

CCB

CLEANCUT system cuttings blower

APPLICATIONS

- Cuttings collection and conveyance units, such as ISO-Pump* cuttings collection and conveying unit, skip and ship
- Feeding cuttings reinjection, thermal desorption, and cuttings dryer installations

BENEFITS

- Reaches any area of an offshore rig
- Conveys cuttings in a variety of applications
- Minimizes worker exposure to drilling fluids
- Reduces slippery areas
- Operates at low noise levels

FEATURES

- Environmentally sound, compact design
- Closed system
- Field-proven reliability
- Pneumatically operated

The CLEANCUT* cuttings collection and transportation systems uses the CCB* CLEANCUT system cuttings blower as the prime mover. The CCB blower is is the prime cuttings mover of the CLEANCUT cuttings collection and transportation system. It is an 8-ft³ [0.23-m³] pressure vessel with an inlet valve, an outlet valve, and a feed hopper mounted on top. It also has a footprint of less than 25 ft² [2.31 m²], minimizing the space required for cuttings-conveying equipment. The CCB blower conveys cuttings at 28 tonUS/h [25 tonUK] in a typical installation, and can transport a sufficient distance to reach any part of an offshore rig. It can also achieve significant vertical lifts of material and can be used to convey materials other than cuttings. It is proven to handle OBM- and WBM-contaminated cuttings. A level probe is normally fitted to ensure optimum cycling efficiency, resulting in automatic operation under normal circumstances. The CCB blower can be used in ATEX Zone I hazardous environments with no modifications. All exposed internal faces are coated for corrosion resistance and lower friction coefficient, and a low-friction plastic liner is fitted to the feed chute.



The CCB blower enables powerful cuttings conveyance while saving space on the rig.

CCB blower

Once drill cuttings enter the feed hopper of the CCB blower, they are brought into a closed system and isolated from personnel. Cuttings are then discharged by compressed air. The CCB blower is in a hazardous-area configuration as standard, and is quiet and clean during operation.

How it works

Gravity feeds material into the CCB blower via a feed chute assisted by air pulses, and vibration if required. Once the unit has been loaded with material, the inlet valve is closed by a two-stage sealing mechanism. First, the spherical valve section is rotated to block the flow of material. Second, an inflatable ring seal is activated to create a pressure-tight seal around the inlet.

Once sealed, the vessel is pressurized, and compressed air activates the material in the vessel and discharges it in a batch. A level probe in the feed chute maximizes efficiency in operation. The CCB blower can also be operated on an adjustable timer. Cycle time should be varied according to the material type and ROP. The CCB blower is normally discharged through a 5-in [127-mm] steel pipe; 5-in [127-mm] NB flexible hose can be used in some applications.

The CCB blower is the first component of the CLEANCUT system, receiving cuttings from the shaker ditch and conveying them to ISO-Pump units, skips, or other destinations. While a typical configuration includes one CCB blower, two may be used in parallel where very high rates of cuttings generation are expected.

The installation, cuttings-feed arrangements, and pipe routing for the blower are key to the survey and installation process. Ideally, the CCB blower should be installed directly under the shaker ditch. Availability of sufficient height is an important consideration as well; augers may be used to supply the CCB blower where necessary. The pipe routing is also crucial to produce optimal performance, and will be detailed during survey.

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