

# Constant power.

THE NEW COAL DUST DOSING SYSTEM FROM BENNINGHOVEN.



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The revised design of the coal dust dosing system provides users with essential advantages regarding

- > functions
- > fuel consumption
- > safety



Coal dust dosing system, flanged to the discharge slide of the coal dust silo, doses coal dust into the conveying pipe, blown into the burner head through a conveyor fan.



Amortisation of the investment possible within 3 years



A development that pays off: cost-efficient fuel in combination with a optimum, even flame pattern



BENNINGHOVEN BURNER  
**EVO JET**

**BENNINGHOVEN is global market leader for burners and the only manufacturer of 4-fuel burners. The complete know-how allows development of unique burners with excellent attributes.**

Customers can add up to three fuels to their burner, which was developed for drying and heating the white material and designed as a standard as pure oil burner.

This turns the burner into a combination burner, so that oil, natural gas, liquid gas, heavy oil, BtL-fuel (biomass to liquid) and, among other things, coal dust can be used as fuels. A combination burner offers the advantage that plant downtime due to lack of raw materials or delivery issues no longer occur. In the event of price fluctuations for any particular fuel, the cheapest fuel can always be selected.



EVO JET BURNER



BURNER TEST BED

BURNER HEAD FOR COAL DUST APPLICATION



State of the art with BENNINGHOVEN retrofit

Plant optimization and retrofitting



## Clever concept.

Continuous material flow in the coal dust dosing line

**CLF (Continuous Lignite Flow)**

- > Low pulsations
- > Constant, calm and even flame
- > Clean flame - complete burning of the coal dust

## Maximum safety.

Tested quality for guaranteed process and functional reliability

- > ATEX tested, TÜV approved
- > The coal dust dosing system is manufactured in accordance with the new ATEX Directive 2014/34/EU and is type-tested: TUV 19 ATEX 8337
- > Approved for use in zone 21

## Optimum customer benefit.

Efficient and economically viable for a high level of user friendliness and performance

### A CLEAN THING

- > With the correct burner settings, coal dust is a clean fuel that is on a level with other fuels for heating minerals
- > Complies with the stringent requirements of the German TA Luft directive and all associated regulations

### FUEL SAVINGS

- > Support flame switches off at approx. 20 % burner output
  - > Support flame consumption: lowered from 80 l/h to approx. 50 l/h
  - > Reduction by approx. 35 % heating oil
- \* always depending on the quality/calorific value of the coal dust

### OPTIMISED BURNER SETTINGS

- > Extremely improved control range
- > 1:8 with support flame, 1:5 coal dust alone
- > Particularly interesting for customers who run a high RAP feed rate, i.e. two burners running in parallel
- > White material burner can accordingly be operated at an optimum, more economic level
- > Especially considering the limited heat output of the burner(s) to 19.8 MW (Gas Emissions Trading Act)

