VOLVO BM4300





The Volvo BM 4300 – the economical way to achieve capacity with versatility

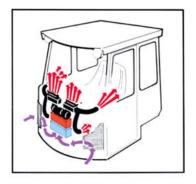
The Volvo BM 4300 is a highly efficient allround loader. Its size makes it economical at most jobs. It weighs 8.55 tonnes (18,800 lb) – and has a 79 kW (107 hp) SAE turbocharged engine. The power is transmitted through a 4-speed, in-line power shift gearbox, producing smooth gear shifting combined with instant acceleration. Rigorous laboratory tests and practical trials on demanding worksites throughout Sweden and Europe have proven the 4300's reliability and high capacity. So it is a thoroughly tried and tested machine. The 4300's success is due to a well-balanced interplay of all functions – engine output, tractive power, hydraulics, and loader unit geometry. The new, wide attachment bracket ensures even easier attachment changes. These features combine to give a production capacity which makes the Volvo BM 4300 one of the most efficient loaders in its class, both for bucket loading and materials or timber handling.



Comfort – important aid to efficiency

The 4300 has a high class ROPSapproved safety cab designed as an integral part of the machine, featuring superb insulation and an efficient climatic control system.

A high-capacity 3-speed fan supplies filtered fresh air to the cab maintaining a comfortable temperature in both hot or severely cold weather. For operations in particularly hot climatic conditions, an additional cooling function is available as an optional extra.



The powerful built-in ventilation system, with its large filters replaceable from the outside, is an exclusive feature of the Volvo 4300.

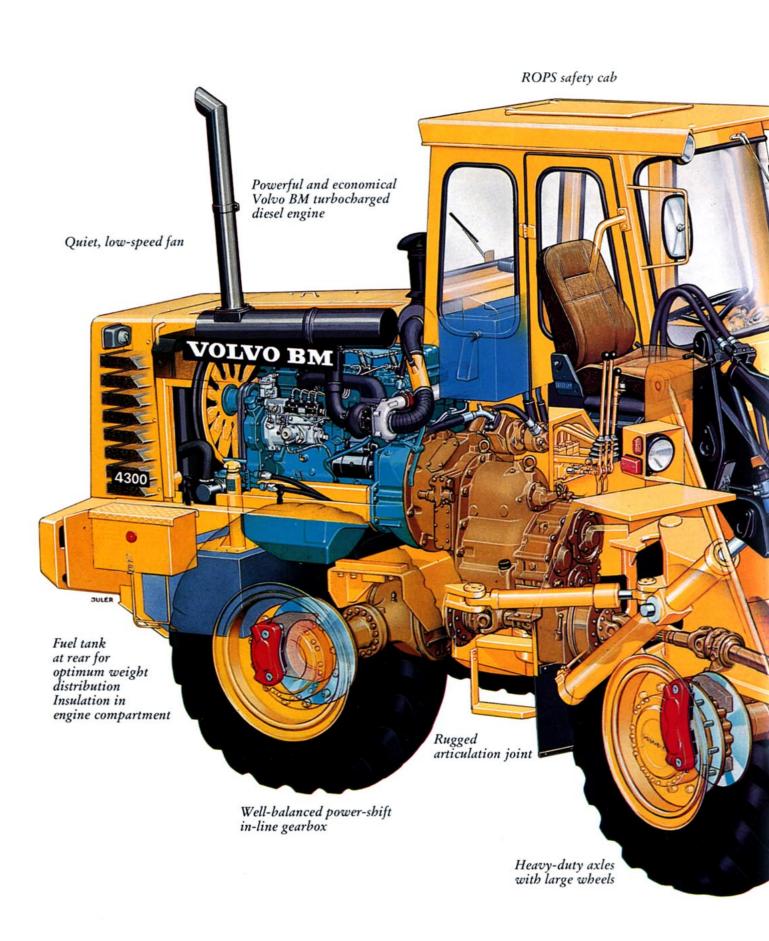


Operator safety and comfort is outstanding in this machine. Seat, levers, controls and instruments have been thoroughly tested and arranged inside the cab for optimum efficiency and ease of operation. The cab has been built – and approved – to ROPS standards. Its strength is gained from its heavy-gauge steel frame. Large windows provide excellent all-round visibility.



The instrument panel provides ata-glance information on all functions, with instruments and warning lamps, all marked with easily recognisable sym-

bols. For added safety, there is also a large central warning lamp to indicate a fault should one occur in any of the vital functions.



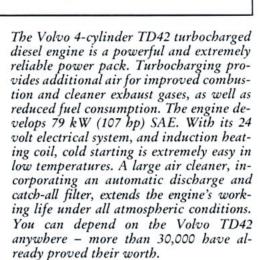
Built-in ventilation and air filter system – optional cooling unit available

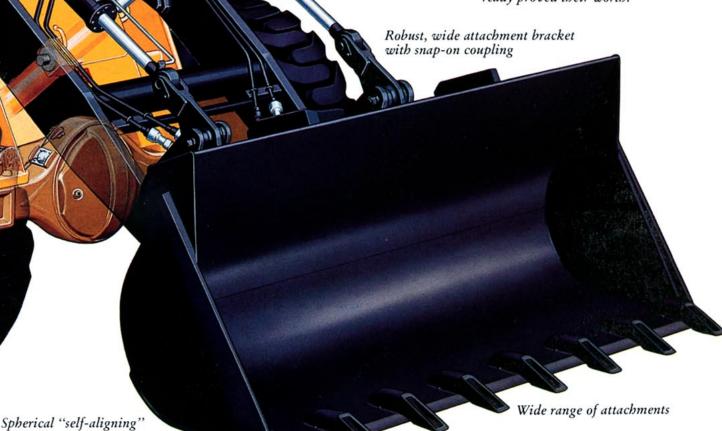
cooling unit available

linkage bearings to withstand heavy stresses

Powerful halogen lighting



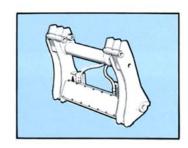






ve loader unit's numerous advantages mean high productivity

The attachment bracket enables implements to be changed in less than a minute. This bracket is also available with a hydraulic lock – so the operator can change attachments without leaving the cab.





Volvo BM's long experience in loader manufacture has resulted in the 4300's sophisticated loader unit. It combines generous reach and height with good parallel side-arm action, ample breakout force, wide bucket angles and, by virtue of its "open construction", excellent visibility.





One of the notable features of the 4300 is its loader unit. It is designed for optimum efficiency at a variety of jobs.

Bucket loading

The bucket has ample breakout force for work involving hard materials, so the bucket is always well-filled. At the end of the rollback movement, the bucket accelerates nudging the heaped load to the back of the bucket. The carrying angle of 50°, keeps the material where it should be – in the bucket.

Timber handling

Generous outreach and height are essential when loading or unloading timber trucks. The 4300 loader unit has these both assets, enabling all work to be done quickly and efficiently. Good breakout force in the top position allows superb handling with the log grapple. Excellent parallel side-arm action is a clear advantage when handling bulk timber. In chip loading, the 4300 can easily reach over high body sides, due to its generous lifting height.

Materials handling

Materials handling is another of the machine's strong points. High lift, generous reach, ample breakout force throughout the entire lifting range, and superior parallel side-arm action: vital for efficient materials handling operations. The tilt movement hydraulics can be adjusted to obtain a special "inching" action for that extra precision.

A catalogue of advantages

• Wide and stable with heavy-duty bearings. • Spherical self-aligning bearings for inherent safety and quality. • Good outreach, lifting height, and excellent parallel side-arm action. • Superb visibility due to the "open construction". • Ample breakout force – 7.9 tonnes (17,400 lb) – even in the top position. • Two speeds for the tilt movement: The slower speed is for precision work. • The bucket accelerates at the end of the rollback movement to position the load at the back of the bucket. • The carrying angle is 50°, minimizing spillage and giving optimum bucket fill. • Powerful fast-acting hydraulics for fast cycle times. • Matt black, non-glare finish.







































































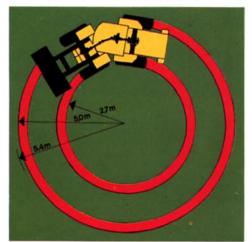










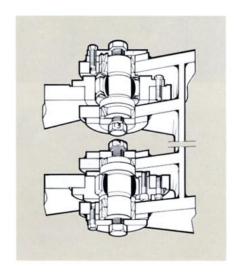


Manoeuvrable – short work cycles

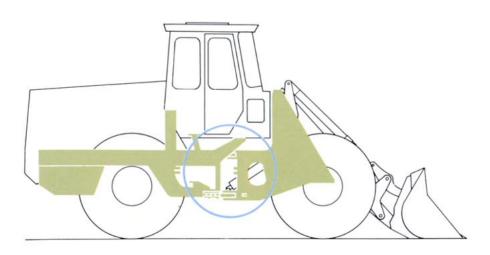
Wherever short precision work cycles are required, the Volvo BM 4300 is the right machine. With its small turning circle it is easy to manoeuvre in restricted areas. Fast acceleration means more work done on each and every shift. The loader unit's long reach makes it easy to load trucks and railway wagons from one side – and all the time the operator enjoys the excellent visibility needed for safe, precision work.

Volvo Standard Components

The engine, hydraulic transmission and front and rear axles are of Volvo's own manufacture. This guarantees high quality and reliability.



The heavy-duty pivot joint has been well-tried and tested for good resistance to wear. The joint incorporates two rugged spherical bearings.



The Volvo BM 4300 is mounted on a welded, articulated frame with the engine, transmission, rear axle and cab mounted on the rear frame section, and the front axle and loader unit mounted on the front section. All mating surfaces are machined to give a precise and solid mounting.

Well dimensioned all-round disc brakes ensure reliable performance under continuous repeated braking.

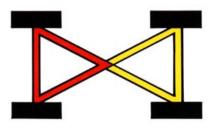




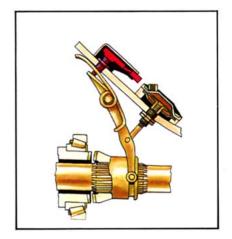
Reliable and effective

brake system

A loader's brakes are used many times during each shift. It is therefore absolutely vital for the brake system to possess ample capacity and be completely reliable when subjected to continuous use. The Volvo BM 4300 has a dual pneumatic-hydraulic brake system with disc brakes on all wheels, and a total brake area of 898 cm² (140 in²).



The 4300 has large wheels for good offroad mobility and reduced "ground pressure". In particularly slippery conditions, traction is safeguarded by the differential lock. This is operated electropneumatically and provides 100 % lock-up.



Disengagement of power transmission train

The power transmission train can be automatically disengaged when the brakes are applied. This is effected by means of a switch on the instrument panel. During braking, all the engine power is channelled into the hydraulic system to provide faster loader speeds.

Thorough testing

Great emphasis is laid on function and quality testing. Modern equipment and well-trained personnel reveal the slightest defects in components. Assembly technology is made effective through modern, efficient equipment. This all adds up to built-in Volvo quality in the final product.











The Volvo BM 4300 is a highly versatile and efficient allrounder. Its size makes it economical for most jobs, being as ideally suited for bucket loading as for materials and timber handling.