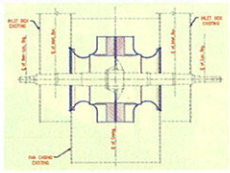
Client : Raasi Cement Ltd. Application : Cooler ESP Fan

Components replaced : Impeller, Shaft & Inlet Cone
Reason for retrofitting : Improving Efficiency
Existing Fan Make : Batliboi

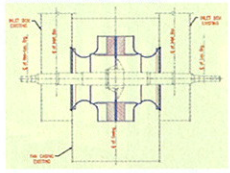


	Before Retrofitting		
	Design	Operating	After Retrofitting
Flow	681,840 m³/Hr	591,000 m³/Hr	732,960 m³/Hr
Static Pressure	165 mm WG	80 mm WG	150 mm WG
Power	381 kW	390 kW	428 kW
Fan Speed	590 rpm	600 rpm	678 rpm
Efficiency	81.5 %	33.0 %	70.0 %

1 Retrofitting the Cooler ESP Fan at Raasi Cement

Client : Orient Cement Application : Cooler ESP Fan

Components replaced : Impeller, Shaft & Inlet Cone
Reason for retrofitting : Improving Efficiency
Existing Fan Make : Andrew Yule



	Before Retrofitting		
	Design	Operating	After Retrofitting
Flow	405,000 m³/Hr	294,000 m³/Hr	390,000 m³/Hr
Static Pressure	125 mm WG	70 mm WG	100 mm WG
Power	187 kW	190 kW	135 kW
Fan Speed	745 rpm	710 rpm	745 rpm
Efficiency	73.7 %	29.5 %	78.7 %

2 Retrofitting the Cooler ESP Fan at Orient Cement

impeller at lower speed will be better option to minimize the problem.

– **Raw mill fan/Raw mill exhaust fan:** In this case, blade outlet angle is the prime criteria while designing the impeller. Since raw mill fan is handling lot of dust and the dust may be abrasive, it is necessary to protect the impeller against wear and tear and a suitable liner has to be selected for its protection. There are various options of protection against wear and tear.

www.reitzindia.com
www.reitz-ventilatoren.de

TISCO – Tata Iron & Steel Co. Ltd., Jamshedpur

As already announced in our May 2006 "Maerz News" TISCO – Tata Iron & Steel Co. Ltd., Jamshedpur/India (**Fig. 1**), placed an order with Maerz for the installation of a 425 t/d mixed gas fired PFR Kiln. For this project Maerz supplied the design and engineering, key equipment for the mixed gas firing system as well as supervision services for the erection and commissioning work of the kiln. The industrial production, as defined in the order specification, has now been reached and the performance and quality parameters shown in **Table 1** have been achieved: The client furthermore confirmed that, under current conditions, the kiln plant is able to produce lime fulfilling the standards and requirements of the TATA steel plant and has taken over the responsibility for kiln operation.

1 Kiln for Tata

www.maerz.com

Tab. 1 Production data

Daily production [tons/day]	> 425
Heat consumption [kcal/kg]	< 890
Residual CO_2 in the lime [%]	< 2
Reactivity of burnt lime [ml 4 HCl]	> 350

Dedusting 1500 m above sea level

Ambuja Cements Limited (former name Gujarat Ambuja Cements Limited), with company headquarter in Mumbai, is one of the largest Indian cement producers. The company produces 18.5 million t/a of cement. Ambuja invests within the scope of its environmental engagement sustainably and intensely in the modernisation of its cement plants. The plant Rauri–Darlaghat will also be equipped with up-to-date technologies. At the production plant located at a height of 1500 m above sea level the assembly of modern dedusting technology from Intensiv-Filter has begun (**Fig. 1**). The dedusting plant of the rotary kiln is designed for a volume flow of 2 100 000 m³/h at 200 °C. The two filters for the kiln dedusting are of the type IFJCN 80/48-8000 D ECO, equipped with 8 m long bags und a very energy efficient, admission-pressure controlled cleaning control system. The complete dedusting solution is provided by Intensiv-Filter India Pvt. Ltd. The commissioning is scheduled for spring 2010.

1 Ambuja Cement Limited construction site

www.intensiv-filter.com