



# INSPIRING THE NEXT GENERATION

With almost 60 years' expertise in the design, development and manufacture of backhoe loaders, our world-renowned range is designed to deliver durability, versatility and productivity for the operator. Available in both centre mount and side shift variations, we have the perfect model for every application.

The dual functionality of our backhoe loaders combines the power of a wheel loader and the versatility of a compact excavator into one dynamic machine – productive, cost effective and flexible... enough to boost your bottom line!

Manufactured at our state-of-the-art production facility in the UK, we continue to innovate, setting new standards in compact construction.

#### **KEY FEATURES**

- High ground clearance to suit tough terrain
- Excellent operator visibility
- Ergonomically-designed controls
- Easy maintenance access
- Powerful hydraulics make light work of tough tasks
- Excellent lift capacity and bucket breakout force
- LED worklight for improved reliability and worksite illumination





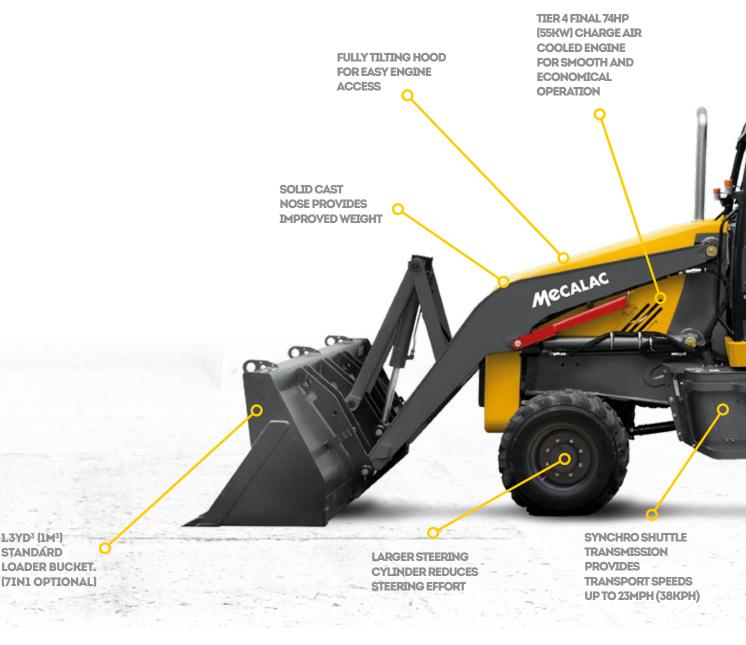


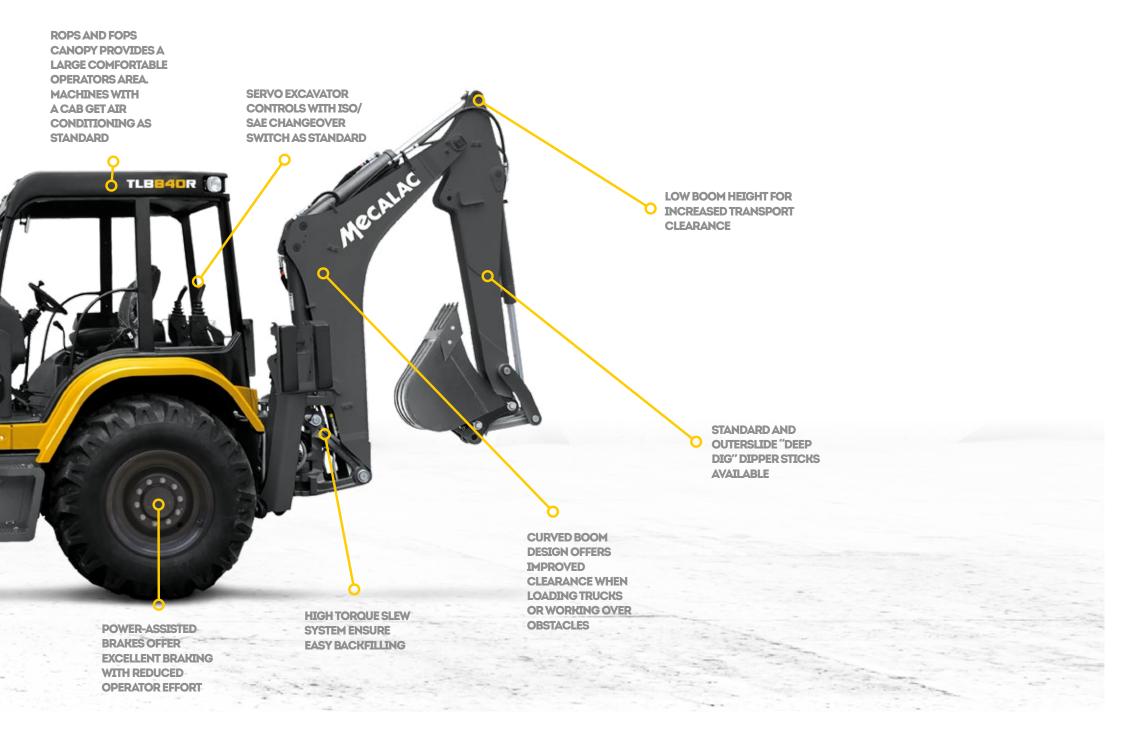
### DESIGNED TO GET YOUR JOB DONE

1.3YD3 (1M3)

STANDARD

(7IN1 OPTIONAL)







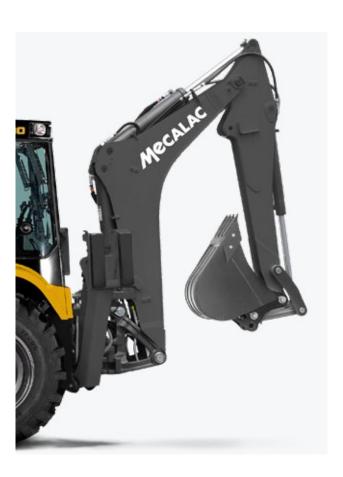
## **OPERATOR CONTROLS**

Any operator can become instantly familiar with the controls of our backhoe loader, with servo excavator controls as standard the ISO/SAE switch can be used to easily switch between Excavator or Backhoe control patterns.



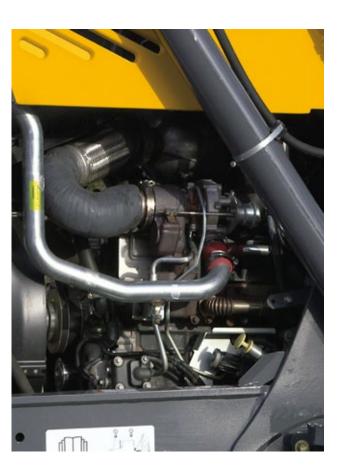
#### **BACKHOE**

The curved boom design provides greater clearance when working over obstacles and the ability to load closer into trucks, increasing versatility. Dig depths of up to 17'10" (5.44m) and ground level reach of up to 22' (6.7m) can be achieved with the optional "Deep Dig" dipper stick.



#### **ENGINE**

The powerful 74hp (55kw) engine with 288lbf (390Nm) of torque meets Tier 4 Final emissions requirements without the use of a Diesel Particulate Filter (DPF) or Selective Catalytic Reduction (SCR / Adblue). A "life of the engine" Diesel oxidation Catalyst (DOC) is fitted which requires no regeneration, servicing or cleaning.



#### **TRANSMISSION**

The synchro shuttle transmission provides smooth shifting between all 4 gears and transport speeds of up to 23mph (38kph). Power assisted brakes and selectable 4 wheel braking ensure high braking forces with low operator effort.





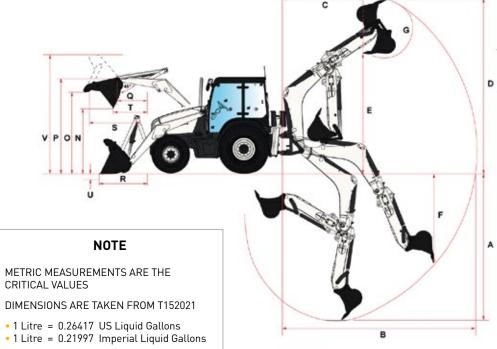
### → TECHNICAL DATA

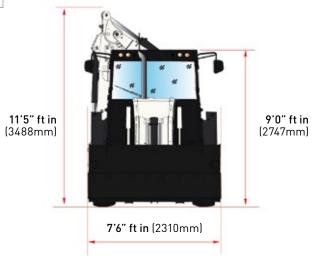
BACKHOE DIMENSIONS*		Standard Dipper ft in (mm)	Deep Dig Dipper ft in (mm)		
				Retracted	Extended
A	Dig depth	Maximum SAE 2 ft Flat Bottom SAE	<b>14'6"</b> (4411) <b>14'3"</b> (4337)	<b>14'6"</b> [4411] <b>14'3"</b> [4337]	<b>17'10"</b> (5438) <b>17'7"</b> (5364)
В	Reach - ground level to s	slew	<b>18'8"</b> (5695)	<b>18'8"</b> (5695)	<b>21'11"</b> (6670)
C	Loading reach		<b>7'7"</b> (2302)	<b>7'7"</b> (2302)	<b>10'4"</b> (3156)
D	Operating height		<b>17'0"</b> (5182)	<b>17'0"</b> (5182)	18'12" (5782)
E	Loading height SAE Max dumping height		<b>11'9"</b> (3569) <b>11'4"</b> (3446)	<b>11'9"</b> (3569) <b>11'4"</b> (3446)	<b>13'8"</b> (4168) <b>13'3"</b> (4046)
F	Straight wall dig depth		<b>7'6"</b> (2298)	<b>7'6"</b> (2298)	<b>10'6"</b> (3210)
G	Bucket rotation degrees	Speed Power	194° 164°	194° 164°	194° 164°
Stal	biliser spread		<b>9'9"</b> (2980)	<b>9'9"</b> (2980)	<b>9'9"</b> (2980)
Max. levelling angle degrees			12°	12°	12°

<sup>\*</sup>Includes standard 24" (600 mm) HD bucket.

LOADER DIMENSIONS	Standard / 7in1 Bucket ft in (mm)
N Dump clearance – at 45°	<b>8'7"</b> (2609)
O Loader height	<b>10'4"</b> (3145)
P Hinge pin height	<b>11'2"</b> (3401)
Pin forward reach	<b>1'5"</b> (430)
Reach at ground	<b>5'0"</b> (1525)
S Max. reach at full height	<b>2'7"</b> (776)
Reach at full height – at 45°	<b>2'5"</b> (732)
Dig depth	<b>0'10"</b> (251)
U Rollback at ground	48°
Max. dump angle fully raised	50°
V Overall operating height	<b>14'1"</b> (4304)

BACKHOE PERFORMANCE		Standard Dipper	Deep Di	g Dipper
			Retracted	Extended
		Standard Bucket   HD Bucket	Standard Bucket   HD Bucket	Standard Bucket   HD Bucket
Max slew torque kNm (lbf-ft)		<b>21</b> (15488.8)	<b>21</b> (15488.8)	<b>21</b> (15488.8)
Dipper tearout <b>kN</b> (lbf) (SAE J49 Standard)		<b>35.4</b> (7958)   <b>35.4</b> (7958)	<b>35.4</b> (7958)   <b>35.4</b> (7958)	<b>26</b> (5845)   <b>26</b> (5845)
Bucket tearout <b>kN</b> (lbf)	Speed Power	<b>47</b> (10566)   <b>47</b> (10566) <b>54</b> (12140)   <b>54</b> (12140)	<b>47</b> (10566)   <b>47</b> (10566) <b>54</b> (12140)   <b>54</b> (12140)	<b>47</b> (10566)   <b>47</b> (10566) <b>54</b> (12140)   <b>54</b> (12140)





NOTE: IMAGE IS FOR REFERENCE PURPOSE ONLY

ENGINE	
Deutz TCD 3.6 L4 (Tier 4 Final)	Torque Rise 63% Electronic fuel injection
Cylinders	4
Capacity	3.6 L (219.6 in <sup>3</sup> )
Rated speed	2200 rpm
Gross power @ 2200rpm Cert. rating to ISO 14396:2002	55.4 kW (74.0 hp)
Derived net rating @ 2200 rpm	51.9 kW* (69.6 hp*)
Max Torque @ 1300 rpm ISO 14396	390 Nm (288 lbf)

<sup>\*</sup>Nominal non-certified values.

ELECTRICAL SYSTEM
External wiring and connectors meet IP69k standard
Maintenance free battery
12 volt negative ground
Battery isolator
95 amp alternator
Blade type fuses
110 A/hr single battery with 920 CCA – EN Standard

CAPACITIES	Ltrs (gals)
Fuel tank	<b>140</b> (37.0)
Engine coolant	<b>17</b> (4.5)
Engine oil (including filter)	<b>8</b> (2.11)
Synchro shuttle transmission	<b>20</b> (5.3)
Rear axle (including final drives)	<b>17.1</b> (4.5)
Front axle (including final drives)	<b>6.9</b> (1.52)
Hydraulic tank	<b>52</b> (13.7)

Front axle (including final drives)		<b>6.9</b> (1.52)
Hydraulic tank		<b>52</b> (13.7)
AXLES AND BRAKES		
Outboard planetary drives for easier se	ervicing	
Foot operated differential lock with 10	0% lockup	
16° front axle oscillation to maintain m	naximum ground contact to traction	
Power boosted inboard wet disc brake	S	
Self equalizing and self adjusting brake	es .	
Selectable 2 or 4 wheel braking		
Axle Ratings	Max Static Loading	Max Dynamic Loading
Front kN (lbf)	<b>175</b> (39342)	<b>70</b> (15737)
Rear kN (lbf)	<b>187.5</b> [42152]	<b>75</b> [16861]

TURNING CIRCLES		
	Over Tyres	Over Bucket
Without brakes <b>m</b> (ft)	<b>7.9</b> (25'11")	<b>10.9</b> (35'9")
With brakes <b>m</b> (ft)	7 (23')	<b>10</b> [32'10"]

TRANSMISSION			
4 Speed synchro shuttle gearbox			
Modulated forward and reverse clutch packs enable smooth d	irection changes		
De-clutch button on gear lever			
Direction control with neutral safety interlock			
Single stage torque converter with 3:01:1 stall ratio			
Tyres	Front: Rear:	12 x 16.5 12 PR SKS XTRA 19.5 x 24 12 PR SLA R4	
Travel Speeds	Forw	ard/Reverse <b>Km/h</b> (mph)	
1st		<b>5</b> (3)	
2nd		<b>8</b> (5)	
3rd		<b>19</b> (12)	
4th		<b>38</b> (24)	

HYDRAULIC SYSTEM	
Tandem gear pumps with inloader valve	
Open centre valves	
External oil level gauge	
125 micron suction strainer	
10 micron return line filter	
10 micron filler breather	
Main pump flow @ 2200 rpm <b>L/min</b> (gpm US / gpm)	<b>83</b> (22 / 18)
Secondary pump flow @ 2200 rpm L/min (gpm US / gpm)	<b>45</b> (12 / 10)
System main relief setting <b>bar</b> (psi)	<b>250</b> (3626)

OPERATING WEIGHTS	
Base Machine Weight*	<b>7320 kg</b> (16138 lbs)
Add/Delete	
Deep dig dipper	<b>+ 295 kg</b> (650 lbs)
ROPS frame	<b>- 185 kg</b> (408 lbs)

<sup>\*</sup>Base operating weight includes cab, standard loader bucket, standard dipper stick, 24 in | 600 mm bucket, full fuel tank, standard counter weight 407.85 lbs | 182Kg and 165 lbs | 75Kg operator.

LOADER PERFORMANCE	
	Standard Bucket
Bucket breakout* kN (lbf)	<b>42</b> (9441.98)
Arms breakout* <b>kN</b> (lbf)	<b>46</b> (10341.2)
Lift capacity to full height** kg (lbs)	<b>3759.34</b> (8287)
Rated operating capacity** kg (lbs)	<b>2813.55</b> (6202)

<sup>\*</sup>Loader specifications are stated in accordance with ISO 14397 and EN474 Part 4.

\*\*Based on basic machine configuration; cab, standard loader bucket, standard dipper stick, 24" (600 mm) bucket, full fuel tank.





## THE RIGHT TOOLS FOR THE JOB

Alongside standard fittings, we offer a comprehensive range of attachments to make your backhoe the perfect tool for every job.

#### **PALLET FORKS**

- Safe working load at 500mm (1'8") load centre – 2500kg (5511lbs)
- Class 2B 100mm (4in) x 40mm (1.6in)
- Weight 228kg (502lbs)

#### **HIGH-TIP BUCKET**

- Heaped capacity of 0.97m³ (1.3yd³)
- Dump height of 4100mm (13'5")
- Weight 840kg (1852lbs)

#### LOADER QUICK ATTACH

- Simple design
- Mechanical or hydraulic locking
- Picks up standard and 7-in-1 buckets

#### FARM FORK AND GRAPPLE

- 2290mm [7'6"] wide
- Perfect for handling manure and silage
- Can also be used in recycling applications

#### **BROOM BUCKET**

- Bucket capacity 0.58m³ (0.76yd³)
- Max width 2750mm (9')
- Max flow 76L/min (17gpm)
- Maximum pressure 207bar (3002psi)

#### 7-IN-1 BUCKET

- Digging
- Spreading
- LoadingDozing
- Grabbing Lifting
- Scraping
- oo. ap...g

#### HYDRAULIC BREAKER

- Powerful performance
- Max energy per blow 1100 Joules
- Blow rate 550-1100 per min
- Simple servicing

### **EXCAVATOR QUICK**ATTACHES

- Hydraulic version enables bucket changing from the cab
- Picks up competitive buckets
- Mechanical version available

### → STANDARD AND OPTIONAL EQUIPMENT

#### **ENGINE**

Deutz 3.6TCD L4 (Tier 4 Final)

Diesel oxidation catalyst (DOC)

Wastegate turbo and charge air cooled

Electric fuel pump

Common rail fuel injection

4 Glow plug starting aid

Horizontal spin on oil filter

Primary fuel filter with water separator

Vertical element secondary fuel filter

500hr service period

Oil to air/water plate type oil cooler

Engine gradeability fore/aft and side/side of 30°

Anti-freeze rated to -37°C

Coolant header tank

Alternator, fan and water pump drive by Multi V belt

Puller type 6 blade cooling fan

Dual element powercore air cleaner

Stainless steel exhaust stack

Fan Guard

#### **DRIVE LINE**

Synchro shuttle transmission 4F/4R speeds

Direction control with neutral safety interlock

Transmission de-clutch on gear and loader controls

Torque converter stall ratio 3.01:1

Easy clean transmission oil cooler

Vertical element oil filter

Foot operated electro/hydraulic differential lock

Inboard planetary final drive axles

Large capacity inboard oil immersed disc brakes -

3 kevlar friction discs per side

Brakes self adjusting and self equalising

Dual brake pedals with combined or independent use

Internal wet disc parking brake - max parking slope

[unladen] 1:2 - Laden 1:2.5

 $\underline{\hbox{Hydrostatic steering with emergency manual operation}}$ 

4wd Standard

Selectable 2 and 4 wheel braking in all gears

Selectable 2 and 4wdi

#### **CAB AND CANOPY**

ROPS/FOPS conform to ISO3471/3449

Access from both sides

Self cleaning footsteps and large grab handles

Anti slip floor mat (Canopy)

Internal rear view mirror

2 Cup holders

Coat hook

Tilt adjustable steering wheel

Side console mounted horn switch

Seat storage for operators manual

2in (51mm) retractable seat belt

Vinyl seat with mechanical suspension (canopy)

1 Auxiliary 12 volt outlet

Cab with 2 door access

Opening rear guarter windows with internal operation

Full depth up and over rear window

Laminated windscreen

Tinted toughened safety glass

Front and rear screen washer and wipers

Fabric seat with mechanical suspension

Cab heater (7.37kw) with Air conditioning (7.6kw cooling)

Front side lights with direction indicators

Internal noise level 78dB (a)

Digital gauge for warning lights, fuel level, engine

temperature, RPM and machine hours.

4 Front and 4 rear worklights

2 External power points for beacons

#### **CANOPY OPTIONS**

Windscreen with wiper

Lockable vandal covers

#### **CAB OPTIONS**

3inch seat belt

Folding external rear view mirrors

Steering wheel spinner

#### LOADER

Hydro-Mechanical self leveling

Control lever with transmission disconnect button

Single bucket cylinder

Bucket cylinder cushioning

Return to dig

Float position with positive hold

Bucket level indicator

Integral loader arm safety bar

Standard 1m³ bucket with lifting eye

Bucket teeth or bolt on reversible cutting edge

#### **OPTIONS**

7in1 1m3 bucket with lifting eye

3rd Hydraulic line with standard bucket

Pallet forks with safe working load of 1000kg

Dido control

Loader bucket return to dig

#### **BACKHOE**

Curved style boom

Standard dipperstick

Outer slide "deep dig" dipperstick

Externally adjustable lubrication free wear pads

Thumb cylinder mounting bracket incorporated

Replaceable serrated clamping plates

Dual transport lock - cable operated

Servo excavator controls

ISO/SAE pattern change switch

24" Heavy duty excavator bucket

Stab leg lock out valves

#### **OPTIONS**

Mechanical quick attach

Auxiliary hydraulics with single and double acting operation

#### **GENERAL POINTS**

Heavy duty chassis construction

Lockable side mounted toolbox

Fully tilting engine hood

Front hard nose counter weight

Lifting eyes and tie downs (2 front and rear)

12.5" Front and 24" rear Mitas tyres

#### **OPTIONS**

Front fenders

Cold start kit

## Mecalac

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