

Ring Power®



Ring Power Corporation
500 World Commerce Parkway
St. Augustine, FL 32092

Prepared For:
Florida Sheriff's Association

8/5/2020

Item #200: (1) NEW CATERPILLAR MH3022 MATERIAL HANDLER

CONTRACT DETAILS

Florida Sheriff's Association
Bid # FSA20-EQU18.0
Item #200: Group: Rubber Tire Material Handler, 48,000 LB Op Wt, and Options
Contract Dates: October 1, 2020 through September 30, 2023

BID SPECIFICATION:

1. ENGINE a. Tier IV Final Diesel Engine - 132 hp b. Spin on Filters c. Two Stage Air Cleaner 2. WEIGHT a. Minimum Operating Weight - 48,000 lbs 3. TRAVEL SYSTEM a. 2-speed - 0-3.0 mph/0-12.0 mph 4. HYDRAULIC SYSTEM a. Main Hydraulic System flow 80 GPM 5. UNDERCARRIAGE a. Two axles with all wheel drive b. 8 - 10:00X20 Solid Tires 6. OPERATING STATION a. Cab to be climate controlled with pressurized filtration b. Hydraulic elevating cab c. Sliding door window and tilt out front window d. Tinted windows with safety glass e. Adjustable suspension seat with safety belt and seat heater f. Catwalk with handrail g. Fire extinguisher h. Rear view and right view camera system i. Halogen work lights on roof cap 7. WORKING EQUIPMENT a. Purpose built material handling boom and stick b. Safety check valves on boom and stick cylinders

BASE MACHINE

501-3128	MH3022-06C WHEEL MTL HANDLER
503-3877	1PC, 9' 2" STK, BKT LKG
460-8163	BLCV, VA
440-3574	SPEED 12.4 MPH
442-1598	UC MH
474-7226	TIRES, SOLID RUBBER, 10.00-20 DUAL
456-9507	CONTROL, MPF, 1PC & VA
453-5090	NO PUMP, REFUELING
491-7073	CAB, 70/30
374-5098	WIPER, 70/30
373-6030	SEAT COMFORT W/ 2" SEAT BELT
261-3608	NO PEDAL
497-1005	JOYSTICK, 1-SLIDER
510-9701	CONTROL, 1PC & VA

459-6004	PRODUCT LINK, CELLULAR PL641
491-8396	LIGHTS, LED
491-1065	MIRROR, VA/MH
506-6557	COOLING SYSTEM, FINE MESH
509-7093	NO GENERATOR
433-5666	COUNTERWEIGHT, 9258 LBS
442-0428	HYDRAULIC OIL, MINERAL
473-2982	DECALS, NORTH AMERICA (ANSI)
462-8865	STEPS, UC, SIDE
176-6765	COUPLING, QUICK DISC MPF DC
494-0903	SETTING, QC CTRL, PIN GRABBER
237-0065	ALARM, BACK-UP HCR
422-9762	BEACON, ROTATING, REMOVABLE
511-5334	BUCKET-DCT, 60" 1.18 YD3
513-7228	LINES, CONNECTOR, DCT BKT
123-4801	PIN, BUCKET, ADJ

Ring Power Corporation

Cat[®] MH3022

Wheel Material Handler

2018



We know that when it comes to material handling equipment, your success depends on productivity and low operating costs. The MH3022 is a purpose-built material handler, designed for industrial and recycling applications that call for safe, quality and reliable products. It is the agile solution for all space-restricted areas, while offering good reach. And a perfect fit for all indoor sorting and waste applications.

Performance

- **Powerful and efficient** – Cat[®] C7.1 ACERT[™] engine meets U.S. EPA Tier 4 Final/EU Stage IV emission standards. Emissions technology is transparent – no action required from the operator and no stopping for regeneration.
- **Dedicated swing pump** allows faster and smoother combined movements.
- **Efficient hydraulic system** provides precision and speed, while preserving fuel consumption.

Efficiency

- **Fuel consumption** reduced up to 10%*, with no impact on your productivity to lower operating costs.
- **Built-in fuel savers** eliminate waste thanks to Auto Engine Speed Control, Engine Idle Shutdown and enhanced Eco Mode.
- **High cooling efficiency** axial fan keeps operating temperatures and costs low.

Safety

- **Blue Angel certified** with low vibrations and sound levels.
- **Options for specific applications** – Thicker high impact and impact resistant windshields fulfill respectively the EN356 P8B and P5A standards. The Advanced Cab Filtration system almost completely eliminates dust entry and air contamination.
- **Great visibility** – Large glass areas, LED lights for all working lights and cameras, with both displays split on the same screen.
- **Direct access to the cab** is possible with the upperframe swung thanks to new steps on the front and rear of the undercarriage.

Ease of Operation

- **Enjoy integrated technologies** – They act transparently. Features like the Auto Brake and Axle Lock or Automatic Travel lock remove some of the tasks you had to do.
- **Smart technologies** – They help boost your productivity while making operation easier; try the optional SmartBoom[™] or Joystick steering.
- **Our cabs are unique** – It's a cab just for you where everything can be adjusted, from the seat to the work tools controls assignment on joysticks and pedal.

Maintenance

- **Ground level access** for routine maintenance items like fuel and engine oil filters or fluid taps.
- **Reduced maintenance** – Automatic features like electric lift pump and lubrication system along with long greasing intervals.

Versatility

- **Various configurations** – A wide choice of front linkage lengths including digging, straight and drop nose sticks. The new 4.5 m (14'9") drop nose stick is a perfect addition for indoor applications while allowing transportation without stick removal.
- **Increase your efficiency with the front push blade** to clear the ground from materials commonly encountered in industrial applications.
- **Various Waste Handling (WH) Packages options** – The "fine mesh" package protects the cooling hood from dust and includes an engine air precleaner. The adjustable reversing fan and vibrating grill of the WH package add more protection.
- **Various attachments** to tackle all kinds of jobs, from various grapple types to the 15 kW Cat Generator.

Cat Connect Technology

- **Product Link[™]** connects owners to their equipment, providing access to machine data such as location, hours, fuel consumption, idle time and events, and diagnostic codes.

*Versus previous D MH Series.

Cat® MH3022 Wheel Material Handler

Engine		
Engine Model	Cat C7.1 ACERT	
Emissions	Tier 4 Final/Stage IV	
Maximum Gross (ISO 14396)	129.4 kW	174 hp (176 hp/PS*)
Maximum Net (ISO 9249/SAE J1349)	126 kW	169 hp (171 hp/PS*)
Bore	105 mm	4.1 in
Stroke	135 mm	5.3 in
Displacement	7.01 L	427.8 in ³
Cylinders	6 in-line	
Maximum Torque @ 1,400 rpm	830 N·m	612.0 lbf·ft
*Metric values.		

Swing Mechanism		
Swing Speed	8.5 rpm	
Maximum Swing Torque	54 kN·m	39,828 lbf·ft

Transmission		
Maximum Travel Speed (2nd gear)	25 km/h	16 mph
Creeper Speed (2nd gear)	10 km/h	6.2 mph
Maximum Gradeability (23 500 kg/51,810 lb)	65%	

Service Refill Capabilities		
Fuel Tank	330 L	87 gal
Cooling System	46.9 L	12.3 gal
Diesel Exhaust Fluid Tank	34.5 L	9.1 gal
Hydraulic Tank Capacity	153 L	40.4 gal
Hydraulic System Capacity	253 L	66.8 gal

Undercarriage		
Axle Clearance (MH 2.55 m/8'4" undercarriage)	325 mm	12.8 in
Oscillation Axle Angle	±5 degrees	

Maximum Dimensions (approximate)		
Maximum Shipping Height	3620 mm	11'11"
Maximum Shipping Width	2550 mm	8'4"

Hydraulic System: Maximum Flow		
Implement/Travel Circuit	288 L/min	76 gal/min
Auxiliary Circuit – High Pressure	250 L/min	66 gal/min
Auxiliary Circuit – Medium Pressure	49 L/min	13 gal/min
Swing Mechanism	108 L/min	28.5 gal/min

Hydraulic System: Maximum Pressure			
Implement Circuit (Normal/Heavy Lift)	35 000/ 37 000 kPa	5,076/ 5,366 psi	
Travel Circuit	35 000 kPa	5,076 psi	
Auxiliary Circuit			
Medium Pressure	21 000 kPa	3,046 psi	
High Pressure	35 000 kPa	5,076 psi	
Swing Mechanism	31 000 kPa	4,496 psi	

Weights		
Operating Weights*	21 815- 22 930 kg	48,094- 50,552 lb
With MH Boom (6400 mm/20'1")		
MH Undercarriage and Straight Stick	22 930 kg	50,552 lb
MH Undercarriage and 4900 mm/16'1" Drop Nose Stick	22 550 kg	49,714 lb
With Short MH Boom (5350 mm/17'6")		
MH Undercarriage and Straight Stick	22 670 kg	49,979 lb
MH Undercarriage and 4500 mm/14'9" Drop Nose Stick	22 240 kg	49,031 lb
With One-Piece Boom		
MH Undercarriage and Industrial Stick	21 815 kg	48,094 lb
With VA Boom		
MH Undercarriage and 2800 mm/9'2" Digging Stick	22 685 kg	50,012 lb
Counterweights		
Standard	3700 kg	8,157 lb
Optional	4200 kg	9,259 lb

*With solid tires, standard counterweight, MH 2.55 m/8'4" undercarriage, full fuel tank, operator and work tool (1400 kg/3,086 lb). Weight varies depending on configuration.

Working Ranges – without Work Tool								
	MH Boom				Short MH Boom			
Boom Length	6.40 m (20'1")				5.35 m (17'6")			
	mm	ft/in	mm	ft/in	mm	ft/in	mm	ft/in
Stick Length	4200	13'9"	4900	16'1"	4200	13'9"	4500	14'9"
Maximum Height	11 520	37'9"	12 065	39'0"	10 445	34'3"	10 680	35'0"
Maximum Reach	10 345	33'11"	11 005	36'1"	9325	30'7"	9610	31'6"
Maximum Depth	1485	4'10"	2185	7'2"	1655	5'5"	1955	6'5"
• Working Ranges with VA and One-Piece Booms can be found in the M320F brochure. 4500 mm/14'9" Drop Nose Stick also available with the 6400 mm/20'1" MH Boom.								

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

© 2017 Caterpillar
All rights reserved

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

CAT, CATERPILLAR, SAFETY.CAT.COM, their respective logos, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

AEXQ2200
(Americas North, Europe,
Australia, New Zealand)



Effective with sales to the first user on or after January 1, 2018

CATERPILLAR LIMITED WARRANTY

Earthmoving, Construction, Material Handling, Forestry and Paving Machines

Worldwide

Caterpillar Inc. or any of its subsidiaries ("Caterpillar") warrants the following new products sold by it to be free from defects in material and workmanship:

- Earthmoving, construction, material handling, forestry and paving machines (except as listed below).
- Attachments/work tools installed on such machines prior to delivery (unless covered by the Cat® Work Tool warranty statement or another manufacturer's warranty). Hammer tool points and compacting plates used on hydraulic hammers are not warranted.

Additional warranties are applicable against breakage for certain Cat Ground Engaging Tools and for wear on all landfill compactor tips. Refer to the applicable warranty statements for coverage detail.

This warranty does not apply to:

- Cat Batteries
- Mobil-trac belts, rubber tracks used on multi terrain loaders, compact track loaders, and mini hydraulic excavators
- Cat Work Tools
- 424 Backhoe Loaders, 216 and 226 Skid Steer Loaders, and 320 Excavators sold in India
- Prentice brand forestry machines
- Longwall mining machines
- 785, 789, 793, 794, 795, 797 Off-Highway Truck models sold in regions other than the Commonwealth of Independent States ("CIS")
- 24 Motor Grader models sold in regions other than the CIS
- 854, 992, 993, 994 Wheel Loader models sold in regions other than CIS
- Cat Utility Vehicles (UTV)
- Compact Construction Equipment including Compact Track & Multi Terrain Loaders, Mini Hydraulic Excavators, and Skid Steer Loaders sold in USA or Canada.

These products are covered by other Caterpillar warranties.

This warranty is subject to the following:

Warranty Period

For new machines and work tools/attachments the warranty period is 12-months/unlimited hours, starting from date of delivery to the first user.

Note:

- For hydraulic line's quick connect/disconnect components sold on compact wheel loaders, mini hydraulic excavators, skid steer loaders, multi terrain loaders, and compact track loader machines, the warranty period is 50 hours starting from the date of delivery to the first user.
- For Draglines, Electric Rope Shovels, Hard Rock Movers, Hard Rock Feeders, Hard Rock Miners, Hard Rock Conveyors, Hard Rock Roof Supports: the warranty period is not to exceed 24 months from shipment of the last major component from the Caterpillar place of manufacture.

Caterpillar Responsibilities

If a defect in material or workmanship is found during the warranty period, Caterpillar will, during normal working hours and at a place of business of a Cat dealer or other source approved by Caterpillar

- Provide (at Caterpillar's choice) new, remanufactured, or Caterpillar approved repaired parts or assembled components needed to correct the defect.

Note: New, remanufactured, or Caterpillar approved replacement parts provided under the terms of this warranty are warranted for the remainder of the warranty period applicable to the product in which installed as if such parts were original components of that product. Items replaced under this warranty become the property of Caterpillar.

- Replace lubricating oil, filters, antifreeze, and other service items made unusable by the defect.
- Provide reasonable and customary labor needed to correct the defect.

User Responsibilities

The user is responsible for:

- Providing proof of delivery date to the first user.
- Labor costs, except as stated under "Caterpillar Responsibilities."
- Transportation costs, except as stated under "Caterpillar Responsibilities."
- Premium or overtime labor costs.
- Parts shipping charges in excess of those that are considered usual and customary.
- Local taxes, if applicable.
- Costs to investigate complaints, unless the problem is caused by a defect in Caterpillar material or workmanship.
- Giving timely notice of a warrantable failure and promptly making the product available for repair.
- Performance of the required maintenance (including use of proper fuel, oil, lubricants, and coolant) and items replaced due to normal wear and tear.
- Allowing Caterpillar access to all electronically stored data.

Limitations

Caterpillar is not responsible for:

- Failures resulting from any use or installation that Caterpillar judges improper.
- Failures resulting from attachments, accessory items, and parts not sold or approved by Caterpillar.
- Failures resulting from abuse, neglect, and/or improper storage or repair.
- Failures resulting from user's delay in making the product available after being notified of a potential product problem.
- Failures resulting from unauthorized repair or adjustments, and unauthorized fuel setting changes.

continued...

This warranty covers every major component of the products. Claims under this warranty should be submitted to a place of business of a Cat dealer or other source approved by Caterpillar. For further information concerning either the location to submit claims or Caterpillar as the issuer of this warranty, write Caterpillar Inc., 100 N. E. Adams St., Peoria, IL USA 61629, telephone 1 (309) 675-1000, or go to URL www.cat.com, Find Your Dealer

Caterpillar's obligations under this Limited Warranty are subject to, and shall not apply in contravention of, the laws, rules, regulations, directives, ordinances, orders, or statutes of the United States, or of any other applicable jurisdiction, without recourse or liability with respect to Caterpillar.

A) For products operating outside of Australia, Fiji, Nauru, New Caledonia, New Zealand, Papua New Guinea, the Solomon Islands, and Tahiti, the following is applicable:

NEITHER THE FOREGOING EXPRESS WARRANTY NOR ANY OTHER WARRANTY BY CATERPILLAR, EXPRESS OR IMPLIED, IS APPLICABLE TO ANY ITEM CATERPILLAR SELLS THAT IS WARRANTED DIRECTLY TO THE USER BY ITS MANUFACTURER.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, EXCEPT CATERPILLAR EMISSION-RELATED COMPONENTS WARRANTY FOR NEW ENGINES, WHERE APPLICABLE. REMEDIES UNDER THIS WARRANTY ARE LIMITED TO THE PROVISION OF MATERIAL AND SERVICES, AS SPECIFIED HEREIN.

CATERPILLAR IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

CATERPILLAR EXCLUDES ALL LIABILITY FOR OR ARISING FROM ANY NEGLIGENCE ON ITS PART OR ON THE PART OF ANY OF ITS EMPLOYEES, AGENTS, OR REPRESENTATIVES IN RESPECT OF THE MANUFACTURE OR SUPPLY OF GOODS OR THE PROVISION OF SERVICES RELATING TO THE GOODS.

IF OTHERWISE APPLICABLE, THE VIENNA CONVENTION ON CONTRACTS FOR THE INTERNATIONAL SALE OF GOODS IS EXCLUDED IN ITS ENTIRETY.

B) For products operating in Australia, Fiji, Nauru, New Caledonia, New Zealand, Papua New Guinea, the Solomon Islands, and Tahiti, the following is applicable:

THIS WARRANTY IS IN ADDITION TO WARRANTIES AND CONDITIONS IMPLIED BY STATUTE AND OTHER STATUTORY RIGHTS AND OBLIGATIONS THAT BY ANY APPLICABLE LAW CANNOT BE EXCLUDED, RESTRICTED OR MODIFIED ("MANDATORY RIGHTS"). ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED (BY STATUTE OR OTHERWISE), ARE EXCLUDED. WITHOUT LIMITING THE FOREGOING PROVISIONS OF THIS PARAGRAPH, WHERE A PRODUCT IS SUPPLIED FOR BUSINESS PURPOSES, THE CONSUMER GUARANTEES UNDER THE CONSUMER GUARANTEES ACT 1993 (NZ) WILL NOT APPLY.

NEITHER THIS WARRANTY NOR ANY OTHER CONDITION OR WARRANTY BY CATERPILLAR, EXPRESS OR IMPLIED (SUBJECT ONLY TO THE MANDATORY RIGHTS), IS APPLICABLE TO ANY ITEM CATERPILLAR SELLS THAT IS WARRANTED DIRECTLY TO THE USER BY ITS MANUFACTURER.

IF THE MANDATORY RIGHTS MAKE CATERPILLAR LIABLE IN CONNECTION WITH SERVICES OR GOODS, THEN TO THE EXTENT PERMITTED UNDER THE MANDATORY RIGHTS, THAT LIABILITY SHALL BE LIMITED AT CATERPILLAR'S OPTION TO (a) IN THE CASE OF SERVICES, THE SUPPLY OF THE SERVICES AGAIN OR THE PAYMENT OF THE COST OF HAVING THE SERVICES SUPPLIED AGAIN AND (b) IN THE CASE OF GOODS, THE REPAIR OR REPLACEMENT OF THE GOODS, THE SUPPLY OF EQUIVALENT GOODS, THE PAYMENT OF THE COST OF SUCH REPAIR OR REPLACEMENT OR THE ACQUISITION OF EQUIVALENT GOODS.

CATERPILLAR EXCLUDES ALL LIABILITY FOR OR ARISING FROM ANY NEGLIGENCE ON ITS PART OR ON THE PART OF ANY OF ITS EMPLOYEES, AGENTS OR REPRESENTATIVES IN RESPECT OF THE MANUFACTURE OR SUPPLY OF GOODS OR THE PROVISION OF SERVICES RELATING TO THE GOODS.

CATERPILLAR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES UNLESS IMPOSED UNDER MANDATORY RIGHTS.

IF OTHERWISE APPLICABLE, THE VIENNA CONVENTION (CONTRACTS FOR THE INTERNATIONAL SALE OF GOODS) IS EXCLUDED IN ITS ENTIRETY.

C) For products supplied in Australia:

IF THE PRODUCTS TO WHICH THIS WARRANTY APPLIES ARE:

- I. PRODUCTS OF A KIND ORDINARILY ACQUIRED FOR PERSONAL, DOMESTIC OR HOUSEHOLD USE OR CONSUMPTION; OR
- II. PRODUCTS THAT COST AUD 40,000 OR LESS,

WHERE THOSE PRODUCTS WERE NOT ACQUIRED FOR THE PURPOSE OF RE-SUPPLY OR FOR THE PURPOSE OF USING THEM UP OR TRANSFORMING THEM IN THE COURSE OF PRODUCTION OR MANUFACTURE OR IN THE COURSE OF REPAIRING OTHER GOODS OR FIXTURES, THEN THIS SECTION C APPLIES.

THE FOLLOWING MANDATORY TEXT IS INCLUDED PURSUANT TO THE AUSTRALIAN CONSUMER LAW AND INCLUDES REFERENCES TO RIGHTS THE USER MAY HAVE AGAINST THE DIRECT SUPPLIER OF THE PRODUCTS: OUR GOODS COME WITH GUARANTEES THAT CANNOT BE EXCLUDED UNDER THE AUSTRALIAN CONSUMER LAW. YOU ARE ENTITLED TO A REPLACEMENT OR REFUND FOR A MAJOR FAILURE AND COMPENSATION FOR ANY OTHER REASONABLY FORESEEABLE LOSS OR DAMAGE. YOU ARE ALSO ENTITLED TO HAVE THE GOODS REPAIRED OR REPLACED IF THE GOODS FAIL TO BE OF ACCEPTABLE QUALITY AND THE FAILURE DOES NOT AMOUNT TO A MAJOR FAILURE. THE INCLUSION OF THIS TEXT DOES NOT CONSTITUTE ANY REPRESENTATION OR ACCEPTANCE BY CATERPILLAR OF LIABILITY TO THE USER OR ANY OTHER PERSON IN ADDITION TO THAT WHICH CATERPILLAR MAY HAVE UNDER THE AUSTRALIAN CONSUMER LAW.

TO THE EXTENT THE PRODUCTS FALL WITHIN THIS SECTION C BUT ARE NOT OF A KIND ORDINARILY ACQUIRED FOR PERSONAL, DOMESTIC OR HOUSEHOLD USE OR CONSUMPTION, CATERPILLAR LIMITS ITS LIABILITY TO THE EXTENT IT IS PERMITTED TO DO SO UNDER THE AUSTRALIAN CONSUMER LAW TO, AT ITS OPTION, THE REPAIR OR REPLACEMENT OF THE PRODUCTS, THE SUPPLY OF EQUIVALENT PRODUCTS, OR THE PAYMENT OF THE COST OF SUCH REPAIR OR REPLACEMENT OR THE ACQUISITION OF EQUIVALENT PRODUCTS.

THE WARRANTY SET OUT IN THIS DOCUMENT IS GIVEN BY CATERPILLAR INC. OR ANY OF ITS SUBSIDIARIES, 100 N. E. ADAMS ST, PEORIA, IL USA 61629, TELEPHONE 1 309 675 1000. THE USER IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH MAKING A CLAIM UNDER THE WARRANTY SET OUT IN THIS DOCUMENT. EXCEPT AS EXPRESSLY STATED OTHERWISE IN THIS DOCUMENT, AND THE USER IS REFERRED TO THE BALANCE OF THE DOCUMENT TERMS CONCERNING CLAIM PROCEDURES, CATERPILLAR RESPONSIBILITIES AND USER RESPONSIBILITIES.

TO THE EXTENT PERMISSIBLE BY LAW, THE TERMS SET OUT IN THE REMAINDER OF THIS WARRANTY DOCUMENT (INCLUDING SECTION B) CONTINUE TO APPLY TO PRODUCTS TO WHICH THIS SECTION C APPLIES.

©2018 Caterpillar All Rights Reserved.

CAT, CATERPILLAR, their respective logos, "Caterpillar Yellow," the "Power Edge" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.