

## A1 Test

## LYCRA

COUNT	Ne 20	
Ring D	40 mm	
Comparative	15.500 rpm	17.850 rpm

Parameter	Conventional	Spinhole	U/kg
<b>Parameters for Soliman</b>			
Number of spindles, Z	1630	1630	0
Traveller wieght, G (mg)	40	20	
Ring diameter, Dr (cm)	4	4	
Bobbin diameter, d (cm)	3,5	3,5	
Bobbin track, h (cm)	17,5	17,5	
Spindle gauge, g (cm)	7	7	
Spindle speed, n (rpm)	15,5	17,8	
<b>Soliman Formula</b>			
Total Power, Nt (kW)	36,74	40,83	
Power Reduction, %		-11%	
kgCO2/kwh		0,670	
Kg CO2 reduction (equal Kw)		13.362,1	
<b>Production parameters</b>			
Yarn count, Ne	20	20	
Yarn count, Nm	34	34	
Alpha	4,9	4,9	
Feed speed	17,9	20,6	
Twist, t/m	866	866	
Production, kg/h	51,5	59,3	
Production increase, %		15,1%	
Energy Cost, €/kwh	0,069	0,069	
Ukg	0,71	0,68	5,38%
Margin profit of yarn , €/kg	0,6	0,60	
<b>Financial Parameters</b>			
Spinhole price, €/spindle		€ 30,0	
Total cost, €		€ 48.900	
Amortitzation time (years)		1,27	
Rentability		79%	