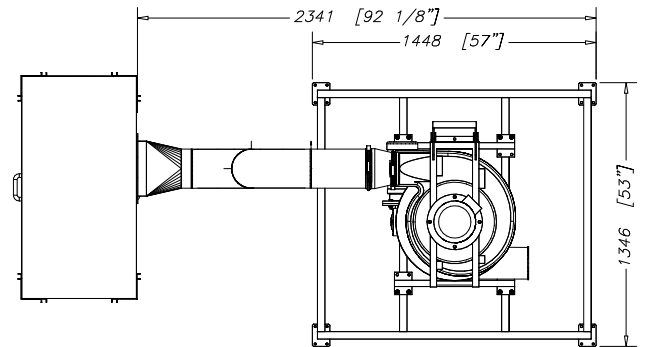
Polyvac 100/150 with K-500 series filter

## Dimensions

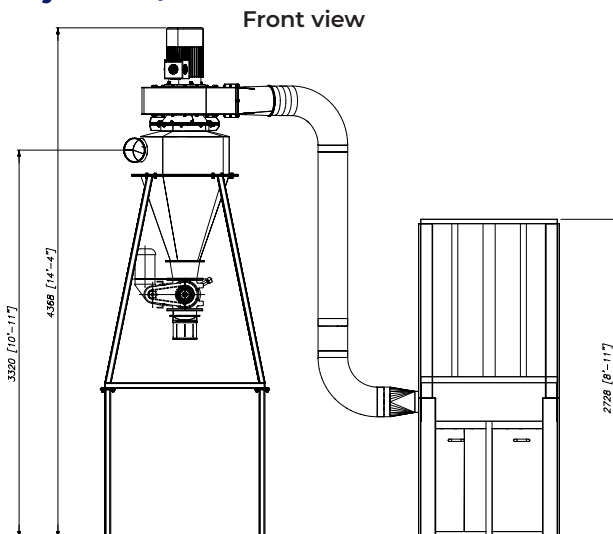
### Polyvac 30/50



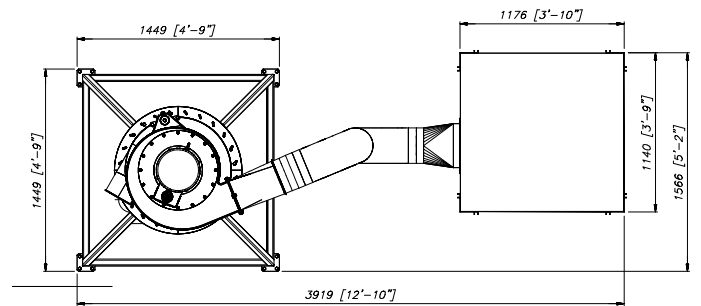
### Top view



### Polyvac 100/150



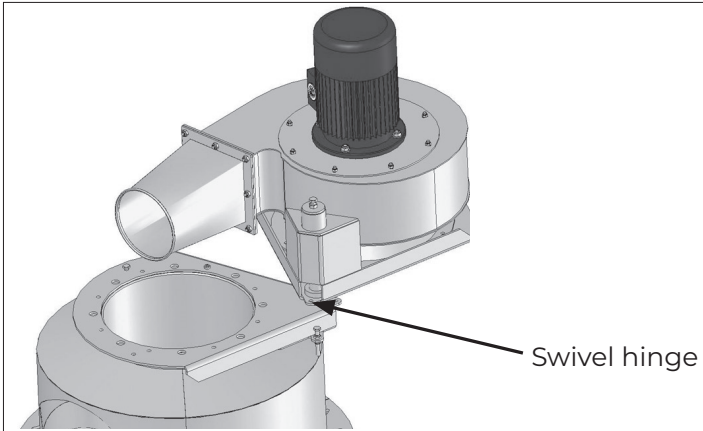
### Top view



# Accessories

## Swivel hinge for the blower:

The standard Polyvac 100/150 units can be fitted with a swivel hinge for the blower that enables easy inspection, cleaning or maintenance.



Subject to be changed without notice. 123002110 KNA/Polyvac/DATA/0223

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