

FH330

Continuous Haulage



Specifications

Capacity	816 tonnes/hr	900 tons/hr
Seam Heights	914 mm and above	36 in and above
Conveyor Width	762 mm	30 in

Peak Production in Low Coal

Productivity

Continuous Haulage in low seam coal is the most productive and cost effective way to get coal from the continuous miner to the conveyor.

Long Term Durability

The frames and major components of this system are so tough, the product can be rebuilt three and four times during its service life.

Compatibility

This machine is designed specifically to match the tremendous output of the Cat® CM210, CM220 and CM230 continuous miners.

Quality

Manufactured at Caterpillar's Houston, Pennsylvania, facility where stringent quality and contamination control procedures help us deliver a reliable product that's ready to go to work.

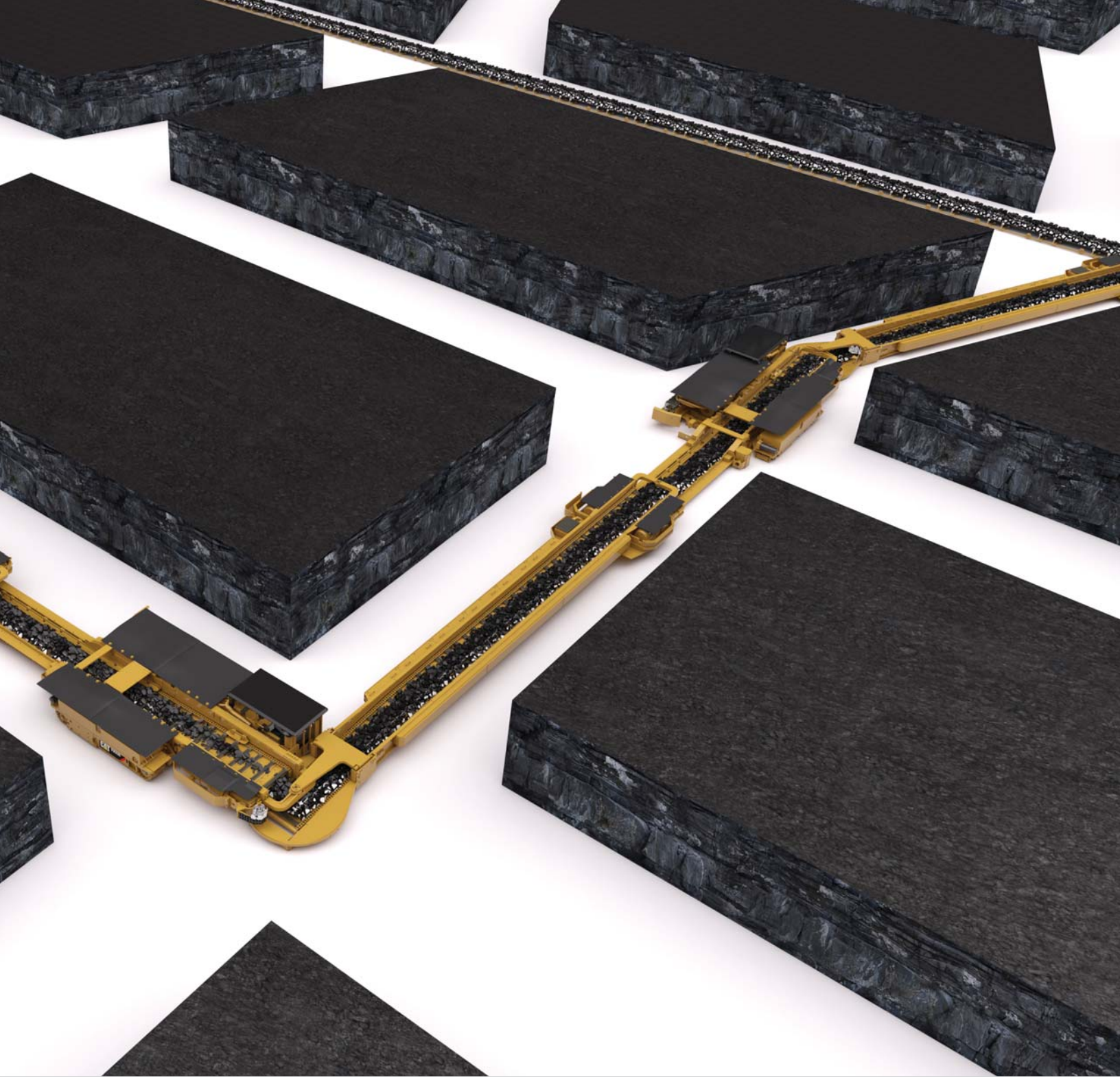
Safety

Remote control capable and well equipped to mitigate risk.

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The FH330 is Caterpillar's dimensional mining solution for low coal applications. This is a tough and proven product that moves a lot of coal. We've matched its high capacity to the production output of our Cat CM210, CM220 and CM230 continuous miners for system efficiency. If your mine is considering continuous haulage for processing material, the Cat FH330 can be a tremendous asset and productivity tool for your operation.

Mobile Bridge Carrier (MBC)

We've made the FH330 mobile bridge carrier easy to operate with important safety features.



Hydrostatic Drive – Responsive, Smooth and Operator Friendly

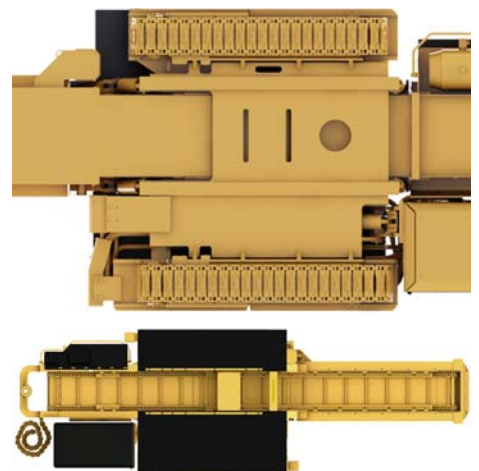
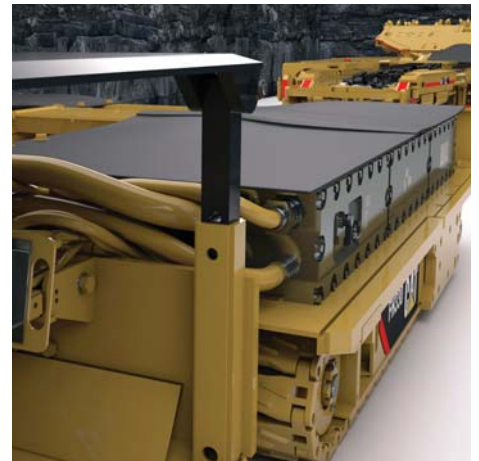
- A 56 kW (75 hp) motor provides all the power needed for excellent traction in less than perfect ground conditions
- Hystat controls respond quickly and smoothly to operator input reducing the stress and effort of operating the machine
- Variable speed up to 19.8 m/min (65 ft/min) allows operators ultimate control over tramming

Track – Sized Right, Long Life and Excellent Traction

- 53 cm (14 in) crawler shoes are designed for traction in poor footing
- Shoes are forged steel for strength and hardness
- Low ground pressure for mobility and flotation in sloppy footing

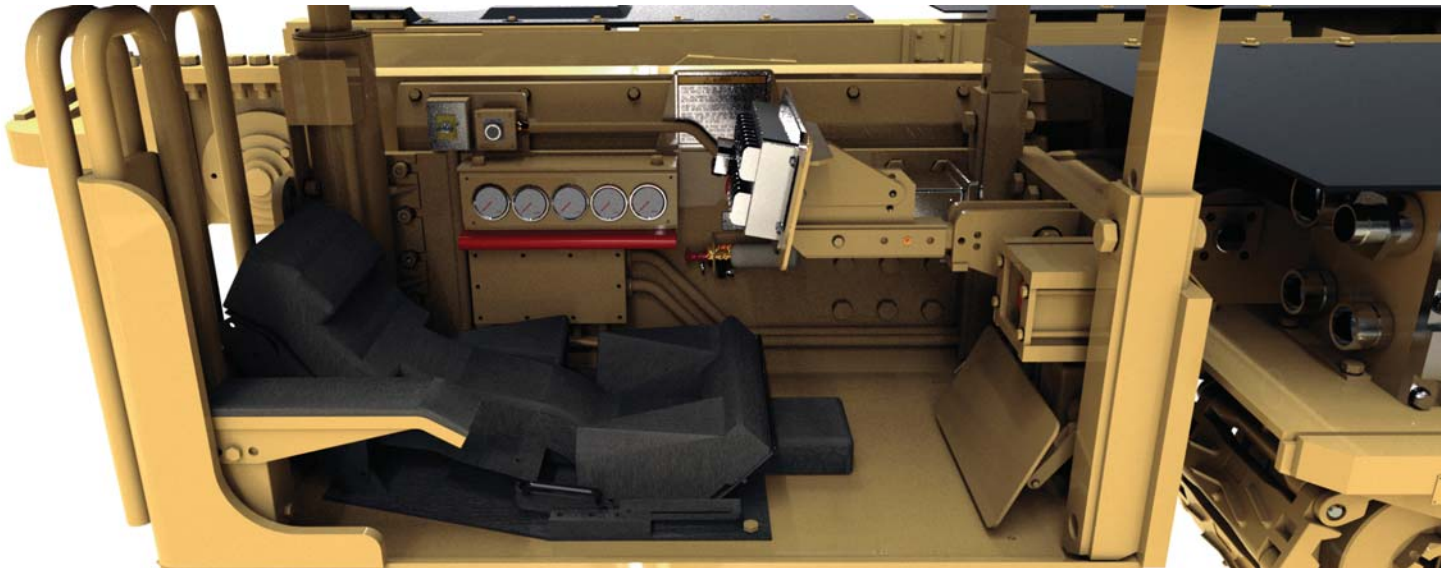
Conveyor – Capacity, Synchronized to the Miner

- A 30 kW (40 hp) motor processes 18 tonnes/min (20 tons/min)
- Grease take up on the conveyor, simple and convenient
- Auto sequence started with the continuous miner
- Sideboard option for more capacity
- Torque limiting clutches on all conveyor motors to prevent chain damage



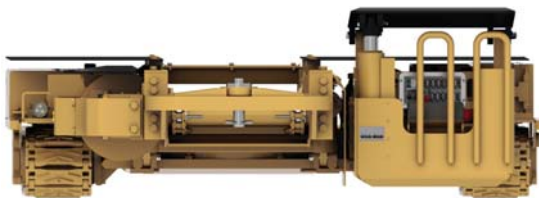
Operator Environment

Seated or remote control options for your mine.



Operator Compartment – Simple and Straightforward

- Hinged for flotation and comfort
- Pivots for visibility when machine is on an angle
- Canopy protects against falling objects
- Canopy height is hydraulically adjusted
- Centralized control station



Operator Compartment – Safety Features

- “Operator present” foot activated safety plate
- Maintenance mode switch
- Machine stop button on control panel
- Tape strip emergency stop switch next to operator
- System reset button for energizing after eStop has been pressed
- Horn
- Fire suppression actuator
- Tram Enable switch
- Can be operated using remote controls



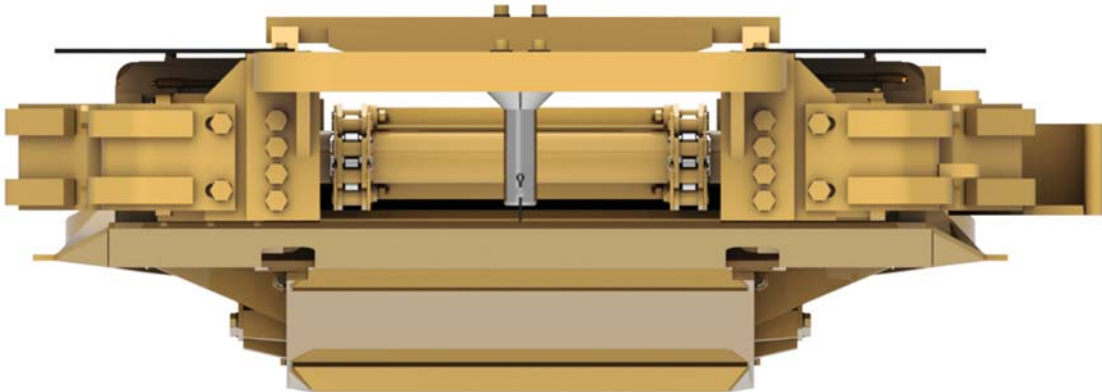
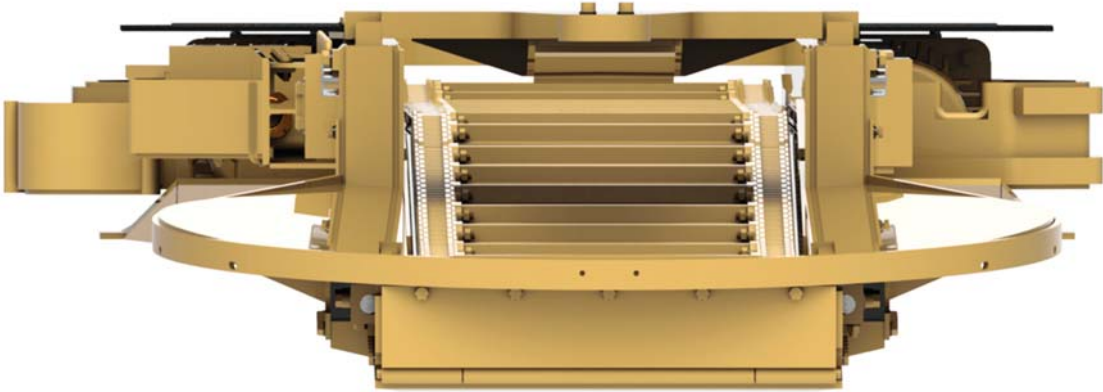
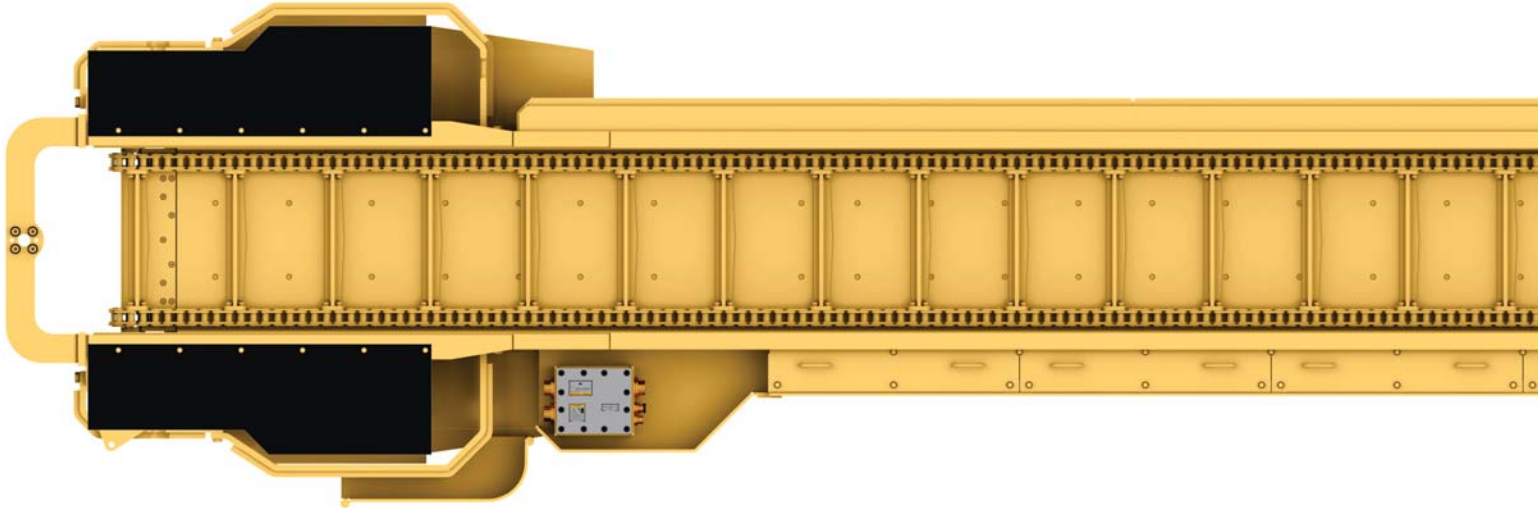
Operator Information – Visibility to Key Machine Information

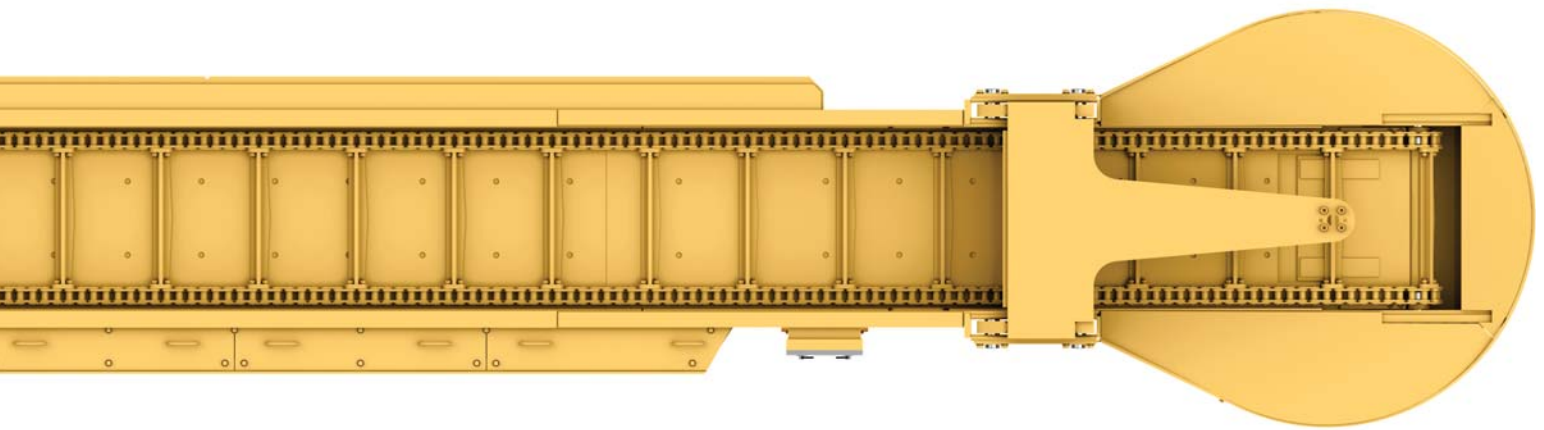
- Text display – operated using a remote control to scroll through available display information
- Important machine operating information displayed
- Shows error codes – simplifying diagnostics
- All MBCs have visibility to all error messages within the entire system allowing excellent communication and assisting diagnostics



Piggyback Conveyors

Bridge conveyor between MBCs.



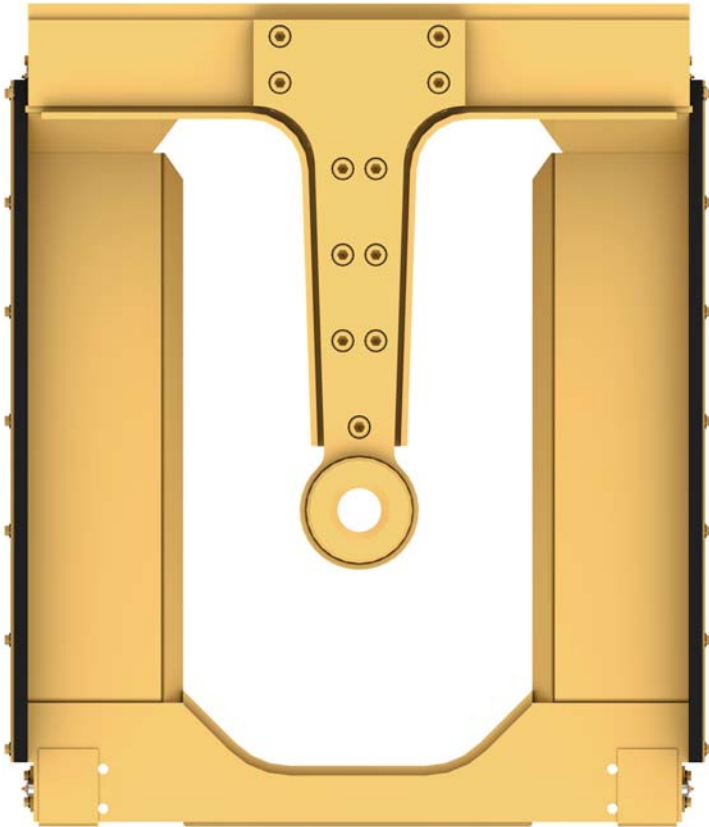


Piggyback Conveyors

- Two sizes of piggyback conveyor available – 914 or 1189 cm (30 or 39 ft) lengths to meet specific mine projections
- Two conveyor drive setups:
 - A 22 kW (30 hp) dual motor conveyor drive
 - A low profile single 30 kW (40 hp) motor conveyor drive for extremely low seam applications
- Two connecting pin options – standard 63.5 mm (2.5 in) drop pin provides greater flexibility in sloping ground conditions or heavy duty 76.2 mm (3 in) pin for longevity
- Side board option for maximum haulage
- Chromium carbide overlay for abrasion resistance, long wear life
- Torque limited coupling on conveyor drive – protection against the unexpected
- Convenient access to grease points and hose connections
- Grease chain take up – for convenience and safety
- Three panels on underside of conveyor provide access to return lines and for conveyor maintenance

MBC Dolly Connection

Keeps the coal moving.



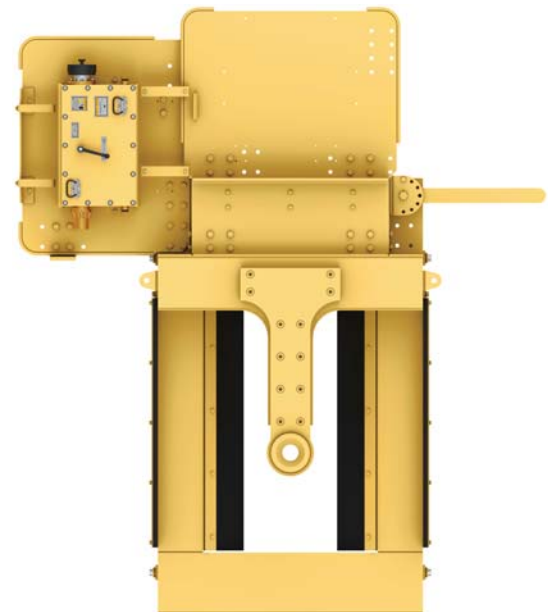
The connection between the mobile bridge carrier and piggyback conveyors is achieved using a dolly system. This simple but effective design slides along rails located on the inside of the mobile bridge carrier's conveyor. It allows time for the operators to adjust to new machine positions without affecting the flow of coal, and gives new operators reaction time without affecting production.

Our Dolly design uses bolted joints to help this high load component retain frame integrity. The bolts are sacrificed under extreme loads to protect the frame structure. The bolts are easily replaced and protect against downtime that might otherwise require welding repair.

Tail Dolly

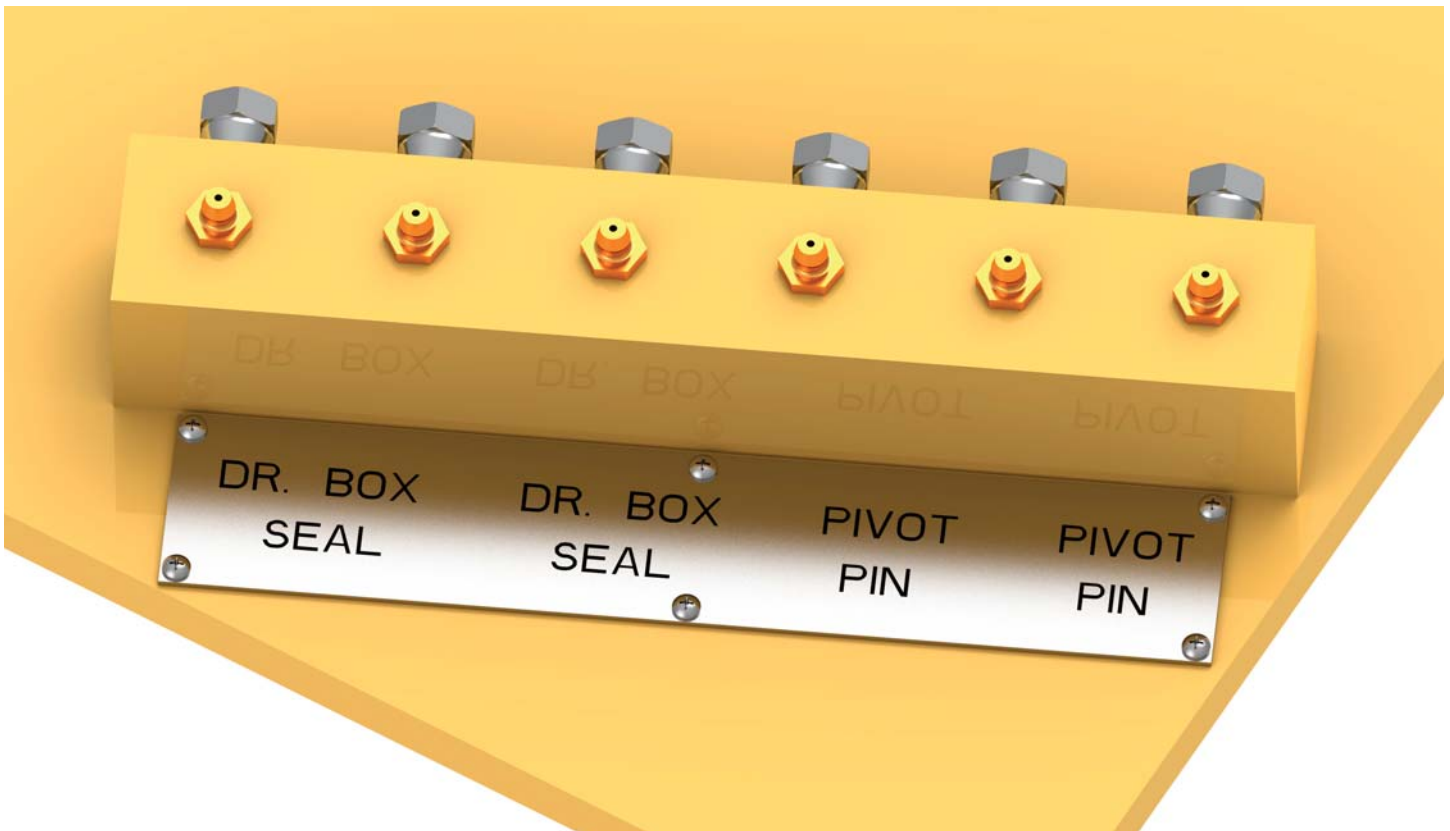
Connecting to the conveyor belt.

- 152.4 or 228.6 mm (6 or 9 in) dolly wheel options for more or less wear life
- Incorporated belt trainer for alignment
- Breaker located on tail dolly for cable length management and quick disconnect to power
- Incorporated scraper clears the belt of debris
- 548.6 cm (18 ft) sections
- 91, 107 and 122 cm (36, 42 and 48 in) belt widths
- Tail roller grease access
- Simple pin connection between sections
- Steel rollers
- Different feet for return clearance



Service and Support

People and parts when you need them.



Service Simplicity

- Grouped, centralized grease points help expedite service
- Excellent accessibility to all filters and oil fill and drain locations
- Easily removed access covers
- In cab diagnostics
- Booms can be lowered to support the machine for track maintenance
- Magnetic drain plugs help pull debris from the system

Dealer Support

- Our dealers are dedicated to your success and have the deep product expertise you need in a partner
- Proud to serve the coal mining community
- Local, at-the-ready support of the machine by experienced technicians
- A team of experienced professionals to help you before, during and after the sale

Complimentary Systems

Improving your output through system integration.





Continuous Miners

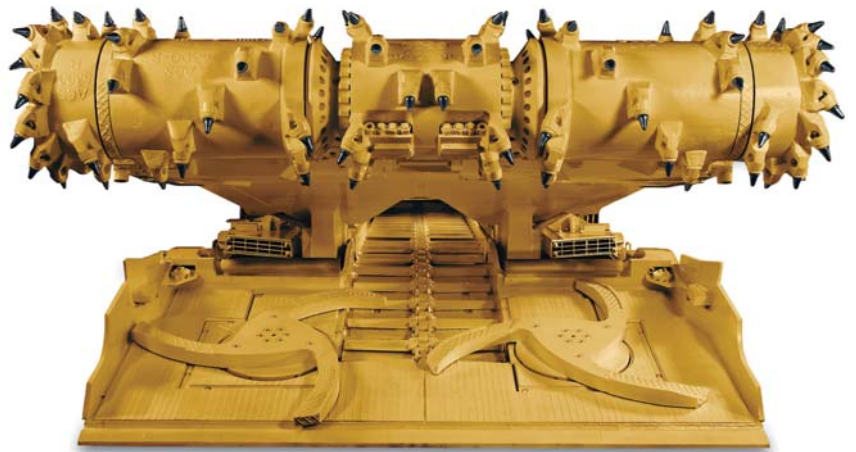
Our CM210, CM220, and CM230 models are all excellent matches to the performance and production capabilities of the FH330. Our continuous miners are all proven performers, with the CM210 being one of the most productive and powerful low seam miners available.

Roof Bolter

With a tram height of just 81 cm (32 in) – the Cat RB220 fits nicely into this portfolio for dimensional mining. It features four wheel independent planetary drives for control and 4536 kg (10,000 lb) of drill feed thrust. Both simple to operate and reliable, the RB220 is a proven design with years of experience behind it.

Scoops

Cat scoops offer long lasting value, super hauling capability and can be rebuilt for second and third service lives. Our pivoting center sections are exceptionally strong and keep the wheels firmly engaged on uneven ground. With a canopy installed, the SU488L will clear coal seams as low as 1067 mm (42 in).



CAT[®]

Financial

Global Mining Finance

Your financial solutions partner.

Experienced Team

- We are industry and commodity experts with a global presence in every mining market
- We offer expertise in both developed and emerging countries
- Our centralized account management is proficient in worldwide coverage

Tailored Solutions

- We offer tailored and flexible solutions through all your mining cycles
- Customized project financing available, structured to assist the emerging miner

One-Stop Shop

- One source for all your financial needs, offering a wide range of products
- Bundle financing and extended protection solutions so it's easier to manage – Equipment Protection Plans, lines of credit, physical damage insurance, project financing, leases, loans and a wealth of other solutions

Our Commitment

- Higher approval rates – we approve a higher percentage of received transactions than our competitors
- Lower down payments – half of our customers put down less than what our competitors require
- Faster service – you'll likely get your approval and funding quicker with us
- More flexibility – you can count on us to be there for you in good times and bad

Contact Us

- Contact us at www.catfinancial.com or contact your local Cat dealer



Caterpillar Job Site Solutions

A new way of partnering.

Sometimes a collaborative look at your operation and key business metrics develops into ground breaking efficiencies and profit. That is the ultimate goal of Caterpillar Job Site Solutions – to work closely with your team, develop a plan, and deliver sustainable, profitable growth by productivity growth, improving asset utilization and providing flexible financial solutions.

Engaging the Right People – your knowledge and expertise combined with that of Cat and Cat dealer professionals creates an ideal model. Teams will include key decision makers, commercial experts and application specialists.

We listen – then together design a performance plan. It all starts with a working session at your site and systematic evaluation of the operation.

Fact-Based – we can leverage a full range of technologies to capture data. Rigorous analysis of the data drives fact-based decisions, increasing the odds of success.

Action-Oriented – all parties work with urgency, focusing on execution, predicting and preventing problems and continuously innovating.

Enduring – our work doesn't end when the plan is created; in fact, we deploy the performance plan together, side-by-side, for the duration.

FH330 Continuous Haulage Specifications

Weights

Total Weight Empty	18 144 kg	40,000 lb
Total Weight with Bridge Attached at Each End	27 216 kg	60,000 lb
Bridge Weight Empty	9072 kg	20,000 lb

Capacities

Conveyor Capacity – No Sideboards	13.6 tonnes/ min	15 tons/ min
Conveyor Capacity with Sideboards	18.1 tonnes/ min	20 tons/ min
Hydraulic Oil Tank	246 L	65 gal

Hydraulic System

Hydraulic Pressure	30.5 bar	4,425 psi
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Power

Conveyor Drive – Standard	2 @ 22 kW	2 @ 30 hp
Conveyor Drive – Low Profile Outby (liquid cooled)	1 @ 30 kW	1 @ 40 hp
Tram Drive	1 @ 56 kW	1 @ 75 hp

Speeds

Chain Speed	91 m/min	300 ft/min
Tram Speed (variable)	0-20 m/min	0-65 ft/min

Ground Pressures

Empty	124 kPa	18 psi
Loaded	179 kPa	26 psi

Dimensions

Dolly Travel	1549.4 mm	5 ft 1 in
Piggyback Conveyor Swing	90 degrees from center	
Chain Flight Spacing	457.2 mm	18 in
Stack Up Height over Bridges (no sideboards) Receiving End	711.2 mm	28 in
Stack Up Height over Bridges (no sideboards) Discharge End	711.2 mm	28 in
Conveyor Depth	152.4 mm up to 254 mm	6 in up to 10 in
Ground Clearance	152.4 mm	6 in

MBC Dimensions

MBC

Overall Length	884 cm	29 ft
Overall Width	293 cm	9 ft 6 in
Overall Height	711 mm	28 in
Pivot to Pivot Length	7924.8 mm	26 ft
Ground Clearance	152.4 mm	6 in
Conveyor Width	762 mm	30 in
Crawler Length (center to center)	2044.7 mm	80.5 in
Crawler Width	355.6 mm	14 in

Piggyback Bridge Conveyor Dimensions

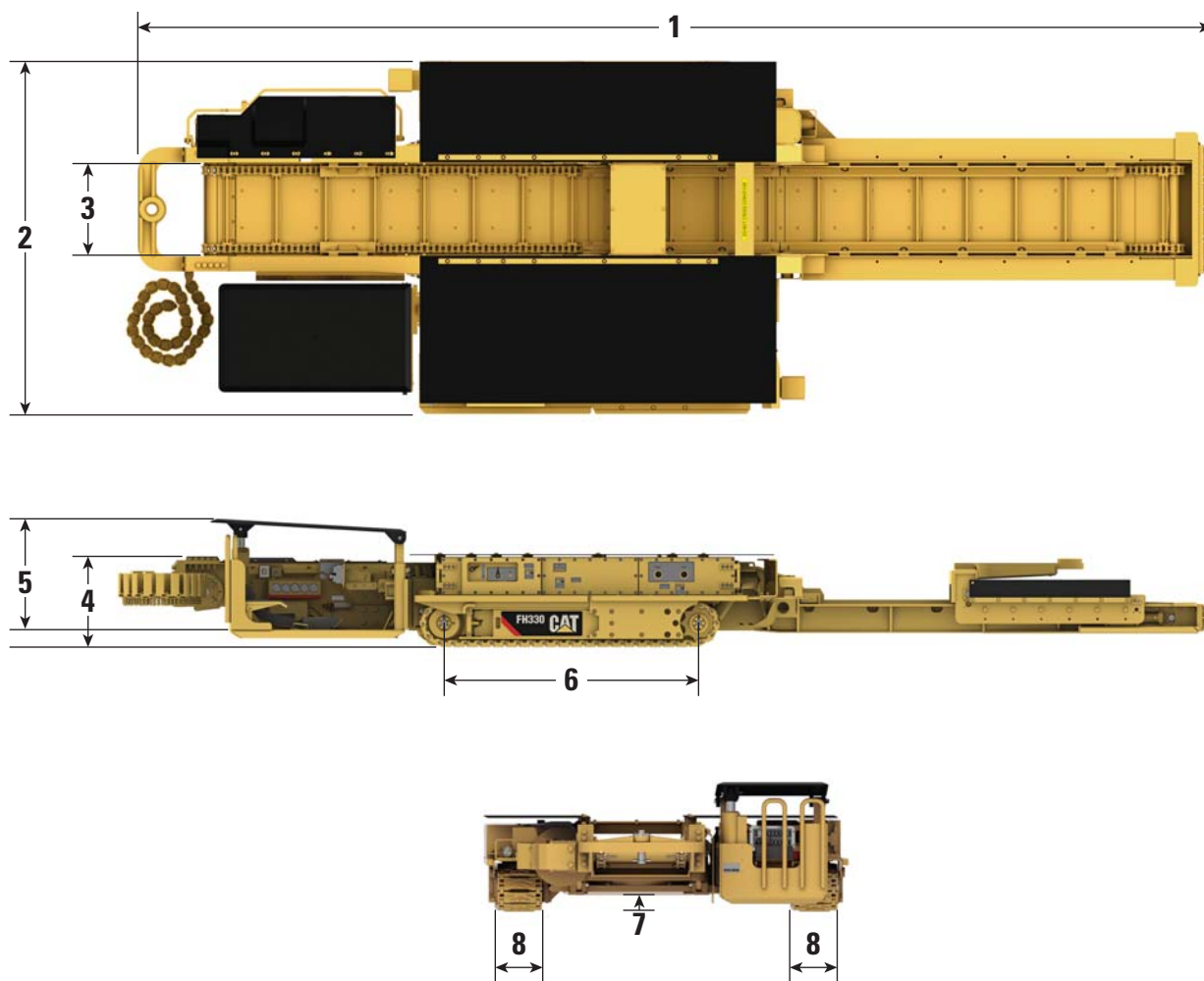
Pig

Overall Length (without 274 cm [9 ft] intermediate)	9906 mm	32 ft 6 in
Overall Length (with 274 cm [9 ft] intermediate)	12 649.2 mm	41 ft 6 in
Overall Width at Motors	1905 mm	6 ft 3 in
Overall Height at Receiving End	711.2 mm	28 in
Swing In	90 degrees each side of center line	
Conveyor Depth without Sideboards	152.4 mm	6 in
Conveyor Depth with Sideboards	254 mm	10 in

FH330 Continuous Haulage Specifications

Dimensions

All dimensions are approximate.

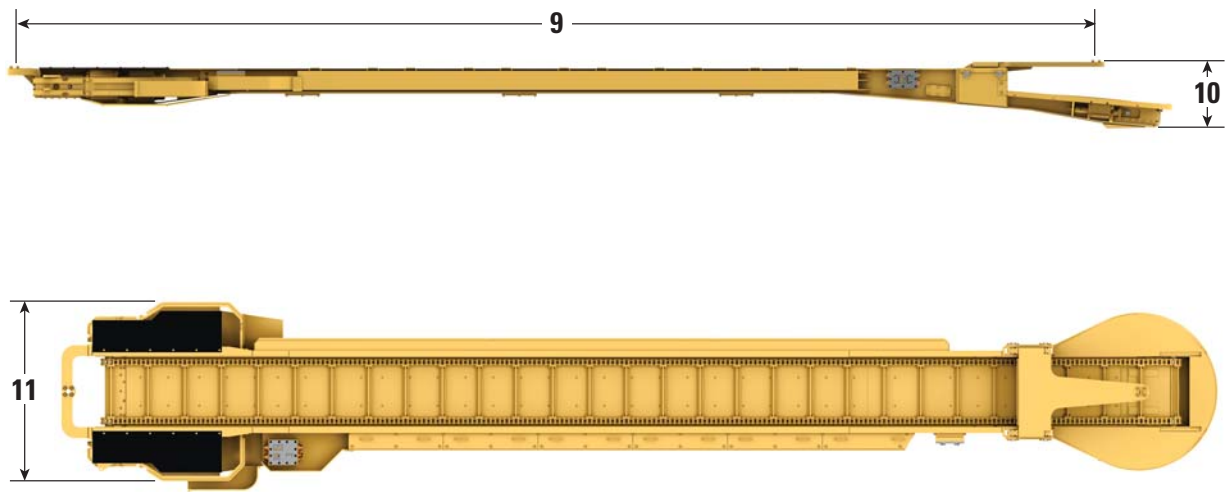


1 Overall Length	884 cm	29 ft
2 Overall Width	293 cm	9 ft 6 in
3 Conveyor Width	762 mm	30 in
4 Ground to Chassis Height	711 mm	28 in
5 Canopy Height Adjustment	889-1117 mm	35-44 in
6 Track Length (center to center)	2044.7 mm	80.5 in
7 Ground Clearance	152.4 mm	6 in
8 Track Width	355.6 mm	14 in

FH330 Continuous Haulage Specifications

Dimensions

All dimensions are approximate.



9 Pin to Pin Length (operational length)	11.8 m	39 ft
10 Stack Up Height	711.2 mm	28 in
11 Overall Width at Motors	1905 mm	6 ft 3 in

Standard Equipment

Standard equipment may vary. Consult your Cat dealer for details.

- MBC cab
 - Canopy
 - Digital display
 - Seat
 - Safety step plate
 - eStops
 - Control station
- Pig conveyor 914.4 or 1188.7 cm (30 or 39 ft) dual 22 kW (30 hp) motors
- Connecting pin – 63.5 mm (2.5 in)
- MBC dolly (must choose high or low adjustability)
- 950 VAC electrical system voltage

Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

- Conveyor – low profile in either 914.4 or 1188.7 cm (30 or 39 ft) with single 30 kW (40 hp) motor
- Connecting pin – 76.2 mm (3 in) heavy duty
- Rigid Frame Modular Structure (RFM) – choose 1066 mm or 1219.2 mm (42 or 48 in) belt width
- RFM slider material (polymer or abrasion resistant)
- Tail pulley support section
- Tail dolly
- Bretby cable handlers
- 76.2 mm (3 in) sideboards on MBCs and piggyback conveyors
- Cable handler trailers
- Radio remote
- System options
 - 5-unit attached haulage system (2 × MBC, 3 × piggyback conveyors)
 - 6-unit detached haulage system (2 × MBC, 1 MBC with hopper, 3 × piggyback conveyors)
 - 7-unit attached haulage system (3 × MBC, 4 × piggyback conveyors)
 - 8-unit detached haulage system (3 × MBC, 1 MBC with hopper, 4 × piggyback conveyors)

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

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