Original instructions

SAM DIGITAL SERVICE USER'S GUIDE



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1.SAM

1.1. OVERVIEW

1.1.1 Introduction to SAM

Sandvik Rock Processing SAM is a service that provides customers with the equipment data of their Sandvik products. Authenticated users can view the equipment data in SAM which can be used, for example, to optimize breaker performance, view breaker work history, manage service schedules, and conduct fleet management. SAM can be accessed via any standard Web browser (https://sam.rockprocessing.sandvik/).

Note: To view data privacy details related to using the SAM service, see the "RD3 and data privacy" section in the Operator's manual. For further details, see the privacy notice, acceptable use policy, online terms of service, and data processing addendum in the Agreements view in SAM.

SAM consists of the following views: Fleet and Admin.

- The Fleet view is used for viewing equipment data, such as a unit's working hours, impact series, and location. See "Fleet view" on page 10.
- The Admin view includes information on the SAM account. See "SAM account view" on page 28.

Note: The available content in SAM may vary according to the user role.

1.2. ACCESSING SAM

1.2.1 Entering SAM

Contact your Sandvik or dealer representative to request a user account in SAM. You will receive an email confirmation after the user account has been created.

To enter SAM, go to https://sam.rockprocessing.sandvik/ and sign in with the credentials provided in the email.

	English
Username or email	
Password	
	Forest Possessed
	Folgot Fassword?
SIGN IN	
Or sign in with	
SANDVIK AD	

Note: Use the latest versions of supported web browsers, such as Google Chrome, Microsoft Edge, and Mozilla Firefox to access the portal. Internet Explorer is not a supported web browser.

1.2.2 Accepting SAM policies

Upon accessing SAM for the first time, you will get a dialog for accepting the use policy and privacy policy. To accept the policies, click ACCEPT.



The agreed policies can be viewed in the Preferences section of your personal profile. See "Preferences settings" on page 7.

1.2.3 Preferences settings

To view your personal information and agreements, click your user profile in the left-hand pane and choose Preferences in the opening menu.



The Preferences settings include the following tabs:

- The Personal information tab is used for managing user settings. See "Personal information tab" on page 7.
- The Agreements tab includes the Sandvik privacy notice, acceptable use policy, online terms of service, and data processing addendum. See "Agreements tab" on page 8.

1.2.3.1 Personal information tab

In the Personal information tab, you can view your contact information and change your password.

PREFERENCES			SANDVIK
 Personal information Agreements 		Θ	
		HI JOHN DOE, WELCOME TO SAM!	
	CONTACT		
	First name	John	
	Family name	Doe	
	E-mail	johndoe@email.com	
	PASSWORD		
	New password		Ø
	Confirm new password		Ø
			CHANGE PASSWORD
			CLOSE
			B051626

Changing password

- 1. In the Personal information tab, enter the new password to the fields under PASSWORD.
- 2. Click CHANGE PASSWORD.

Your password is changed.

1.2.3.2 Agreements tab

In the Agreements tab, you can view the Sandvik privacy notice, acceptable use policy, online terms of service, and data processing addendum.

PREFERENCES	JOHNDOE@EMAIL.COM	NDVIK
9 Personal information	PRIVACY NOTICE	~
Agreements	ACCEPTABLE USE POLICY	~
	ONLINE TERMS OF SERVICE	~
	DATA PROCESSING ADDENDUM	^
	SAM DIGITAL SERVICE - DATA PROCESSING ADDENDUM (DPA)	
	1. SUBJECT MATTER AND SCOPE	
	 Sandvik and Customer has entered into an Agreement regarding Sandvik's provisioning of th SAM Digital Service (the "Service") to Customer. Customer Data processed by Sandvik as pa the Service may include Personal Data. 	ne art of
	2. Subject to the terms of this Data Processing Addendum (the "DPA"), Personal Data will be processed by Sandvik (as a 'data processor') on behalf of Customer (as the sole 'data contro The DPA consists of this document as well as Annex 1, which is hereby incorporated by refer	ller'). ence.
	 Where an Affiliate of Customer is the data controller for Personal Data hereunder, Customer confirms that it has been instructed by and obtained the mandate and authorization of all rel Customer affiliate(s) to enter into this DPA with Sandvik on behalf of such Customer Affiliate 	evant (s).
	4. This DPA constitutes an addendum and integrated part of the Agreement. In the event of inconsistencies between clause(s) in other Agreement documents and this DPA in regards to Sandvik's processing of Personal Data, this DPA shall prevail and apply in lieu of such incons clause(s) in other documents.	o istent
	5. For the avoidance of doubt. Personal Data collected and processed by Sandvik as the data	
		CLOSE
		R0516

2.Monitoring fleet

2.1. FLEET VIEW



The Fleet view shows fleet information in several views: Equipment data, Notice board, Equipment basics, and Parts. The views give further information on a specific product unit. To enter the Fleet view, select FLEET in the main menu.

Note: All views are not applicable for all Sandvik product categories.

Monitoring fleet data

- To view the information on a specific unit, use the Fleet search to find and select the desired unit. See "Fleet search" on page 11.
- Monitor hammer hours and other data in the Equipment view. See "Equipment data view" on page 15.
- When a field check or full service is done for a product unit, create a new service log in the Activities view. See "Activities view" on page 21.

2.2. FLEET SEARCH

2.2.1 Searching specific units



By default, all units are on display in the Fleet view. To find specific units, click the icon in the top left corner and select the filters in the Filter equipment window. You can filter the search results by, for example, company, model, serial number, and site.

Ŧ			EQUIP	MENT DATA (
FILTER EQUIPMENT				
Company -	Model	*	Connectivity	*
INCLUDE SUB-COMPANIES	Alias		Active alerts	
Site	7.000		From	То
	Serial number		Service due in	(h)
	Category		From	То
	0000307		Last connected	I
	Manufacturer	-		
	2.11		Work hours (h)	T
	Rental use	*	From	10
			Last service (h)	
			From	То
RESET FILTERS				CLOSE
				B090

2.2.2 Changing search result views



The search results can be shown in a list view which includes further information on the units. Change the search results view by clicking the list icon in the top right corner.

_ 1			≡ Ø
Filter 🔻	+1 Filter 💌	Filter 💌	Filter
Model	Company	Connectivity	Serial nurr
3288E	Breakers and Demolition Tools Oy	Connected	3288EA10
3288E	Breakers and Demolition Tools Oy	Connected	3288EA10
3288E	Breakers and Demolition Tools Oy	Connected	3288EA10
3288E	Breakers and Demolition Tools Oy	Connected	3288EA10
3288E	Breakers and Demolition Tools Oy	Connected	3288EA10
3288E	Breakers and Demolition Tools Oy	Connected	3288EA10
R18P	Breakers and Demolition Tools Oy	Connected	18PA1000
R25P	Breakers and Demolition Tools Oy	Connected	25PA1000
R35P	Breakers and Demolition Tools Oy	Connected	35PA1000
R35P	Breakers and Demolition Tools Oy	Connected	35PA1000
•			+
COLUMNS	Rows per page: 25 🤜	1-10 of 10	< >

The search result list view displays the following information:

- Model
- Alias
- Company
- Connectivity
- Active alerts
- Serial number
- Service due in (h)
- Last connected
- Work hours (h)
- Last service (h)
- Category
- Site
- Manufacturer
- Rental use status of the unit

2.2.3 Customizing search result list

The list view can be set to show and hide columns. Click on the COLUMNS button under the list view and select the desired columns by checking the boxes in the opening menu.

To change the order of the columns shown in the list view, click on the = symbols in the COLUMNS menu and drag the columns up or down in the menu. The order is updated automatically in the list view.

Filter 👻	Filt	er	Filter
Model	Alias		Company
1322E			
1533	\checkmark	Model	=
155E	\checkmark	Alias	=
155E	~	Company	=
155E	~	Connectivity	=
155E	~	Active alerts	=
155E		Serial number	_
155E			
1655	\checkmark	Service due ir	1 (h) 💻
1655	~	Last connecte	ed 💻
4	\checkmark	Work hours (h) =
COLUMNS		Last service (h) =
	~	Category	=

2.2.4 Viewing fleet on map

You can view the locations of one or more product units on a map. In the list view, select the product units to be shown on the map, and click the map icon in the top right corner.

_ 0				∭ ≡ ∭
X 2	selected			
SELE	CT ALL 9			
	Filter	•	+1 Filter 💌	Filter 💌
	Model \downarrow		Company	Connectivity A
	3288E		Breakers and Demolition Tools O	y Connected
	3288E		Breakers and Demolition Tools O	y Connected
	3288E		Breakers and Demolition Tools O	y Connected
	3288E		Breakers and Demolition Tools O	y Connected
				B090563

The map opens showing the fleet and the selected product units on the map.



2.3. EQUIPMENT DATA VIEW

The Equipment data view is used for viewing equipment data, such as a unit's working hours, impact series, and location.

2.3.1 Breaker data

To view breaker data details, click on the downwards arrow in the Equipment data view.

EQUIPMENT DATA	3288EA10004		:: ×
BREAKER DATA			^
TOTAL WORK HOURS	Time to maintenance	383h	
417	Time since maintenance	416h	
41/ h	Maintenance interval	800h	
	Battery	85%	
	Temperature	6.5°C	
	Device last connected	4/18/2022 : 11:03:30 PM	
	Trip meter reset date		
	Work hours since trip meter reset	417h	Reset

R090569

In the Breaker data section, you can:

- See the hammer work hours and impact hours.
- See the battery life of the remote monitoring device (percent charged).
- Check the time to next maintenance.
- See the maintenance interval of the hammer.
- See the local temperature.
- See the device's last connection date.
- See the trip meter reset date.
- See the trip meter work hours since the last reset and reset the trip meter.

Note: The available information may vary according to the user role.

2.3.2 Impact periods cumulative

The Impact periods cumulative graph shows the amount of time, in hours, that the hammer is operated for impact periods of 0-2, 2-5, 5-15, 15-30, 30-60, and 60+ seconds. The ideal impact periods are between 0-15 seconds shown with light and dark green bars.

By default, the graph shows the impact periods from the last 7 days. The overall or period-specific hammer impact periods can also be viewed by defining start and end dates in the calendar.



2.3.3 Location

The Location section can be used to view the location history of the unit on a map and to edit geofences.

2.3.3.1 Location history

By default, the known locations of the product unit for the last 7 days are shown on the map. To change the date range for the location history, click the calendar button and define the start and end dates in the Set date range dialog box.



2.3.3.2 Geofence

You can view a geofence on the map and edit it in the GEOFENCE drop-down menu.



R090521

To create a geofence, do the following:

- 1. Select Edit in the GEOFENCE drop-down menu.
- 2. Click ENABLE GEOFENCE.
- 3. Choose the center point of the geofence.
- 4. Define the desired radius for the geofence by using the slider above the map. The radius can be set between 200 m and 10000 m.
- 5. In the Notification menu, set alert triggers to send email notifications if the unit exits or enters the geofence area. The defined geofence alert will be triggered once a day at the scheduled RD3 reporting time.
- "On enter" means the alert will be triggered when the unit enters the geofence.
- "On exit" means the alert will be triggered when the unit exits the geofence.
- "On change" means the alert is triggered when the unit exits or enters the geofence.
- 6. If you want to receive email notifications on alert triggers, set the Subscribe me switch on.
- 7. Select the email notification recipient(s) in the Subscribers dialog.
- 8. To save changes, click DONE.

To remove a geofence, select Edit in the GEOFENCE drop-down menu and click DISABLE GEOFENCE in the opening view. To save changes, click DONE.

2.3.4 Daily work hours

The Daily work hours section shows the hammer work hours per day in a graph.

■ Hammer work hours: The total of hammer impact times and hammer pause times (includes, for example, moving rocks). Hammer pause times greater than 30 seconds are not included in the hammer work hours.

By default, the graph shows the hours from the last 7 days. To view the hours of a specific date range, click the calendar button and define the start and end dates in the Set date range dialog box.



2.3.5 Work hours

The Work hours section shows the total hammer work hours during a specific date range in a graph.

By default, the graph shows the hours from the last 7 days. To view the work hours of a specific date range, click the calendar button and define the start and end dates in the Set date range dialog box.

ORK HOURS		al Ga	4/10/2022 - 4/16/2022	^
			_	
14 -				
12 -				
10 -				
8 -				
6 -				
4 -				
2 -				
0 -				
	Apr 16			

2.3.6 Battery

The Battery section shows the battery condition of the RD3 device for a specific date range.

By default, the graph shows the battery condition for the last 7 days. To view the battery condition during a specific date range, click the calendar button and define the start and end dates in the Set date range dialog box.

BATTERY					3/29/2022 - 4/5/2	022 ^
100 -						
90 -						
80 -						
70 -						
60 -						
50 -						
40 -						
30 -						
20 -						
10 -						
0 n Mar 29	Mar 30	Mar 31	Apr 01	Apr 02	Apr 03	Apr 04

2.3.7 Temperature

The Temperature section shows the local temperature for a specific date range.

By default, the graph shows the local temperature for the last 7 days. To view the local temperature during a specific date range, click the calendar button and define the start and end dates in the Set date range dialog box.



2.4. NOTICE BOARD VIEW

The Notice board view displays a list of notices for the product unit. The notices can be filtered by creation date, topic, content, and creator. To view a notice, click on the notice in the list.

Note: The Notice board functionality is not available for hammers.

2.5. ACTIVITIES VIEW

The Activities view is used for viewing and creating service logs of a specific product unit.

CHVITES	3288EA10004				+ NEW ACTIV	
Filter	Filter	Filter 💌	Filter	Filter 👻	Filter	Filter
erformed \downarrow	Published	Status	Name	Туре	Assigned to	Equipment
/7/2022	-	🕕 In progress	Full service	Full service	John Doe	-
/4/2022	4/7/2022	Completed	Field check	Field check	John Doe	i -
COLUMNS				Rows per pa	ge: 10 v 1-	2 of 2 < >

2.5.1 Service log types

There are two service log types in SAM:

- Full service: Product unit service is done by the dealer in their premises.
- Field check: The dealer visits the customer's site to check the product unit functionality.

2.5.2 Viewing service logs

To view the activities of a specific product unit, select the product unit in the fleet list. The Activities pane opens to the right of the window showing the service logs in a list.

	Ⅲ ≔ Ⅲ	ACTIVITIES	(3288EA10004)			l	+ NEW ACTIVITY	п×
		Filter	Filter	Filter 💌	Filter	Filter 👻	Filter 💌	Filter 👻
- 👖 🤶		Performed \downarrow	Published	Status	Name	Туре	Assigned to	Equipment
<u>i</u>	l li	4/7/2022	(F)	In progress	Full service	Full service	John Doe	
Hammers Ltd.	Breakers and Demoliti	4/4/2022	4/7/2022	Completed	Field check	Field check	John Doe	
3288EA10001	3288EA10002					Rows per page	: 10 + 1-2 of	2 < >
Breakers and Demoliti 3288E 3288EA10004	Breakers and Demoliti 3288E 3288EA10005							
- II ?	□ 1 ^{\$}							
Breakers and Demoliti 3288E 3288EA10007	Hammers Ltd. 4099E 4099EA10000							
								B090530

To view a specific service log in more detail, click on the service log row.

Note: Completed service logs can only be viewed as read-only, whereas service logs with the status of "in progress" can be edited by dealers.

2.5.3 Creating service logs

1. In the Activities view, click NEW ACTIVITY.

The New activity dialog opens.

NEW ACTIVITY	
Type (required)	
Field check	Ť
Name (required)	
Field check 2	
Performed (required)	
05/24/2022	(I [*])
Work hours	
	CANCEL
	B0905

- 2. In the New activity dialog, you can:
- Select "Full service" or "Field check" as the service type.
- Give a description of the service.
- Set the date of service.
- 3. Click OK.

A service log is created and the Tasks tab opens.

- 4. To complete the service log information, add information on the service items.
- Select suitable service information in the drop-down menus for each item.
- Add notes by clicking on the item and entering notes in the opening pane.
- Upload pictures from your local computer by clicking ADD in the pane.

FULL SEF	RVICE (3288EA10002)		COMPLETE	SEAL SET	[] ×
FASKS G	ENERAL INFORMATION		7 / 10 complete	Seal set Replaced + NOTES Seal set replaced.	
Pos. 个	Name				
1	Application	Primary breaking 👻		ATTACHMENTS	
2	Buffer	No action needed 👻		T ADD	
3	Seal set	Replaced -	=		
4	Lower tool bushing	No action needed 👻			
5	Pads	No action needed 👻			
6	Membrane	No action needed 👻			
7	Retaining pins	No action needed 👻			
8	Tool	•			
9	Greasing	•			
10	Other parts	-			

5. To change the name of the activity, select the GENERAL INFORMATION tab and EDIT in the Activity section.

6. After entering the details into the fields, click COMPLETE.

The Complete activity dialog opens.

7. To complete the activity, click COMPLETE and ARE YOU SURE? buttons.

The status of the activity is shown as completed in the Activities list.

ACTIVITIES	3288EA10004				+ NEW ACT	илих 🖸 🗙
Filter	Filter	Filter 👻	Filter	Filter 🔻	Filter	▼ Filter ▼
Performed ↓	Published	Status	Name	Type	Assigned to	Equipment
4/1/2022	4/7/2022	Completed	Field check	Field check	John Doe	-
				Rows per pa	ge: 10 🗸 1	→ -2 of 2 〈 〉
						R090529

2.6. EQUIPMENT BASICS VIEW

The Equipment basics view shows the general information of the product unit.

QUIPMENT BASICS (3288EA100	104	:: >
GENERAL INFORMATION		^
Category	Hydraulic hammer	
Model	3288E	
Model code	-	
Manufactured	-	
Manufacturer	SANDVIK	
Serial number	3288EA10004	
RD3 serial number	-	
Owner	Breakers and Demolition Tools Oy	
Alias	3288EA10004	
Rental use	No	
Rented to		
		Door

The view also displays the warranty period of the product unit in the Warranty information section.

ARRANTY INFORMATION		^
Warranty start date	XXXXXXXX	
Warranty end date	XXXXXXXX	
Warranty status	Valid	

2.7. PARTS VIEW

The Parts view shows the available spare part catalogs and a list of spare parts of the product unit. Spare parts can be filtered by name and part number.

Spare parts can be added to the shopping cart by clicking on the spare part and pressing the ADD TO CART button.

Note: The Parts functionality is not supported for hammers yet.

3. Checking account details

3.1. SAM ACCOUNT VIEW

The SAM account view includes details on the company using the account and the data sharing parties. To enter the view, select ADMIN in the main menu.

SAM	/ FLEET 🏟 ADMIN	_
SAM account	SAM ACCOUNT	
	GENERAL INFORMATION	
	Company name	Mining and Construction Ace Oy
	Parent company	Breakers and Demolition Tools Oy
	DATA SHARING	
	Sharing data with	Breakers and Demolition Tools Oy
	Controller of data	Sandvik
		R030329



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