

**Table calculation**

**Vacuum conveying**

Client:

Filepath: Quick modeling

Product: Fly ash

Altitude: 0 m

Convey distance horizontal: 72 m

Convey distance vertical: 21 m-up 0 m-down

Total conveying length: 93 m

Number of Bends: 3

Pipe diameter begin: 203 mm

Pipe diameter end: 254 mm

Pump displacement: 1.138 m3/sec (Screwcompressor + pre-inlet)

Gas volume end: NaN m3/sec

MM-DD-YY: 09-02-2009

Two vessel + suction nozzle installation

**Table**

Vacuum bar	Suction capacity tons/hr	Interrupted capacity tons/hr	Solid Loading Ratio SLR	gas velocity begin m/sec	gas velocity end m/sec	System energy consumption kWh/Ton	residence time seconds	Sediment
0.5	35	34	14.4	23.1	52.5	1.95	6.75	No sedimentation
0.4875	34.5	34	13.9	23.7	52.5	1.93	6.65	No sedimentation
0.475	34	33	13.3	24.3	52.5	1.96	6.57	No sedimentation
0.4625	33.4	33	12.7	24.9	52.3	1.93	6.49	No sedimentation
0.45	32.7	32	12.2	25.4	52.4	1.97	6.41	No sedimentation
0.4375	31.8	31	11.6	26	52.3	2	6.34	No sedimentation
0.425	30.9	30	11	26.6	52.2	2.04	6.27	No sedimentation
0.4125	29.8	29	10.3	27.2	52.3	2.09	6.21	No sedimentation
0.4	28.6	28	9.7	27.7	52.4	2.13	6.15	No sedimentation
0.3875	27.2	27	9	28.3	52.4	2.18	6.1	No sedimentation
0.375	25.5	25	8.3	28.8	52.2	2.32	6.04	No sedimentation
0.3625	23.7	23	7.6	29.4	52.3	2.49	6	No sedimentation
0.35	21.7	21	6.8	29.9	52.2	2.69	5.95	No sedimentation
0.3375	19.5	19	5.9	30.4	52.3	2.93	5.92	No sedimentation
0.325	17.1	17	5.1	30.9	52.2	3.23	5.88	No sedimentation
0.3125	14.4	14	4.2	31.3	52.4	3.87	5.85	No sedimentation
0.3	11.7	11	3.4	31.8	52.6	4.85	5.82	No sedimentation
0.2875	8.9	8	2.5	32.2	52.5	6.57	5.8	No sedimentation
0.275	6.3	6	1.7	32.6	53.3	8.63	5.77	No sedimentation
0.2625	3.7	3	1	33	53.4	17	5.75	No sedimentation
0.25	0	0	0	33.1	NaN	Infinity	2.79	No sedimentation

Empty pipeline system pressure drop: NaN mmWC

Buttons: Back to start menu, Print table, New Calculation