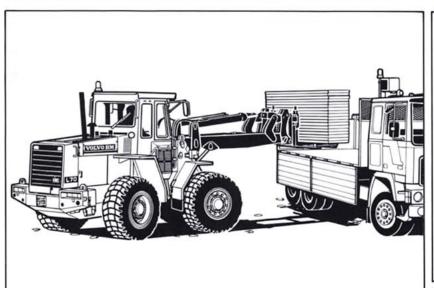
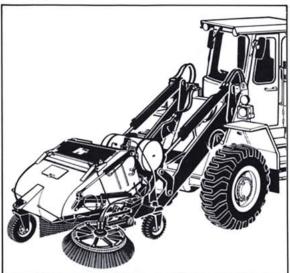
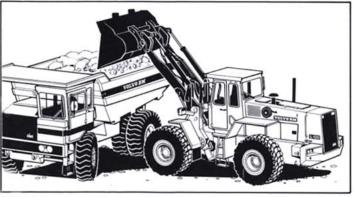
VOLVO BM

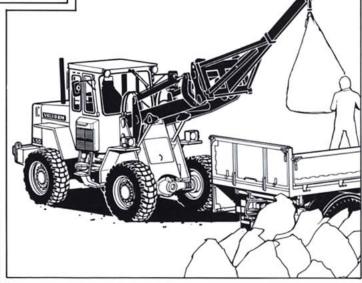
ATTACHMENTS

FOR WHEEL LOADERS L50, L70, L90, L120, L160=

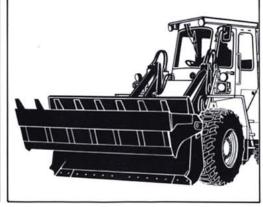












GENUINE ATTACHMENTS FOR BEST OVERALL ECONOMY

As a loader manufacturer, Volvo BM realized at an early stage the importance of flexibility and quick adaptation to different jobs. In all situations the machine and its attachment must function as an integral unit giving maximum capacity and thereby optimum economy.

In addition to bucket loading, a loader must be capable of handling many other working operations, such as handling of timber, sawn wood and palletized goods, as well as snow clearance, construction work etc.

Volvo BM is the only loader manufacturer who both designs and manufactures a full range of attachments. This means that the design of each attachment is perfectly adapted to the loader's liftarm system and performance. Technical modifications to the machines are coupled with continuous modification of the attachments in order to ensure maximum possible capacity. In other words, the ultimate goal is to provide a well functioning unit able to exploit the loader's performance capacity in the best possible way.

VOLVO BM VOLVO BM COMPANY ESKILSTUNA SWEDEN WARIE A SUBSIDIARY OF VME GROUP NV SKOPA / BUCKET MODEL NO TILLV. / SERIAL NO VOLYM / RATED CAPACITY SAE m3 LAST / RATED LOAD ton MAX TRYCK / PRESSURE MPa VIKT / WEIGHT kg SKOPBREDD / BUCKET WIDTH mm PART NO SKAR / EDGE SPARSKÄR / EDGE SAVER 0 PART NO TAND / TOOTH PART NO HALLARE / ADAPTER PART NO VOLVO BM 4787 064

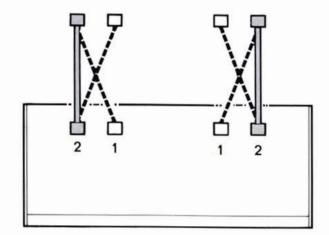
The product data plate affixed to all genuine attachments is the buyer's guarantee that the attachment has been tested and approved by Volvo BM with respect to quality and function. Reassuring to know. The data plate not only marks the attachment as a genuine Volvo BM product, but also serves as a certificate of identification.

MACHINE AND ATTACHMENT WORKING TOGETHER

Volvo BM's lift-arm system gives good breakout forces throughout the entire lift- arm movement, together with good bucket angles. This is the result of the ingenious design of the linkage arms, which ensures that the lever that carries out the tilting movement is always long.

- The loader unit developed with the aid of up to date computer technology has been designed especially for Volvo BM attachments ensuring correct bucket angles and breakout force. If the geometry is altered by using non Volvo BM bucket, the capacity of the machine can be considerably reduced.
- High lift-arm attachment and long reach give a high working level. This makes it possible to reach in and across truck platforms and railway from one side without bumping the underside of the arms - a common problem on many other machines.
- Maximum visibility together with good function and high strength have been achieved by arranging the loader unit in such a way that the cylinders lift arms and linkages are correctly aligned.
- Loading forces act symmetrically on the lift-arm system and its bearings, thereby eliminating bending stresses and unnecessary wear.
- Attachments must not be heavier than necessary, as this reduces overall working capacity. Volvo BM attachments feature high material quality and are ideally matched to the power resources of the machine.

All of these factors must act in harmony with each other. Only then can the best possible capacity and economy be achieved.

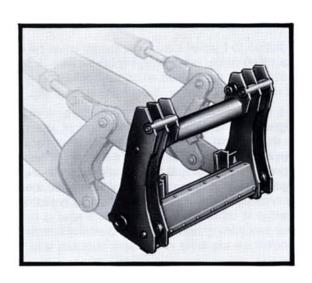


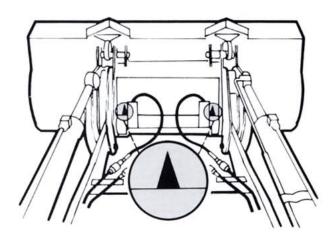
- Non-parallel points of attachment result in offcenter forces and thereby a greater risk of rapid wear.
- 2 This is the best and least stressful means of attachment, and it is the one Volvo BM has chosen for its range of loaders.

ATTACHMENT BRACKETS

Different materials require different handling methods - but not necessarily different machines. Volvo BM loaders are continuously being developed to provide higher capacity within different fields of operation. Snap-on coupling of attachments permits effective utilization of the machine where previously only special-purpose machines, such as fork-lift trucks and mobile cranes, could be used.

The idea of interchangeable attachments is a unique solution that made Volvo BM a market leader long ago. The attachment bracket with snap-on coupling is easy to operate and withstands hard use. Precision fits and quality engineering with large, rounded hooks make it easy to guide the attachment onto the bracket. The difference in operating load between direct-mounted (pin-on) and bracket-mounted (hook-on) attachments is not great. Bushes, plates etc for attachment to the lift-arms are located either on the bracket or on the attachment. The difference in weight is insignificant. As designers of both the machine and the attachment, we have taken the unique opportunity to build an integral unit.





Attachment bracket with hydraulic lock

The attachment is locked from the cab via the control lever for the 3rd/4th hydraulic control. The operator can tell when the attachment is fully engaged and locked by observing two indicator arrows on the attachment bracket.

Please note that the attachment bracket requires a third hydraulic control.

		L50	L70	L90	L120	L160
Order No Weight	kg		90271 145	90423 200	90423	99032 305
A B	mm mm		1150 800	1150 800	1150 800	1300 1010

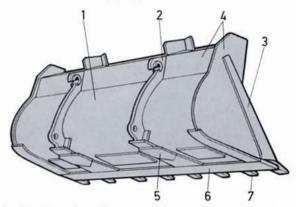
QUALITY

High material quality in each attachment is essential if it's to stand up to the rigorous treatment to which it will be constantly subjected. That's why Volvo BM uses the very best materials in each and every part - materials that make for lightweight attachments and thereby high operating loads.

But the concept of quality includes more than just quality of materials; quality of workmanship is just as important. Our attachments are manufactured in well-equipped workshops. Correct tolerances are essential for the best possible fits. The high quality liftarm system need top quality attachments. This is achieved by manufacture in advanced jigs and fixtures, frequent dimensional inspection, advanced welding methods and precision machining, including boring of bearing seats and bucket mountings. By boring the attachment mountings, a fully centered hole pattern is obtained, thereby avoiding inherent stresses which could result in rapid wear.

Each Volvo BM loader has a fully modern and functional range of attachments at its disposal. This enables the best attachment to be chosen for the task at hand. This in turn means that the machine's features can be utilized to the full, giving high capacity and thereby good economic returns.

The hard and abrasive materials that constitute normal working conditions in Scandinavia have forced us to use high-quality grade steels. Since conditions are not only severe but also varying, mere strength is not enough - flexibility is also important. Through extensive testing, we have developed a large number of buckets for materials of different density for optimum utilization of the tipping load.



- 1 Hardened-and-tempered special steel in the shell (on smaller machines only in the bottom).
- 2 Solid plate prevents stresses being built in from the start and distributes them better during the work. This leads to longer service life.
- 3 The side cutter has extra wear plates (edge and corner bits) of hardened-and-tempered special steel.
- 4 Grain-refined structural steel.
- 5 Easily replaceable wear plates of hardened-andtempered abrasion-resistant steel.
- 6 Bucket lip of hardened-and-tempered abrasionresistant steel.
- 7 Teeth of the best quality.

EDGE SAVERS

In order to reduce the maintenance of buckets, some can be fitted with edge savers. These protect the bottom of the bucket and prolong the life of the wear plates. An additional advantage is that they help to prevent spillage. The edge savers are mounted in sections and are interchangeable, permitting optimum economy. They are fastened with three bolts in each section.

To obtain the best results edge savers should be fitted to the bucket from new.

All straight-lip buckets without teeth have been equipped with pre-drilled cutting edges to prepare them for easy edge saver mounting. High-dump buckets and some non-hydraulic-dump wood chip buckets are equipped as standard with edge savers. The data plate on each bucket specifies the appropriate edge savers.

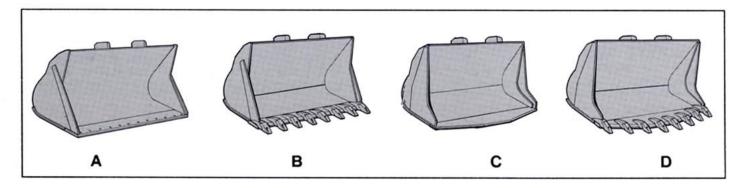
SPILL GUARD

These prevent materials from spilling over the rear edge of the bucket during rollback. They can be mounted on a bucket equipped with a tilt cylinder guard. Spill guards complete with fasteners are supplied only for retrofitting.

		L50	L70	L90	L120	L160
Order No					99174	99175
Width	mm	The same of	1650	1700	1700	1850
Height	mm		185	285	245	305
Weight	kg	1	26	44	44	69

SELECTING A BUCKET

Bucket volume alone is not an adequate measure of the capacity of the loader. The crucial factor is the ability of the machine to fill the bucket every time. A large bucket can mean lower capacity because it is more difficult to fill, while a small bucket that is easier to fill can increase capacity. A number of factors have to be taken into account, such as the nature of the material being handled, the condition of the machine, the operator's skill and the transport distance. If the transport distance is long, this may mean spillage. Since all of these factors vary, a wide selection of buckets is required in order to achieve maximum capacity. The Volvo BM range offers such a wide selection.



A

Straight-lip bucket without teeth. The best choice for loosened material or for loading easily broken material from banks. Can be fitted with an edge saver.

В

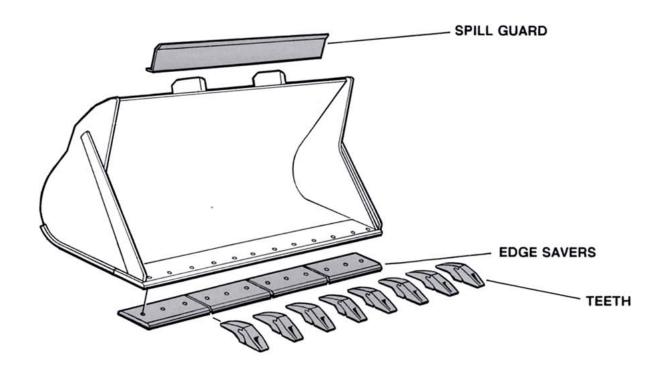
Straight-lip bucket with teeth. Designed for materials that require good penetration and breakout forces, e g gravel, clay and for excavation work.

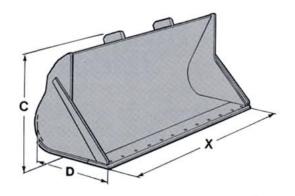
C

Spade nose bucket without teeth. The bucket is used for materials that require high penetration and breakout forces. Suitable for gravel, finely blasted rubble and ore.

D

Spade nose bucket with teeth. Used for breaking out hard and stony material and rubble.





STRAIGHT-LIP BUCKET WITHOUT TEETH (sand, gravel, soil, clay)

The bucket is designed for stockpiling and for loading material that is relatively easy to break out from the bank.

Available with edge savers.

1,8 t/m ³ (3000	lb/yd3)	L	50	L	70	L	90	L1	20	L1	60
Type of mounting	le proprie	R	D	R	D	R	D	R	D	R	D
Order No		90039	PF	90041	PF	90442	90446	90450	90453	98933	99026
Volume Heaped	m ³ yd ³	1,15 1,5	1,15 1,5	1,5 2,0	1,5 2,0	2,1	2,1	2,8 3,66	2,8 3,66	3,8 5,0	3,8 5,0
Weight	kg	450	470	630	625	930	1030	1145	1245	1800	1830
X Cutting edge	mm	2300	2300	2430	2430	2500	2500	2750	2750	3200	3200
C	mm	1100	1100	1200	1200	1370	1370	1475	1475	1630	1630
D	mm	810	810	970	910	1054	1054	1190	1190	1310	1310

1,6 t/m ³ (2700 lb/yd ³)		L50		L70		L90		L120		L160	
Type of mounting Order No		R* 99776	D PF	R* 99784	D PF	R* 90229	D* 90447	R* 90226	D* 90454	D* 99203	
Volume Heaped	m ³	1,25	1,25	1,65	1,65	2,3	2,3	3,1	3,1	4,2	
	yd ³	1,64	1,64	2,17	2,17	3,0	3,0	4,05	4,05	5,5	
Weight	kg	470	490	650	645	960	1060	1160	1260	1910	
X Cutting edge	mm	2300	2300	2430	2430	2500	2500	2750	2750	3200	
C	mm	1200	1200	1295	1295	1450	1450	1550	1550	1700	
D	mm	810	810	970	910	1054	1054	1190	1190	1310	

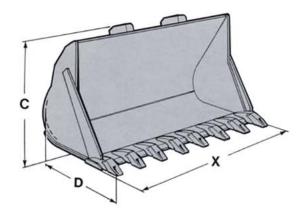
1,5 t/m ³ (2500 lb/yd ³)		L50	L50 L70		L90		L120		L160	
Type of mounting		R	R	D	R	D	R	D	R	D
Order No		99778	99786	PF	90443	90448	90451	90455	99028	99027
Volume Heaped	m ³ yd ³	1,4	1,8 2,4	1,8 2,4	2,5 3,26	2,5 3,26	3,3 4,3	3,3 4,3	4,5 6,0	4,5 6,0
Weight	kg	4540	690	670	1025	1125	1275	1375	1900	1930
X Cutting edge	mm	2300	2430	2430	2500	2500	2750	2750	3200	3200
C	mm	1180	1280	1295	1480	1480	1610	1610	1740	1750
D	mm	910	1015	1015	1170	1170	1315	1315	1445	1445

= Bracket-mounted (hook-on)= Direct-mounted (pin-on)= On request= Spill guard cannot be fitted

STRAIGHT-LIP BUCKET WITH TEETH (sand, gravel, soil, clay)

The bucket is designed for loading materials that require high penetration and breakout forces.

All dimensions are inclusive of teeth.



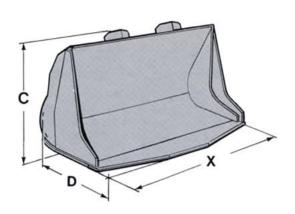
1,8 t/m ³ (3000	lb/yd ³)	L	50	L	70	LS	90	L1	20	L1	60
Type of mounting Order No		R 90040	D 90252	R 90042	D 90043	R 90444	D 90227	R 90225	D 90228	R 98936	D 98932
Volume Heaped	m ³ yd ³	1,15 1,5	1,15 1,5	1,5 2,0	1,5 2,0	2,1 2,7	2,1	2,8 3,66	2,8 3,66	3,8 5,0	3,8 5,0
Weight Number of teeth	kg	500 8	520 8	705 8	695 8	1020	1060	1270 9	1350	2050	2110
X Cutting edge C D	mm mm mm	2300 1100 960	2300 1100 960	2430 1210 1065	2430 1200 1065	2500 1370 1280	2500 1370 1280	2750 1500 1410	2750 1500 1410	3200 1630 1510	3200 1630 1510

1,6 t/m ³ (2700 lb/yd ³)		L50		L70		L90		L120		L160	
Type of mounting Order No		R* 99777	D 90250	R* 99785	D* 99781	R* 90445	D* 90449	R PF	D* 90456	D* 99202	
Volume Heaped	m ³ yd ³	1,25 1,64	1,25 1,64	1,65 2,17	1,65 2,17	2,3 3,0	2,3	3,1 4,05	3,1 4,05	4,2 5,5	
Weight Number of teeth	kg	520	540 8	725 8	715	1030	1055	1305	1355	2170	
X Cutting edge C D	mm mm mm	2300 1205 960	2300 1200 960	2430 1280 1065	2430 1300 1065	2500 1440 1280	2500 1440 1280	2750 1560 1385	2750 1560 1410	3200 1690 1510	

SPADE NOSE BUCKET WITHOUT TEETH (gravel, finely-blasted rubble)

The bucket is designed for loading materials that require very high penetration and breakout forces.

Spade nose buckets for L50 and L70.



1,8 t/m ³ (3000 lb/yd ³)		L50	L70		L90		L120		L160	
Type of mounting		R	R	D	R	D	R	D	R	D
Order No		99838	99841	PF	90487	90485	90483	90480	PF	99023
Volume Heaped	m ³ yd ³	1,15 1,5	1,5 2,0	1,5 2,0	2,1	2,1	2,8 3,66	2,8 3,66	3,8 5,0	3,8 5,0
Weight	kg	470	705	700	965	1065	1260	1360	2290	2340
X Cutting edge	mm	2300	2430	2430	2500	2500	2750	2750	3200	3200
C	mm	1100	1290	1290	1340	1340	1530	1530	1630	1630
	mm	1010	1155	1155	1205	1205	1315	1315	1508	1510

Bracket-mounted (hook-on)Direct-mounted (pin-on)

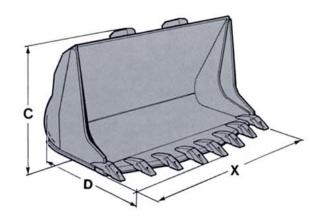
PF = On request

⁼ Spill guard cannot be fitted

SPADE NOSE BUCKET WITH TEETH (hard gravel, blasted rock)

The bucket is designed for loading materials that require very high penetration and breakout forces. The bucket has low-cut sides to facilitate penetration into the material.

All dimensions are inclusive of teeth.



1,8 t/m ³ (3000 lb/yd ³)		L70		L90		L120		L160	
Type of mounting Order No		R 99839	D PF	R 90486	D 90484	R PF	D 90479	R PF	D 98934
Volume Heaped	m ³ yd ³	1,5 2,0	1,5 2,0	2,1 2,7	2,1 2,7	2,8 3,66	2,8 3,66	3,8 5,0	3,8 5,0
Weight Number of teeth	kg	750 8	710 8	1075	1140	1370	1450 9	2430	2415
X Cutting edge C D	mm mm	2430 1200 1145	2430 1200 1145	2500 1340 1430	2500 1340 1430	2750 1520 1515	2750 1520 1540	3200 1570 1708	3200 1570 1575

SPADE NOSE BUCKET WITH TEETH (Heavy duty rock bucket)

The bucket is designed for handling materials in stone and rock quarries etc. where extra-high penetration forces are required.

All dimensions are inclusive of teeth.

		L120	L160
Type of mounting Order No		D 91075	D 91076
Volume Heaped	m ³ yd ³	2,4 3,14	3,4 4,5
Weight Number of teeth	kg	1295	2165
X Cutting edge C D	mm mm	2750 1425 1460	3200 1570 1665

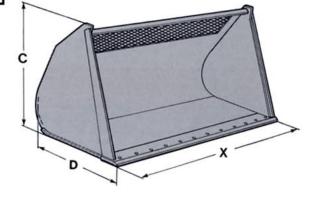
0,8-1,0 t/m ³ (1350-1700 lb/yd ³)		L50	L70	L90	L120	L160
Type of mounting Order No		R 98611	R 90928	R 90926	R 90927	R 99172
Volume Heaped	m ³	2,1	3,0	4.0	5,4	7,0
Weight	yd ³ kg	2,75 540	3,9 830	5,2 1215	7,1 1510	9,16
X Cutting edge C D	mm mm mm	2380 1200 1220	2500 1365 1415	2750 1510 1520	2950 1675 1720	3200 1925 1835

LIGHT MATERIALS BUCKET (wood chips, coal, coke, snow etc)

The bucket is designed for handling materials of low density.

Available with edge savers.

		0,7 t/m ³ (1250 lb/yd ³)			t/m ³ b/yd ³)
		L50	L70	L120	L160
Type of mounting		R	R	R*	R*
Order No		98018	98432	90505	99358
Volume Heaped	m ³	2,5	3,6	10,0	13,0
Weight	yd ³	3,3	4,7	13,0	17,0
	kg	735	1080	1710	2050
X Cutting edge	mm	2430	2500	3500	4020
C	mm	1280	1475	2150	2600
D	mm	1235	1440	1915	2300



R = Bracket-mounted (hook-on)

D = Direct-mounted (pin-on)

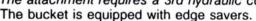
PF = On request

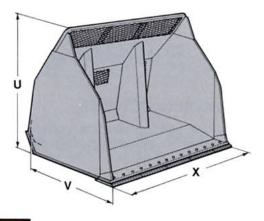
 ⁼ Spill guard cannot be fitted

HIGH-DUMP LIGHT MATERIALS BUCKET (wood chips, coal, coke, etc)

The bucket is designed for handling materials of low density. Since it can be dumped over a special frame, its unloading height can be considerably increased. Buckets for loaders up to and including the L70 have one tipping cylinder, the others have two. The attachment requires a 3rd hydraulic control.

The bucket is equipped with edge savers.





0,8-1,0 t/m ³ (1350-1	700 lb/yd ³)	L50	L70	L90	L120	L160
Type of mounting		R	R	R	R	R
Order No		98612	99788	90501	90503	90900
Volume	m ³	1,6	2,2	3,4	4,8	6,5
Heaped	yd ³	2,1	2,9	4,5	6,3	8,5
Weight	kg	760	1115	1480	1960	2650
X Cutting edge	mm	2430	2500	2750	2830	3500
v	mm	1100	1280	1920	1875	1950
	mm	1090	1200	1535	1675	1910

0,5 t/m ³ (850 lb/yd ³)		L50	L70	L90	L120	L160
Type of mounting		R	R	R	R	R
Order No		98605	99795	98643	90504	90110
Volume	m ³	3,0	4,3	6,5	8,8	12,0
Heaped	yd ³	3,9	5,6	8,5	11,5	15,7
Weight	kg	990	1120	1810	2130	2950
X Cutting edge	mm	2430	2430	2500	2830	4000
V	mm	1500	1650	2250	2380	2620
	mm	1295	1627	1875	2115	2330

GRADING BUCKET

This bucket is intended for earthmoving work such as topsoil stripping, small-scale dozing, landscaping and leveling of infill.

The bucket is provided with an edge at the rear that can be used for grading when the machine is reversed.

1,3-1,5 t/m ³ (2200-250	00 lb/yd ³)	L50	L70
Type of mounting		R	R
Order No		91180	91180
Volume	m ³	1,6	1,6
Heaped	yd ³	2,1	2,1
Weight	kg	593	593
X Cutting edge	mm	2500	2500
C	mm	890	890
D	mm	1205	1205



PF = On request

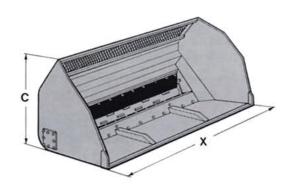
= Spill guard cannot be fitted

SAND SPREADING BUCKET, EPOKE

Intended for spreading sand, gravel, wood chips, salt, urea etc. Adjustment of the spreading rate is effected by means of a hydraulic control valve. The bucket can also be used for snow loading.

The attachment is hydraulically powered and requires a 3rd hydraulic control.

		L50	L70
Type of mounting		R	R
EPOKE Order No		3401-4	3401-4
Volume	m ³	2,0	2,0
Heaped	yd ³	2,6	
Weight Spreading width min.	kg mm	680 1900	680
X Cutting edge	mm	2445	2445
C		1215	1215



MULTIPURPOSE BUCKET WITH TEETH

ULRICH "SIMPLEX" from REYNOLDS BOUGHTON Ltd.

This bucket is intended for different types of earthmoving work and can be used as an ordinary bucket, a grader blade, a dozer blade, a grab bucket etc.

The attachment requires a 3rd hydraulic control.

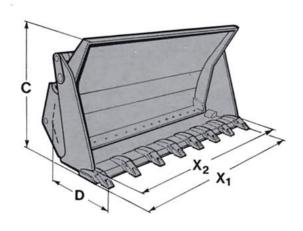
All dimensions are inclusive of teeth.

Multipurpose buckets for L120 and L160 on request.

Direct-mounted (pin-on) versions of the buckets and buckets without teeth are available on request.

Also available for L90 and L160 in compactor version. Then fitted with a HIGH MESH REFUSE SPILLGUARD.

On-request versions delivery time 4-6 weeks.



1,8 t/m ³ (3000 lb/yd ³)		L50	L70	L90	L120	L160	
Type of mounting Boughton order no.		R SP3-20 MK4 HB	R SP2-17 MK5 MHB	R SP2-32 MK5 MHB	R SP1-22 MK3 HB	R SP44-13 MK2 HB	
Volume	m ³ yd ³	1,0 1,25	1,3 1,75	1,9 2,5	2,5 3,25	3,4	
Weight No of teeth	kg	780 8	1210	1520	1645	2150	
X ₁ Cutting edge, clam X ₂ Cutting edge, blade	mm mm	2341 2219	2484 2353	2688 2547	2845 2727	3197 3050	
C D	mm mm	945 875	1140 858	1278 1054	1278 1258	1506 1349	

R = Bracket-mounted (hook-on)

D = Direct-mounted (pin-on)

PF = On request

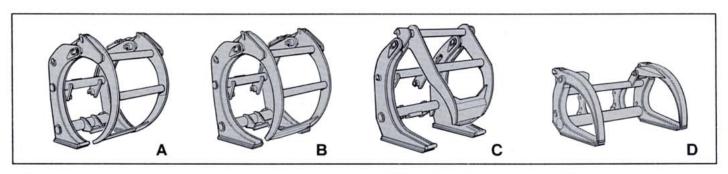
 ⁼ Spill guard cannot be fitted

SELECTING A LOG GRAPPLE

One of the fundamental principles in choosing a log grapple for handling round timber is that the longer the timber is, the smaller the grip area and the wider the grapple must be. The log grapples are designed differently depending on how the machine is to work. Size is normally expressed in m². The length of the timber then decides how much can be carried measured in m³.

Log grapples always require a 3rd hydraulic control.

The 3rd valve, and sometimes the complete piping assembly, is standard equipment on Volvo BM loaders, which means that they are "prepared for work with log grapples".



Δ

The unloading grapple has short, rounded tines, making it easier to fill the grapple when unloading a vehicle. Long, straight tines could damage both the timber and the vehicle if used for this purpose.

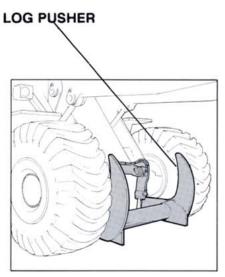
В

The sorting grapple has relatively long and straight bottom tines that can slide along the ground so that the grapple can be well filled when loading from stacks and sorting bunkers.

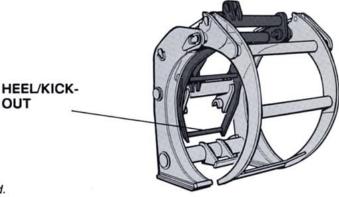
C

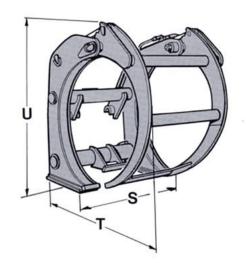
The tree-length grapple is a wide grapple that is capable of gripping single stems as well. It is slightly longer then the sorting grapple.

The tropical timber grapple is very wide with two separate clamping arms to hold large, heavy stems securely. Principally intended for handling largediameter and high-density timber of the tropical type.



Recommended for all handling of roundwood. Permits timber to be stacked higher and clears a path in front of the loader wheels. Hydraulic heel/kick-out is available for most grapples. The heel is used, for example, for holding a single log in a large grapple. The kick-out is used to make higher stacks, since the grapple does not have to be tilted to empty; instead, the log is pushed out, making it possible to reach about half a meter higher.





UNLOADING GRAPPLE

For unloading timber from e g vehicles and placing it in stacks. The grapple has short tines and a clamping arm that gives the grapple a large grip opening. The short tines permit effective and gentle unloading. The attachment requires a 3rd hydraulic control.

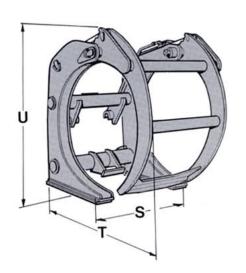
Only stocked for mounting in attachment bracket.

Can be equipped with hydraulic heel/kick-out.

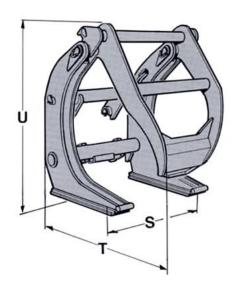
		L50	L70	L90		L120	L160	
Order No Log length	m_			90353 3,0	90350 4,5	90353 4,5	PF 3,0	99745 4,5
Area	m ² ft ²			2,2 23,7	1,7 18,3	2,2 23,7	4,1 44,0	3,1 33,3
Recommended load Weight	kg kg			3700 1560	4300 1420	5500 1560	6890 2050	7800 2150
S T U	mm mm mm			1650 2020 2180	1650 1800 1920	1650 2020 2180	1780 2750 2900	1820 2260 2480

SORTING GRAPPLE

For feeding sorting plants from a stack. It has relatively long tines to reach into bunkers. The clamping arm is designed to provide a large grip opening. The attachment requires a 3rd hydraulic control. Only stocked for mounting in attachment bracket. Can be equipped with hydraulic heel/kick-out.



		L50	L70	L90	L120	L160
Order No Log length	m	90259 4,5	90257 4,5	90354 9035 3,0 4,5	90354	99999 4,5
Area	m² ft²	0,9 9,5	1,2 12,9	2,2 1,7 23,7 18,3	2,2 23,7	3,1 33,3
Recommended load Weight	kg kg	2270 865	3000 945	3700 4300 1650 1520	5500	7800 2150
S T U	mm mm mm	1610 1400 1430	1610 1550 1620	1640 1640 1830 1680 2180 1920	1640 1830	1790 2110 2480



TREE-LENGTH GRAPPLE

For handling tree-length stems. The grip area is adapted for handling single stems, i. e. a small minimum grip area can be obtained.

The attachment requires a 3rd hydraulic control.

Only stocked for attachment in attachment bracket.

		L50	L70	L90	L120	L160
Order No		90438	90438	90439	90439	90774
Area	m ² ft ²	0,7 7,5	0,7 7,5	1,3 13,9	1,3	1,8
Recommended load Weight	kg kg	2270 850	3100 850	4450 1375	5775 1375	8200 1750
S T U	mm mm mm	1610 1230 1500	1610 1230 1500	1640 1620 2020	1640 1620 2020	1790 1900 2370

HI-LIFT SWIVEL WOOD CLAMP

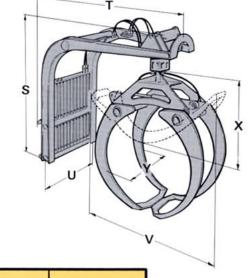
The hi-lift SWC handles pulpwood in 2-3 meter lengths and is mounted in the attachment bracket. It is designed for unloading vehicles to a stack or feeding table.

It is also suitable for transporting wood from a stack to a feeding table.

The grip can be positioned at either position "a" or postion "b" depending on the size of the grip, density and length of timber. The specifications apply for a machine with 75% CaCl₂ in the rear tires.

Tipping load applies with horizontal arms and the frame in a vertical position.

3rd and 4th hydraulic controls are required.



ontrols are required.		LS	90	L120		
Grip Order No Area	m² tt²	90973 0,5-1,5 5,4-16,1	90975 0,7-2,0 7,5-21,5	90975 0,7-2,0 7,5-21,5	PF 0,7-1,8 7,5-19,3	
Weight Frame Order No Weight	kg kg	880 90897 1070	930 90897 1070	930 90897 1070	900 90897 1070	
Tipping load Position a Position b	kg	3500	3500	5300	5300	
	kg	3900	3900	5900	5900	
Working load Position a Position b	kg	2100	2100	3300	3300	
	kg	2500	2500	3700	3700	
S	mm	2588	2588	2588	2588	
T	mm	2440	2440	2440	2440	
U V	mm mm	1317 1590 1380	1317 1770	1317 1770	1317 1670	
X	mm	825	1605	1605	1505	
Y	mm		825	825	825	

PF = On request

HEEL/KICK-OUT

Hydraulically operated. Supplied as assembly kit, assembly not included in price.

The equipment requires a 3rd hydraulic control.

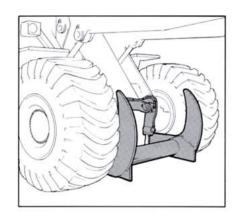




For grapple Order No		L50	L70	L9	L1	20	L160	
		90259 90260	90257 90258	90350 90352	90351 90352	90353 90355	90354 90355	99745 90001
Weight M min. area	kg mm	200 85	210 200	300 170	300 170	330 220	330 220	410 240
For grapple Order No			90259 90260	90353 90355	90354 90355			99999 90001
Weight M min. area	kg mm		200 85	330 220	330 220			410 240

LOG PUSHER

Recommended for all handling of roundwood. Permits timber to be stacked higher and clears a path in front of the loader wheels.



		L50	L70	L90	L120	L160
Order No Weight	kg		90665 ¹)	91238 ¹) 550	90664 ¹) 550	99292 ²)
Width Depth	mm		1310 1475	1314 1710	1314 1710	1500 2060
Height	mm		610	810	810	1100

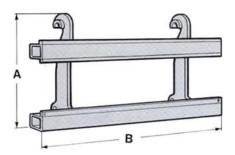
- Operated with a 4th hydraulic control. If the log grapple has heel/kick-out, a 5th hydraulic control is required.
- 2) Necessary control equipment included.

FORK ATTACHMENTS FOR VARYING NEEDS

On account of their special features, high performance, maneuverability and unique lift-arm system, Volvo BM loaders are used within many different fields of application today. The snap-on coupling permits the machine to be utilized effectively where previously only special-purpose machines such as fork-lift trucks and mobile cranes could be used. The stability of Volvo BM loaders and the reach and parallel lift-arm action of the loader unit make them particularly suitable for work with fork attachments.

On material yards, in warehouses and on docks, maximum use is made of the available space. It is here that Volvo BM's arm system and effective attachments really prove their worth. Their high lifting height and long reach permit work with high stacks. They can also load wide vehicles from one side, permitting short work cycles.

For handling pallets of non-standard dimensions, we have a series of fork tines with lengths of 1050, 1225 and 1450 mm and fork frames with three different widths: 1200, 1500 and 2000 mm. Pallet forks and frames can be combined to form any desired unit. Our fork attachments meet the most diverse needs. From extra-heavy-duty breakout forks to forks with hydraulic positioning and combined hydraulic positioning and side shift.



FORK FRAME

For materials handling. Can be combined with different fork tines.

Available in three different widths.

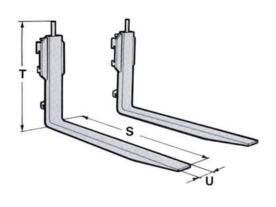
			L50 L70			L90			L120		L16	0
Order no. Weight	kg	97791 130	97792 145	97793 180	90785 195	90786 225	90787 310	90785 195	90786 225	90787 310	99542 400	
A B	mm mm	1200 815	1500 815	2000 815	1200 825	1500 825	2000 825	1200 825	1500 825	2000 825	2260 1090	

FORK TINES

Available in three different lengths. For use in combination with the above- mentioned fork frame. The fork tines are marked in accordance with existing Swedish and international standards. Specified maximum load applies at a load center distance of 600 mm

NOTE! The order number is for one fork tine only.

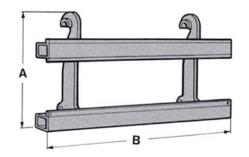
			L50	
Order No. Max. load		97788	97789	97790
per arm Weight	kg kg	2000 110	2000 125	2000 130
S	mm mm	1050 920	1225 920	1450 920
Ü	mm	125	125	125



			L70		L90		L120			L160	
Order No. Max. load		97788	97789	97790	90782	90783	90784	90782	90783	90784	99845
per arm	kg	2000	2000	2000	4000	4000	4000	4000	4000	4000	9000
Weight	kg	110	125	130	140	152	168	140	152	168	310
S	mm	1050	1225	1450	1050	1225	1450	1050	1225	1450	1500
T	mm	920	920	920	980	980	980	980	980	980	880
U	mm	125	125	125	150	150	150	150	150	150	200

BREAKOUT FORK FRAME

Extra heavy-duty. Intended for heavy jobs where a large breakout force is needed, e. g. stone quarrying.



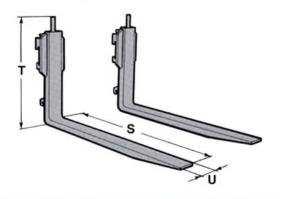
			L50 L70		L90	L120
Order no.	kg	90785	90786	90787	90786	90786
Weight		195	225	310	225	225
A	mm	1200	1500	2000	1500	1500
B	mm	825	825	825	825	825

BREAKOUT FORK TINES

Available in three different lengths. To be combined with the breakout fork frame. The fork tines are marked in accordance with existing Swedish and international standards.

Specified max. load applies at a load center distance of 600 mm.

NOTE! The order number is for one fork tine only.

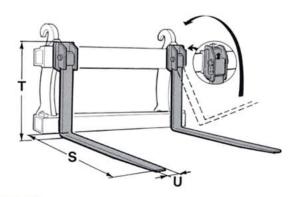


			L50			L70			L90		L120
Order No. Max. load		90782	90783	90784	90782	90783	90784	90895	90896	90895	90896
per arm	kg	4000	4000	4000	4000	4000	4000	4700	4700	4700	4700
Weight	kg	140	152	168	140	152	168	160	194	160	194
S	mm	1050	1225	1450	1050	1225	1450	1050	1450	1050	1450
T	mm	980	980	980	980	980	980	990	990	990	990
U	mm	150	150	150	150	150	150	150	150	150	150

HINGED FORK TINES

Used where irregularities in the ground make the load difficult to pick up with conventional fork tines. The upward movement of the tines is 75 mm (3 in). The fork tines are marked in accordance with Swedish and international standards. Specified max. load applies at a load center distance of 600 mm.

NOTE! The order number is for one fork tine only.



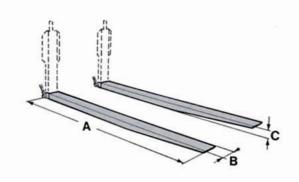
			L50 L70		L90	L120
Order No. Max. load		98098	98098	98098	98104	98104
per arm	kg	2000	2000	2000	3300	3300
Weight	kg	125	125	125	145	145
S	mm	1225	1225	1225	1225	1225
T	mm	810	810	810	830	830
U	mm	125	125	125	150	150

FORK TINE EXTENSION

Intended for handling of light materials.

NOTE! The order number is for one fork tine extension only.

		L50 L70	L90 L120
Order No.		99107	99444
For fork size	mm	125x50	150x60
Permissible load per tine 1250 mm (49,2 in) from frame	kg	1000	1750
Weight	kg	70	72
A	mm	2500	2500
В	mm	170	200
C	mm	70	86



PALLET FORK WITH FORK POSITIONER

This type of fork frame is ideal for cases where the width of the load varies. The fork tines can be hydraulically adjusted to the width of the load. Assembly components are included. The attachment requires a 3rd hydraulic control.

NOTE! Fork tines not included in order number.

n	R	n
s		
41	o	1.7

		L50		L	70	L90		L1	20
Order No. O Range of movement	mm	90898 300- 1350	90899 300- 1750	90898 300- 1350	90899 300- 1750	90898 300- 1350	90899 300- 1750	90898 300- 1350	90899 300- 1750
Weight	kg	265	325	265	325	265	325	265	325
R	mm mm	1500 825	2000 825	1500 825	2000 825	1500 825	2000 825	1500 825	2000 825



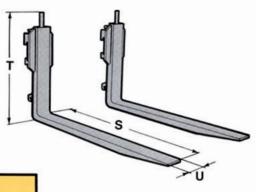


FORK TINES

There are three types of tines for use with the fork frame. Note that excessively long fork tines can damage goods located behind the load when picking up and setting down. The fork tines are marked in accordance with existing Swedish and international standards. Specified max. load applies at a load center distance of 600 mm.

NOTE! The order number is for one fork tine only.

			L50 L70			L90 L120	
Order No. Max. load		99228	99229	99230	90782	90783	90784
per arm	kg	2000	2000	2000	4000	4000	4000
Weight	kg	110	120	130	140	152	168
S	mm	1050	1225	1450	1050	1225	1450
T	mm	920	920	920	980	980	980
U	mm	125	125	125	150	150	150



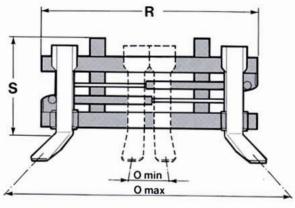
EML PALLET FORK WITH POSITIONER AND SIDE-SHIFT

This type of pallet fork is ideal for cases where the width of the load varies. The fork tines can be hydraulically adjusted to the width of the load. The side-shift function, which allows the load to be moved sideways, is invaluable for handling goods in cramped areas.

The attachment requires a 3rd and 4th hydraulic control.

The side-shifting movement is depending on the position of the fork tines. Maximum side-shift is obtained with the fork tines positioned at 0 max/2.

When ordering, state the order No. for the pallet fork and the fork length.











		L50	L70	L90	L120
EML Order No	mm	4000 F/SS/V	4000 F/SS/V	7000 F/SS/V	7000 F/SS/V
O Range of movement		205-1295	205-1295	270-1930	270-1930
Weight	kg	290	290	680	680
R	mm	1500	1500	2100	2100
S	mm	735	735	910	910

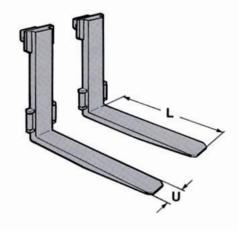
^{*} Above ground level



Available in different lengths for use in combination with the above mentioned fork frame.

Note that excessively long fork tines can damage goods located behind the load when picking up and setting down.

When ordering, state the order No. for the pallet fork and the fork length.



			50 70	L90 L120				
L	mm	1200	1400	1600	1800	1200	1600	1800
Weight	kg	181	203	426	671	310	356	385
U	mm	125	125	125	125	150	150	150

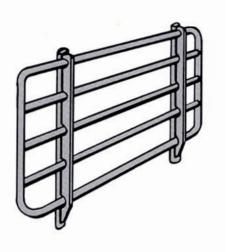
PROTECTION BARS

This type of attachment can be mounted on both old and new fork tines. It is used for handling goods that need support to keep them from falling backwards over the frame.

Fits all fork attachments up to and including the L120 loader.

(Sweden requires protection bars for certain material handling, according to ASS 94).

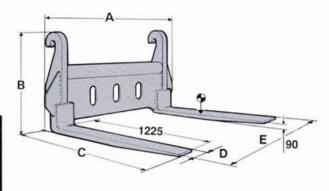
Order No. Width	mm	98568 1200
Depth	mm	50
Height	mm	600
Weight	kg	25



FORK ATTACHMENTS WITH FIXED TINES

Fork attachments with heavy-duty tines.

		L120	L160
Attachment type		R	R
Order No.		PF	99995
Max load per arm	ko	7000	10000
Weight	kg kg	485	10000 850
	mm	1300	1500
A B C D E	mm	970	1215
С	mm	1435	1500
D	mm	160	230
E	mm	1160	1330



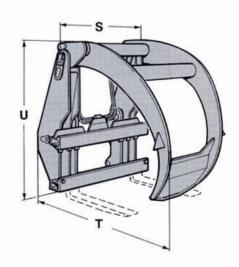
= Bracket-mounted (Hook-on)

COMBI-FORK WITH ONE-PIECE CLAMP

A fork that is recommended for handling palletized goods and roundwood. The maximum height of palletized goods is 1200 mm (47 in). Hinged fork tines can be used to advantage for handling on uneven surfaces. Fork tines not included.

The attachment requires a 3rd hydraulic control.

		L50	L70	L90	L120
Order No. A area	m ²	97949 0,8- 1.05	97949 0,8- 1,05	90789 0,75- 1,7	90789 0,75- 1,7
	ft ²	8,61- 11,30	8,61- 11,30	8,07- 18,29	8,07- 18,29
Recommended load Weight	kg kg	2400 ¹) 790	3300 ¹) 790	4100 ²)	5600 ²
S	mm	1830	1830	1750	1750
Ţ	mm	1330	1330	1400	1400
U	mm	1410	1410	2320	2320



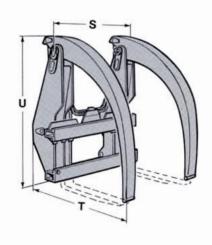
1) Load center distance 500 mm (19,7 in)

COMBI-FORK WITH TWIN-ARM CLAMP

This fork is suitable for materials handling at pulp mills, building sites etc. The clamping arms are automatically adjusted to provide a secure grip. Fork tines not included.

The attachment requires a 3rd hydraulic control.

		L50	L70	L90	L120
Order No. A area	m ²	97950 0,8-	97950 0,8-	90790 0,5-	90790 0,5-
	ft²	1,05 8,61- 11,30	1,05 8,61- 11,30	1,5 5,38- 16,14	1,5 5,38- 16,14
Recommended load Weight	kg kg	2400 ¹) 770	3300 ¹) 770	4100 ²) 1025	5600 ²
S T U	mm mm	1830 1450 1410	1830 1450 1410	1750 1120 2330	1750 1120 2330



- 1) Load center distance 500 mm (19,7 in)
- 2) Load center distance 600 mm (23,6 in)

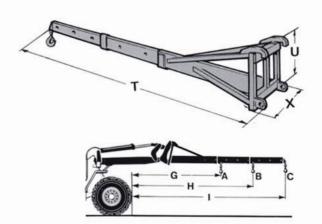
PF = On request

²⁾ Load center distance 600 mm (23,6 in)

MATERIAL HANDLING ARMS

MATERIAL HANDLING ARM

The material handling arm is used on construction sites, for pipelaying etc. It has two telescopic sections with built-in mechanical stop to prevent overextension. Volvo BM furnishes type examination documents for Sweden.



			L50	L70	L90	L120
Order No. Weight		ka	97824 360	97824 360	98761 455	98761
Permissible load:	Δ	kg	1120	1480	2200	3000
remissible load.	B	kg kg kg	940 750	1260 1000	1750 1450	2400
G H		mm mm	3245 4310	3270 4335	3290 4325	3245 4280
I T		mm mm	5445 2030	5465 2030	5455 2050	5410 2050
U X		mm mm	840 1180	840 1180	840 1180	840 1180

HYDRAULIC FOLDING MATERIAL HANDLING ARM

The material handling arm has a telescopic section and can be folded down hydraulically. It is used where loads have to be lowered below ground level or where obstacles have to be bypassed. The arm is equipped with a line rupture valve and the folding section can be lowered at a restricted rate.

Volvo BM furnishes type examination certificates for Sweden.



The attachment requires a 3rd hydraulic control.

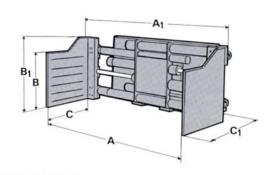
			L50	L70	L90	L120
Order No. Weight		kg	97819 410	97819 410	98762 560	98762 560
Permissible load:	A B	kg kg	900 750	1150 960	1700 1400	2300 1950
G		mm mm	4430 5425	4455 5450	4460 5460	4415 5415
T U		mm mm	3210 830	3210 830	3225 850	3225 850
X		mm	1180	1180	1190	1190

OTHER ATTACHMENTS

HYDRAULIC BALE CLAMP

The attachment is intended for handling baled material such as pulp bales, light scrap metal bundles etc.

The attachment requires a 3rd hydraulic control.



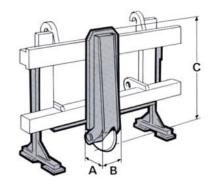
		L50	L70	L90	L120
Order No.	kg	98067	98067	91105	91105
Clamping force		4500	4500	9500	9500
Weight	kg	700	700	950	950
A min.	mm	850-	850-	900-	900-
max.	mm	2400	2400	2700	2700
A ₁ min. max.	mm mm	1600- 2560	1600- 2560	1800-	1800-
B	mm	370	370	500	500
B ₁	mm	850	850	980	980
C'	mm	900	900	900	900
C ₁	mm	1250	1250	1250	1250

ASPHALT CUTTER

Facilitates removal of asphalt for repair work on road surfaces, pavements etc. The attachment makes one cut so that the asphalt edge is not damaged during the excavation work.

Mounted on fork frame.

Cutting depth 50-70 mm (3 in).



		L50	L70	L90	L120
Order No.	kg	97815	97815	97815	97815
Weight		96	96	96	96
A	mm	390	390	390	390
B	mm	280	280	280	280
C	mm	1050	1050	1050	1050

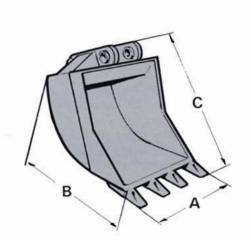
SERVICE DIGGER

When coupled to the loader, the service digger comprises an agile and nimble unit, particularly suited for emergency service and repair jobs.

It is coupled to the loader's attachment bracket, and four hydraulic oil hoses are connected via quick-connect couplings. A lifting height of about 3 m and a side slew of 85° permit loading directly onto trucks with high sides. Raising and lowering of the bucket arm is effected by the loader's lifting and tilting cylinders. The digger unit's cylinders for bucket movement and side slew are double-acting.

3rd and 4th hydraulic controls as well as lever kit 90860 are required.

(20)		L50 L70
Order No. Weight	kg	97977 850
Max. digging depth Max. reach from	mm	3750
center of drive wheel Unloading height	mm	5355 3390
Max. lateral deflection with tipped bucket	mm	3100
Slewing angle Breakout force at bucket lip	kp	170 3100



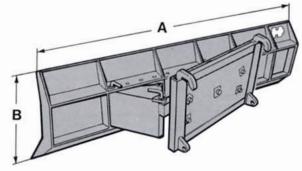
EXCAVATING BUCKETS

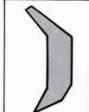
Three different buckets are available for the service digger. They can be changed easily.

		Excavating bucket	Post hole bucket	Cable bucket
Order No.		97821	97822	97823
Weight	kg	135	90	100
Volume	1	167	50	96
Number of teeth	st	4	4	4
A	mm	560	475	360
В	mm	1070	690	1070
C	mm	580	400	580

DOZER BLADE, HOLMS

The dozer blade is intended for dozing and leveling work and can be angled 20° to the right or left mechanically. The wear bar is reversible. Mounted in attachment bracket.





		L50	L70	L90	L120
Holms Order No.	And had	F32550	F32550		
Weight	kg	480	480		
A	mm	2500	2500		
В	mm	800	800		

SNOW BLADE Type KHP, HOLMS

(municipal blade)

Recommended for snow clearance of roads etc. The blade has a reversible cutting edge divided into sections that fold back when they run into small obstacles such as manhole covers. Hydraulically adjustable 35° and equipped with horizontal oscillation with *variable ground pressure* for road-hugging performance. Can be equipped with rubber blades and snow screen.

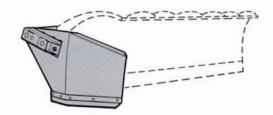
B

The attachment requires a 3rd hydraulic control.

		L50	L70	L90	L120
Holms Order No. Weight	kg	F31975 740	F31975 740		
A B	mm mm	3200 800	3200 800		

SNOW WING, HOLMS

The snow wing prevents the creation of a ridge of snow when the plow passes driveways, intersections, pedestrian crossings etc. The snow wing is operated hydraulically and fits most Holms snow blades.



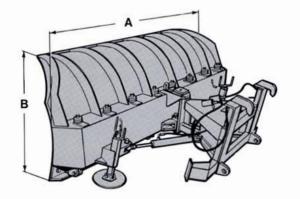
	155079
kg	60
	kg



HEAVY-DUTY SNOW BLADE Type TKH, HOLMS (municipal blade)

Recommended for snow clearance of roads etc. The blade has a reversible cutting edge divided into sections that fold back when they run into small obstacles such as manhole covers. Hydraulically adjustable 35° and equipped with horizontal oscillation. The blade can be fitted with rubber blades and snow screen.

The attachment requires a 3rd hydraulic control.



		L50	L70		L	L120	
Holms Order No. Weight	kg	F32125 900	F32125 900	F32225 1100	F32125 900	F32225	F32225
AB	mm mm	3200 1050	3200 1050	4000 1050	3200 1050	4000 1050	4000 1050

SWEEPER, HOLMS SBHL

For street cleaning where the sweepings do not have to be collected. Can be equipped with water tank and spray nozzle for laying the dust.

The sweeper is connected to the attachment bracket and the brush cylinder's two hydraulic motors are connected via quick-connect couplings to the 3rd hydraulic control. The brush pressure against the surface is regulated automatically. The brush cylinder has an easily replaceable brush made of polypropylene or rippled wire. The pivoting parking support provides stable parking of the sweeper.

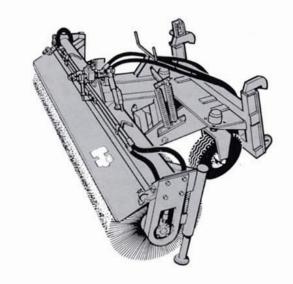
The attachment requires a 3rd hydraulic control.

The sweeper can be equipped with hydraulic pivoting 30° to the right/left, without disturbing the performance of the brush.

A 4th hydraulic control is required.

A hydraulic oil cooler and a single-acting lifting function are required.

A revolution counter is recommended.



		L50		L70		L90	
Holms Order No. Weight		F22300	F22310*	Charles of the last of the las	F22310*		
Working width	kg	550 2500	550 2500	580 2500	550	580	
Brush cyl. diameter	mm mm	600	600	600	2500 600	2500 600	
Brush cyl. rot. speed	r/min	150	150	150	150	150	
Necessary hydr. pressure	kp/cm ²	75	75	75	75	75	
Necessary hydr. flow	l/min	100- 120	100- 120	100- 120	100- 120	100- 120	

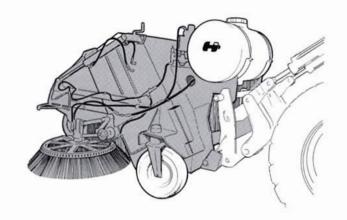
^{*} Dual-circuit hydraulics required.

SWEEPER, HOLMS 601

This fully hydraulic, self-collecting sweeper with high-pressure watering is particularly useful on park roads, pavements, industrial sites and in residential areas. The Holms 601 can be snapped on to the attachment bracket on a Volvo BM loader, providing an effective and economical system for public cleansing. The machine's 3rd hydraulic control powers the two bristle brushes, the sweepings elevator and the water pump for the spray nozzles. These nozzles create a dust-laying curtain around the brushes. A 3rd hydraulic control is required in order to empty the container.

The attachment requires a 3rd hydraulic control. A hydraulic oil cooler and a single-acting lifting function are required.

A revolution counter is recommended.



		L50		L70		L90	
Holms Order No.	kg	F20001	F20006*	F20002	F20006*	F20003	
Weight		1160	1160	1200	1160	1200	
Working width Sweeping container volume	mm	2500	2500	2500	2500	2500	
	I	700	700	700	700	700	
Water tank volume	l	300	300	300	300	300	
Necessary hydr. flow	Vmin	110	110	110	110	110	
Working pressure Water spray nozzles Carrying wheels	kp/cm ²	90 16 3	90 16 3	90 16 3	90 16 3	90 16 3	

^{*} Dual-circuit hydraulics required.

SWEEPER, HOLMS SBHL

For street cleaning where the sweepings do not have to be collected. Can be equipped with water tank and spray nozzle for laying the dust.

The sweeper is connected to the attachment bracket and the brush cylinder's two hydraulic motors are connected via quick-connect couplings to the 3rd hydraulic control. The brush pressure against the surface is regulated automatically. The brush cylinder has an easily replaceable brush made of polypropylene or rippled wire. The pivoting parking support provides stable parking of the sweeper.

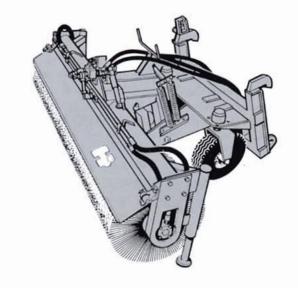
The attachment requires a 3rd hydraulic control.

The sweeper can be equipped with hydraulic pivoting 30° to the right/left, without disturbing the performance of the brush.

A 4th hydraulic control is required.

A hydraulic oil cooler and a single-acting lifting function are required.

A revolution counter is recommended.



		L50		L70		L90	
Holms Order No.	kg	F22300	F22310*	F22375	F22310*	F22350	
Weight		550	550	580	550	580	
Working width	mm	2500	2500	2500	2500	2500	
Brush cyl. diameter	mm	600	600	600	600	600	
Brush cyl. rot. speed	r/min	150	150	150	150	150	
Necessary hydr. pressure	kp/cm ²	75	75	75	75	75	
Necessary hydr. flow	Vmin	100- 120	100- 120	100- 120	100- 120	100- 120	

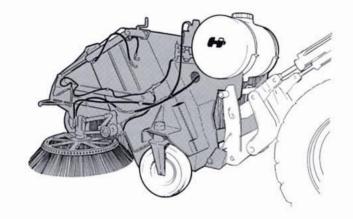
^{*} Dual-circuit hydraulics required.

SWEEPER, HOLMS 601

This fully hydraulic, self-collecting sweeper with high-pressure watering is particularly useful on park roads, pavements, industrial sites and in residential areas. The Holms 601 can be snapped on to the attachment bracket on a Volvo BM loader, providing an effective and economical system for public cleansing. The machine's 3rd hydraulic control powers the two bristle brushes, the sweepings elevator and the water pump for the spray nozzles. These nozzles create a dust-laying curtain around the brushes. A 3rd hydraulic control is required in order to empty the container.

The attachment requires a 3rd hydraulic control. A hydraulic oil cooler and a single-acting lifting function are required.

A revolution counter is recommended.



		L50		L70		L90	
Holms Order No.	kg	F20001	F20006*	F20002	F20006*	F20003	
Weight		1160	1160	1200	1160	1200	
Working width	mm	2500	2500	2500	2500	2500	
Sweeping container volume		700	700	700	700	700	
Water tank volume	l	300	300	300	300	300	
Necessary hydr. flow	Vmin	110	110	110	110		
Working pressure Water spray nozzles Carrying wheels	kp/cm ²	90 16 3	90 16 3	90 16 3	90 16 3	90 16 3	

^{*} Dual-circuit hydraulics required.



"All over the world Volvo BM loaders have gained special status for their flexibility and reliability.

They can perform a wide range of tasks, no matter how tough, and they have extra capacity for coping with peak work times."

Volvo BM Company S-63185 ESKILSTUNA SWEDEN

