



# BOMAG

FAYAT GROUP

## Operating Instruction

*Original Operating Instructions*

### BF 900 C



S/N 821 893 08 1001> / S/N 821 893 09 1001>

---

## Paver

---



## Table of contents

<b>1</b>	<b>Introduction</b> .....	<b>7</b>
	1.1 Foreword.....	8
	1.2 Machine type plate and engine type plate.....	10
<b>2</b>	<b>Technical data</b> .....	<b>11</b>
<b>3</b>	<b>Safety regulations</b> .....	<b>19</b>
	3.1 Stickers and decals.....	31
<b>4</b>	<b>Display and control elements</b> .....	<b>37</b>
	4.1 View of main control panel.....	38
	4.2 Description.....	40
	4.2.1 Quick adjustment lever for screed angle of attack.....	54
	4.3 View of external operator stations.....	55
	4.4 Control elements on external operator stations.....	56
	4.5 Screed operating console.....	58
	4.5.1 Toggle switch for cleaning system.....	58
	4.5.2 Pressure gauge for relief pressure.....	59
	4.5.3 Control lamp screed relieved.....	59
	4.5.4 Potentiometer screed relieve right/left distribution.....	59
	4.5.5 Toggle button protection roof.....	60
	4.5.6 24 V Universal socket.....	60
	4.5.7 Potentiometer for timer.....	60
	4.5.8 Potentiometer for screed relief - machine stopped.....	61
	4.5.9 Potentiometer for screed relief - machine in motion.....	61
	4.5.10 Toggle button straight crossfalls adjustment.....	61
	4.6 Operating console for screed heating.....	62
	4.7 View of levelling control.....	65
<b>5</b>	<b>Operation</b> .....	<b>67</b>
	5.1 General.....	68
	5.2 Tests before taking into operation.....	69
	5.3 Adjusting the driver's seat and displacing the driver's platform.....	70
	5.4 Starting the engine.....	73
	5.5 Driving the machine in transport speed mode.....	74
	5.6 Preparing for work.....	78
	5.7 Operation.....	82
	5.7.1 Preliminary remarks.....	82
	5.7.2 Starting operation.....	82
	5.7.3 During work.....	84
	5.8 Activities at the end of the day.....	87
	5.9 Shutting the engine down.....	89
	5.10 DPF-regeneration.....	91
	5.11 Adjusting the auger height.....	92
	5.12 Operating the screed.....	93
	5.12.1 Preliminary remarks.....	93
	5.12.2 Adjusting the straight crossfalls.....	93
	5.12.3 Adjusting the screed width.....	94

## Table of contents

5.12.4	Adjusting the mat thickness.....	95
5.12.5	Adjusting the mat height for extra thick mat heights.....	95
5.12.6	Height adjustment of mobile screed sections.....	96
5.12.7	Adjusting the angle of attack of the mobile screed sections.....	97
5.12.8	Setting vibration and tamper frequencies.....	97
<b>5.13</b>	<b>Operating the screed heating.....</b>	<b>98</b>
5.13.1	Switching on the screed heating.....	98
5.13.2	Operating the side plate heater.....	98
5.13.3	Setting the nominal temperature.....	99
5.13.4	Setting the temperature manually.....	100
5.13.5	Switching off a screed section.....	101
5.13.6	Switching off the screed heating.....	101
<b>5.14</b>	<b>Levelling control MOBA-matic<sup>Optional equipment</sup>.....</b>	<b>102</b>
<b>5.15</b>	<b>Hopper lock.....</b>	<b>103</b>
<b>5.16</b>	<b>Operating the protection roof on the operator's stand.....</b>	<b>104</b>
<b>5.17</b>	<b>What to do in events of emergency.....</b>	<b>106</b>
5.17.1	Actuate the emergency stop switch.....	106
5.17.2	Disconnecting the battery.....	106
5.17.3	Towing the machine.....	106
5.17.4	After towing.....	107
<b>5.18</b>	<b>Loading/transport.....</b>	<b>109</b>
<b>6</b>	<b>Maintenance.....</b>	<b>111</b>
<b>6.1</b>	<b>General notes on maintenance.....</b>	<b>112</b>
<b>6.2</b>	<b>Fuels and lubricants.....</b>	<b>114</b>
6.2.1	Engine oil.....	114
6.2.2	Fuel.....	115
6.2.3	Coolant.....	116
6.2.4	Hydraulic oil.....	119
6.2.5	Gear oil SAE 80W-140.....	119
6.2.6	Lubrication grease.....	119
6.2.7	High-temperature lubrication grease.....	120
<b>6.3</b>	<b>Table of fuels and lubricants.....</b>	<b>121</b>
<b>6.4</b>	<b>Running-in instructions.....</b>	<b>122</b>
6.4.1	General.....	122
6.4.2	After 50 operating hours.....	122
6.4.3	After 250 operating hours.....	122
6.4.4	After 500 operating hours.....	122
6.4.5	After 1000 operating hours.....	122
<b>6.5</b>	<b>Maintenance table.....</b>	<b>123</b>
<b>6.6</b>	<b>Every 10 operating hours.....</b>	<b>125</b>
6.6.1	Checking the engine oil level.....	125
6.6.2	Check the fuel level.....	125
6.6.3	Check the hydraulic oil level.....	127
6.6.4	Check the coolant level.....	128
6.6.5	Checking the emulsion level, topping up.....	129
6.6.6	Lubricating the machine.....	129

6.6.7 Check the grease supply in the central lubrication system.....	130
<b>6.7 Every 250 operating hours.....</b>	<b>132</b>
6.7.1 Servicing the scraper belt.....	132
6.7.2 Servicing the scraper belt drive chain.....	134
6.7.3 Servicing the auger.....	135
6.7.4 Greasing the gliding surface of the screed mobile section.....	137
6.7.5 Lubricating the machine.....	138
6.7.6 Checking the central lubrication system.....	140
6.7.7 Clean the cooling fins on engine and hydraulic oil cooler.....	140
6.7.8 Check the oil level in the transfer box.....	141
6.7.9 Checking oil level in travel gear.....	142
6.7.10 Servicing the V-belts for the screed heating generator.....	142
6.7.11 Checking hopper, scrapers and rubber apron.....	144
<b>6.8 Every 500 operating hours.....</b>	<b>146</b>
6.8.1 Change engine oil and oil filter cartridge.....	146
6.8.2 Check the anti-freeze concentration and the condition of the coolant.....	147
6.8.3 Servicing the battery, checking the battery isolation.....	148
6.8.4 Servicing tamper bar and levelling plate.....	149
6.8.5 Checking the track lengthening.....	150
<b>6.9 Every 1000 operating hours.....</b>	<b>151</b>
6.9.1 Checking the ribbed V-belt, replacing if necessary.....	151
6.9.2 Replace the fuel filter.....	152
6.9.3 Replacing the fuel pre-filter cartridge, bleed the fuel system.....	153
6.9.4 Change hydraulic oil and hydraulic oil filter.....	155
6.9.5 Oil change in transfer case.....	157
6.9.6 Changing oil in travel gear.....	158
6.9.7 Intercooler, drain off oil and condensation water.....	159
<b>6.10 Every 2000 operating hours.....</b>	<b>161</b>
6.10.1 Adjusting the valve clearance.....	161
6.10.2 Replacing the coolant.....	162
6.10.3 Replacing ribbed V-belt and idler pulley.....	164
6.10.4 Checking, cleaning the components of the exhaust gas aftertreatment system.....	165
6.10.5 Checking the DBF-burner .....	165
<b>6.11 Every 4000 operating hours.....</b>	<b>166</b>
6.11.1 Servicing the DBF-burner.....	166
<b>6.12 Every 6000 operating hours.....</b>	<b>167</b>
6.12.1 Replace the injection valve.....	167
6.12.2 Replace the crank case ventilation valve .....	167
<b>6.13 As required.....</b>	<b>168</b>
6.13.1 Air filter maintenance.....	168
6.13.2 Check, clean the water separator.....	170
6.13.3 Replace heating elements.....	172
6.13.4 Extending auger and tunnel.....	176
6.13.5 Drain the fuel tank sludge.....	176
6.13.6 Measures before longer downtimes of the machine.....	177

## Table of contents

<b>7</b>	<b>Troubleshooting</b> .....	<b>179</b>
	7.1 Preliminary remarks.....	180
	7.2 Starting the engine with jump leads.....	181
	7.3 Screed heating fault code display.....	182
	7.4 Fuse assignment.....	183
	7.5 Fault code display.....	186
	7.6 Engine faults.....	187
<b>8</b>	<b>Disposal</b> .....	<b>191</b>
	8.1 Final shut-down of machine.....	192



### 1.1 Foreword

**BOMAG manufactures machines for earth, asphalt and refuse compaction, stabilizers/recyclers as well as planers and pavers.**

**BOMAG's vast experience in connection with state-of-the-art production and testing methods, such as lifetime tests of all important components and highest quality demands guarantee maximum reliability of your machine.**

The machine described in this manual complies with the applicable standards and safety regulations.

If your machine is used in traffic on public roads, it must comply with all applicable national legal regulations. The driving permit must be acquired from the responsible authorities.

The machine is equipped with latest technology. Now it's a matter of handling your machine properly and keeping it in good working order.

These instructions will provide you with all necessary information. Read and follow these notes before starting to operate your machine!

In case of operating errors, inadequate maintenance or the use of unapproved fuels and lubricants all warranty claims will become null and void.

This manual was written for operators and maintenance personnel.

Always keep this manual close at hand, e.g. in the tool compartment of the machine or in a specially provided container. These operating and maintenance instructions are part of the machine.

You should only operate the machine in compliance with these instructions.

Strictly observe the safety regulations.

If you are not yet acquainted with the controls and indicating elements on this machine, you should thoroughly read the corresponding chapter ↪ *Chapter 4 'Display and control elements' on page 37.*

The description of the individual operating steps including the notes on safety to be followed can be found in chapter "Operation" ↪ *Chapter 5 'Operation' on page 67.*

Thorough maintenance of the machine guarantees far longer safe functioning of the machine and prolongs the lifetime of important components. The effort required for this purpose is by all means lower than the faults that may occur in case of non-compliance.

The machine must only be serviced by qualified and authorized personnel. A description of all necessary service work as well as information on fuels and lubricants can be found in the chapter "Maintenance" ↪ *Chapter 6 'Maintenance' on page 111.*

For your own personal safety you should only use original parts from BOMAG.

For your machine we offer original parts kits to make maintenance easier.



In the course of technical development we reserve the right for technical modifications without prior notification.

These operating and maintenance instructions are also available in other languages.

Apart from that, you can also order the spare parts catalogue against the serial number of your machine.

The above notes do not constitute an extension of the warranty and liability conditions specified in the general sales and delivery conditions of BOMAG GmbH.

We wish you successful work with your BOMAG machine.

# Introduction – Machine type plate and engine type plate

## 1.2 Machine type plate and engine type plate

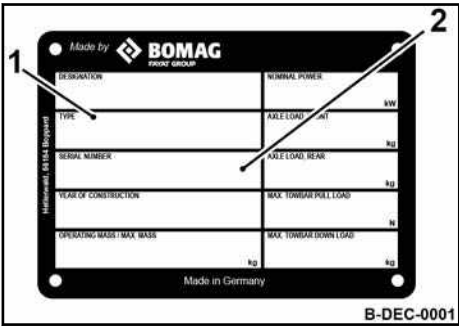


Fig. 1: Machine type plate (example)

<b>Please enter here:</b>	
Machine type (1):	
Serial number (2):	

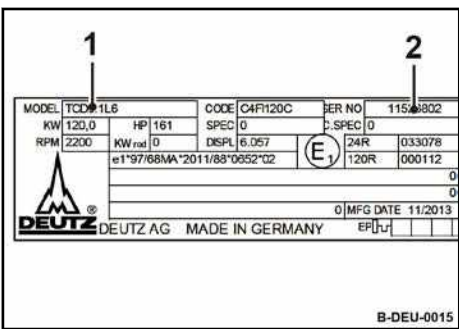


Fig. 2: Engine type plate (example)

<b>Please enter here:</b>	
Engine type (1):	
Engine number (2):	



## Technical data

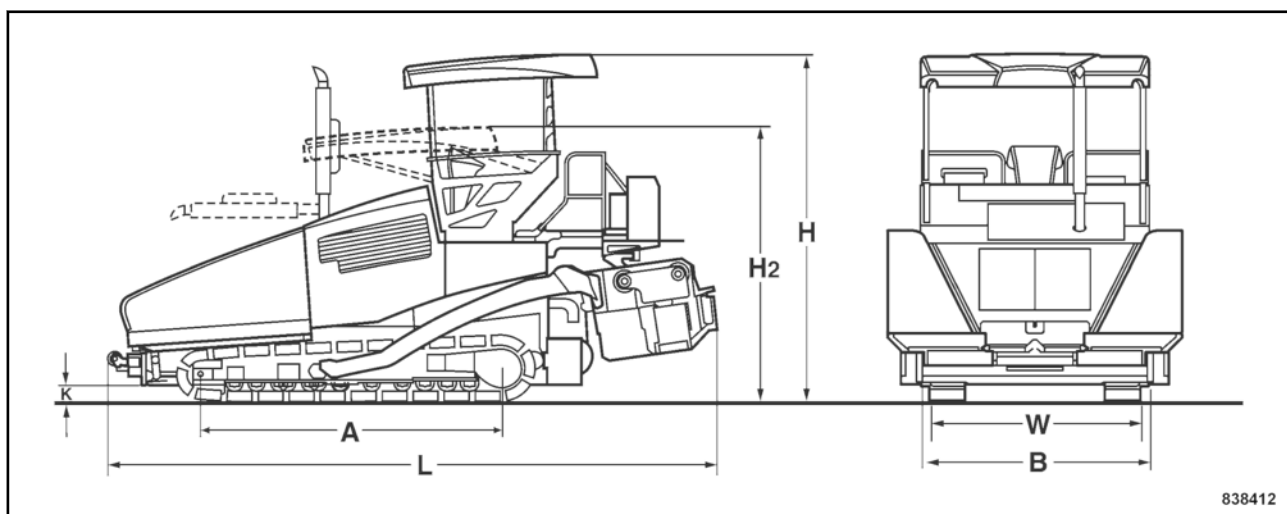


Fig. 3

BF 900 C S-500	A	B	H	H <sub>2</sub>	K	L	W
Dimensions in mm	3360	2550	3865	3055	190	6850	2255

<b>Weights</b>		
Operating weight (CECE)	kg	21150
Weight of basic screed	kg	3900
<b>Travel characteristics</b>		
Working speed	m/min	0 - 25
Transport speed	km/h	0 - 4.5
<b>Drive</b>		
Engine manufacturer		Deutz
Type		TCD 6.1 L6
Cooling		Water
Number of cylinders		6
Rated power ISO 3046	kW	160
Rated speed	min <sup>-1</sup>	2000
<b>Crawler track</b>		
Ground contact area (length x width)	mm	2700 x 300

## Technical data

<b>Hopper</b>		
Capacity	m <sup>3</sup>	7.2
Width (wings open)	mm	3320
Width (wings closed)	mm	2250
Length	mm	2010
Filling height (middle)	mm	500
<b>Scraper belt / auger</b>		
Quantity		2
Width	mm	400
Rated speed	min <sup>-1</sup>	60
Individual control		Standard
Reversing operation		Standard
<b>Conveyor auger</b>		
Quantity		2
Auger diameter	mm	450
Rated speed	min <sup>-1</sup>	95
Reversing operation		Standard
<b>Screed</b>		
Basic width retracted	mm	2550
Basic width extended	mm	5000
Max. working width	mm	9000
Min. paving width with reducing skids	mm	1800
Mat height	mm	300
Smoothing plate depth	mm	400
Smoothing plate thickness	mm	15
Heating		electric
Straight crossfalls	%	-2.5 ... +4.5
Tamper frequency	Hz	0 ... 30
Vibration frequency	Hz	0 ... 60

## Technical data

### Filling capacities

Fuel (diesel)		315
---------------	--	-----

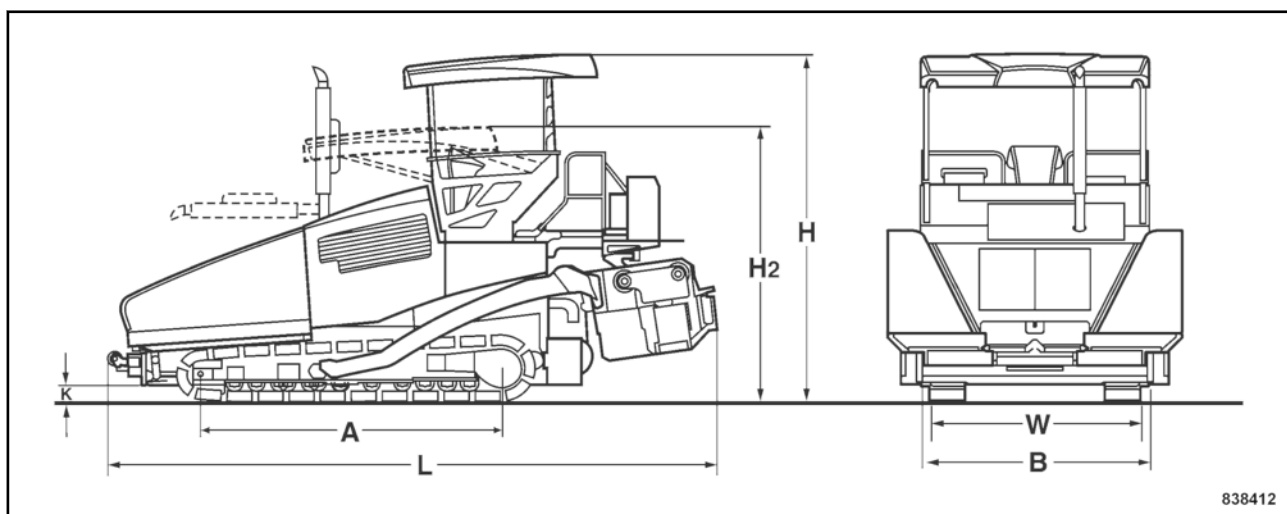


Fig. 4

BF 900 C S-600	A	B	H	H <sub>2</sub>	K	L	W
Dimensions in mm	3360	3000	3865	3055	190	6850	2255

<b>Weights</b>		
Operating weight (CECE)	kg	21300
Weight of basic screed	kg	4200
<b>Travel characteristics</b>		
Working speed	m/min	0 - 25
Transport speed	km/h	0 - 4.5
Max perm. inclination (ramp)	°	15
<b>Drive</b>		
Engine manufacturer		Deutz
Type		TCD 6.1 L6
Cooling		Water
Number of cylinders		6
Rated power ISO 3046	kW	160
Rated speed	min <sup>-1</sup>	2000
<b>Crawler track</b>		

## Technical data

Ground contact area (length x width)	mm	2700 x 300
<b>Hopper</b>		
Capacity	m <sup>3</sup>	7.2
Width (wings open)	mm	3320
Width (wings closed)	mm	2250
Length	mm	2010
Filling height (middle)	mm	500
<b>Scraper belt / auger</b>		
Quantity		2
Width	mm	400
Rated speed	min <sup>-1</sup>	60
Individual control		Standard
Reversing operation		Standard
<b>Conveyor auger</b>		
Quantity		2
Auger diameter	mm	450
Rated speed	min <sup>-1</sup>	95
Reversing operation		Standard
<b>Screed</b>		
Basic width retracted	mm	3000
Basic width extended	mm	6000
Max. working width	mm	10000
Min. paving width with reducing skids	mm	2300
Mat height	mm	300
Smoothing plate depth	mm	400
Smoothing plate thickness	mm	15
Heating		electric
Straight crossfalls	%	-2.5 ... +4.5
Tamper frequency	Hz	0 ... 30
Vibration frequency	Hz	0 ... 60



Filling capacities		
Fuel (diesel)	I	315

The following noise and vibration data acc. to

- EC Machine Regulation edition 2006/42/EC
- the noise regulation 2000/14/EG, noise protection guideline 2003/10/EC
- Vibration Protection Regulation 2002/44/EC

were determined during conditions typical for this type of equipment and by application of harmonized standards.

During operation these values may vary because of the existing operating conditions.

### Noise value

**Sound pressure level on the place of the operator:**

$L_{pA} = 83$  dB(A), determined acc. to ISO 11204 and EN 500

**Guaranteed sound power level:**

$L_{WA} = 107$  dB(A), determined acc. to ISO 3744 and EN 500



#### **WARNING!**

**Danger of hearing damage!**

Wear your personal noise protection means (ear defenders) before starting operation.

### Vibration value

**Vibration of the entire body (driver's seat)**

The weighted effective acceleration value determined according to ISO 7096 is  $\leq 0.5$  m/s<sup>2</sup>.

**Hand-arm vibration values**

The weighted effective acceleration value determined according to EN 500/ISO 5349 is  $\leq 2.5$  m/s<sup>2</sup>.





## Safety regulations

### General

**This BOMAG machine has been built in compliance with the latest technical standard and complies with the applicable regulations and technical rules. However, dangers for persons and property may arise from this machine, if:**

- it is used for purposes other than the ones it is intended for,
- it is operated by untrained personnel,
- it is changed or converted in an unprofessional way,
- the safety instructions are not observed.

**Each person involved in the operation, maintenance and repair of the machine must therefore read and comply with these safety regulations. If necessary, this must be confirmed by obtaining the signature of the customer.**

Furthermore, the following obviously also applies:

- applicable accident prevention instructions,
- generally accepted safety and road traffic regulations,
- country specific safety regulations. It is the duty of the operator to be acquainted with these instructions and to apply these accordingly. This applies also for local regulations concerning different types of handling work. Should the recommendations in these instructions be different from the regulations valid in your country, you must comply with the safety regulations valid in your country.

### Intended use

This machine must only be used for the application of:

- asphalt mixes.
- hydraulically bonded base courses.
- crushed rock base courses.
- mineral mixes.
- sand.

### Unintended use

Dangers may arise from the machine when it is used for purposes other than the one it is intended for.

Any danger caused by intended use is the sole responsibility of the customer or driver/operator, the manufacturer cannot be made liable.

Examples for unintended use are:

- driving on unstable sub-bases or insufficient grip or too small contact area (danger of tipping over).
- the generator is used for unauthorized external consumers.
- transportation of loose parts on the screed.
- using the machine for towing.
- using the machine for lifting.

Transporting persons, except the operating personnel, is prohibited.

Climbing onto and off the machine while driving and riding on the screed is prohibited.

Starting and operation of the machine in explosive environments and in underground mining is prohibited.

This as a preview PDF file from [best-manuals.com](http://best-manuals.com)



Download full PDF manual at [best-manuals.com](http://best-manuals.com)