

0.34 m3/sec

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Part	length	v-air	v-product	press.drop	v-wall/v-susp	sediment
1 intake	1.0	45.4	21.9	563.	8.9	■■■■■■■■■
2 pipe	2.0	44.8	28.2	693.	8.7	■■■■■■■■■
3 bend		44.9	16.8	731.		
4 pipe	8.0	44.5	30.3	1235.	8.5	■■■■■■■■■
5 bend		44.6	18.2	1273.		
6 pipe	51.0	57.5	38.7	4375.	9.6	■■■■■■■■■
7 bend		57.9	23.1	4426.		
8 pipe	2.3	59.1	34.4	4619.	9.7	■■■■■■■■■
9 outlet		59.1	34.4	4809.		
10 filter		0.5		4900.	v-filter 0.48 m/min	

No booster > Length 64.300 2.08 sec 25.kW 12.69 kWh/ton  
 Francesco Pebble Lime francnd Re = 3.02 [ENTER] to continue

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Francesco REMARK : 07-07-2008  
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 PRODUKT : Pebble Lime

Pipeline capacity .....	= 1.95 ton/hr	Convey Length	= 64 m
System-pressure.(airlock) ..	= 4300. mmwC	Number of Bends	= 3 -
Q-pump.....	= 0.340 m <sup>3</sup> /s	D-begin =100 D-end =100	
Q-convey-pipe .....	= 0.384 m <sup>3</sup> /s	Outlet force ..	= 160 N
loading-ratio .....	= 1.25 - -	(dynamic)	
NO BOOSTER		T-Pebble 73.6/ 45.6	Deg.C
Ambient temperature .....	= 40.0 °C	T-out compressor = 143.	Deg.C
Reynoldsnumber ..[ Re ]...	= 3.02 --	Cooled heat compr=	0 kW
spec.energy-consumption...	= 12.69 kWh/ton	T-out booster ...=	0. Deg.C
backpressure at pipe-end..=	-600. mmwC	Cooled heat boost=	0 kW
Δp-accel.excl.prod.resist.=	265. mmwC	Compr power .....	= 25. kW
Δp-suspension.....	= 40. mmwC	Booster power ...=	0 kW
Δp-lifting.....	= 14. mmwC	-----	
Δp-airfriction.....	= 3413. mmwC	Total power .....	= 25 kW
Δp-productresistance.....=	566. mmwC	Mass in pipeline..=	1 kg
Δp-intake productcolumn...=	100. mmwC	Rotary lock cap..=	16 t/hr
Δp-intake .....	= 376. mmwC	Empty pipe dp....=	3794 mmwC
Δp-nozzle .....	= 563. mmwC	[ENTER] to continue	
Δp-filter.....	= 91. mmwC		
density product/air mix ..=	2.7 kg/m <sup>3</sup>		

0.17 m<sup>3</sup>/min

Part	length	Press: v-air	v-product	Press.drop	prod.loss.fact	v-wall/v-susp	sediment
1 intake	1.0	27.6	12.7	260.	4.8		■■■■■■■■■
2 pipe	2.0	27.4	16.5	315.	4.8		■■■■■■■■■
3 bend		27.4	9.8	327.			
4 pipe	8.0	27.5	17.3	567.	4.7		■■■■■■■■■
5 bend		27.6	10.4	580.			
6 pipe	51.0	30.6	20.8	1714.	5.0		■■■■■■■■■
7 bend		30.8	12.4	1728.			
8 pipe	2.3	30.9	18.1	1799.	5.0		■■■■■■■■■
9 outlet		30.9	18.1	1850.			
10 filter		0.3		1875.	v-filter 0.25	m/min	

5/5 2.0 tons/hr Press: 1275 Press.drop : 1875 prod.loss.fact 0.01000  
 No booster > Length 64.300 3.64 sec 8.kW 4.24 kWh/ton  
 Francesco Pebble Lime francd Re = 1.58 [ENTER] to continue

Parameter	Value	Unit
PRODUCT	Pebble Lime	
Pipeline capacity	1.99	ton/hr
System-pressure (airlock)	1275.	mmwC
Q-pump	0.170	m <sup>3</sup> /s
Q-convey-pipe	0.199	m <sup>3</sup> /s
loading-ratio	2.46	-
NO BOOSTER		
Ambient temperature	40.0	°C
Reynoldnumber ..[ Re ]	1.58	--
spec.energy-consumption	4.24	kWh/ton
backpressure at pipe-end	-600.	mmwC
Δp-accel.excl.prod.resist.	138.	mmwC
Δp-suspension	96.	mmwC
Δp-lifting	24.	mmwC
Δp-airfriction	1037.	mmwC
Δp-productresistance	324.	mmwC
Δp-intake productcolumn	100.	mmwC
Δp-intake	121.	mmwC
Δp-nozzle	260.	mmwC
Δp-filter	25.	mmwC
density product/air mix	4.1	kg/m <sup>3</sup>
Convey Length	64	m
Number of Bends	3	-
D-begin	100	
D-end	100	
Outlet force	85	N
(dynamic)		
T-Pebble	51.8 / 40.9	Deg.C
T-out compressor	148.	Deg.C
Cooled heat compr	0	kW
T-out booster	0.	Deg.C
Cooled heat boost	0	kW
Compr power	8.	kW
Booster power	0	kW
Total power	8	kW
Mass in pipeline	2	kg
Rotary lock cap.	16	t/hr
Empty pipe dp	1095	mmwC

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