

Cement grinding plant with roller press and air separator
KVT and LTRR at PCLA Ladce, Slovakia

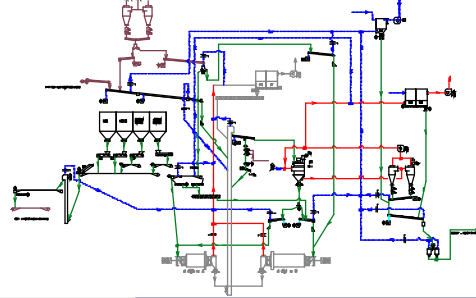
Inlet belt conveyor
with water spraying
and metal indication



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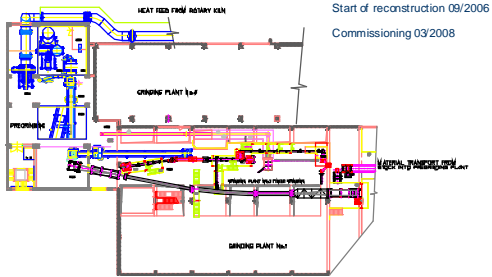
Equipment flow sheet of grinding plant after reconstruction



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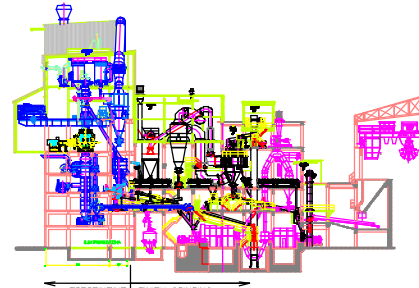
General arrangement CM No.2 with pregrinding



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Side section
CM No.2 with
pregrinding



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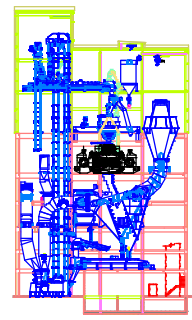
Additional building of
pregrinding plant



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Roller press
HPGR
750/15-1300



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Summary of the ground products in the year 2008

Sort of product	Operating hours
CEM II/B-S 32,5R	2 974
CEM II/B-M 32,5R	43
CEM II/B-S 32,5R plus	10
CEM III/A 32,5	130
CEM I 32,5R	447
CEM I 42,5R	299
Slag	8



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Power consumption comparing of CM2 with CM3

Product	Specific power consumption (kWh/t) (main drive, separator, process fan)		
	CM3	CM2	Decrease
CEM I 42,5N	35,1	20,65	41,2 %
CEM II B-S 32,5 R	39,0	26,0	33,3 %



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Output
comparing
during the
guaranty tests

Values	Warranty	Achieved	Recalculated
Type of product	CEM I 42,5 N **		
Composition : clinker	%	90,25	
gypsum	%	5,0	
limestone	%	4,75	
slag	%	-	
Fineness acc. Blaine	cm ² /g	3 300	3 600
Output	th	125	127,9
Specific consumption	kWh/t	27,0	23,9
Type of product	CEM II B-S 32,5 R *		
Composition : clinker	%	61,75	
gypsum	%	5,0	
slag	%	28,5	
limestone	%	4,75	
Fineness acc. Blaine	cm ² /g	3 400	3 670
Output	th	106	105,2
Specific consumption	kWh/t	33,0	28,2



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Output
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Values	Warranty	Achieved	Recalculated
Type of product	Struska (slag) **		
Composition : slag	%	100	
Fineness acc. Blaine	cm ² /g	4 000	3 945
Output	th	60	60
Specific consumption	kWh/t	46,0	40,6
Type of product (Type of product)	CEM III A 32,5 *		
Composition : clinker	%	33,25	
gypsum	%	5,0	
slag	%	57,0	
limestone	%	4,75	
Fineness acc. Blaine	cm ² /g	3 800	4 100
Output	th	80	76
Specific consumption	kWh/t	40,0	36



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General merids of using pregrinding circuit

- Grinding all sort of cement
- Possibility of effective drying wet raw materials or cooling of cement
- Decreasing of power consumption
- Utilization of existing ball mills
- Large flexibility of operation



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Thank you for your attention



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