

MAYA FAN AIR ENGINEERING Pvt. Ltd.

Plot No.53B, Industrial Area No. 1.
 A. B. Road, DEWAS - 455 001
 Ph : 07272-258734, 328890 Fax: 07272 - 251450
 Email : info@mayafanfrp.com



Customer :	WMD BSP SAIL BHILAI
Fan Model :	J12 M
Plant :	LANCE COOLING C.T. FAN # 02
Tag :	

Date: 22-11-07

FAN PERFORMANCE REPORT

	Unit	Existing Fan				Maya FRP Fan			
		S ₁	S ₂	S ₃	S ₄	S ₁	S ₂	S ₃	S ₄
Fan Diameter	mm	3700				3700			
Hub Diameter	mm	750				450			
Fan casing diameter	mm	3718				3718			
Number of Blades	Nos.	09				08			
Blade Angle	Drgee	12°				14°			
Area at measuring section	m ²	11.222				11.222			
Hub Area	m ²	0.441				0.158			
Discharge Area	m ²	10.781				11.064			
Air Velocity	m/sec	S ₁	S ₂	S ₃	S ₄	S ₁	S ₂	S ₃	S ₄
	R ₁	10.5	10.6	10.2	8.5	15.7	17.7	17.4	16.2
	R ₂	14.8	18.1	14.3	14.7	16.5	18.2	16.8	17.9
	R ₃	17.8	20.4	17.8	20.5	13.5	14.4	12.4	16.5
	R ₄	14.8	17.4	11.6	16.3	12.8	14.2	12.3	13.0
	R ₅	9.8	9.0	3.5	10.9	12.3	12.2	8.9	11.5
Av. Air Velocity:	m/sec	271.4 ÷ 20 = 13.57 m/sec				290.4 ÷ 20 = 14.52 m/sec			
Air Flow	m ³ /sec	10.781 x 13.57 = 5,26,867 m/hr.				11.064 x 14.52 = 5,78,337 m/hr			
Connected Motor	kW	30 kW.				30 kW.			
Supply Voltage	Volt	435	435	435	435	438	439	438	438
Motor Current	Ams.	35.29	35.40	35.64	35.44	29.18	29.64	29.52	29.44
Consumed Power.	kW	21.00	20.75	20.46	20.73	15.39	15.24	15.05	15.22
Power Factor	-	0.78	0.78	0.76	0.77	0.69	0.67	0.67	0.67
Power Saving	%					26.57%			

Remark

Dawp

Engineer

Maya Fan Air Engineering Pvt. Ltd.

P. B. Patnaik
 22/11/07
 P. B. PATNAIK
 Jt. Eng. WMD
 Signature

K. K. Kataria
 22/11/07
 Signature