

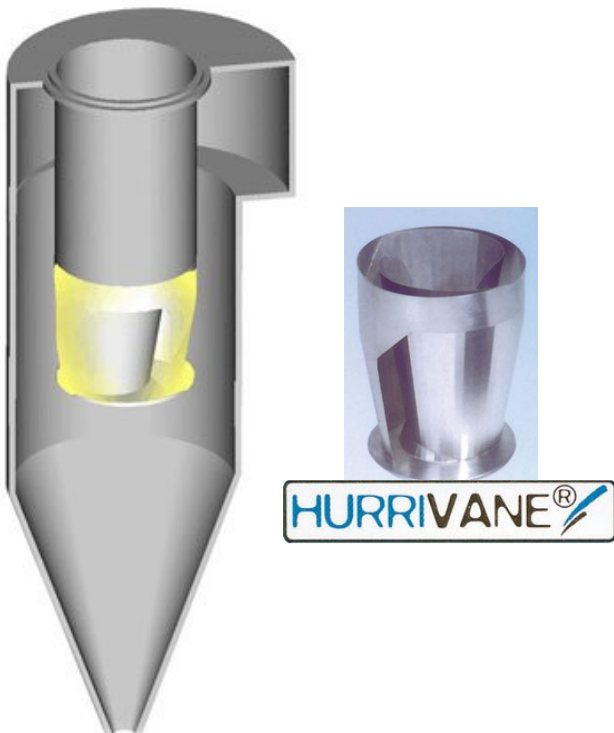
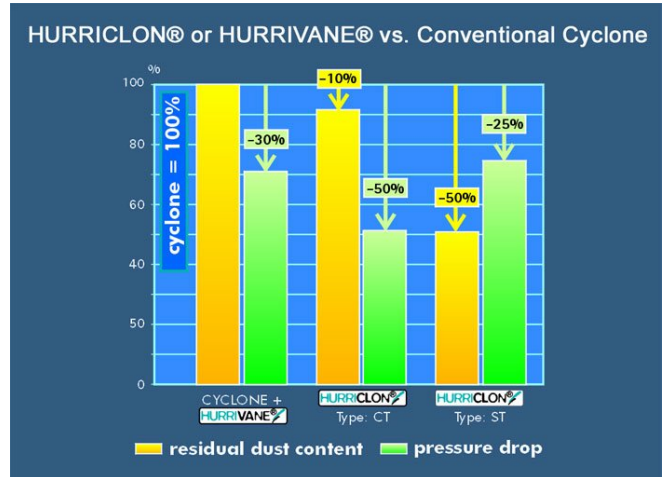
THE WORLD'S FAVORITE DIP TUBE ADD-ON

PRODUCT: HURRIVANE®

ISSUE DATE: March 2006

ADVANTAGES

- Highest pressure drop reduction (> 30%)
- Reliability in operation



DESCRIPTION

- Originally used with HURRICLON® or installed as an extension to the dip tube in conventional cyclones.
- Well proven in more than 350 installations worldwide.
- For pressure drop reduction and production increase.



ATEC

World Leader in Cement Pyroprocess Technology

EXAMPLES OF REALIZED PROJECTS

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Installed HURRIVANE® at Mokrá plant

HEIDELBERGCEMENT - CZECH REPUBLIC Ceskomoravsky Cement

Mokrá plant

SITUATION BEFORE:

Total gas quantity (top stage):	310,000 Am ³ /h
Temperature (top stage):	280°C
Total gas quantity (2 nd stage):	450,000 Am ³ /h
Temperature (2 nd stage):	535°C

Clinker Production:	1,700 t/d
Pressure drop (of top/2nd stage):	3,400 Pa

INSTALLED:

2 units HURRIVANE® Ø 1800 mm (in top stage)
1 unit HURRIVANE® Ø 2500 mm (in 2nd stage)
Modification of cyclone in 2nd stage

RESULTS:

Increased clinker production:	2,000 t/d
Reduction of pressure drop (top/2 nd stage):	1,200 Pa
Reduction of power consumption: (of ID-fan)	75 kW

CEMEX SARABURI - THAILAND

Saraburi plant

SITUATION BEFORE:

2 lines with 5-stage preheater incl. precalciner	
Gas quantity:	175,000 Am ³ /h
Clinker production:	1,300 t/d
Gas temperature:	360 °C
Pressure drop of top stage cyclone:	1,000 Pa

INSTALLED:

2 units HURRIVANE® Ø 1250 mm (top stage - kiln line 1)
2 units HURRIVANE® Ø 1250 mm (top stage - kiln line 2)

REALIZED:

<i>Kiln Line 1 (top stage):</i>	
Reduction of pressure drop:	372 Pa (- 37 %)
New pressure drop of top stage cyclone:	628 Pa
<i>Kiln Line 2 (top stage):</i>	
Reduction of pressure drop:	390 Pa (- 39 %)
New pressure drop of top stage cyclone:	610 Pa

ASIA CEMENT - TAIWAN

Hsin Chu plant

SITUATION BEFORE:

2 units raw mill cyclones	
Mill Capacity:	250 t/h
Total gas quantity:	6,600 Am ³ /min
Pressure drop:	1,250 Pa
Energy consumption of raw mill fan :	782 kWh

INSTALLED:

2 units HURRIVANE® Ø 2500 mm
Modification of cyclone entrance

REALIZED:

Reduction of pressure drop:	400 Pa (- 33 %)
Reduction of power consumption: (of raw mill fan)	56 kW
Reduction of energy consumption: (of raw mill fan)	390,000 kWh/year
Installation time for HURRIVANE®:	5 days

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