

BARNHART

Minds Over Matter

A Mountain Top Experience

Page 2

Barnhart's Modular Lift Tower In The Motor City

Page 2

Barnhart's Key To Fit Any Lock

Page 3

Modular Lift Tower Best Option In Toledo

Page 4

Nuclear Reactor Head Decommissioning

Page 4

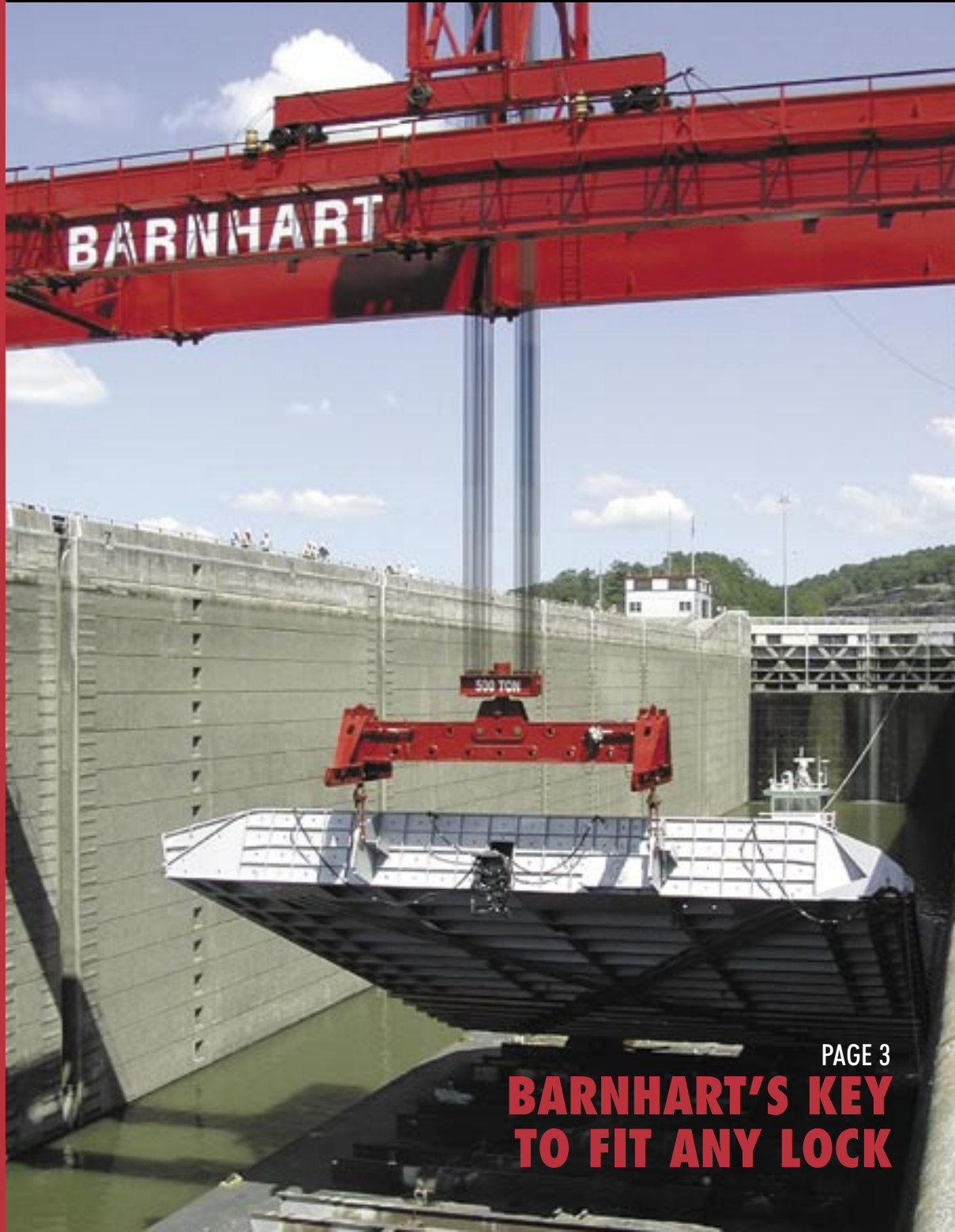
Hurricane Ivan vs. Barnhart

Page 5

THE LIFTING LETTER

2004 THIRD EDITION

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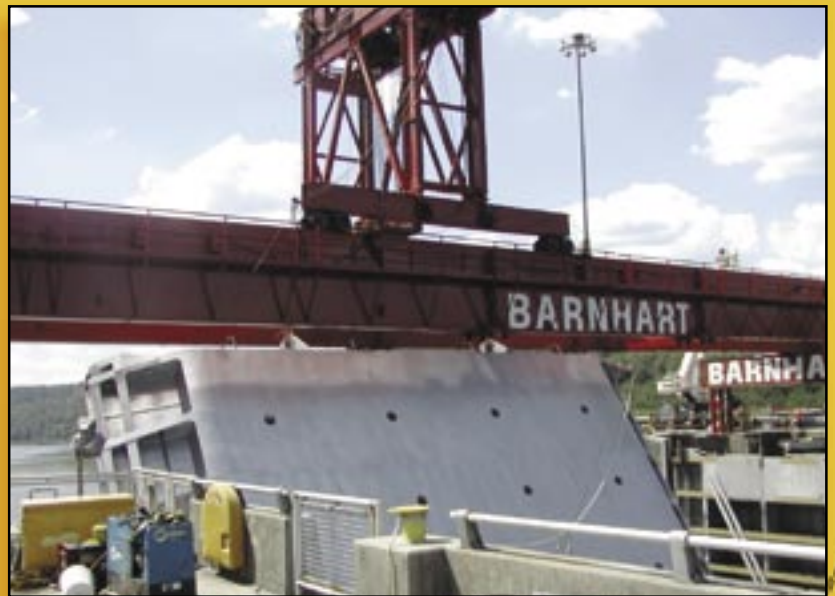


PAGE 3

BARNHART'S KEY TO FIT ANY LOCK

BARNHART'S KEY TO FIT ANY LOCK

This fall, Barnhart was contracted to replace the gates at a lock in the U.S. Army Corps of Engineers' Mobile District. The gates were 85' tall, 65' wide, 7' thick and 360 tons each. The key to Barnhart's solution was their 500 ton containerized hoist that traveled across the lock on a wheeled trolley. The main structural components consisted of a pair of 8' deep box girders placed on either side of the lock. The fully assembled gates arrived via barge and the barge was used as the tailing device to both tail down the old gates and tail up the new gates. The ability to replace the gates intact saved significant time and money in the replacement process. After dewatering, the new gates were lifted and set on new bases allowing the contractor to work "in the dry" versus the old method of using divers to complete the work. Barnhart's solution provided a higher degree of safety and a more suitable plan for execution.





MODULAR LIFT TOWER BEST OPTION IN TOLEDO

This application of the MLT was unique in that Barnhart was not erecting but removing a reactor in preparation for a new hydrotreater installation at a Toledo refinery. The removal of the reactor presented significant challenges for a heavy lift crane due to site constraints. The Barnhart Modular Lift Tower was the perfect option. The 450 ton reactor was safely and quickly tailed down to horizontal with Goldhofer SPMT outfitted with a tailing fixture.



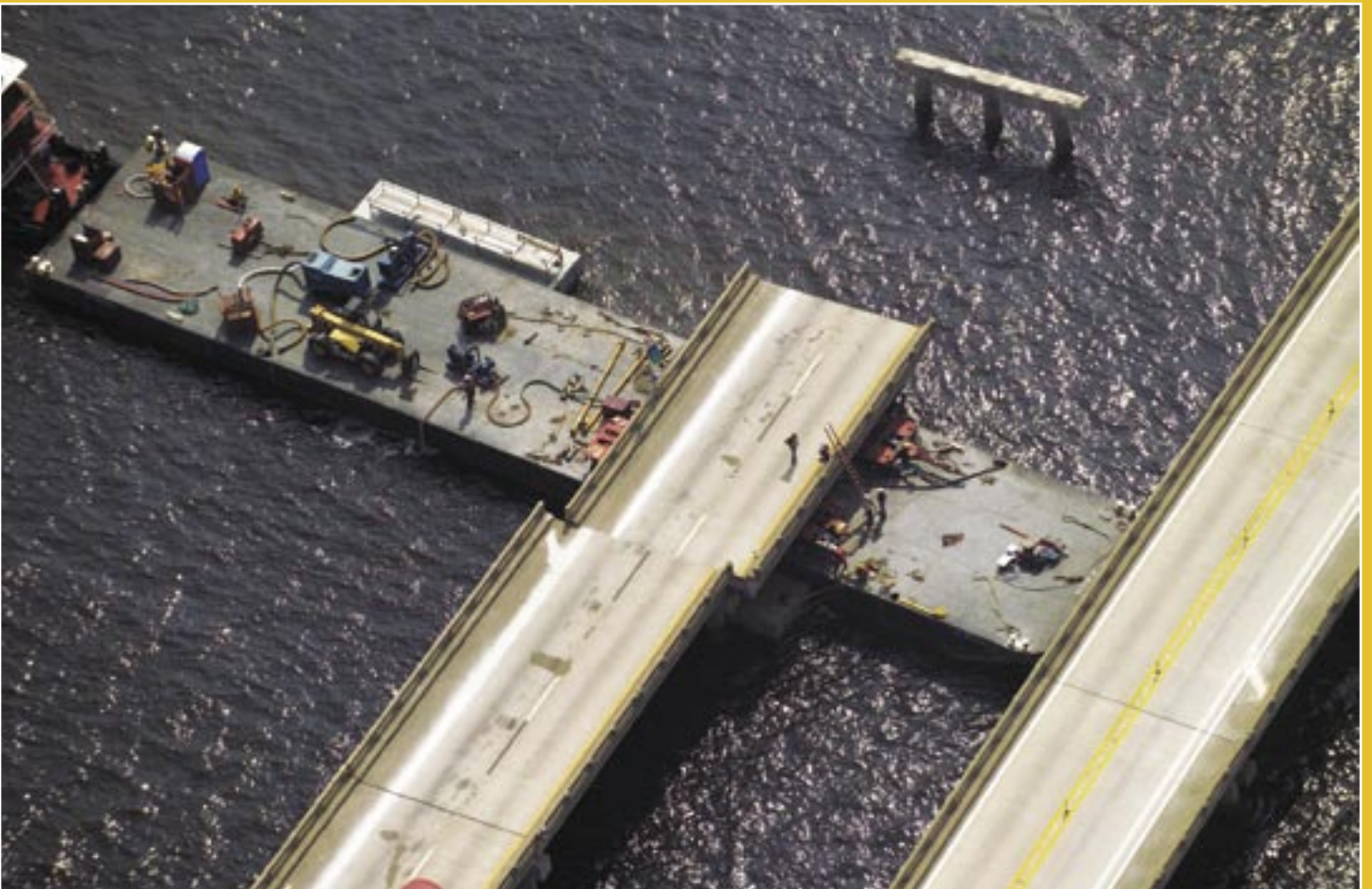
NUCLEAR REACTOR HEAD DECOMMISSIONING

Earlier in 2004, Barnhart was awarded two contracts by separate contractors to provide heavy lift and transportation services to support the disposal of a 200 ton nuclear reactor vessel head from an east coast power plant. The reactor head was discharged from barge directly to platform trailer at Barnhart's Heavy Lift Terminal at the Port of Memphis. The 1,250 ton stiff-legged derrick crane, Ichabod, made easy work of the lift. After transporting the reactor head to a radioactive processing facility, gantries and a 500 ton crane were employed to upend the packaged reactor head to allow for removal of the shipping container. Then the head was down ended and moved into the facility. The shipping container was not designed with upending or down-ending in mind. Barnhart engineered an innovative down-ending device which protected the re-usable shipping container and solved the customer's problem.



HURRICANE IVAN VS BARNHART

This summer, Hurricane Ivan devastated the I-10 Bridge in Pensacola, Florida. Barnhart assisted in the rebuild of this vital bridge. Only 24 days were allotted to reopen the westbound lane for traffic. Barnhart innovation allowed traffic to flow in 17 days. Barnhart's scope included realigning 60 bridge spans and relocating another 12 spans from the eastbound to the westbound side to replace the gaps created by Ivan's storm surge. Hydraulic jacks raised the misaligned bridge sections to allow the placement of slide pads, and two 30' hydraulic rams moved the bridge sections back in place. Platform trailer on a barge relocated the 12 spans to the westbound side. Overcoming changing tides, winds, underwater obstructions and a tight schedule, the Barnhart crews helped open the bridge seven days ahead of schedule.



A MOUNTAIN TOP EXPERIENCE



Barnhart tackled a wind turbine project that many in the industry said could not be completed on time due to the physical challenges of the terrain. The fifteen 1.8MW units were set atop of Buffalo Mountain near Knoxville, TN. Barnhart coordinated rail shipments, transported all the wind turbine parts up the mountain, assembled them on site and erected the turbines with a CC2600 crawler crane with luffing jib. This challenging project was completed on time earlier this year.



BARNHART'S MODULAR LIFT TOWER IN THE MOTOR CITY



Barnhart's proprietary Modular Lift Tower (MLT) erected a 650 ton reactor in support of a Clean Fuels Program at a Detroit refinery. The 130' long reactor was rolled off a barge with 36 lines of platform trailer and transported to the MLT. A pair of 450 ton strand jacks handled the main lifting while tailing operations were executed with the Modular Tailing Tower (MTT) in lieu of a large tail crane. In four hours, the reactor was vertical and safely on the anchor bolts.



TELESCOPIC BOOM CRANES

	MODEL NO.	BOOM
500 Ton Liebherr All-Terrain (2)	LTM 1400	440'
440 Ton Demag Truck Crane (2)	HC 1010	348'
300 Ton Demag All-Terrain	AC 665	389'
225 Ton Liebherr All-Terrain	LTM 1160	364'
210 Ton Krupp All-Terrain (2)	GMK 5210	322'
180 Ton Demag All-Terrain (3)	AC 435	262'
165 Ton Demag All-Terrain (3)	AC 335	302'
150 Ton Demag All-Terrain (2)	AC 395	253'
150 Ton Krupp All-Terrain (2)	KMK 5100	227'
120 Ton Demag All-Terrain	AC 265	204'
110 Ton Liebherr (3)	LTM 1090	243'
110 Ton Krupp All-Terrain	KMK 5110	214'
100 Ton Demag All-Terrain (4)	AC 205	219'
80 Ton Krupp All-Terrain (4)	KMK 4070	175'
80 Ton Grove RT (2)	RT 990	206'
70 - 60 Ton Truck Crane (5)		186'
50 - 30 Ton Grove Truck Crane (14)		142'
22 Ton Grove All-Terrain/Truck (4)		113'
27 - 12 Ton Boom Truck (6)		149'
17.5 - 8 Ton Carry Deck (7)		37'

CRAWLER/RINGER CRANES

	MODEL NO.	BOOM
1800 Ton Demag with Ringlift	CC 4000	595'
880 Ton Demag Crawler with Superlift	CC 4000	550'
600 Ton Demag Crawler with Superlift	CC 2600	295'
500 Ton Demag Crawler	CC 2600	295'
440 Ton Demag Crawler with Superlift	CC 2000	435'
360 Ton Link-Belt Heavy Lift	LS 718 HL	480'
330 Ton Demag Crawler	CC 2000	433'
250 Ton Link-Belt Crawler Tower Crane (2)	LS 718	550'
250 Ton Link-Belt Crawler Crane (2)	LS 718	450'

LATTICE BOOM TRUCK CRANES

	MODEL NO.	BOOM
800 Ton Demag Truck Crane with Superlift	TC 3000SL	496'
550 Ton Demag Truck Crane	TC 3000	496'
440 Ton Demag Truck Crane with Superlift	TC 1200 SL	472'
308 Ton Demag Truck Crane	TC 1200	472'
200 Ton Link-Belt Truck Crane	HC 258	370'
125 Ton Link-Belt Truck Crane (2)	HC 238	300'

HEAVY LIFTING, MOVING & SLIDING

500 Ton Hydraulic Gantries (20)	Lift Towers to 1200 Tons
1000 Ton Sliding Systems (8)	2400 Ton Jacking System
Forklifts to 120,000 lbs. with hydraulic booms	Air Casters to 500 Tons
1800 Ton Strand Lift	

MARINE SERVICES

Memphis, TN - Heavy Lift Terminal with 1250 Ton Derrick Crane, Rail Service, Heavy Storage
 Mobile, AL - Heavy Cargo discharge and storage, RO-RO, Barge/Rail Loading Heavy Lift Services
 Decatur, AL - Barge Dock, Cranes to 500 Tons, RO-RO
 Pascagoula, MS - Heavy Cargo discharge and storage, Barge/Rail Loading, Heavy Lift Services

TRANSPORTATION SERVICES

Over 2000 Tons of Hydraulic Platform Trailer Capacity including SPMT
 Barge and Rail Loading and Securement
 Dolly Transporters to 1000 Tons
 48 State Heavy Haul, Stretch Trailers, Tank Trailer to 16' diameter
 Temporary Bridges to 152'
 Jumper Ramps 30'-152'

INTERNATIONAL SERVICES

The following can be shipped in standard containers:
 Lift Towers, Dolly Transporters, Gantries, Goldhofer Trailers, Sliding Systems,
 Barge Ramps, Temporary Bridges, Strand -Lift Systems

STORAGE CAPABILITIES

500,000 Square Feet of Indoor Warehousing
 Over 100 Acres of Outdoor Storage

**MULTIPLE BARNHART LOCATIONS**

- 1701 Dunn Ave • Memphis, TN 38106 • 901-775-3000 • 800-727-0149 • fax 901-775-2992
 731 Finley Island Road • Decatur, AL 35601 • 256-355-5531 • 800-830-4260 • fax 256-355-2091
 8216 Arch Street Pike • Little Rock, AR 72206 • 501-570-0700 • 800-543-2318 • fax 501-570-0304
 6033 155 South • Jackson, MS 39272 • 601-664-3005 • 800-394-8652 • fax 601-664-3077
 5700 Ironworks • Theodore, AL 36582 • 251-654-0541 • 800-587-3249 • fax 251-654-0547
 100 Crane Lane • Oak Ridge, TN 37830 • 865-966-9786 • fax 865-966-9705
 938 E 4th Street • Richmond, VA 23224 • 804-233-9221 • fax 804-232-9141
 190 Smith Street • West Monroe, LA 71292 • 318-322-LIFT (5438) • fax 318-388-3808
 6875 Woolworth Road • Shreveport, LA 71129 • 318-687-4416 • fax 318-687-4421
 1202 Columbus Street, PMB 221 • Ottawa, IL 61350-2107 • 815-431-0078 • fax 815-431-0776
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