

A5 Test

MELANGE COTTON

COUNT	Ne 30	
Ring D	40 mm	
Comparative	15.000 rpm	17.500 rpm

Parameter	Conventional	Spinhole	U/kg
Parameters for Soliman			
Number of spindles, Z	1008	1008	0
Traveller wieght, G (mg)	50	20	
Ring diameter, Dr (cm)	4	4	
Bobbin diameter, d (cm)	3,5	3,5	
Bobbin track, h (cm)	18,5	18,5	
Spindle gauge, g (cm)	7	7	
Spindle speed, n (rpm)	15	17,7	
Soliman Formula			
Total Power, Nt (kW)	23,64	25,91	
Power Reduction, %		-10%	
kgCO2/kwh		0,670	
Kg CO2 reduction (equal Kw)		13.196,4	
Production parameters			
Yarn count, Ne	32	32	
Yarn count, Nm	54	54	
Alpha	3,9	3,9	
Feed speed	17,3	20,4	
Twist, t/m	869	869	
Production, kg/h	19,3	22,8	
Production increase, %		18,0%	
Energy Cost, €/kwh	0,069	0,069	
Ukg	1,22	1,12	8,06%
Margin profit of yarn , €/kg	0,58	0,58	
Financial Parameters			
Spinhole price, €/spindle		€ 30,0	
Total cost, €		€ 30.240	
Amortitzation time (years)		1,85	
Rentability		54%	