


BE220X HYDRAULIC EXCAVATOR


SPECIAL FEATURES


- Integral X-design box section type track frame offers excellent stability and durability.
- Revolving frame of I-bam sections increases service life.
- Sturdy work Equipment.
- Powerful fuel efficient BEML engine.
- Two pump hydraulic system with OLSS and two mode selection for operational optimization.
- Centralised electronic monitoring system allows fast daily checks and also keeps the operator constantly informed of any abnormality during operation.
- Special roomy cabin provides ample work space and excellent visibility.
- Centralised lubrication for work Equipment.
- Large undercarriage units for longer Service life.


Operating mass : 20900 kg.
Flywheel power(net) : 110 kW (148 fhp) @ 2100 r/min
Bucket Capacity : 0.44-1.26m³



 ENGINE	
Model & type	BEML BS6D105-1 , 6 cylinder inline, diesel, 4 stroke, water cooled, turbocharged
Bore & Stroke	105 x 125 mm
Piston Displacement	6.494 ltrs. (6494 cc)
Flywheel Horsepower	110 kW (148 fhp) @ 2100 r/min
Governor	All speed, mechanical
Electricals	
Alternator	24V, 30A
Starting Motor	24V, 4.5kW
Battery	2 x 12 V, 120 Ah

 DRIVES & BRAKES	
Steering control	Either hand levers or foot pedals
Drive type	Fully hydrostatic type with two stage planetary reduction.
Max. drawbar pull	153.96 kN (15700 kg)
Max. travel speed	0.94 m/sec (3.4 kmph)
Travel / parking brake	Hydraulic lock Type spring applied and hydraulically released oil disc brakes. Travel motors are equipped with brake valve which regulates speed when making descents.

 UNDER CARRIAGE	
Track frame	Integral X-frame box section type
Shoe width	500 mm
No. of shoes	47 each side
No. of Carrier rollers	2, each side
No. of track rollers	8, each side
Ground pressure	54 kPa (0.55 kg/cm ²)

 HYDRAULIC SYSTEM		
Type	Open Center Load Sensing System (OLSS) with two mode selection for optimum utilisation of hydraulic power resulting in improved fuel efficiency.	
Hydraulic pumps		
Main pump		
No. & type	2 nos. variable displacement axial piston pump	
Maximum flow	193 litre/min/pump @ 2100 r/min	
Pilot pump		
No. & type	1 no. gear pump	
Maximum flow	50 litre/min @ 2100 r/min	
Hydraulic motors		
Travel	2 nos. axial piston motor with parking brake.	
Swing	1 no. axial piston motor	
Relief valve settings		
Implement circuits (Boom, arm & Bucket)	31.4 MPa (320 kg/cm ²)	
Swing circuits	26.97 MPa (275 kg/cm ²)	
Travel circuits	31.4 MPa (320 kg/cm ²)	
Pilot circuits	2.94 MPa (30 kg/cm ²)	
Control valves		
Type	4 spool and 5 spool type with a service spool.	
Hydraulic cylinders		
Type	Double acting piston type .	
	Numbers	Bore x Stroke
Boom	2	130 x 1234 mm
Arm	1	140 x 1628 mm
Bucket	1	130 x 989 mm



SWING SYSTEM

Swing lock	Pin lock type
Swing reduction	Spur and planetary reduction
Swing speed	13 r/min
Tail swing radius	2859 mm



SYSTEM CAPACITIES (refill)

Fuel tank	280.0 litre
Radiator	26.5 litre
Engine	17.5 litre
Final drive, each side	3.7 litre
Swing Drive	9.3 litre
Hydraulic Tank	150.0 litre



OPERATING MASS (approx.)

20900 kg. [including one piece boom (5.85m), arm(2.5m), SAE heaped backhoe bucket(1.0 m³ coolant, oils, full fuel and operator)]



GAUGES & INDICATORS

Gauges	Fuel gauge, hydraulic oil level sight gauge, engine cooling water temperature gauge, engine oil pressure gauge, service meter.
Indicators & alarms	Hydraulic oil level, engine oil level, battery charge(indicator), radiator water level, engine oil pressure.



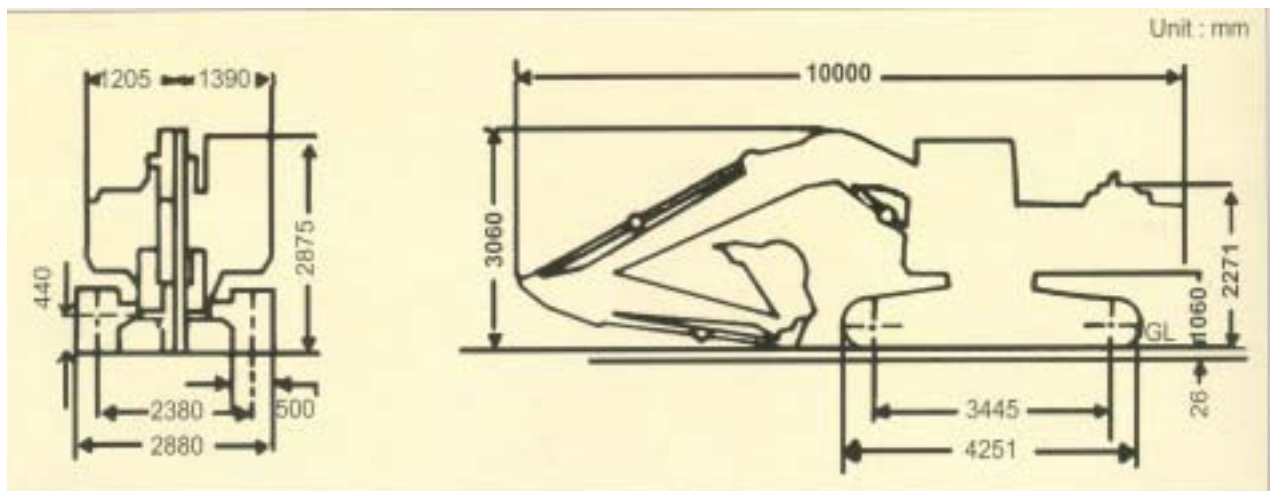
FILTRATION SYSTEMS

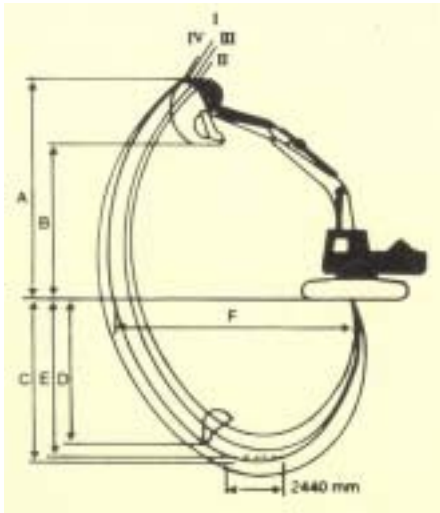
Engine	Two stage fuel filter with water separator
Air intake	Dry type, two stage air cleaner with dust evacuator
Hydraulic	One suction strainer, one line filter in the charge pump circuit & one return line filter



DIMENSIONS(mm)

Overall length	10000
Overall width	2880
Overall height(Top of boom)	3060
Track length on ground	3445
Track gauge	2380
Minimum ground clearance	440





WORKING RANGE

A Max. digging height	8935 mm
B Max. dumping height	6135 mm
C Max. digging depth	5885 mm
D Max. vertical wall digging depth	5745 mm
E Max. digging depth of cut for 2440 mm level bottom	5675 mm
F Max. digging reach at ground level	9275 mm
Bucket digging force kN(kg)	126(12,820)
Arm crowd force kN(kg)	136(13905)

BE220X HYDRAULIC EXCAVATOR STANDARD EQUIPMENT

Standard Equipment :

24 V/4.5 kW starting motor	Front light
30 A alternator	Electric horn
12V, / 120 Ah x 2 batteries	Counter weight
Dry type air cleaner	Rear view mirror
PPC hydraulic control	Electronic monitoring system
Hydraulic track adjuster	All weather steel cab(with safety glass windows, lockable door, window wiper, room lamp and adjustable seat)
Fully hydrostatic drive	Tool kit
Suction fan	Portable fire extinguisher
Radiator & oil cooler	

- Note :
1. Material and specifications are subject to change without notice.
 2. Illustrations may include optional equipment and accessories and may not include all standard accessories.
 3. All the specifications meet relevant ISO standards