



Evaluating the Right Elevator Solution for Coker & Cat Cracker Operations

Coking.com
MORE PRODUCTION - LESS RISK!

Coking & CatCracking Safety Seminar
May 3-6, 2011 – Galveston, Texas

“Finding Solutions are Top Priority”



Economic Value of Elevators

Coker downtime costs can be huge!

- Transporting material by hand is exhausting/potential safety issue.
- Elevators reduce time, increase production & are more efficient.
- Supervisor/QC inspections are safe, quick & easy which reduces downtime and rework.

Finding the right elevator solution is a top priority!

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EXPERIENCE

- Right company, right background are key.
- Century's team is comprised of very experienced professionals.
- Walter Manning, 40 years in business, former owner of Champion Elevators for 29 years.
- Our team of engineers, sales, service and staff have met challenges in extreme conditions.

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IDENTIFICATION

What is the **BEST** elevator solution for Coker & Cat Cracker Operations?

- Many current Coker & Cat Cracker Elevators are Traction Drive Style or Rack and Pinion.
- Rack and Pinion Elevators have a robust design for rugged operation that is ideal for your operations.

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The Rack-and-Pinion Advantage

When determining the specifications for your industrial elevator, please consider the following benefits and advantages that a rack-and-pinion drive elevator has in comparison to a traction drive elevator.

RACK-AND-PINION DRIVE ELEVATOR

No Structural Costs

- No machine room required
- No hoistway required
- No overhead loads
- Reduces size of steel supports

Lower Installation Costs

- Equipment designed for faster installation (3-4 weeks)
- Equipment can be erected by crane
- Installation not performed in confined area

TRACTION DRIVE ELEVATOR

Structural Costs

- Machine room required
- Hoistway required
- Considerable overhead loads
- Increases size of steel supports

Higher Installation Costs

- Equipment design takes longer to install (8-10 weeks)
- Equipment cannot be erected by a crane
- Installation performed in a confined area

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The Rack-and-Pinion Advantage

RACK-AND-PINION DRIVE ELEVATOR

Manufactured Only For Industrial Applications

- Designed for outdoor use
- Can be stored outdoors after delivery
- Unit can be located on exterior of facility; allowing more production space

Few Mechanical Costs

- Single speed AC with VFD control; smoother ride, accurate leveling
- Doors designed for fork lift traffic
- Roof elevation can be served
- Light counter weighted doors – smooth manual operation

TRACTION DRIVE ELEVATOR

Manufactured Primarily for Commercial Applications

- Designed for indoor use
- Must be stored indoors after delivery
- Unit usually placed inside a facility; obstructing production space
- Machine room needs to be climatized

High Mechanical Costs

- Two speed AC with relay logic controls
- Doors not designed for fork lift traffic
- Roof elevation cannot be served
- Automatic doors – sensitive – prone to failures
- Heavy

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The Rack-and-Pinion Advantage

RACK-AND-PINION DRIVE ELEVATOR

Improved Corrosion Protection

- Hot-dipped galvanized components
- SS options
- Solid doors or perforated
- Sealed bearings

Lower Service Costs

- Owner is provided detailed service instructions to implement in to their PM Program
- Owner is provided with detailed service training

TRACTION DRIVE ELEVATOR

Less Corrosion Protection

- Painted Components
- Hollow metal doors

Higher Service Costs

- Owner is not provided service instructions; must use service company
- Owner is not provided with service training

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INSPECTION

What is needed?

Permanent, temporary, ex-proof, non ex-proof, standard or custom?

What are the conditions?

Dust/powder, debris, caustics, corrosion, water, wind, other?

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INSPECTION

Site inspection will determine:

- Best location for elevator placement.
- Uses.
- Load capacity: number of personnel and materials.
- Environmental conditions.
- Codes/area classification requirements.
- Economic evaluation.
- Cost of installation.
- Usability.
- Ease of access for men and materials.
- Safety.

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INSPECTION

Finding the right elevator solution is a top priority:

- Reliability and safety are #1!
- Fewer/no breakdowns equate to tremendous dollar savings.

The total cost savings of one turnaround can pay for the elevator itself!

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CODES

Century Elevators are Compliant for:

- ASME ANSI A17.1 – Part 4.1 & 5.7 for Permanent Installations
- ASNI A10.4 – Temporary
- ASNI A10.5 – Material Lift
- ANSI A92.9 – Platform
- ANSI A92.10 – Transport Platform
- OSHA Compliant
- NEC – National Electric Code

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CLASSIFICATION

Century can supply elevators to meet your area classification, i.e. explosion-proof:

- Class 1, Division 2, Groups A-F
- Other classifications available upon request .

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ENGINEERING

- Safety.
- Quality.
- Reliability/Performance.
- Innovative/new technological solutions.

*Bring on your challenges!
We are NOT afraid to think out of
the elevator box!*

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FABRICATION

Standard and/or custom options:

- Automatic lubricating systems.
- Overload sensors.
- Anemometer for wind alerts.
- Drive package with helical gear, extra drive package.
- Ground purge cabinet for increased protection.
- Drive assembly mounted on top.
- Vertical bi-swing door w/mechanical & electrical locks at all landing levels.
- Roof top control for maintenance inspections and service techs.

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FABRICATION

Standard and/or custom options:

- Base enclosures with buffer unit, area for cable trolley and free space.
- Patented over-speed safety brake.
- Emergency lowering device.
- Urethane rollers on SH models.
- Variable frequency drives.
- Automatic call systems to suit all applications.
- Explosion proof (Class 1, Division 2, Groups A-F).
- Exotic corrosion resistant materials.
- Hot dipped galvanizing meeting ASTM Standards.
- Elevators meet all relevant codes.

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TESTING

Houston based test tower

- Testing of ALL newly manufactured elevators before delivery.
- Testing of ALL temporary elevators returned from field.
- On-going research and development.

*Tours/inspections are welcome.
Schedule a visit.*

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INSTALLATION

- Rental units installations 1-2 weeks.
- Permanent installations 2-6 weeks
- Detailed service instructions provided.

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TRAINING

- Operational training of key personnel.
- Procedural training i.e. to limit water intrusion during floor wash-downs.
- Evaluations & consulting available.

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MAINTENANCE

- Preventative maintenance program designed to be implemented into your on-going maintenance program.
- CE preventative maintenance packages available with many options.
- Check out the advantages of Century's monthly program.

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24-7 SERVICE

- One call, one service when you need it.
- We have parts and well trained technicians.
- We will handle all of your Rack and Pinion elevator needs.

Call us!

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“Finding Solutions are Top Priority”



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