



### General Specifications - MineMaster R20S Series

|                           | R520S  | R420S  | R320S  |
|---------------------------|--|--|--|
| <b>ENGINE</b>             | Liquid cooled, diesel powered  |  |  |
| Make                      | Kubota E-TVCS  | Kubota E-TVES  | Kubota E-TVCS  |
| Model                     | V2203-RP   | D1503-T-RP-1   | V1305-E2-RP  |
| HP (SAE gross) kW(HP)/rpm | 36.6 (49) / 2600   | 32.1 (43) / 2600   | 26.6 (19.8) / 2600   |
| Cylinders                 | 4  | 3 (Turbo)  | 4  |
| Alternator                | 105 amp  | 60 amp   | 55 amp   |
| Rating                    | 49 hp @2600 RPM  | 43 hp @ 2600 RPM   | 26.6 hp @2600 RPM  |
| Certified                 | Canmet #1045   | Canmet #1043   | Pending  |
| <b>AXLES</b>              | Limited slip front differential on front axle<br>Inboard planetary drives  |  |  |
| <b>TRANSMISSION</b>       | Automatic load sensing<br>High/Low, forward/reverse  |  |  |
|                           | Electro-hydraulic forward & reverse shuttle shift  |  | Electric shuttle shift   |
| <b>STEERING</b>           | Articulated center pivot<br>Angle of articulation each way 40 degrees<br>Frame oscillation each way 8 degrees  |  | Articulated center pivot<br>Angle of articulation each way 41 degrees<br>Frame oscillation each way 7 degrees  |
| <b>DRIVE SYSTEM</b>       | 4 wheel drive  |  |  |
| <b>BRAKES</b>             | Wet type friction plate, outboard of differential case in rear axle  |  | Enclosed wet disc in transfer case   |
| Service                   | Wet driveline disc on front & rear differential input,<br>S.A.H.R. dash activated or with loss of hydraulic or engine stall  |  | Spring application of transfer case brake<br>S.A.H.R. dry discs on front wheel ends  |
| Park/Emergency            |  |  |  |
| <b>TIRES</b>              | 14/60-16 / 24 Ply aircraft   | Heavy duty 13/70-18 / 24 ply   | Low profile mining tires<br>30 x 11.5 - 14.5 26 ply rating   |
| <b>GROUND CLEARANCE</b>   | Loader unit - 12.5"<br>Loader Backhoe unit - 10.5"<br>Forklift Mast unit - 9.25"   | Loader unit - 10.5"<br>Loader Backhoe unit - 10"<br>Forklift Mast unit - 9.25"   | Loader unit - 13 7/16"   |
| <b>LOADER</b>             | Operating Load: 2420 lbs<br>Tipping Load (SAE): 4840 lbs<br>Breakout force: 7440 lbs<br>Max hinge pin height: 130.3"<br>Max dump height: 105.7"<br>Counterweight: R520CW | Operating Load: 2,245 LBS<br>Tipping Load (SAE): 4,490 LBS<br>Breakout Force: 6,570 LBS<br>Max hinge pin height: 110.7"<br>Max dump height: 88.8"<br>Counterweight: R520CW | Operating Load: 1,485 Lbs<br>Tipping Load: 2,710 LBS<br>Breakout Force: 3,700 LBS<br>Max hinge pin height: 86.2"<br>Max dump height: 65.6"<br>Counterweight R320CW |
| <b>PALLET FORKS</b>       | Lift: 130"<br>Capacity: 1800 lbs<br>Counterweight: R520CW<br>C/W load backrest   | Lift: 110"<br>Capacity: 1400 lbs<br>Counterweight: R520CW<br>C/W load backrest   | Lift: 74"<br>Counterweight: R320CW<br>C/W load backrest  |
| <b>FORKLIFT MAST</b>      | Lift: 107.5"<br>Lowered: 79"<br>Forks-folding 2 1/2" x 5" x 40"<br>Capacity: 6,000 lbs @24" LC<br>Full free lift<br>Counterweight: R520CW                                |  | Capacity: 3,500 lbs @24" LC<br>Full free lift<br>Folding forks<br>Counterweight: R320CW  |
| <b>BACKHOE</b>            | Side shift type- vertical stabilizers<br>Max Digging depth: 9'<br>Bucket Width: 17.7"<br>Bucket digging force: 4,100 lbs<br>Side shift: 19.5" (each way)                 |  | Sideshift Type, C/W Vertical Stabilizers<br>Max Digging Depth: 84"<br>Bucket Capacity: 1 cu. Ft.<br>Bucket digging force: 1,710 lbs<br>Side shift each way 16 1/2" |

Specifications subject to change without notice

**Tracks & Wheels** builds the MineMaster product in several standard configurations to suit a variety of applications, we also design and build custom units to our customers unique needs for specialized applications. Contact us for complete specifications and general arrangement drawings of the Mine Master you require.



**TRACKS & WHEELS**  
Equipment Brokers Inc.  
Registered ISO 9001:2000



**SUDBURY**

400 69 N. Box 2592  
Sudbury, ON P3A 4S9  
Tel: (705) 566-5438  
Fax: (705) 566-5422

**TIMMINS**

2200 Riverside Dr. RR2  
Timmins, ON P4N 7C3  
Tel: (705) 268-5438  
Fax: (705) 268-3382

**NORTH BAY**

701 Graham Drive  
North Bay, ON P1B 9E6  
Tel: (705) 840-5438  
Fax: (705) 474-0417

**SAULT STE MARIE**

232 Drive-In Road  
Sault Ste Marie, ON P6B 6A9  
Tel: (705) 256-5438  
Fax: (705) 256-1451

**THOMPSON MB**

35 Station Rd  
Thompson, MB R8N 0N6  
Tel: (204) 778-3777  
Fax: (204) 778-4477

WEBSITE: [www.tracksandwheels.com](http://www.tracksandwheels.com)

EMAIL: [sudbury@tracksandwheels.com](mailto:sudbury@tracksandwheels.com)

*"Our Service Makes the Difference"*

**MINEMASTER R20S Series**

**WHEN IT COMES TO MINE UTILITY  
VEHICLES NOTHING BEATS A  
MINEMASTER!**



**TRACKS & WHEELS**  
Equipment Brokers Inc.  
Registered ISO 9001:2000

# MineMaster R20S Series

## The MineMaster R20S Series is backed up by over 20 years of on-the-job training!

Customer driven improvements over the years from experienced, knowledgeable mine personnel working together with our qualified professional staff has refined the R20S MineMaster into a state-of-the-art mine utility vehicle.



The MineMaster R20S series utility vehicles are designed to out-work, out-last and out-maneuver the competition. This MineMaster is built tough to stand up to the rigors of the underground environment but still offers a high standard of operator comfort and safety.

### Our strong points include:

- Canmet certified diesel engines
- Fully upgraded electrical system
- Stainless steel dash and heavy duty mining type switches
- Heavy duty frame
- Walk-through operator compartment
- Inching pedal
- High ground clearance
- Protective operator guards
- Non slip 3-point access on all entry points for safety
- Safety starting system

### ATTACHMENTS INCLUDE

#### R320S, R420S/R520S Series

**Forklift Mast**- forks or flip-up forks—3,500, 5,500 or 6,000 lbs capacity

**Man Basket** - front or rear

**Loader assembly** - bucket, pallet forks, or rake

**Backhoe** - standard, rotating or side shifting, bucket, scraper blade, or rock breaker

Cab, canopy, ROPS, folding ROPS

# FEATURES

### ARTICULATING FRAME WITH CENTER OSCILLATION

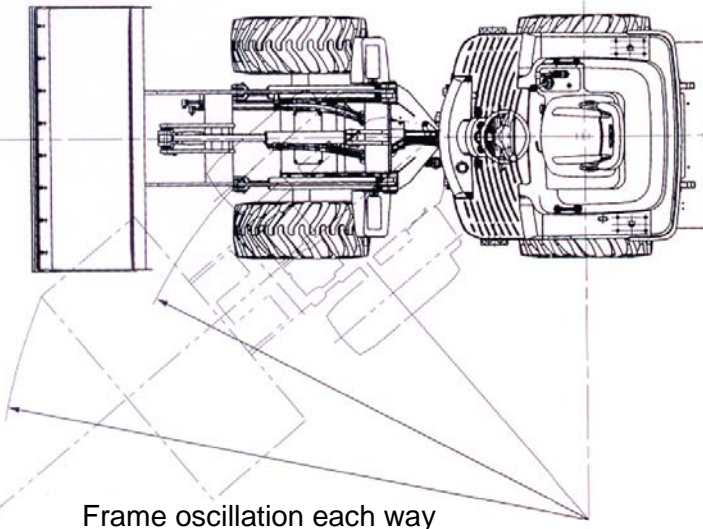


Heavy duty articulating frame with and center pivoting oscillation offers greater stability when operating in an industrial environment. With center oscillation when the driver encounters rough terrain or an obstacle the center oscillation allows the load and driver shift separately offering a more comfortable ride.

The articulating steering allows the R20S MineMaster exceptional maneuverability in tight spaces. Also this unit can be equipped with a Forklift Mast, Loader complete with Bucket or Pallet forks, a Backhoe, Man Basket, or Shotcreter. The R20S series has proven itself to be a tough competitor and has become an industry favorite.



Angle of articulation each way  
41° R320S  
40° R420S & R520S



Frame oscillation each way  
7° R320S and 8° R420S & R520S

### LOADER FRAME



Reinforced loader frame offers superior lifting capacity, unobstructed visibility and the highest dumping clearance in its class.

### SERVICING



Quick and easy servicing with a wide, flip-open engine compartment. The engine cover locking feature offers added security.

### REAR AXLE



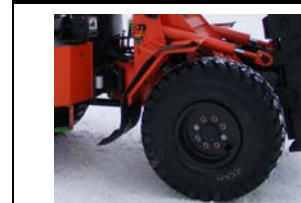
Heavy duty rear axle offers strong traction on rough terrain

### FRONT AXLE

Limited slip, heavy duty front axle with inboard planetary drives. High load capacity providing long wear and less maintenance.



### FENDERS & TIRES



The R20S series are equipped with heavy duty fenders and 30 ply tires for underground use.

### EASY FILL POINTS



Fill & check points are at each reach from ground level. All caps are painted, and labeled for easy identification and chained for safety.

### DASH & ELECTRICAL



The MineMaster R20S series features a fully upgraded wiring package, heavy duty stainless steel dash, heavy duty mining type switches, special lighting package, and front and rear work lights.

### LUBRICATION



The R20s series offers a 10, 17, or 19 point in-line lubrication system. Greasing is completed in one step by re-filling the grease reservoir.

### ENGINE & TRANSMISSION



Canmet certified 3 & 4 cylinder diesel engines offering exceptional power and reliability.

Automatic load sensing transmission allowing automatic shifting from high speed/low torque to high speed/high torque.

### FUEL & HYDRAULIC TANKS



Heavy duty fuel and Hydraulic tank with side foot step. Steps are treated with anti-slip compounds for safety.

### OPERATOR'S COMPARTMENT & CONTROLS



Operator's compartment features fully adjustable suspension seating reduces noise and vibration levels increasing operator comfort. All gauges are large and easy to read and controls are within reach of the operator to minimize operator stress and strain. Seat is equipped with a retractable seat belt for safety.

Our excellence in quality is achieved through the commitment of our highly skilled staff combined with the selection and continual updating of the equipment, materials, processes, and manufacturing methods.