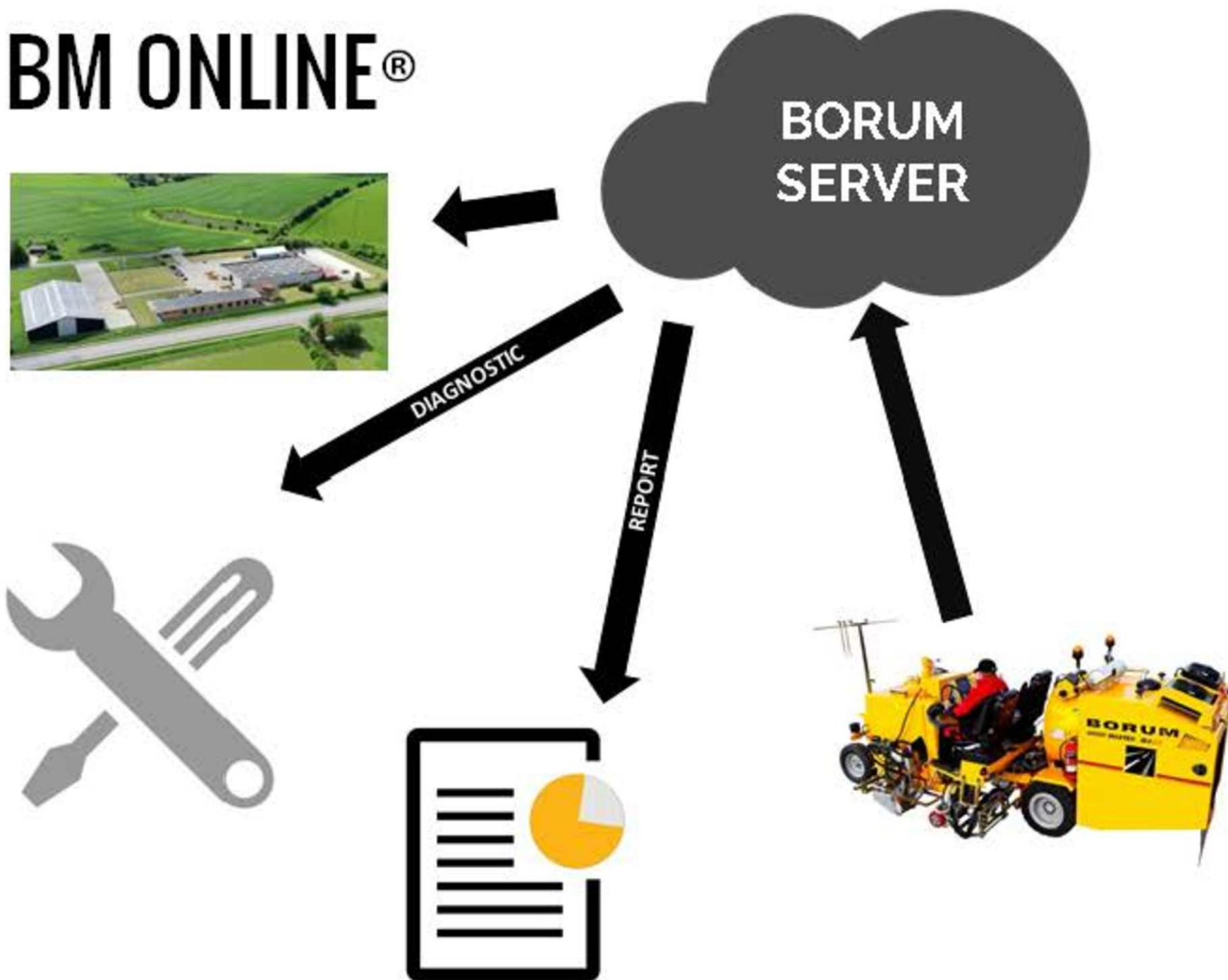


BM ONLINE®



WELCOME TO THE ONLINE WORLD!

We are happy to have you on board for the first online fleet management tool dedicated to road marking professionals.








The BM Online is a web portal that has been developed to help you get a better overview of your road marking machines and activity right from your computer, tablet or phone.

With BM Online you will be able to see online data collected from the BM LineMasters and Master Control found on your Borum machines. This will make it easy to keep track of the machine's activity, be notified if any parts of the machines are overheating and even set service notifications from your desk or on the go.

Furthermore, reporting will be much easier to handle as you can export all this data with the push of the button from the BM Online web portal.

We hope you enjoy the BM Online experience!

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1. SYSTEM OVERVIEW: WHAT IT DOES & HOW IT WORKS

1.1 The System

The Borum Online is a Web portal designed for Borum Machines and Trucks.

Diagnostic data from the machine/truck will be sent to the LineMaster. (Only machines with the Master Control can send data to the LineMaster.)

Report data from the LineMaster, together with the received diagnostic data from the machine/truck is then sent to a Borum Server.

These data can be accessed via the Web portal, in the sections called BM Online ® Report and BM Online Diagnostic.



1.2 BM ONLINE®REPORT

The BM Online ® Report is a Web portal that collects reported data from the BM LineMaster.

The reported data that is generated from the BM LineMaster is stored in BM-Online. You can access data and generate reports by entering the BM Online Web portal. If data is deleted from the LineMaster, data will still be stored in BM-Online (data will be stored for 5 years). Reports can easily be generated, by the Web interface in BM Online.

LineMasters from Serial no: 73-xxxx supports BM Online.

It is possible to update LineMasters with Serial no: 72-xxxx to BM Online Report (P#512836).

Advantages:

- Reports from LineMaster available Online
- Location of the machine (When Ignition is On)
- Possibility to sort the data according to Equipment ID, Job ID, Date, etc. and generate reports
- Possibility to manually compare the data, with other available on-line data. E.g. meteorological data
- Generate reports as CSV file (Excel), PDF file or KLM file (Google Earth)
- No data loss. All information is saved on the Server for minimum 5 years

1.3 BM ONLINE® DIAGNOSTIC

The BM Online® Diagnostic is a Web portal that allows you to easily get an overview of your Borum machine/Truck activities from your laptop, tablet or phone.

In order to collect and make the data available online, the Borum machine needs to have the BM Master Control installed. The Master Control collects the data from the Machine and sends it to the LineMaster computer. Afterwards, this data is made available in your own account on the BM-Online platform.

Diagnostic data from the Machine is stored on the BM-Online platform for minimum 5 years. This means that you can always access that data and generate reports by accessing your BM Online account.

You can also opt to receive a notice by SMS or e-mail 20 hours before the next service, or if the engine, the compressor or the hydraulic oil is overheating.

Borum can also access the diagnostic data, which allows us to better understand your needs. Therefore, we can offer improved support and more efficient solutions, e.g. by foreseeing the need for spare parts, which will improve delivery time.

Advantages:

- Tool for planning service schedules
- View of the condition of the machine to prevent breakdown
- Possibility to receive the best support from Borum
- No loss of Data

1.4 SPECIFICATIONS

Communication (Modem type)

GSM 3G (Global System for Mobile Communication 3. Generation)

Satellite navigation

GPS (Global Position System)

System Interface

Web (Access from a web browser installed on a laptop, tablet, phone or other)





2. GETTING STARTED

2.1. Accept the terms concerning user of BM Online

Before you can start you will need to sign the agreement concerning BM Online. When Borum have received your signed agreement, you will receive an e-mail with a link where you can finalize your account for accessing the platform.

2.2. Activating your Borum Online

Please follow the link you have received. Here you will need to fill in the Confirmation on the Borum Online



Confirmation

Please enter your information

Email

Password *

At least 6 characters and at least one lowercase and one uppercase and one digit.

Confirm Password *

First Name *

Last Name *

Company

Job Title

☐ I have read and agree to the following [Terms and conditions](#)

Save

← Here you e-mail will be shown

← You must enter the password you want

← You must confirm your password

← You must enter your first name

← You must enter your last name

← You can enter your Company name

← Your can enter your Job Title

← You must read the Terms and conditions , and confirm you agree.

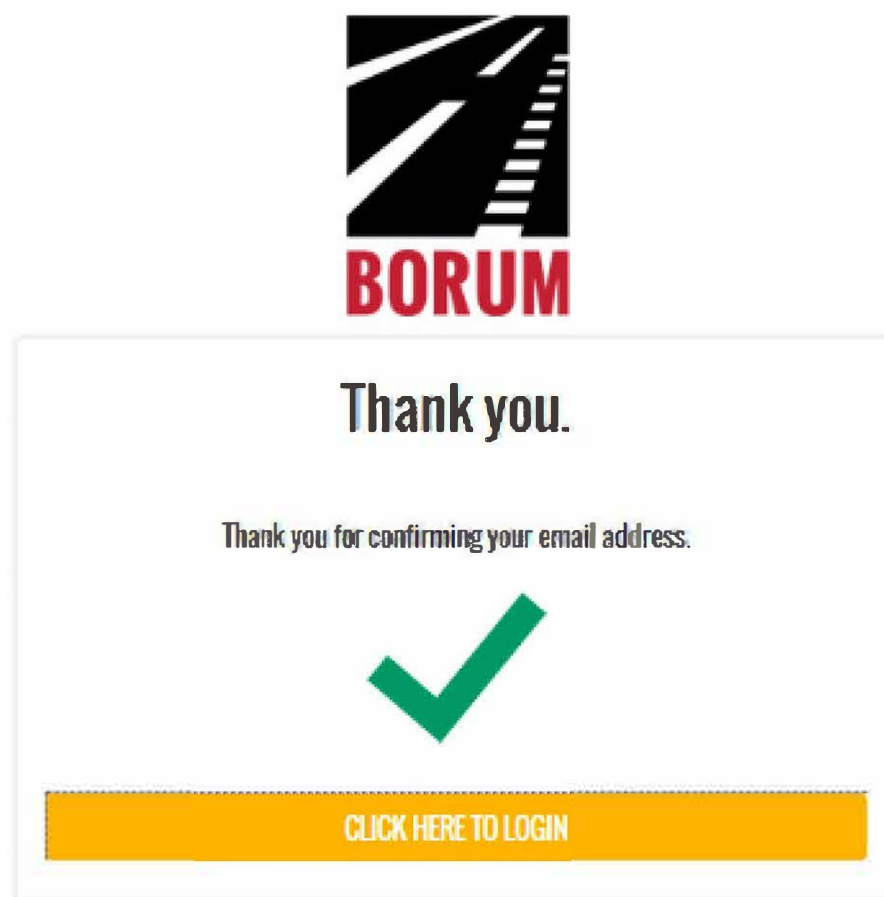
← You must remember to save




2.3. Log in

When you click on , in the Confirmation section.


You will be linked to this:



Now Click on: , and you will be linked to the Login page.

We recommend to add the BM Online page as a favorite page in you web brower, so you easily access the login page next time. Link for Log in Page: <http://bmonline.borum.as/Account/Login>

The image shows a login form with the BORUM logo at the top. Below the logo, it says "Login" in a large font. Underneath, it says "Use a local account to login." Below this text are two input fields: "Email" and "Password". Below the "Password" field is a checkbox labeled "Remember me". At the bottom of the form is a yellow button with the text "LOGIN". Below the button is a link that says "Forgot your password?".

Enter your e-mail address and your password, and click  to login. Now you will enter your web portal.

2.4. Edit your profile

You can edit your profile by clicking at  located in the upper right corner
As a Borum Customer your "Universal roles" will be "Customer Main"

Now Click on , to edit your profile.

Johnny Jørgensen

Password	*****
First Name	Johnny
Last Name	Jørgensen
Email	info@borum.as
Company	Borum
Job Title	Tester
Phone	+45 87 613 213
Universal Roles	- Customer Main
Groups	TEST



Edit Profile

Your profile already contains the data that you entered in the Confirmation section.
You can now edit these data.

Your Universal Roles is set by Borum to "Customer Main" and it cannot be changed unless agreed otherwise with Borum.

The section Group is also set at Borum. The Group will be your Company or organization.

You can enter a picture, by double clicking at 

You can choose if you want an alarm notice sent by E-mail and/or SMS.
If you want it to be sent by SMS, you will need to enter your mobile number in your profile.

Edit Profile

User Profile

Email

info@borum.as

Password

Set Password

First Name *

Johnny

Last Name *

Jorgensen

Company

Borum

Job Title

Tester

City

Hadsten

Created Date

Thursday, February 2, 2017

☒ SMS Alarms

☒ Email Alarms

☒ Active

Phone

-45 87 613 213

Language

English

Country

Denmark

Time Zone

(UTC-01:00) Brussels, Copenhagen, Madrid, Paris

Last Login

Thursday, February 2, 2017

Units

☒ Metric System

☐ Imperial

Universal Roles

☐ Borum

☐ Borum Technician

☐ Dealer Main

☐ Dealer Admin

☐ Dealer Technician

☒ Customer Main

☐ Administrator

☐ Roadmarker / Technician


☐ Roadmarker

☐ Technician

☐ Customer

Groups

TEST



Browse...

Johnny Jorgensen.jpg

Save

Cancel

Remember to click  when done.




3. BM REPORT

3.1. Overview

BM REPORT can be found under the section Linemasters.

 **Linemasters**

- To enter this portal you must click on
- Now you will have an overview of the Linemasters in your BM Online.
- You can see a map with the Linemasters location.
- The Linemasters are arranged in a List, and you can arrange the list according to Status,
- Linemaster serial number, Machine serial number etc.

BORUM

Johnny Jorgensen

Linemasters


Machines

Groups

Users

Links

Map



Status














































Online and is running

Online but not running

Offline

Refresh rate: 30 sec

View Linemasters

All	Status	Linemaster serial number	Machine serial number	Updated date	Equipment type	Equipment Name	Job number	Job Id	Group	
		1850000	185000000	25/01/2017 08:11:31	EquipmentType 5	Equipment 1 type EquipmentType 5	143	Job-3	TEST2	  
		1850001	185000001	25/01/2017 08:11:31	EquipmentType 5	Equipment 3 type EquipmentType 5	64	Job-3	TEST2	  
		1850004	185000004	25/01/2017 08:11:31	EquipmentType 5	Equipment 4 type EquipmentType 5	185	Job-3	TEST2	  
		1850005	185000005	20/01/2017 12:54:49	TWO_COMPONENT	debug test			TEST2	  
		1850006	185000006	08/11/2016 11:53:36					TEST2	  
		1850007	185000007	08/11/2016 11:53:36					TEST2	  
		1850008	185000008	08/11/2016 11:53:36					TEST2	  
		1850009	185000009	08/11/2016 11:53:36					TEST2	  
		1850010	185000010	08/11/2016 11:53:36					TEST2	  

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go to page Go

Number per page 10

Column selector

3.2. Linemaster Data and reports

To view a Linemaster you must click on the serial number of the Linemaster.

Status

Online and is running

Online but not running

Offline

Move Device

All	Status	Linemaster serial number	Machine serial number	Updated date
<input type="checkbox"/>	<div></div>	73-0002	990001	30/01/2017 07:01:53

1 of 1

go to page

Go

Now you enter the Linemaster History.
And you can make selections between all the reports from this Linemaster.

LineMasters History

By Group

Borum

TEST

Serial Number

73-0002

Status

Linemaster Serial No.: 73-0002

Machine Serial No.: 990001

Equipment Name

Job Id

Start Date

End Date

Equipment Name

Job Id

Search

Equipment type	Equipment Name	Job number	Job Id	Job name	First log	Last log	
TWO_COMPONENT	Paint	8	JJO	BM_TEST	19/01/2017 12:29:10	25/06/2016 12:14:52	<div></div> <div></div> <div></div>
TWO_COMPONENT	CP Aggl. 20 cm	5	XW	TEST_F	23/01/2017 14:36:42	23/01/2017 14:38:10	<div></div> <div></div> <div></div>
TWO_COMPONENT	CP Extruder 15 cm	1	RST	TEST_E	23/01/2017 11:12:30	23/01/2017 11:15:42	<div></div> <div></div> <div></div>
TWO_COMPONENT	CP Dot	2	NCO	TEST_D	23/01/2017 10:41:25	23/01/2017 10:43:27	<div></div> <div></div> <div></div>
TWO_COMPONENT	Paint	1	JJO	TEST_B	23/01/2017 09:48:11	23/01/2017 09:59:36	<div></div> <div></div> <div></div>
TWO_COMPONENT	CP Extruder 15 cm	1			20/12/2016 16:19:40	21/12/2016 14:08:55	<div></div> <div></div> <div></div>
TWO_COMPONENT	Paint	7					<div></div> <div></div> <div></div>

7 of 7

go to page

Go

Number per page

10

You have the following options for exporting a report:

- Export the log as a CSV file, click at
- Make a report in PDF format, click at:
- Generate a KML file, to open with Google Earth:



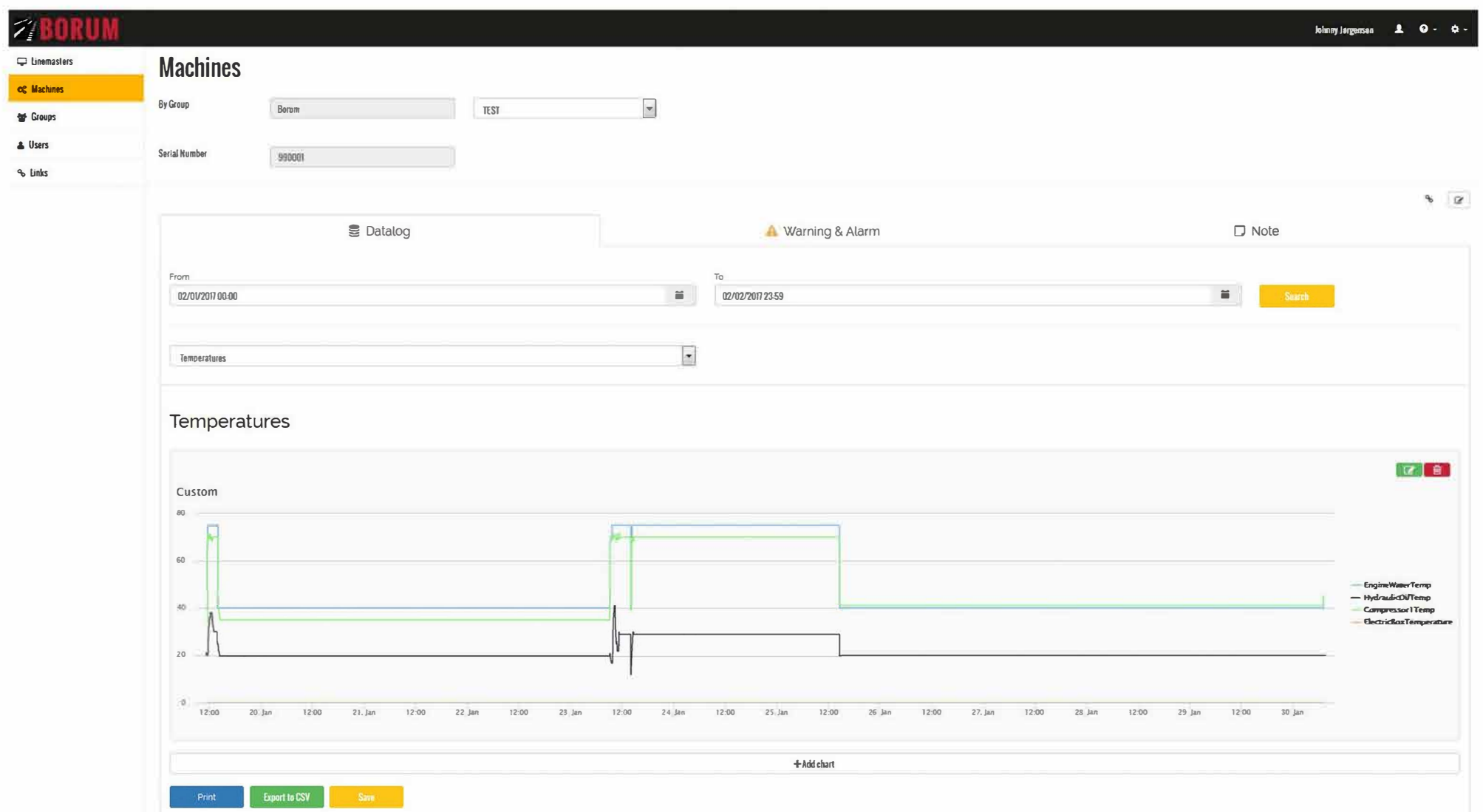
4.2. Machine diagnostic

To enter a Machine diagnostic data you must click on the serial number of the Machine.

All	Status	Machine serial number	Linemaster serial number	Updated date	Last Warning	Last Alarm	Time/How Counter
		MA000000	JE0000	07/11/2016 10:17:56	15/10/2016 14:42:41 High Water Temp Warning	16/10/2016 14:42:41 Water High Temp Switch Error	22
		MA000001	JE0000	07/11/2016 10:14:09	14/10/2016 14:42:41 ServiceNotice Warning	16/10/2016 14:42:41 OilSensor Error	16
		MA000011	JE0000	07/11/2016 10:15:04	13/10/2016 14:42:44 High Water Temp Warning	16/10/2016 14:42:44 Voltage Error	18
		0	73-0018	07/11/2016 10:28:17	01/01/0001 00:00:00	01/01/0001 00:00:00	0
		220192	73-0013	18/01/2017 18:52:39	01/01/0001 00:00:00	18/01/2017 18:52:39 Voltage Error	8

Now you enter this Machine and its datalog.
You can select the date/time from/to, of the data you want to view.

In the data log there are 2 preset charts:
One concerning temperature and one concerning Warnings and alarms.



You can also make your own chart by clicking **+ Add chart**

Now you just need to pick the diagnostic data you want in your chart.

Please notice: The data you can select, depends on the configuration of your machine. Therefore, some options might not be available to select.

Edit Datalog Chart

Engine

☐ Engine RPM

☐ Engine hours

☐ Engine water temp

☐ Ignition ON

☐ Engine water temp. sensor error

☐ Low oil pressure

☐ Engine high water temp. shutdown

☐ Engine oil pressure sensor error

☐ Engine water temp. sensor error

☐ Engine water temp. switch error

☐ No charging

Hydraulic

☐ Hydraulic oil temp.

Material Tank

☐ Thermic oil tank temp.

☐ Material tank temp.

☐ Burner error

☐ Material temp. low (warning)

☐ Material temp. high (warning)

☐ Thermic Oil tank temp. sensor error

☐ Material tank temp. sensor error

☐ Thermic oil temp. calls for heat

☐ Material temp. calls for heat

☐ Burner activated

☐ Thermic oil tank temp. setpoint

☐ Material tank temp. setpoint

☐ Material temp. difference warning setpoint

Pneumatic/Hydraulic

☐ Air pressure

☐ Compressor 1 oil temp.

☐ Compressor 2 oil temp.

☐ Compressor OFF (overtemp. error)

☐ Low air pressure

☐ Compressor 1 ON

☐ Fan comp.1/hydr. ON

☐ Compressor 2 ON

☐ Fan comp 2 ON

☐ Low air pressure shutdown

☐ Air release set

☐ Hydraulic oil high temp. (warning)

☐ Compressor high temp. shutdown

☐ Compressors activated

☐ Compressor 1 high temp. (warning)

☐ Compressor 2 high temp. (warning)

☐ Compressor 1 oil temp. sensor error

☐ Compressor 2 oil temp. sensor error

☐ Hydraulic temp. sensor error

Other

☐ Fuel level

☐ Equipment down (pneu.)

☐ Equipment down (hydr.)

☐ Service notice

☐ Battery voltage

☐ CAN communication error

☐ Battery voltage error

☐ Deactivate pause for application

☐ Fuel gauge sensor error

☐ Fuel level low

☐ Electric box temp.

☐ Notice sent

☐ Electric box temp. sensor error

☐ Electric box high temp. (warning)

Close

OK

For each chart you have the following options:

- Print it
- Export the data to a CSV file
- Save it, so you easy can access this chart again





5. Groups

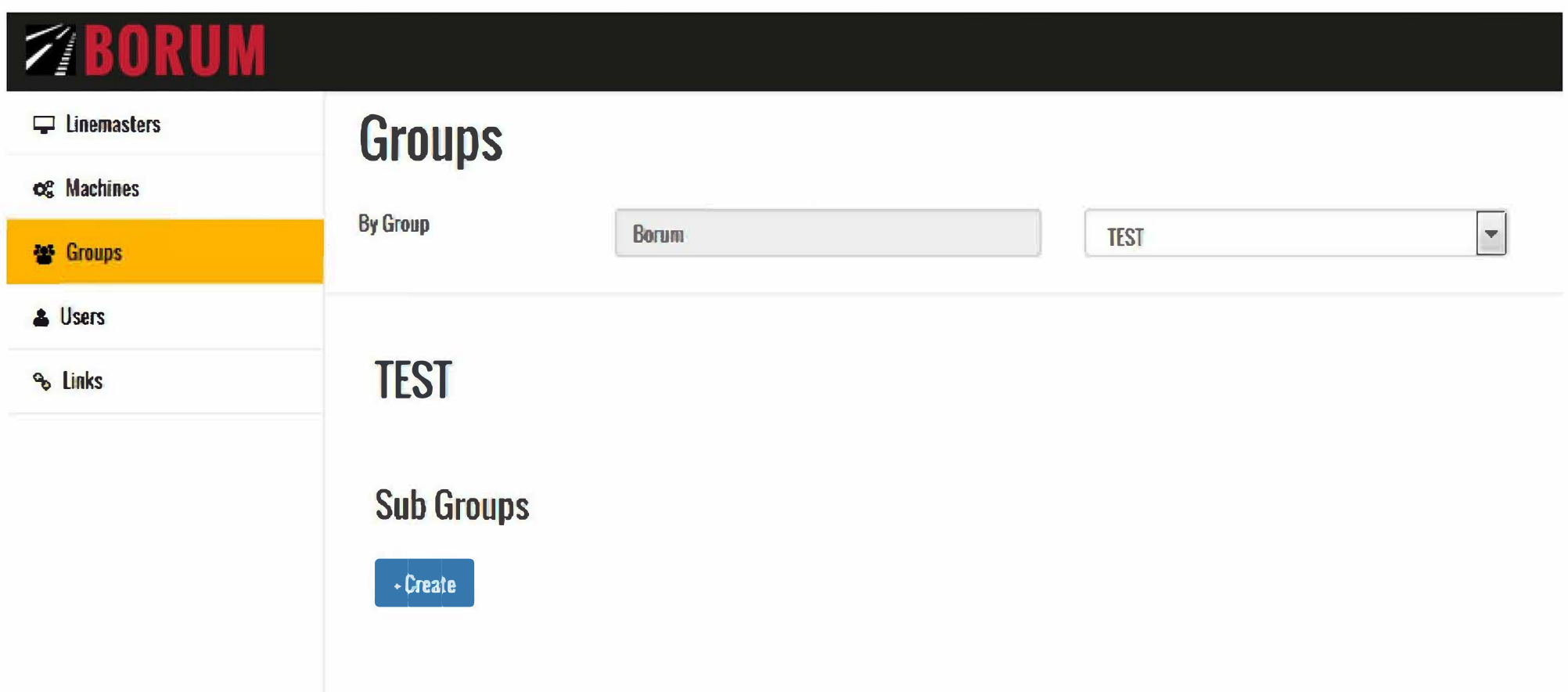
If you have more than one machine, you have the option to create more groups. Each group can contain one or more Linemasters and Machines, depending on your needs. This way you can assign different users to access specific groups.

Example:

- If you have more machines, you create a group for each Machine. It could be TEAM 1, TEAM 2 and etc.
- Then you put each Machine and its Linemaster into the correct group (TEAM)
- Now when you create a user on TEAM 1.
- You only give this user permission to access the data in group TEAM 1. Then this user only has access to the data of the Linemaster and machine in group TEAM 1.

To create/arrange Groups click on  Groups

Now you can create a new group by clicking at 



You will also be able to create sub-groups.

If you have 2 departments (e.g. EAST and WEST), you create EAST and WEST as groups. Next you can create sub-groups for each main group e.g. TEAM 1 consisting of Machine 1 + LineMaster 1).


Now you create a user and decide if this user should have access to group EAST, or only group EAST/TEAM 1. If a user have access to EAST, he will have access to all the sub-groups in-EAST. (EAST/TEAM 1, EAST/TEAM 2 etc.)

It is also possible to set different Permissions in each group.



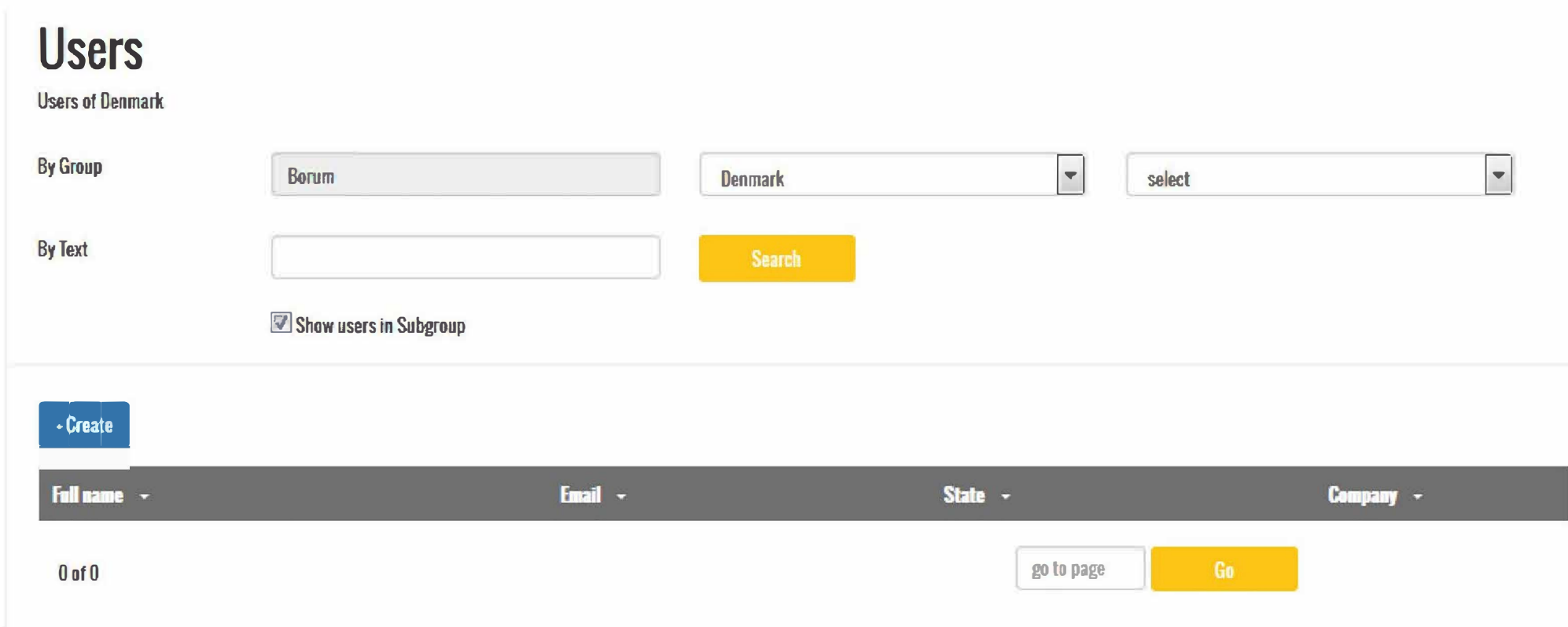
6. Users

If you want someone other than yourself to have access to your Borum Online profile, you will need to create a new user.

To create a new user, you must click on 

Now you can create a new user by clicking on 

Before you "Create", make sure you have chosen the correct Group/Sub group.



The screenshot shows the 'Users' management page. At the top, there's a header 'Users' with a subtitle 'Users of Denmark'. Below this, there are search filters: 'By Group' with a dropdown menu showing 'Borum', 'Denmark', and 'select'; 'By Text' with a text input field and a 'Search' button. There's also a checkbox labeled 'Show users in Subgroup'. A '+ Create' button is visible on the left. Below the filters is a table with columns: 'Full name', 'Email', 'State', and 'Company'. At the bottom, there's a pagination bar showing '0 of 0' and a 'Go' button.

When you create a new user, you just need to fill in the E-mail address of the user, the Expiry Date and the Universal roles.

As Universal roles you can choose between.

Administrator	Have same permission as you.
Roadmarker / Technician	Can see data from the Linemaster report and diagnostic data from the machine.
Roadmarker	Can only see data from the Linemaster report.
Technician	Can only see the diagnostic data from the machine.
Customer	Can only see data from the Linemaster report.

When you are done, remember to click on 

User Entry

By Group

Borum

Denmark

Email *

Expire Date

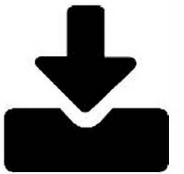
☐ Application Administrator

Universal Roles

- ☐ Borum
- ☐ Borum Technician
- ☐ Dealer Main
- ☐ Dealer Admin
- ☐ Dealer Technician
- ☐ Customer Main
- ☐ Administrator
- ☐ Roadmarker / Technician
- ☐ Roadmarker
- ☐ Technician
- ☐ Customer

Save

Cancel



7. Links

You can create your own links (e.g. company website) and add them to different groups.

Example:

- Create a link in the main Group that have been made from Borum. This could be you company website for example.
- Or you could create a link in you group "EAST". All users with access to group EAST will have access to this link.
- You could also make a link for a sub-group EAST/TEAM 1, then users that have access to EAST or EAST/TEAM 1 have access to this link.
- This link can contain any type of files, website, etc. (E.g. a sheet where users must fill in information, a page with information concerning EAST/TEAM 1).

To create a new link, you must click on 

Now you can create a new link by clicking on 

Before you "Create", make sure you have choosen the correct Group/Sub group.

Links

Links of Denmark

By Group

Borum

Denmark

select

+ Create

Sort Order	Name	Active	Publish	Group	Comment	URL
1	Borum A/S	<input checked="" type="checkbox"/>	Public	Borum	Professional road marking equipment	http://www.borum.as

1 of 1

go to page


Go


Number per page

10

Now you must fill in:

- Sort Order

The sort order of the different links, when you go into 
- Name

The name that will be displayed in 
- Comment

A short description
- URL

The address of the link

Create Link

By Group

Borum

Denmark

select

Sort Order *

0

Publish

Private

☒ Active

Group

Denmark

Name *

Comment *

URL *

Save

Cancel

When you are done, remember to click on 

WE HOPE YOU ENJOY THE BM ONLINE!

For any questions, contact us at info@borum.as and call us at +45 87 613 213.

