

# **PERFORMANCE PAR EXCELLENCE MOST VERSATILE BACKHOE LOADER**

**THE NEW MAHINDRA EARTHMASTER SX90**



**Mahindra**  
Construction Equipment  
GENUINE SERVICE



**Mahindra**  
Construction Equipment  
LUBRICANTS



**Mahindra**  
Construction Equipment  
ATTACHMENTS



**Mahindra**  
Construction Equipment  
GENUINE PARTS



**Mahindra**  
Construction Equipment  
RENTAL SERVICES

**EARTHMASTER**

**SX90**

| Engine   |   |             |
|--|---|-------------|
| Model  | 4915-IA-CEV   |             |
| Emission Standard  | BSIII   |             |
| Type   | Turbocharged Intercooled  |             |
| No. of Cylinders   | 4   |             |
| Displacement   | 3532 cc   |             |
| Gross Horse Power  | 66.9 KW @ 2200  |             |
| Peak Gross Torque  | 345 Nm ± 5% @ 1400 - 1600 RPM   |             |
| Hydraulics   |   |             |
| System Type and Pressure   | Open Centre: 250 Bars (3675 PSI)  |             |
| Pump Type  | Fixed Displacement, Gear Pump   |             |
| Pump Delivery  | 117 litres @ 2250 RPM   |             |
| Control Valves (Backhoe and Loader)  | Sectional Valves (Sandwich Type, Individually Replaceable)  |             |
| Transmission   |   |             |
| <b>Type:</b> Four Speed (4 Forward, 4 Reverse), Four Wheel Drive (4 WVD), Synchro Shuttle Transmission with Electrically Operated Reversing Shuttle and Torque Converter having Stall Ratio of 2.64:1  |   |             |
| Axles  |   |             |
| <b>Rear Axle:</b>  | Rigidly mounted drive axle, with outboard planetary final drives, driven by short drive shaft.  |             |
| <b>Front Axle:</b>   | Centrally pivoted, driven unbalanced type axle, with total oscillation of 16°, with remote greasing facility for the main pin.  |             |
| Brakes   |   |             |
| <b>Service Brakes:</b>   | Hydraulically actuated, self adjusting, maintenance free, oil immersed multi-disc, on the rear axle, operated by independent foot pedals, joined together for normal operation. |             |
| <b>Parking Brakes:</b>   | Hand operated, inbuilt in the rear axle, low maintenance.   |             |
| Electricals  |   |             |
| Dust-proof switches, ignition controls for engine start and stop, horn and reverse alarm, water and dust-proof electrical connectors. Electric: 12V, Battery: 100Ah<br>Alternator: 90 Ampere for Non-AC Version  |   |             |
| Cabin  |   |             |
| Ergonomically designed cabin with contemporary styling, excellent operator comfort, day and night time visibility, rear view mirror, multiple storage options, two door access, sliding rear window, stowable doors and an integrated tool box. Cabin frame built with sturdy tubular sections and protected with CED technology for longer rust protection. Fully adjustable premium operator seat with safety belt. Excellent leg space, conveniently positioned control levers and pedals. Low line curved hood to enhance operator visibility. Rops, FOPS Compliance - Yes. Climate control optional |   |             |
| Steering   |   |             |
| Front wheel hydrostatic power steering with priority function and pressure relief setting of 145 bar.  |   |             |
| Operator information and Entertainment Syatem  |   |             |
| M-Star Non - CAN cluster with Water and Dust-proof connectors (IP-67) with Speedometer, Turn and Head Light Signals.<br>Gauges : Temperature, Oil, Fuel, RPM gauge   |   |             |
| Ratios (Gear Speed)  |   |             |
| 1st F/R  | 4.93 to 5.38 km/hr  |             |
| 2nd F/R  | 7.94 to 8.58 km/hr  |             |
| 3rd F/R  | 17.43 to 18.83 km/hr  |             |
| 4th F/R  | 34.84 to 37.64 km/hr  |             |
| Service Capacities (System)  |   |             |
| System Capacities  | Service Replacement Capacities  |             |
| Hydraulic Oil Capacity   | 100 Litres  | 100 Litres  |
| Fuel Tank  | 120 Litres  | 120 Litres  |
| Engine Coolant   | Ready Mix (17 Litres)   | 17 Litres   |
| Engine Oil   | 13.7 Litres   | 13 Litres   |
| Transmission   | 22 Litres   | 12 Litres   |
| Rear Axle  | 17.1 Litres   | 17.1 Litres |
| Front Axle   | 9.1 Litres  | 9.1 Litres  |

| Tyres                         |  | Standard (Traction/Industrial) |                           |
|-------------------------------|--|--------------------------------|---------------------------|
| Front                         | 12.5 X 18 -12PR  |                                |                           |
| Rear                          | 16.9 X 28 - 12PR, 14 X 25 - 12PR / 20PR                |                                |                           |
| Backhoe Static Dimension      |  |                                |                           |
|                               |  | SX 4WD IND                     | SX 4WD HD                 |
| AA                            | Overall Length   | 5864 mm                        | 5856 mm                   |
| AB                            | Wheelbase  | 2175 mm                        | 2175 mm                   |
| AE                            | Height to top of Cab                                   | 2798 mm                        | 2950 mm                   |
| AF                            | Overall Height   | 3665 mm                        | 3634 mm                   |
| AG                            | Track Width Rear                                       | 1720 mm                        | 1720 mm                   |
| AH                            | Track Width Front                                      | 1920 mm                        | 1920 mm                   |
| AJ                            | Width over Bucket                                      | 2238 mm                        | 2238 mm                   |
| AK                            | Max Length From Front Axle Center (Carry Position)     | 1836 mm                        | 1829 mm                   |
| AL                            | Max Length From Rear Axle Center (Carry Position)      | 3207 mm                        | 3210 mm                   |
| AM                            | Width During Transport Condition                       | 2422 mm                        | 2422 mm                   |
| AN                            | Max Length (Carry Position)                            | 7218 mm                        | 7215 mm                   |
| Backhoe Performance           |  |                                |                           |
| A                             | Max Dig Depth*   | 4885 mm                        | 4885 mm                   |
| B                             | Reach at ground level to Wheel Center                  | 7092 mm                        | 7101 mm                   |
| C                             | Reach at ground level to Slew Center                   | 5761 mm                        | 5773 mm                   |
| D                             | Reach at full height to Slew Center                    | 2676 mm                        | 2676 mm                   |
| E                             | Side Reach to Center of Machine                        | 6291 mm                        | 6303 mm                   |
| F                             | Max Working Height*                                    | 5969 mm                        | 5969 mm                   |
| G                             | Max Load Over Height*                                  | 4228 mm                        | 4228 mm                   |
| H                             | King Post Travel                                       | 1060 mm                        | 1060 mm                   |
| Y                             | Bucket Tearout Force                                   | 5828 kg                        | 5828 kg                   |
| Z                             | Dipper Tearout Force                                   | 3182 kg                        | 3182 kg                   |
|                               | Lift capacity to bucket pivot at full reach w/o bucket | 1449 kg                        | 1449 kg                   |
|                               | Bucket (Standard)                                      | 0.3 CuM                        |                           |
| Loader Performance            |  |                                |                           |
| M                             | Dump Height  | 2715 mm                        | 2723 mm                   |
| N                             | Load Over Height                                       | 3267 mm                        | 3277 mm                   |
| O                             | Pin Height   | 3477 mm                        | 3482 mm                   |
| P                             | Pin Forward Reach                                      | 220 mm                         | 204 mm                    |
| Q                             | Reach at Ground  | 1350 mm                        | 1350 mm                   |
| R                             | Max Reach at Full Height                               | 1100 mm                        | 1084 mm                   |
| S                             | Reach at Full Height - Bucket Dump                     | 706 mm                         | 694 mm                    |
| T                             | Below Ground Level Dig Depth                           | 107 mm                         | 97 mm                     |
| U                             | Roll Back Angle at Ground                              | 43°                            | 44°                       |
| V                             | Dump Angle   | 44°                            | 44°                       |
| W                             | Roll Back Angle at Max Lift                            | 48°                            | 49°                       |
| X                             | Overall Height Bucket Raised                           | 4415 mm                        | 4415 mm                   |
| 1                             | Bucket Breakout Force                                  | 6243 kg                        | 6243 kg                   |
| 2                             | Loader Arm Breakout Force                              | 5594 kg                        | 5594 kg                   |
|                               | Shovel   | 1.1 CuM (optional 6-in-1)      | 1.1 CuM (optional 6-in-1) |
|                               | Lift Capacity at Max Height                            | 3428 kg                        | 3428 kg                   |
|                               | Payload  | 1800 kg                        | 1800 kg                   |
| Turning Radius                |  |                                |                           |
| Inner Wheel Braked            |  |                                |                           |
| Turning Radius outside bucket |  | 4494 mm                        | 4494 mm                   |
| Turning Radius outside wheels |  | 3083 mm                        | 3083 mm                   |
| Inner Wheel Not Braked        |  |                                |                           |
| Turning Radius outside bucket |  | 5150 mm                        | 5150 mm                   |
| Turning Radius outside wheels |  | 3825 mm                        | 3825 mm                   |
| Shipping Weight of Vehicle    |  |                                |                           |
| Net Weight of Machine         |  | 7592 kg                        | 7742 kg                   |

Technical specifications, features are subjected to change without prior notice. Image used are for representative purpose only. Accessories shown may not be a part of the standard product. Actual colours may vary. E.S.O.E.^Standard exclusions apply. For further details on the warranty, please contact your dealer. \* According to government approved independent agency, under manufacturer standard PER/VEH/21 certified at 1450 RPM. #When compared to a standard excavation cycle. ## Value measured under specific measuring condition.

## Mahindra Construction Equipment

Mahindra & Mahindra Ltd | CE Business | Gate No. 2 | 1st Floor | Powerol Building | Akurli Road | Kandivali(E) | Mumbai-400 101.

Toll Free Helpline: 1800 209 6006 | Website: www.mahindraconstructionequipment.com | E-mail: mce.marketing@mahindra.com

