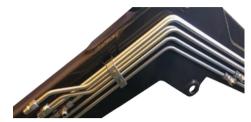


## **Front Loader**

- All tractor which can be mounted on
- An excellent compatibility, powerful durability
- Multipurpose multifunction front end loader



#### **Features**



Hydraulic Pipe Experienced much enhanced durability with the hydraulic pipes manufacture by BENTELER (Made in Germany) and applied to all models



External Hydraulic Coupler This can be simply connected when using the machinery that requires hydraulic action. The operator can easily mount or dismount the part



Leveler It maintains a certain angle to prevent the loaded object from scattering while the leveler is mounted to enable stable work



Separation Stand It enables stable mounting/ dismounting of the loader for it can adjust the height depending on the height of the ground



**Dual Mounting/Dismounting** Device Anyone can easily mount or dismount the loader with simple one-touch lever



Special Hydraulic Cylinder Special hydraulic cylinders are inspected one by one and it puts out the best performance even under rough working conditions



**Options** 

Multi-connections All plates are designed with non-drip Flat-Face couplings according to ISO 16028. Nipples with integrated pressure eliminators ensure smooth connections even with high residual pressure



Relief Valve It automatically adjust the hydraulic pressure to prevent overloading that can occur when working with the loader and ensure safe operation



Solenoid Valve It allows the operator to use a variety of hydraulic machinery by connecting electronic valve and hydraulic couplings



Convenient automatic implement locking Connect the bucket the loader and then release the lever, it will be tightly locked up for safe work



Accumulator Hydraulic accumulator absorb the shock during of loader work and protect the tractor



3rd Service function Fast and efficent 3rd service adds versatility to your loader and tractor when using implements with hydraulic requirements

Model	pecifications		
Name	Model	Agricultural Machinery	Front Loader
Height (mm		Name	HL1900
Depth (mm)   512		Length (mm)	717
Bucket dimension         Width (mm)         1458           Boom cylinder (mm)         35 x 60 x 725 x 435ST           Bucket cylinder (mm)         35 x 60 x 729 x 363ST           Digging depth (mm)         118           Maximum lift height to pivot pin (mm)         2679           Maximum lift height under lever bucket (mm)         2390           Clearance with bucket dumped (mm)         1933           Reach at maximum lift height (mm)         251           Maximum dump angle (°)         52.7           Reach with bucket on ground (mm)         1799           Lift capacity to maximum height a pivot pin (kg)         1198           Breakout force-at pivot pin (kgf)         2458           Bucket rollback force at ground line (kgf)         1355           Boom raising time (seconds)         4.0           Boom lowering time (seconds)         2.6           Bucket rollback time (seconds)         2.2           Bucket dumping time (seconds)         3.3           Maximum pressure - governing loader operation (bar)         150		Height (mm	496
Boom cylinder (mm)   35 x 60 x 725 x 435ST	Duelset dimension	Depth (mm)	512
Bucket cylinder (mm)   35 x 60 x 729 x363ST	Bucket dimension	Width (mm)	1458
Digging depth (mm)   118		Boom cylinder (mm)	35 x 60 x 725 x 435ST
Maximum lift height to pivot pin (mm) 2679  Maximum lift height under lever bucket (mm) 2390  Clearance with bucket dumped (mm) 1933  Reach at maximum lift height (mm) 251  Maximum dump angle (°) 52.7  Reach with bucket on ground (mm) 1799  Power take-off Lift capacity to maximum height at pivot pin (kg) 1198  Breakout force-at pivot pin (kgf) 2458  Bucket rollback force at ground line (kgf) 1355  Boom raising time (seconds) 4.0  Boom lowering time (seconds) 2.6  Bucket rollback time (seconds) 3.3  Maximum pressure - governing loader operation (bar) 150		Bucket cylinder (mm)	35 x 60 x 729 x363ST
Maximum lift height under lever bucket (mm)  Clearance with bucket dumped (mm)  Reach at maximum lift height (mm)  251  Maximum dump angle (°)  52.7  Reach with bucket on ground (mm)  1799  Lift capacity to maximum height at pivot pin (kg)  Breakout force-at pivot pin (kgf)  2458  Bucket rollback force at ground line (kgf)  1355  Boom raising time (seconds)  4.0  Boom lowering time (seconds)  2.6  Bucket rollback time (seconds)  2.2  Bucket dumping time (seconds)  3.3  Maximum pressure - governing loader operation (bar)  150		Digging depth (mm)	118
Clearance with bucket dumped (mm)  Reach at maximum lift height (mm)  251  Maximum dump angle (°)  52.7  Reach with bucket on ground (mm)  1799  Lift capacity to maximum height at pivot pin (kg)  Breakout force-at pivot pin (kgf)  2458  Bucket rollback force at ground line (kgf)  1355  Boom raising time (seconds)  4.0  Boom lowering time (seconds)  2.6  Bucket rollback time (seconds)  2.2  Bucket dumping time (seconds)  3.3  Maximum pressure - governing loader operation (bar)  150		Maximum lift height to pivot pin (mm)	2679
Reach at maximum lift height (mm) 251  Maximum dump angle (°) 52.7  Reach with bucket on ground (mm) 1799  Lift capacity to maximum height at pivot pin (kg) 1198  Breakout force-at pivot pin (kgf) 2458  Bucket rollback force at ground line (kgf) 1355  Boom raising time (seconds) 4.0  Boom lowering time (seconds) 2.6  Bucket rollback time (seconds) 2.2  Bucket dumping time (seconds) 3.3  Maximum pressure - governing loader operation (bar) 150		Maximum lift height under lever bucket (mm)	2390
Power take-off Reach with bucket on ground (mm) 1799 Power take-off Lift capacity to maximum height at pivot pin (kg) Breakout force-at pivot pin (kgf) 2458 Bucket rollback force at ground line (kgf) 1355 Boom raising time (seconds) 4.0 Boom lowering time (seconds) 2.6 Bucket rollback time (seconds) 2.2 Bucket dumping time (seconds) 3.3 Maximum pressure - governing loader operation (bar) 150		Clearance with bucket dumped (mm)	1933
Power take-off    Comparison of the indicated properties o		Reach at maximum lift height (mm)	251
Power take-off  Lift capacity to maximum height at pivot pin (kg)  Breakout force-at pivot pin (kgf)  2458  Bucket rollback force at ground line (kgf)  Boom raising time (seconds)  4.0  Boom lowering time (seconds)  2.6  Bucket rollback time (seconds)  2.2  Bucket dumping time (seconds)  3.3  Maximum pressure - governing loader operation (bar)  150		Maximum dump angle (°)	52.7
Lift capacity to maximum height at pivot pin (kg)  Breakout force-at pivot pin (kgf)  2458  Bucket rollback force at ground line (kgf)  Boom raising time (seconds)  4.0  Boom lowering time (seconds)  2.6  Bucket rollback time (seconds)  2.2  Bucket dumping time (seconds)  3.3  Maximum pressure - governing loader operation (bar)  150	Down take off	Reach with bucket on ground (mm)	1799
Bucket rollback force at ground line (kgf)  Boom raising time (seconds)  Boom lowering time (seconds)  Bucket rollback time (seconds)  Bucket dumping time (seconds)  3.3  Maximum pressure - governing loader operation (bar)	Power take-off	Lift capacity to maximum height at pivot pin (kg)	1198
Boom raising time (seconds)  Boom lowering time (seconds)  Bucket rollback time (seconds)  Bucket dumping time (seconds)  3.3  Maximum pressure - governing loader operation (bar)		Breakout force-at pivot pin (kgf)	2458
Boom lowering time (seconds)  Bucket rollback time (seconds)  Bucket dumping time (seconds)  3.3  Maximum pressure - governing loader operation (bar)		Bucket rollback force at ground line (kgf)	1355
Bucket rollback time (seconds)  Bucket dumping time (seconds)  Maximum pressure - governing loader operation (bar)  150		Boom raising time (seconds)	4.0
Bucket dumping time (seconds)  Maximum pressure - governing loader operation (bar)  150		Boom lowering time (seconds)	2.6
Maximum pressure - governing loader operation (bar) 150		Bucket rollback time (seconds)	2.2
		Bucket dumping time (seconds)	3.3
Rated flow (gpm) 9.72	Maximum pressure - governing loader operation (bar)		150
		Rated flow (gpm)	9.72

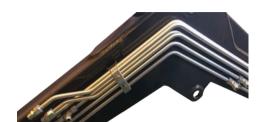


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Specifications		
Model	Agricultural Machinery	Front Loader
	Name	HL1800
	Length (mm)	717
	Height (mm	496
Bucket dimension	Depth (mm)	512
Bucket difficultion	Width (mm)	1458
	Boom cylinder (mm)	35 x 60 x 666.6 x 435ST
	Bucket cylinder (mm)	35 x 60 x 674 x363ST
	Digging depth (mm)	120
	Maximum lift height to pivot pin (mm)	2557
	Maximum lift height under lever bucket (mm)	2269
	Clearance with bucket dumped (mm)	1838
	Reach at maximum lift height (mm)	276
	Maximum dump angle (°)	47.0
Power take off	Reach with bucket on ground (mm)	1693
Power take-off	Lift capacity to maximum height at pivot pin (kg)	959
	Breakout force-at pivot pin (kgf)	2020
	Bucket rollback force at ground line (kgf)	1072
	Boom raising time (seconds)	4.0
	Boom lowering time (seconds)	2.6
	Bucket rollback time (seconds)	2.2
	Bucket dumping time (seconds)	3.3
Maximum pressure - governing loader operation (bar)		150
	Rated flow (gpm)	9.72

<sup>\*</sup> These specifications above to change for enhancements in quality and performance.



### 9/11

# **Back Hoe**

- All tractor which can be mounted on
- An excellent compatibility, powerful durability
- Multipurpose multifunction back hoe



#### **Features**

#### Bucket

Various size options are provided so that the bucket can be exchanged according to the work characteristics, 9", 12", 16", 24" and 36" bucket options are available for each model

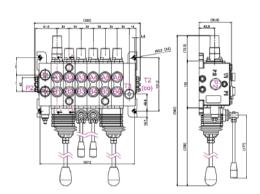
#### Thumb

Digging work is possible with the thumb folded, When using a thumb, it can be easily adjusted to work with tongs, Stones and wood types can be moved and crushed with strong force



Can be used on roads or

soft ground



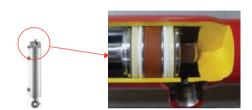
45L capacity LCB type high end main control valvefor strong work performance is applied



The joystick operation method and convenient operation part are designed. Due to this, operability without fatigue is maintained even when working for a long period of time



For smooth operation, a nozzle type orifice is applied to realize smooth and powerful performance during work



Durable hydraulic cylinder is applied to show unchanging durability even in long term work



Field Test



Impact Test



Digging force

### **Specifications**

Model	Agricultural Machinery	Back hoe
	Name	BY65P
Bucket	Loading height - Bucket at 60° (mm)	2286
	Bucket cylinder digging force (kgf)	1220
	Bucket standard	16
	Bucket rotation (°)	169
Stabilizer spread (downward position)		1960
Stabilizer spread (upward position)		1650
Undercut		720
Dipperstick cylinder digging force (kgf)		850
Shipping weight (kg)		540
Hydraulic pressure requirements		165
Digging depth (mm)		2010
Swing arc (°)		180
Reach from center line of swing pivot (mm)		2754
Transportation height - maximum (mm)		2164
Transportation overhung (mm)		1119
Re	ecommended tractor power (HP)	35 - 50



### 9/11

# **Back Hoe**

- All tractor which can be mounted on
- An excellent compatibility, powerful durability
- Multipurpose multifunction back hoe



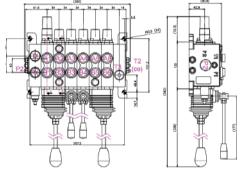
#### **Features**

#### Bucket

Various size options are provided so that the bucket can be exchanged according to the work characteristics, 9", 12", 16", 24" and 36" bucket options are available for each model

### Thumb

Digging work is possible with the thumb folded, When using a thumb, it can be easily adjusted to work with tongs, Stones and wood types can be moved and crushed with strong force



45L capacity LCB type high end main control valvefor strong work performance is applied



The joystick operation method and convenient operation part are designed. Due to this, operability without fatigue is maintained even when working for a long period of time



Provides a street pad to prevent damage to the floor during work, Can be used on roads or soft ground



For smooth operation, a nozzle type orifice is applied to realize smooth and powerful performance during work



Durable hydraulic cylinder is applied to show unchanging durability even in long term work



Field Test



Impact Test



Digging force

### **Specifications**

Model	Agricultural Machinery	Back hoe
	Name	BY75P
Bucket	Loading height - Bucket at 60° (mm)	2406
	Bucket cylinder digging force (kgf)	2066
	Bucket standard	16
	Bucket rotation (°)	175
Stabilizer spread (downward position)		2256
Stabilizer spread (upward position)		1737
Undercut		793
Dipperstick cylinder digging force (kgf)		1148
Shipping weight (kg)		608
Hydraulic pressure requirements		165
Digging depth (mm)		2197
Swing arc (°)		180
Reach from center line of swing pivot (mm)		3140
Transportation height - maximum (mm)		2284
Transportation overhung (mm)		1189
Re	ecommended tractor power (HP)	52 - 60