## OPERATING MANUAL

Read through this operating manual carefully before starting the machine.

Startup Operations Maintenance Accessories



# HYDRAULIC LOG SPLITTER HS 71



Made in Germany



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### **1. INTRODUCTION**

Thank you for the trust you have placed in us. We are pleased to be able to count you as one of our valued customers.

The hydraulic log splitter is available in the following variants:

### HS 71 (400V), splitting force 7 t HS 71 (230V), splitting force 6 t

The log splitters are equipped with mechanical two-handed controls.

### 1.1 Using the operating manual

This operating manual aims to provide you with a way to become familiar with your new machine. The operating manual is divided into different sections, as can be seen in the table of contents. The sections are numbered consecutively, to make it easy to find things quikkly. The figures, instructions and technical specifications in this operating manual reflect the state of the art of the machine construction. Because the product is subject to ongoing development, we reserve the right to make changes to the product. If malfunctions occur on the machine the malfunctions and their probable causes can be rectified with the help of the following table (see Section 13, "Problems, causes and solutions"). If you cannot repair the machine yourself, please contact your dealer or an authorized repair shop. Please note the type and machine number indicated on the type plate before you contact your dealer, an authorized repair shop or the manufacturer. This data is required to rectify the problem or order spare parts.

### 1.2 Full delivery and transport damage

In case of visible transport damages – evident from damage to the package or scratched or defective parts on appliances or machines – it is essential that the damage is noted on the bill of lading: on both the copy that you receive as well as on the bill of lading that you must sign.

It is also essential that the carrier (driver) countersign. If the carrier refuses to confirm the transport damages, the best course of action is to refuse receipt as a whole and notify us about it immediately. Without a direct note on the bill of lading, any subsequent claims will not be recognized by the carrier nor the insurer of the transport.

Any hidden transport damages must be reported within two days at the latest; this means that the delivered goods must be inspected within this time. Usually, any reports after that will be fruitless. If hidden damages are suspected, always note on the bill of lading: "Goods were received subject to suspicion of hidden transport damages." Insurance companies and carriers often react with suspicion and they refuse any indemnification. For that reason, try to provide clear evidence of the damage (possibly with a photo).

Thank you for your understanding and help regarding this matter.

regarding this matter.

### 2. PRODUCT OVERVIEW



# 3. WARNING AND SAFETY LABELS

	<ol> <li>Machine safety label Before setting-up, servicing, maintaining and clea- ning the machine, disengage power and stop the engine. Lock the tool and secure against accidental start." Keep your hands away from all moving parts! Pinched hands danger!!</li> </ol>
	2. Machine safety label "Read, understand, and follow all instructions in this manual and on the splitter before starting" Keep at safety distance from the dangerous zone!
	3. Operation safety label "DANGER! Moving parts!" "One-man operation only!" Possible dangers can arise from moving parts on the machine. The machine is to be strictly operated by one man at a time only.
p max 220 bar	<ul> <li><b>4. "pmax 200 bar" label for 230V</b></li> <li><b>"pmax 220 bar" label for 400V</b></li> <li>This label displays the max. operating pressure.</li> </ul>
$\land $	<ol> <li>Operation safety label "DANGER! Pinched hands danger!"</li> <li>Keep your hands away from all moving parts! pinched hands danger.</li> </ol>
	6. Machine safety label "BEWARE: safely hook the table on the machine!"
	<ul> <li>7. Machine safety label Direction arrow</li> <li>The motor (just 400V) must be turning in the same direction as shown by this arrow.</li> </ul>

= [5] maschinen	8. Manufacturer label "BGU-Maschinen" Manufacturer's logo
	9. Production label "Product identification"
Type : Full-Stanmanner : Salansauft Hong-enname Salansauft : Spahlhaust Bon Acadi : Sana Dar Saladamatk Grandrahl	This label shows the company details of the manufac- turer and the main machine technical data.
	10. Operator's warning sign Wear safety work gloves!
	11. Operator's warning sign "Wear suitable protective cloths and boots."
0	12. Operator's warning sign "Wear earplugs and goggles"
$\wedge$	13. Operator's warning sign "Be careful and aware of safety!"
	14. Machine safety sign "Moving parts!"
	15. Safety instruction sign Read, understand, and follow all instructions in this manual and on the splitter before starting!
	16. Safety instruction sign "Read and mind these instructions at all times!"

### 4. SAFETY INSTRUCTIONS



Servicing, setup, maintenance and cleaning as well as transporting the machine may only be performed with the motor turned off and machine parts at a standstill.

In order to minimize hazards and avoid damage, it is essential that the instructions regarding operation, assembly, maintenance, repair, malfunctions and similar are complied with. Moreover, the machines may only be operated, maintained and repaired by persons who are familiar with the machine and who have been instructed regarding the hazards. Pertinent accident prevention regulations and any generally recognized safety, occupational health and road traffic regulations must be complied with.

Persons under 18 years of age may not work on splitters. It is permissible, however, to assign such work to persons older than 16 years of age, as long as this is necessary for the sake of achieving certain training objectives and if safety is guaranteed by the supervision of other skilled personnel.

The work site must be organized and maintained in such a way that safe working is possible.

The work site must be kept free of obstacles (tripping hazards). Grit/ sand is to be strewn on slippery and slick areas; sawdust and wood ash are unsuitable for this. The machine must be set up on level, even and firm ground.

• The work site must be adequately illuminated.

• A level and stable area with adequate freedom of movement is required for working.

• Work on the electrical system may only be performed by a qualified electrician.

• The operator of the machine is required to wear personal protective equipment, safety boots, snugly-fitting clothing, suitable gloves and protective goggles.

• The log splitter may only be operated if all of the protective guards installed or intended by the manufacturer are in place.

• Never leave the running machine unattended.

The work site around the log splitter and/or the routes for transporting wood to and from the machine must be organized and maintained in such a way that safe working is possible.

### 4.1 Intended use

The log splitter is designed for operation by 1 person. One machine may never be operated by two or more persons. The "HS 71" log splitter is intended solely for splitting firewood into smaller pieces in the direction of the grain.

When splitting wood, it is essential to ensure that the wood to be split is placed only on the splitting table's checkered plate.

Any other use does not comply with the "intended use." The manufacturer is not liable for any kind of damage stemming from this; the risk is borne solely by the user.

In order to rule out hazards and prevent damage, it is essential that the instructions regarding installation, operation, maintenance, repair and similar are complied with.

Only pieces of wood with a minimum diameter of 70 mm and a maximum diameter of 330 mm may be split.

All warranty claims will expire if the machine is used inappropriately.

The manufacturer will not be liable for damage to the machine and for injury to persons caused by improper use. 5. BEDIENUNG

### 5.1 Mounting guard brackets



Before using the log splitter the first time, the guard brackets (1) must be mounted onto the operating arms (see Fig. 1). For transport reasons these are only pre-mounted to the operating arm with one screw (2). Fasten the guard bracket (1) to the operating arm with two screws (2) each (see Fig. 1). Tighten both screws (2) firmly!

Abb. 1

### 5.2 Remarks on the electrical system



Abb. 2

At a length of 25 m (three-phase motor 400 V), the power cable must have a diameter of 2.5 mm<sup>2</sup>. Please note that the log splitter's ground conductor must be connected, otherwise it will not operate.

For 400V motors, the direction of rotation is to be checked by switching it on and off briefly before beginning work. The direction of rotation must match the arrow on the motor's ventilation cover. If the direction of rotation does not match the arrow on the ventilation cover, it must be changed using the phase switch (see Fig. 2) in the power cable.

For AC motors (230V). a minimum cable diameter of 2.5  $\rm mm^2$  is necessary for a cable length of a maximum of 10 m.

### 5.3 Remarks on the hydraulic system



Abb. 3

The hydraulic oil tank (see Fig. 3) can be found in the base of the log splitter. The oil tank (4) is filled with hydraulic oil at the plant. Care must be taken when the log splitter is tipped far to the back during transport, because oil can leak out of the filling nozzle (3). Refer to page 17 for the replacement of hydraulic oil.



At low temperatures the oil in the hydraulic system is still very viscous. Working (splitting) immediately at such temperatures can lead to damage to the hydraulic system. In order to ensure problem-free operation of the hydraulic system at low temperatures, the splitter shouldfirst be run in idle for 10 - 20 min. to allow the hydraulic oil to warm up.



The control valve is set at the manufacturing plant; further adjustments may not be attempted.

#### 5.4 Checking the two-handed controls



Abb. 4

Log splitters are equipped with mechanical two-handed controls. The purpose of this is to ensure that the operator has no way to reach into the splitting area when working with the machine (see Fig.4). The two-handed controls should be checked before each use. Both control levers must be pressed downward to begin the splitting operation. The splitting wedge travels downward.

Letting go of a control lever will cause the splitting operation to be halted. The splitting wedge must now remain in its position and may not return to its initial position.

Letting go of both control levers will cause the splitting wedge to return to its initial position (at the top).

The splitting wedge is not permitted to travel downward if only one control lever is actuated. When control levers are released, they must return automatically to their initial position.



The splitter may not be started up if a malfunction is found in the two-handed controls (due to mechanical causes such as bent arms).

### 5.5 Remarks concerning startup



Abb. 5



The log splitter must be checked for external damage each time before it is started.

The hydraulic hoses (5) and all connection points (6) on the hydraulic system must be inspected to detect any potentially leakage and to eliminate them (see Fig. 5).

All safety systems/quards must be mounted on the machine. They may not be removed or disabled. If malfunctions or defects become evident, the machine may not be started up until they have been rectified.

The machine may not be started if the hydraulic system shows leakage.

### 5.6 Remarks concerning safety



The log splitter must be set up on a firm and even surface. The work site must be kept free of wood scraps and obstacles (tripping hazards). Grit/sand is to be strewn on slippery and slick areas. Never reach into the splitting area when the splitting wedge moves.

#### 5.7 Adjusting the splitting length

When the log splitter leaves the factory, it is set to its maximum splitting length. When the motor is switched on, the splitting wedge travels automatically to its maximum height.



The lift can be limited in cases where it is necessary to split wood whose height is clearly below the maximum lift of the log splitter. The lift height can be adjusted to any level..



Abb. 6

Proceed as follows to modify the lift-height of the splitting wedge:

Move the splitting wedge to the desired height. Pressing on a control arm causes the splitting column to remain at the desired height. Now shut off the motor. The splitting column remains at the desired height. Now loosen the wing bolt (7) at the handle (behind the splitting column) and pull the control rod (8) out as far as possible. Use the wing bolt (7) to clamp the control rod (8) at the desired height, and then tighten the wing bolt firmly.

Now the log splitter can be switched on again. Now the splitting wedge cannot extend to its maximum length anymore, because it is limited by the control rod (8).

To reset the maximum splitting length, it is necessary to loosen the wing bolt (7). Now the splitting wedge can extend to its maximum length again. After that tighten the wing bolt (7) firmly again.

### 5.8 Adjusting the table



Logs ranging from 550 mm to 1065 mm can be easily split by adjusting the splitting table. The table can be adjusted to three heights, without the need for tools.

To adjust the table, unscrew the wing nut (9; Fig.7) on the table mount/column and remove the bolt from the hole. Now the table (10; Fig. 8) can be easily raised and removed by pulling it forward.

Abb. 7



To mount the table (10; Fig. 8), it must again be slightly raised at the front. Place the table on the holders on the stand at the height that matches the wood you are splitting, and slide it to the back in a tipped-up position. Lower the table at the front, and ensure that the hooks on the back of the table latch in behind the upper holders.



The bolt is then to be inserted in the existing holes of the table holder and secured with the wing nut (11; Fig. 9).

(It is only possible to insert the bolt in the holes if the table was mounted properly.)

At the bottom holder, the table can be mounted only without the securing bolt (valve is in the way). Take particular care to ensure here that the hooks on the back of the table latch in behind the holders above them.

Abb. 9

### 5.9 Working with the wood clamps



Abb. 10

### 5.10 Working with the log splitter

Wood clamps (12) are attached to the operating arms to hold wood in place during the splitting operation (see Fig. 10).

Because of the attached pressure springs (13), the wood clamps can adapt variably to logs of any size (see Fig. 10).

The log must be aligned centrally in the wood clamps to ensure optimum functionality and proper splitting.

Place the wood to be split on the splitting table and press both operating arms (A) inwards (see Fig. 10). This will fix the wood in place. Both control levers must be pressed downward (B) simultaneously to begin the splitting operation. This will set the splitting wedge in motion.

Both control levers (B) must be pressed during the entire splitting operation.

Release the control levers to cancel the splitting operation. The splitting wedge will travel back to its initial position. Once the splitting operation is finished, release both control levers so that the splitting wedge can travel back to the top (B).

The split wood may only be removed from the splitting table after the splitting wedge is back in its initial position.

If necessary, clear the wood scraps and chips from the table before beginning the next splitting operation.



Ensure that the wood to be split is always placed on the table straight. Note that wood that is full of branches can splinter. Never use any wood that has not had its branches removed.

#### 5.11 Releasing jammed pieces of wood

Sometimes the wood is not completely split through and it is pulled upward by the splitting wedge as it travels to the top. If this happens, allow the splitting wedge to travel back to its initial position, and then switch off the log splitter. Now the wood must be knocked away. This can be accomplished with a hammer.

## 6. TRANSPORTING THE MACHINE



On electrically-powered machines, always remove the power plug before changing locations.



It is very easy to transport the log splitter. An axle with two wheels is attached at the back.

To transport the log splitter, tip it backward slightly until the wheels are touching the ground (see Fig.11).

The motor guard can also serve as a handle.

There is a transport handle situated near the top of the splitting co-lumn.

When transporting the splitter, it is advisable to drive the splitting wedge right to the bottom.

The two control levers should be bound together at the front so that they do not accidentally swivel around during transport.

Abb. 11

## 7. CROSS SPLITTER AND SPLITTING WEDGE EXPANDER AS ACCESSORIES



Abb. 12



Available as **accessories**\* for our log splitters are a cross splitter and a splitting wedge expander (as additional purchases).

The cross splitter splits the firewood into 4 parts in one operation. The splitting wedge expander allows improved and faster splitting of the wood.

Both accessory parts are simply slid onto the splitting wedge and clamped in place with a star-shaped knob (M12). When mounting the cross splitter, ensure that the inclined side of the crosswise blade is facing the operator.

Splitting wedge expander: Item No. 90303

Cross splitter: Item No. 90302

Ensure that the cross splitter and the splitting wedge expander are fully slid onto the splitting wedge and secured in place with the screw.

If the cross splitter or the splitting wedge expander are not completely slid onto the splitting wedge, they can slip forward during operation and injure the person operating the machine. It is also possible that the machine becomes damaged.

If possible, the cross splitter should not be used for hardwood (fruit trees, beech), because this kind of wood presents the cross splitter with much more resistance and is more likely to trigger the pressure relief valve in the hydraulic system and cause the wood to jam.



The diameter of the wood must be a minimum of 200 mm if the cross splitter is used, otherwise the log splitter could be damaged. Moreover, the wood clamps must be secured in the position furthest to the back using a cotter pin.

\* Accessory parts are not included in the basic equipment and are available at additional cost.

## 8. MAINTENANCE AND SERVICING WORK



Please perform maintenance, servicing and cleaning only after the machine has been turned off (pull plug out of socket) and machine parts are at a standstill.

### 8.1 Regular maintenance tasks

The following tasks are to be performed as necessary and/or on a regular basis:

• Clean away wood scraps, wood chips and any other dirt from the machine

• Grease the splitting column

• Check the level of the hydraulic oil; if there is a loss of oil then check the leak-tightness of the entire hydraulic system (hoses and screw connections)

Lubricate all moving parts

### 8.2 Remarks regarding the hydraulic

Check the level of the hydraulic oil regularly. Ensure that no dirt or wood chips have found their way into the oil tank.

Never run the splitter without or with insufficient oil. If a lack of oil causes air to enter the circulation system, the splitter will begin to work incorrectly (jerking and erratic), and the hydraulic pump can be damaged.

The first oil change must be performed after approx. 25-30 hours of operation. After that the hydraulic oil is to be changed approx. every 50 hours of operation or at least once a year.

The drain screw can be found on the underside of the oil tank. The filler screw can be found on the upper right of the tank.

Recommended hydraulic oils: - HLP 46, DEA HD B 46, Shell Tellus 10-46, Esso Nuto H 46

When changing the oil be sure to collect the old oil in a suitable container. Ensure that the container you use is oil-resistant and has a minimum capacity of 7 liters. If the container is smaller, you can drain the oil in multiple stages.

Old oil is harmful to the environment and must be properly disposed of.

After filling the oil tank, run the log splitter three to four times to allow air to escape out of the hydraulic circulation system; then replace the tank cap.

### 8.3 Guides in the splitting column

If squeaking sounds can be heard while running the log splitter, it is necessary to grease the polyamide guides in the splitting column tracks. A standard commercially-available grease can be used for this.

The squeaking sounds should cease after doing this.

After the polyamide guides have worn out, if the splitting column begins showing signs of excessive play to the column tracks, the polyamide guides must be replaced.

### 8.4 Wear parts

- Item No. 53057 Top guide
- Item No. 53058 Bottom guide

### 9. DECOMMISSIONING AND DISPOSAL

When the machine has reached a condition that it cannot be used anymore and must be scrapped, it is necessary to deactivate and dismantle it. This means that it must be converted into a state in which it cannot be used anymore for the purpose for which it was constructed.

In the scrapping process the recycling of the machine's basic materials must be kept in mind.

These materials may potentially be reusable in a recycling process. The manufacturing company assumes no responsibility for potential injury to persons or damage to property that stem from the re-use of machine parts, if these parts are used for purposes other than those for which they were originally intended.

#### Deactivation of the machine:

All deactivation or scrapping work must be performed by persons who were trained for this.

- Block each movable machine part and dismantle the machine down to its individual parts
- Send all components to controlled disposal facilities
- Drain fuel out of the tank and dispose of it in an environmentally friendly way
- Remove rubber parts from the machine and bring them to a facility that takes them

No residual risk exists anymore after all movable parts have been deactivated and blocked.

Electrical components are considered special/hazardous waste and must be disposed of separate from the machine. If a fire occurs in the electrical systems of the machine, fire extinguishing equipment is to be used that is certified for this purpose (e.g. powder extinguishers).

## **10. TECHNICAL SPECIFICATIONS**

Technical specifications	Unit	230 V	400 V
Splitting height	mm	550/750/1065	550/750/1065
Ram stroke	mm	500	500
Min. wood diameter	mm	70	70
Max. wood diameter	mm	330	330
Splitting force*	t	6	7
Max. operating pressure	bar	200	220
Motor power rating P1	kW	2,2	3,0
Nominal current	А	13,1	4,8
Speed	RPM	2660	2840
Rated voltage	V	230	400
Backup fuse	А		16
Total height, extendet	mm	1570	1570
Total height, retracted	mm	1100	1100
Width	mm	570	570
Depth	mm	940	940
Weight	kg	132	126
Oil capacity (tank/system)	1	5,0	5,0

\*Splitting force can fluctuate by  $\pm$  10%.

### 10.1 Noise emissions

The noise emissions were determined as guide in compliance with the general rules for assessing the noise emitted by technical equipment for agricultural and forestry at the work site as well as the general instructions for measuring the noise emitted by technical equipment for agricultural and forestry, with the following parameters:

Measurement point at the front edge of the machine, 1600 mm high, 1000 mm ahead of the machine Max. noise emission, idle: 75 dB(A) Max. noise emission, full throttle: 80 dB

### **11. CIRCUIT DIAGRAM**

Work on the electrical system of the machine may only be carried out by a qualified electrician.

For electrically-operated splitter machines use a portable residual current device (PRCD) if the residual current device (RCD) in the power supply does not have a nominal residual current of a max. of 0.03A.





Motor 230 V

## **12. OVERVIEW OF RESIDUAL RISK**

### 12.1 Prevention of mechanical dangers

All dangers stemming from moving parts (splitting wedge) are minimized by the two-handed controls. It is impossible to operate the machine when one operating arm is constantly clamped in the lower position.

It is prohibited to modify or disable the two-handed controls. Modifying or disabling the two-handed controls will increase the risk of injury during the splitting operation.

All safety mechanisms must remain untampered with on the machine and may not be disabled.

**Residual risk:** The operator of the machine will be at risk of injury if safety mechanisms are disabled, modified or removed.

### 12.2 Prevention of electrical dangers

All moving parts on the machine are insulated against touching or are encased in fixed and securely fastened protective mechanisms that can be removed only with tools.

**Residual risk:** Injuries due to electrical shock are possible if a fixed and securely fastened casing is removed with tools while the machine is running and the power plug has not yet been pulled out.

## **13. PROBLEMS, CAUSES AND SOLUTIONS**

Fault	Cause	Solution
Splitting wedge does not travel out	<ul> <li>The direction of rotation of the motor</li> <li>Insufficient hydraulic oil</li> </ul>	<ul><li>Check rotation direction</li><li>Fill up</li></ul>
Splitting wedge does not retract	- See above	- See above
Splitting wedge has no power	<ul> <li>Insufficient hydraulic oil</li> <li>Valve misadjusted</li> <li>Pump worn out</li> <li>Cylinder gasket seal damaged</li> </ul>	- Fill up - Adjust - Replace - Replace
Hydraulic lines get very hot	<ul> <li>Insufficient hydraulic oil</li> <li>Pump damaged</li> <li>Valve misadjusted</li> </ul>	- Fill up - Replace - Adjust
Electric motor won't start	<ul> <li>Power plug/socket defective</li> <li>Electrical cable defective</li> </ul>	- Replace - Replace
Electric motor gets very hot	- A phase is missing - Cable diameter too small - Motor coil damaged	- Check - Replace - Replace

### **14. WARRANTY**

The machine comes with the statutory warranty period. The vendor must be notified immediately of any problems which verifiably stem from material or assembly defects. In case of any warranty claims the invoice and sales receipt must be presented as proof of purchase of the machine. The warranty is invalid in cases of parts whose problems stem from natural wear and tear; the influence of temperature and weather; a faulty power connection, faulty setup, operation, or lubrication; or the use of force. Furthermore, no warranty will be granted for damages caused through unsuitable, improper use of the machine such as inappropriate modifications or unapproved repair work performed by the owner or a third party, but also in cases of intentional overloading of the machine.

Wear parts that have a limited service life (e.g. plastic guides, tools and other auxiliary aids) as well as all adjustment work are fully excluded from the warranty.

## **15. GARANTIE**

The guarantee period for SÜMA (Südharzer Maschinenbau GmbH) products in cases of exclusively private use is 24 months and, in cases of commercial or professional use or use as rental equipment, 12 months from the shipment date. The statutory warranty is unaffected by this guarantee. The purchaser must always present the original sales slip in cases of guarantee claims, along with a copy of the guarantee claim. In cases of professional or commercial use, the buyer's address and the machine type must be clearly recognizable. Any problems arising during the guarantee period that stem from material or manufacturer errors, despite the machine having been properly operated and cared for, are to be rectified by repair.





Item	Name	Part. No.	DIN	Dimensions
	Control arm, cpl.			
1	Handle	52110		
2	Arm	32302		
3	Hex nut, self-locking	51607	985	M 8
4	Clamp	18854		
5	Pressure spring	54413		
6	Spring receptacle	51202		
7	Clamp rod, g.	13657		
8	Washer	51648	125	8,4
9	Hex screw	51398	931	M 8x45
10	Spring washer	51234		20x36,6x3
11	Control arm, left, g.	32329		
12	Guard bracket	18282		
13	Fillister head screw	53040	7380	M 6x16
14	Hex nut, self-locking	51606	985	M 6
15	Control arm, right, g.	32328		



Item	Name	Part No.	DIN	Dimensions
	Activation rod, cpl.			
1	Hex screw	51444	933	M 8x20
2	Spring washer	51706	127	8
3	Washer	51648	125	8,4
4	Control rocker	32298		
5	Activation rod, g	32297		
6	Hex nut	51591	934	M 6
7	Hex nut, self-locking	51606	985	M 6
8	Cap nut	11977		
9	Spring washer	51193	137	6
10	Hex screw	51437	933	M 6x55
11	Cable sleeve	54258		6x11,5x6
12	Pressure spring washer	20616		
13	Pressure spring	51867		
14	Rod	13582		

### HS 71 3 Hydraulic cylinder, cpl.



Item	Name	Part No.	DIN	Dimensions
	Hydraulic cylinder, cpl.			
1	Hydraulic cylinder	53019		
2	Spring washer	51234		20x36,6x3
3	Upper fastening bolt	13561		
4	Lower fastening bolt	11959		

Item	Name	Part	DIN	Dimensions
	Hydraulic hose and valve	No.		
1	Hydraulic hose	54544		1SN 16-175 lg
2	Hydraulic hose	52737		2SN 10-390lg
3	Hydraulic hose	55124		2SN 10-550 lg
4	Hydraulic hose	52406		1SN 16-250 lg
5	Hydraulic hose	54123		1SN 13-610 lg
6	W-screw connection	50640		L12 o.m+d
7	W-screw-in connection	52062		L15 RK 3/8"o.m+d
8	Straight e-screw connection	50630		L15 G3/8"A o.m+d
9	Straight screw-in connection	50628		L12 G3/8"A o. m+d
10	Locking screw with flange and hexagonal exterior	53062		3/4"
11	Copper ring for 3/4" locking screw	53152		d=26 D=31 s=2
12	Hydraulic cylinder	53019		70x25x500
13	Hose collar, screwable	50528		d=24mm b=12mm
14	Fitting	54529		DKOL DN 16
15	Gear pump GP1 1:8 taper	50561		
16	T-screw-in connection	50664		L12 o.m+d R3/8"K
17	Straight screw-in connection	54530		18LR 3/8"
18	Control valve 4/3	52112		220 bar (für 400 V machine)
	Control valve 4/3	52413		190 bar (für 230 V machine)

HS 71 4 Motor with pump, cpl.



Item	Name	Part No.	DIN	Dimensions
	Motor with pump, cpl.			
1	Motor	50751		230 V
	Motor	52028		400 V
2	Cylinder head screw	51365	912	M 10x30
3	Spring washer	51707	127	10
4	Washer	51649	125	10,5
5	Clutch	53007		
6	Cylinder head screw	51363	912	M 10x25
7	Pump bearer	50580		
8	Hex nut, self-locking	51608	985	M 10
9	Pump	50561		(230V)
	Pump	52408		(400 V)
10	Washer	51647	125	6,4
11	Spring washer	51705	127	6
12	Cylinder head screw	51341	912	M 6x20
13	Lock washer	51690	6797	10,5



Item	Name Splitting column cpl	Part No.	DIN	Dimensions
1	Splitting column, g.	16016		
2	Wing bolt	51263	316	M 8x20
3	Dip-molded cap	51041		19x25
4	Lamellar plug	50206		100x100x4
5	Threaded rod	51412	916	M 8x16
6	Bottom guide	53058		



Item	Name	Part No	DIN	Dimensions
	Stand, cpl.			
1	Stand, g.	32285		
2	Wheel	52565		
3	Washer	51652	125	17
4	Spring washer	51233		16x28,2x2,3
5	Axle	18864		
6	Fillister head screw	53109	7380	M 8x10
7	Top guide	16070		
8	Hex nut	51592	934	M 8
9	Hex screw	51449	933	M 8x28
10	Washer	51648	125	8,4
11	Hex nut, self-locking	51607	985	M 8
12	Cylinder head screw	51349	912	M 8x16
13	Cover	32290		
14	Cylinder head screw	51350	912	M 8x20
15	Protective plate	32289		
16	Particle board screws	54230		5x16
17	Motor protection switch	50789		400 V
	Motor protection switch	54035		230 V
18	Hood guard	32283		
19	Rivet	51846	7337	



Item	Name	Part No	DIN	Dimensions
	Table, cpl.			
1	Table, g.	32295		
2	Wing nut	54194	315	M 12
3	Hex screw	54317	931	M 12x160

## **17. EC DECLARATION OF CONFORMITY**

According to the EC Machinery Guideline 2006/42/EC and the EMC Guideline 2004/108/EC

We herewith declare that, based on its design and construction and in terms of the design we have brought onto the market, the machine named as follows complies with the basic pertinent safety and health requirements of the EU guidelines in question as well as the main protection requirements of the guidelines of the council for the approximation of the laws of the member states regarding electromagnetic compatibility.

This declaration will become invalid if any changes are made to the machine which were not agreed to by us.

Name of the machine:	Hydraulic log splitter		
Type:	HS 71 (400V) HS 71 (230V)		
Hersteller-Nr.:	Refer to type plate		
EU machinery guidelines:	EC Machinery Guideline 2006/42/EC and pertinent changes and additions of the EC Low-voltage Guideline 2004/108 EC 2006/95/EC		
Applied national standards and technical specifications, in particular:	EN 609-1 Safety of log splitters (Wedge splitters) EN 60204-1 EN 61000-3-2:2006, EN 61000-3-3 EN 55014-1:2006, EN 55014-2:1997+A1:2001		

Authorized representative for the documentation: Re

René Pareis (Geschäftsführung)

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Nordhausen, den 01.07.2016

Date

Official applicable language: German

René Pareis (management)

(Customer copy)



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