



# OPTIMAX/RH120 Mining Shovel

## Terex RH120 Mining Shovel Increases Uptime Percentage and lowers Operating costs

*Summary:* Maintenance personnel were forced to blow out the filters every 150 hours when the restriction light went off at 25 inches of water column. After the OPTIMAX installation no filter maintenance was required between planned maintenance intervals and filter Restriction stayed below 12 inches of water column. Amazing results make mine owner money with lower operating costs and higher uptime percentage.

Company Information	
Company Type:	Mining open pit
Location:	Northern Colombia, SA Coal Mine

Test Criteria	
What would constitute successful test completion?	Reach 2 shovel PMs without filter change (500 hours without filter change or blowout)
Environment(s):	<input checked="" type="checkbox"/> Humid <input checked="" type="checkbox"/> Dry Dust
	<input type="checkbox"/> Muddy <input type="checkbox"/> Mixed Debris
	<input type="checkbox"/> Heavy Debris <input type="checkbox"/> Snow
	<input checked="" type="checkbox"/> Extreme Heat <input type="checkbox"/> Extreme Cold
Other Environment:	
Application:	<input checked="" type="checkbox"/> Mining <input type="checkbox"/> Construction
	<input type="checkbox"/> Agriculture <input type="checkbox"/> Forestry
	<input type="checkbox"/> Waste Industry - Landfill <input type="checkbox"/> Waste Industry - Recycling
	<input type="checkbox"/> Waste Industry - Transfer Station
Other Application:	
Notes:	Excavator running in open pit coal mine

Machine: Before OPTIMAX Installation	
Manufacturer:	O&K Terex
Model:	RH120
Precleaning/Filtration Equipment Currently Installed:	Donaldson Tube bodies
Filter Changed when Level of Restriction Reaches:	25
Primary Air Filter Replacement Interval:	500
Secondary Air Filter Replacement Interval:	2000
Maintenance Includes Blowing Out Filter:	yes
Operator's Comments on Current Machine Performance:	In the 500 hour interval the filter was cleaned 3 times
Notes:	

OPTIMAX Installation	
OPTIMAX Installation Part Number:	9503-004
Other Parts Used:	IN0086
Notes:	

## Performance Results

### Test Period 1

Machine Hours:	36324
Restriction Indicator Reading:	
Filter Changed:	no
Operator's Comments:	

### Test Period 2

Machine Hours:	36738
Restriction Indicator Reading:	8
Filter Changed:	no
Operator's Comments:	

### Test Period 3

Machine Hours:	36889
Restriction Indicator Reading:	11
Filter Changed:	yes
Operator's Comments:	maintenance manager required filter be changed at 500 hours without consideration of inlet restriction

### Test Period 4

Machine Hours:	
Restriction Indicator Reading:	
Filter Changed:	
Operator's Comments:	

## Testimonials

Job Title:	Maintenance director
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Comments on Product Performance:

"The goal was to get to 500 hours without touching the filter housing. Maintenance on the filter is a contributor to machine downtime and a reduction of our uptime percentage. We would remove the filter and blow it out three times in a 500 hour maintenance interval. This contributed to high silica content in the engine oil. The OPTIMAX is working perfectly. We have not touched the filter housing during the 500 maintenance interval and the system restriction which previous got to 25 inches of water three times between PM's has not exceeded 11 inches in 500 hours of run time. I am happy with this performance and choose to change the filters at the PM as requested by the machine manufacturer, although the filters do not need to be changed."

Job Title:	
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Comments on Product Performance:



Four OPTIMAX installations one RH120-E



Terex RH120-E