

Machine & Attachment Information

(for dealers)

How to use the service



Version	Description	Date
V0.1	Launch of the Machine & Attachment Information product pilot	Sept 4th, 2023
V0.2	Simplification of calls on machine/attachment and attachment/machine compatibility endpoints Removal of documents exposed via Documoto Addition of "attributes": "brochures" to access sales brochures Transition from pilot to production	Aug 14th, 2024
V0.3	Go live of the API in production environment	Oct 22nd, 2024
V0.4	Review of the categorization of machines & attachments	May 15th, 2025
V1.0	Global refactoring with: - addition of glossary and overview with tags usage - separation of use case with examples - explanation of the addition of attribute types in the payload - improvement of technical usage constraints (dynamic attributes) - machine & attachment endpoints v2 have become deprecated - minor changes in json payload charts	Sept 10th, 2025



<u>Description:</u> This document provides information on how to obtain the best results from the Machine & Attachment Information Product. This documentation is for customer IT teams to understand the service's design and how to use its features, upon agreement signature and terms & conditions acceptance.



NOTE: changes from the previously published version of this document are marked with the "new" symbol in the margin.

Glossary	4
Preamble	5
1. Understand the features of the Machine & Attachment Information API	6
1.1. Overview	6
1.2. Discover API	6
1.3. Machine use cases	8
1.4. Attachments use cases	10
1.5. PDF or HTML Documentation (brochures and technical sheets) use cases	11
1.6. Settings use cases	22
1.7. What is not included in this API	23
2. In details: the Machine & Attachment Information API	24
2.1. Get a specific product	24
Product attribute types:	24
Product variants:	25
2.2. Get a list of products	30
2.3 . Get a list of assets for a specific product	31
2.4. Get available attachments for a specific machine / compatible machines for an	
attachment	33
2.5. Get products Categories	34
2.6. Get Brochures and Technical Documents	36
2.7. API parameters	37
3. Understand the technical Machine & Attachment Information API design	43
3.1. Onboarding & Security through API manager	43
3.2. Dynamic attributes, how does it work?	43
3.3. Best practices in terms of development strategy	44
Non-breaking changes: Any non-breaking changes made to our product will be communicated in the API Store and in a newsletter, indicating the date of applications.	
according to the column "Associated communication". See below.	44
Breaking changes:	45
3.3. Best practices in terms of Query Strategy	46



3.4. Best practices in terms of Data Hosting	47
3.4. API error codes	47
3.5. Customer support	48
1. Appendices	48
4.1. Country codes (ISO 3166)	48
4.2. Language codes (ISO 639)	56



Glossary (NEW)

Terms	Description
API	Application Programming Interface. Interface that allows two computer applications to communicate with each other.
API Store	MANITOU Group website used to explore and test the available MANITOU Group API catalog.
RESTfull	Architectural principle based on REST with HTTP GET/POST/PUT/DELETE methods.
Endpoint	Specific URL address used to call a specific resource of an API. An API is a set of endpoints.
Operation	Specific action that you can perform on an endpoint.
Route	Common term that refers to an association between an endpoint and an operation. Note: API Store use the Operation terminology to refer the route notion.
Product	Commercial grouping of one or more APIs linked to a subscription and service level access. Do not confuse the term "Product" as used in the API Store with the concept of a MANITOU "product" in the sense of machines or attachments.
Service account	Technical account used to call API. Not to be confused with a registered user account The service account can be created by MANITOU or the dealer, depending on their level of authorization. The service account will be the profile with which you will connect to the API Store.
Subscription	Authorization granted by MANITOU to a service account (either via API key or access token)
Authentication	Process for determining whether the service account is authorized to be associated with a valid subscription.
Service level	Each product is associated with a level of access to the service with a set of defined APIs.
IT Developer	Person responsible for implementing API integration into third-party applications (websites or other applications such as CRM, CMS, etc.). This person may be the dealer themselves or a service provider. API calls are made using the service account provided to this person, not their personal account.



Preamble



This document uses the term Product to refer to both products in the API Store sense and products in the MANITOU sense (machines, attachments). To avoid confusion, when the first letter is capitalized, it refers to Product in the API Store sense; otherwise, "product" or "products" is used in lowercase.

Machine & Attachment Information Product is a data service in the form of RESTful APIs (Application Programming Interface).

These APIs provide a wide range of features that help improve efficiency and productivity to enrich your websites with MANITOU Group machine and attachment data. Among the possibilities offered by this API are:

- machine pages: visuals, data, and brochures,
- attachment pages: visuals, data, and brochures
- compatibility between machines and attachments and between attachments and machines

Availability in the 11 master languages (EN/FR/IT/ES/PT/NL/DE/RU/JP/ZH/PL).

Using these APIs requires an understanding of the technical aspects related to authentication.



1. Understand the features of the Machine & Attachment Information API

1.1. Overview



The Machine & Attachment Information API gives you access to MANITOU Group marketing data

You can promote dedicated product offers, without need of search, with up-to-date data such as:

- Raw datas (machine or attachment technical characteristics)
- Specific assets (main visual, load chart, dimensional drawing, brochures, other documents...)
- Self PDF or HTML generated document
 - Machine Technical data sheet (detailed technical characteristics, including load chart, dimensional drawing and equipment)
 - Attachment Technical data sheet (technical characteristics including compatible machines)
 - Machine book (global technical characteristics including load chart, dimensional drawing and compatible attachments)

You can disseminate raw datas and specific assets in your websites in accordance with your graphic charter. Additionally, you can display ready-to-use self PDF generated documents.

You can also cross-reference the data to provide filters to your users.

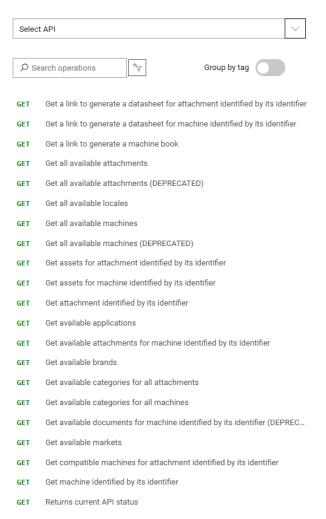
1.2. Discover API



You can view all the operations available for this API by clicking on the API menu and selecting Machine & Attachment Information - v1. This will give you a comprehensive list of the operations available for version V1 of this API.

In the case of the ${\tt Machine}\ {\tt \&}\ {\tt Attachment}\ {\tt Information}\ {\tt API}, only\ {\tt GET}\ {\tt methods}\ {\tt are}\ {\tt implemented}.$





machine & attachment information - v1

API definition Changelog

Data to power your websites (machine and attachments pages). Among the possibilities offered by this API are:

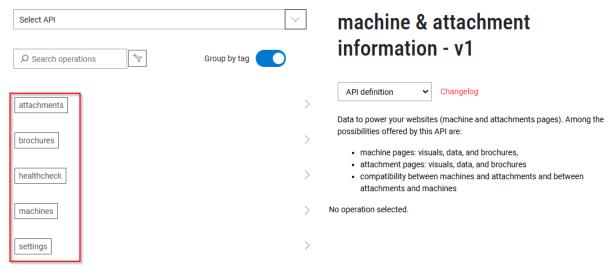
- · machine pages: visuals, data, and brochures,
- · attachment pages: visuals, data, and brochures
- compatibility between machines and attachments and between attachments and machines

No operation selected.

Available operations for api machine & attachment information - v1

The "Group by Tag" option allows you to group these operations by use case, which we recommend doing when you are first exploring the API.

The list of tags is as follows: machines, attachments, brochures, settings and healthcheck

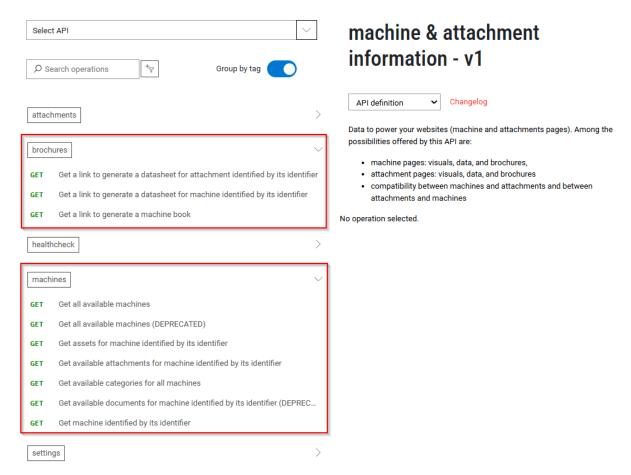


api machine & attachment information - v1 tags



Note: The <code>Setting</code> tag is used for referential data (see details below in use case Settings) and the <code>Healthcheck</code> tag is an internal technical tag which returns the status of API.

Below is an example of the operations available with the brochures and machines tag:



Example of available operations for brochures and machines tag

Note: The v2

1.3. Machine use cases

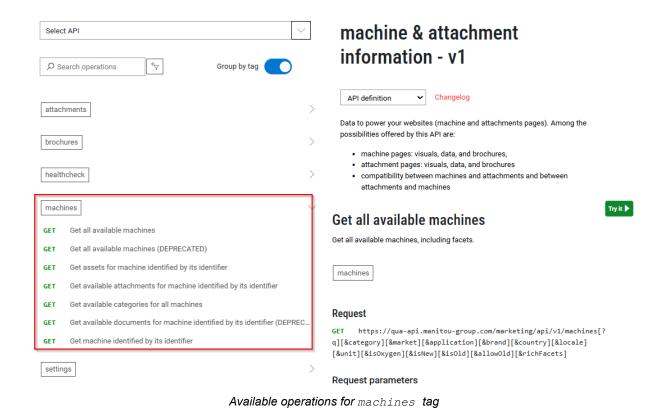


API tag group: machines

As a dealer, I want to retrieve technical data or assets on machines in order to feed my website.

Here are the available operations:





API endpoints:

Get all available machines

GET /api/v1/machines?[locale][unit][q][category][market][brand][application]
[country][allowOld][isOld][isOxygen][isNew][richFacets]

Note: A good practice for using this operation is to restrict the list of machines to a specific marketing territory, particularly to avoid retrieving duplicate machines.

Example to show how to retrieve the ID of the MRT2260E machine commercialized in France



Page 9 / 56



```
"CONS",
"RENT"
],
```

By doing a text search for the machine name in the JSON payload, you can find the corresponding ID ("MRT 2260e" => 52689989)

Get assets for the machine identified by its identifier

GET /api/v1/machines/{machineId}/assets?[locale][market][fields]

Get available attachments for the machine identified by its identifier

GET /api/v1/machines/{machineId}/attachments?[locale][unit][country]

Get available categories for all machines

GET /api/v1/machines/_categories?[locale][structure]

Get the machine identified by its identifier

GET /api/v1/machines/{machineId}?[locale][unit][country]

1.4. Attachments use cases

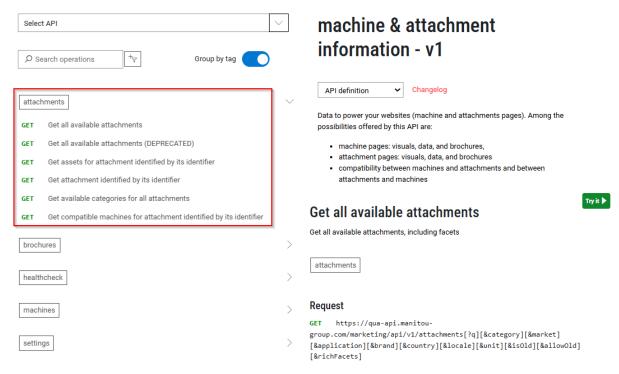
API tag group: attachments

(NEW)

As a dealer, I want to know the compatibility between the machine and accessories and vice versa, along with the technical details of the accessories.

Here are the available operations:





Available operations for attachments tag

API endpoints:

Get all available attachments

GET /api/v1/attachments?[locale][unit][q][category][market][brand][application]
[country][allowOld][isOld][richFacets]

Get assets for the attachment identified by its identifier

GET /api/v1/attachments/{attachmentId}/assets?[locale][market]

Get the attachment identified by its identifier

GET /api/v1/attachments/{attachmentId}?[locale][unit][fields]

Get available categories for all attachments

GET /api/v1/attachments/_categories?[locale][structure]

Get compatible machines for the attachment identified by its identifier

GET /api/v1/attachments/{attachmentId}/machines?[locale][country]

1.5. PDF or HTML Documentation (brochures and technical sheets) use cases

API tag group: brochures

As a dealer, I would like to provide my customers with self-generated documents in PDF or HTML. You can generate 2 types of documentation :

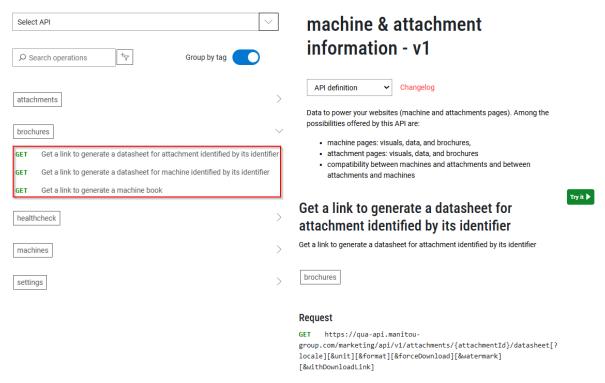
1/ machine or attachment data sheet

2/ machine books (brochures)





Here are the available operations:



Available operations for brochures tag

API endpoints:



- Machine data sheet / Attachment data sheet:

GET /api/v1/machines/{machineId}/datasheet?[locale][unit][country][format]
[watermark][forceDownload][withDownloadLink]

Note: this endpoint uses /machines in url but is associated with brochures tag. Do not confuse url and tag

Datasheet example for the 180 ATJ Articulated Telescopic Jib machine:

url	<pre>curl -X GET -H 'Ocp-Apim-Subscription-Key: clientSecret' https://api.manitou-group.com/marketing/api/v1/machines/52841042/dat asheet?locale=fr-FR&unit=all</pre>
response	{ "link": "https://views.manitou-group.com/machines/52841042?p=b&locale=fr-FR&unit=all" }

Copy/paste the response url to show the corresponding technical sheet PDF:



Technical sheet:

180 ATJ





Capacities		Metric	Imperial
Working height	h21	18.19 m	59 ft 8 in
Platform height	h7	16.19 m	53 ft 1 in
Maximum outreach		10.51 m	34 ft 6 in
Overhang		7.55 m	24 ft 9 in
Pendular arm rotation (bottom)		+-59.50 °	+-59.50 °
Platform capacity	0	230 kg	507 lb
Turret rotation		350 °	350°
Platform rotation (right / left)		90°/90°	90 ° / 90 °
Number of people (indoor / outdoor)		2/2	2/2
Weight and dimensions		2, 2	-, -
Platform weight*		7430 kg	16380 lb
Platform dimensions (length x width)	lp / ep	1.80 m x 0.80 m	5 ft 11 in x 2 ft 7 in
Floor height (access)	h20	0.40 m	1 ft 4 in
Overall length	11	7.79 m	25 ft 7 in
Overall width	b1	2.32 m	7 ft 7 in
Overall height	h17	2.47 m	8 ft 1 in
Overall length (stowed)	19	5.56 m	18 ft 3 in
Overall height (stowed)	h18 ***	2.56 m	8 ft 5 in
Counterweight offset (turret at 90°)	a7	0.22 m	9 in
Counterweight Oversize / Reach	a,	0.22 m	9 in
External turning radius	Wa3	3.75 m	12 ft 4 in
Ground clearance at centre of wheelbase	m2	0.40 m	1 ft 4 in
Wheelbase	y	2.20 m	7 ft 3 in
Performances	у	2.20 111	7 11 3 111
Drive speed - stowed		5 km/h	3 mph
Drive speed - raised		1 km/h	0.62 mph
Gradeability		45 %	45 %
Permissible leveling		43 % 5 °	45 % 5°
Wheels		J	3
Tires type		Foam-filled	Foam-filled
Drive wheels (front / rear)		2 / 2	2 / 2
, ,		2/2	2/2
Steering wheels (front / rear) Braking wheels (front / rear)		0/2	0/2
- , , , ,		0/2	0/2
Engine/Battery		Kubota - D1105-E4B	Kubota - D1105-F4B
Engine brand / model			
Engine norm		Interim Tier 4, Stage IIIA, Stage V	Interim Tier 4, Stage IIIA, Stage V
.C. Engine power rating / Power		24.80 Hp / 18.50 kW	24.80 Hp / 18.50 kW
Miscellaneous		40.1	445.00
Ground Pressure		10 dan/cm2	145 PSI
Hydraulic Pressure		340 bar	4931 PSI
Hydraulic tank capacity		54 1	14 US gal
Fuel tank		52 I	14 US gal
Daily consumption **		4.26	1 US gal
Standards compliance			
This machine is in compliance with:		European directives: 2006/42/EC- Machinery (revised EN280:2013) - 2004/108/EC (EMC)	European directives: 2006/42/EC- Machin (revised EN280:2013) - 2004/108/EC (EM



180 ATJ - Load chart

Load Chart for MEWP Metric

10 5 0 5 10 15 20 25 30 35

2 1 0 1 2 3 4 5 6 7 8 9 10 11

3 60

14 45

13 45

14 45

13 40

13 35

25 6 20

3 10

3 10

3 5 7

5 7

6 20

5 10

5 7

6 20

5 10

5 7

6 20

5 10

5 7

6 20

5 10

6 20

7 8 10

7 8 25

7 8 20

8 25

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

9 30

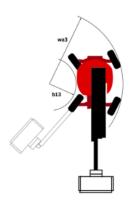
9 30

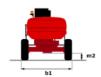
9 30

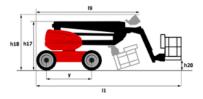
9 30

9 30

180 ATJ - Dimensional drawing









Equipment

Standard

220V predisposition in the platform

4 simultaneous movements

4 wheel drive

4 wheel steer with crab mode

Audible alarm and illuminated indicator lamp (leveling, overload, lowering)

Backup electrical pump

Basket 1,800 mm

CAN bus technology

Differential locking on rear axle

Easy Manager

Emergency stop button in platform and on frame

Fuel gauge with low level indicator

Fully galvanized basket with removable floor - Width: 2100 mm (6 ft. 11 in.)

Hour meter

Leveling unlocking

Load sensing pump

Operator presence pedal

Oscillating front axle

Steer and rotate

Stop & Go system

Optional

Battery charger

Battery cut-off

Biodegradable oil

Coded anti-start

Cold weather protection oil

Continuous turret rotation

Exhaust line protection, spark arrestor and fume reduction system

Fully galvanized basket 1800mm / 5'11" with lateral door

Galvanized basket 2,100 mm

High capacity starting battery

Lockable fuel cap

On-board generator (3,5 or 5 kW)

Personalized paintwork

Safety harness

Secondary Protection System (SPS)

Spark arrester

Water heater

Water predisposition

Working light

Machine technical data sheet example



 $\label{locale} \textbf{GET } / \texttt{api/v1/attachments} / \texttt{\{attachmentId\}/datasheet?[locale][unit][format][watermark]} \\ [forceDownload][withDownloadLink]$

Note: this endpoint uses / attachments in url but is associated with brochures tag. Do not confuse url and tag

Datasheet example for the extensible platform attachment:

url	<pre>curl -X GET -H 'Ocp-Apim-Subscription-Key: clientSecret' https://api.manitou-group.com/marketing/api/v1/attachments/U_NeFCOAA CkA3-x8/datasheet?locale=en-US&unit=all</pre>
response	"link": "https://views.manitou-group.com/attachments/U_NeFCQAACkA3-x8?p=b&locale=en-US&u nit=all" }

Copy/paste the response url to show the corresponding technical sheet PDF:

EXTENSIBLE PLATFORM Created on September 2, 2025 at 8:01 AM UTC

Technical sheet:

EXTENSIBLE PLATFORM





Customer benefits

Technical characteristics

- Flexibility for people lifting applications.
- 2 different working widths available.
- Heavy duty and galvanized structure for an improved longevity.
- Non-slip metal floor.
- Expandable sides are independent.
- Fork sleeves for yard handling.

- Capacity from 365 kg / 805 lb to 1000 kg / 2205 lb.
- Slewing platform +/- 90° on both sides.
- Legally approved for 3 persons.
- Accessible from 3 sides.
- Overload sensor.

MANITOU ATTACHMENTS

Technical characteristics		NAC 2.45 / 5m 365 kg	NAC 2.45 / 5m 1000 kg	NAC 2.45 / 6m 365 kg	PSE 5000 / 365 D 3P	PSE 5000 / 1000 D 3P	PSE 6000 / 365 D 3P
Capacity including people (kg)		365	1000	365	365	1000	365
Number of people		3	3	3	3	3	3
Distance to center of gravity (mm)		1150	1150	1250	1101	1150	1250
Weight							
Overall weight (kg)		1020	1020	1090	1020	1020	1090
Weight and dimensions							
Overall height (mm)	h17	1289	1289	1307	1629	1629	1639
Overall length (mm)	l1	2302	2302	2293	2302	2302	2293
Width minimum (mm)		2451	2451	2451	2451	2451	2451
Width maximum (mm)		4999	4999	5999	4999	4999	5999
Depth (mm)	p5	1120	1120	1120	1120	1120	1120
Working Parameters							
Required machine equipment		\$F 655	\$\$ @\$	\$ E	\$F 655	98 mm	\$\$ EE
Rotation 1 (°)		90	90	90	90	90	90
Rotation 2 (°)		90	90	90	90	90	90
Machines compatibility		NAC 2.45 / 5m 365 kg	NAC 2.45 / 5m 1000 kg	NAC 2.45 / 6m 365 kg	PSE 5000 / 365 D 3P	PSE 5000 / 1000 D 3P	PSE 6000 / 365 D 3P
Reference number			788786	788784			
MT 1335 HA 75D ST5				Х			
MT 1335 HA 100D ST5				Х			
MT-X 1440 A			X	X			
MT-X 1840 A			Х	X			
MT 1440 A OLD			X	X			
MT 1440 HA OLD		-	Х	X	-	-	
MT 1840 A OLD			X	X			
MT 1840 HA OLD		-	Х	Х	-	-	-
Reference number E-RECO		921309	921308	921310	52719253	52719254	52719255
MRT 1645 75					Х	Х	Х
MRT 1645 115			-		X	X	X
MRT 1845 75					X	Х	X
MRT 1845 115					x	X	X

Attachment technical data sheet example

. . .

- Machine book :

GET /api/v1/brochures/machine-book?[locale][unit][machineId][filter][format]
[watermark][forceDownload][withDownloadLink]

Machine book example for the MRT 2260 E rotating telehandler machine:

url	<pre>curl -X GET -H 'Ocp-Apim-Subscription-Key: clientSecret' https://api.manitou-group.com/marketing/api/v1/brochures/machine-boo k?locale=en-US&unit=metric&machineId=52689989</pre>
response	{ "link": "https://brochures.manitou-group.com/machine-book?p=b&machineId=52689989&unit=metric&locale=en-US" }

Copy/paste the response url to show the corresponding machine book PDF:



English Rotating telehandlers MRT Vision Plus

MRT 2260 E

MACHINE BOOK





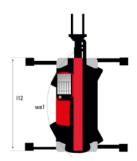


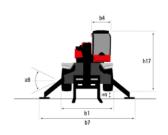
MRT 2260 E - TECHNICAL DATA

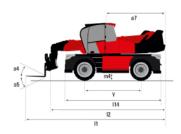
Capacities	Metric
fax. capacity	Q 6000 kg
Max. lifting height	h3 21.80 m
Maximum outreach	18.20 m
Weight and dimensions	
Overall length (with forks)	l1 8.17 m
Length to face of forks	l2 6.97 m
Overall width	b1 2.50 m
Overall height	h17 3.10 m
Overall cab width	b4 0.96 m
Ground clearance	m4 0.38 m
Wheelbase	y 3.05 m
Tilt-up angle	84 12°
Tilt-down angle	a5 110°
Turret rotation	360 °
Overall weight	18000 kg
Forks length / width / section	l/e/s 100 mm x 1200 mm x 60 mm
Wheels	17 e / S 100 IIIII X 1200 IIIII X 60 IIIII
	445/45 D22 5
Standard tires	445/65 R22,5
Drive wheels (front / rear)	2 / 2
Steering mode	2 wheel steer, 4 wheel steer, Crab mode
Stabilisers	
Stabilizers Type	Telescopic Duplex
Controls with stabs	Stabs Commands Individual or Simultaneous
Electric circuit	
Number of batteries / Battery voltage	2 x 12 V
12V Battery capacity	120 Ah
Battery starting current	(EN)850 A
Engine/Battery	
Battery technology	Lithium-ion
Battery capacity	105 Ah
Battery nominal voltage	624 V
Battery max. voltage	680 V
Battery energy	65 kW/h
Electric engine power rating	107 kW
Hydraulic motor power	84 kW
Charger Power / Phase / Current type	11 kW / Single-phase or three-phase / AC
Transmission .	
Transmission Transmission type	Electrical
lumber of gears (forward / reverse)	2 / 2
Max. travel speed	2 / Z 37 km/h
	37 kili/li 8600 daN
rawbar pull	
Prawbar pull continuous	4300 daN
Parking brake	Automatic negative parking brake
ervice brake	Oil-immersed multi-discs braking on front & rear axle
erformances	
Max Gradeability (laden / unladen)	36 % / 48 %
radeability continuous (laden / unladen)	18 % / 23 %
lydraulics	
łydraulic pump type	Fixed displacement piston
lydraulic flow	175 l/min
lydraulic Pressure	350 bar
lydraulic tank capacity	200
loise and vibration	
loise at driving position (LpA)	65 dB
loise to environment (LwA)	103 dB
ibration on hands/arms	< 2.50 m/s²
tiscellaneous	
	2/2
teering wheels (front / rear)	
	2 Jovsticks
Steering wheels (front / rear) Controls Cab certification	2 Joysticks Cabin ROPS - FOPS level 2





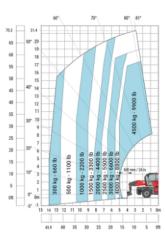




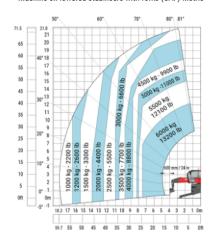


MRT 2260 E - LOAD CHART

Machine on tires with forks Metric



Machine on lowered stabilisers with forks (CAF) Metric



••

MRT 2260 E - COMPATIBLE ATTACHMENTS

BUCKETS

Concrete Mixing Bucket



Concrete Mixing Bucket - BMC 500 (b)

Capacity	Overall weight	Overall height	Width	Depth	Reference number E-RECO		
500 kg	770 kg	1050 mm	1950 mm	1050 mm	52728342		
Mandatory machine equipment: ○ + □□							



Concrete Mixing Bucket - BMC 750

Capacity	Overall weight	Overall height	Width	Depth	Reference number E-RECO	
750 kg	920 kg	1200 mm	1950 mm	1250 mm	52728352	
Mandatory machine equipment: ☐ + □□						

BUCKETS

General Purpose Bucket (MRT)



General Purpose Bucket (MRT) - CBR 1000 / 2450 (a)

Distance to center of gravity	Capacity	Heaped capacity	Overall weight	Overall height	Overall length
500 mm	2100 kg	1000 l	415 kg	802 mm	890 mm
Width	Reference number E-RECO				
2450 mm	921282				
Mandatory machine equipment:					

Machine book example

1.6. Settings use cases

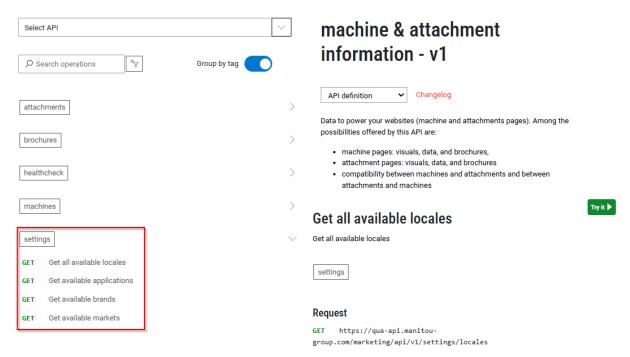
API tag group: settings

As an IT developer, I want to see reference data (in the sense of nomenclatures).



Here are the available operations:





Available operations for settings tag

API endpoints:

Get all available locales

GET /api/v1/settings/locales

Get available applications

GET/api/v1/applications?[locale]

Get available brands

GET /api/v1/brands?[locale]

Get available markets and secondary market

GET /api/v1/markets?[locale]

1.7. What is not included in this API

The Machine & Attachment Information API does not include:

- Videos.
- Application visuals and studio visuals,
- Description of the machines and the attachments (to avoid duplicate content for SEO),



2. In details: the Machine & Attachment Information API

A product is a machine or an attachment.

2.1. Get a specific product

Let's focus on the way to get a specific product.

The endpoint GET /api/v1/machines/{machineId}returns a specific machine

The endpoint GET /api/v1/attachments/{attachmentId} returns a specific attachment



The following chart lists the fields exposed by the previous endpoints for any product, whether for a machine or an attachment.

Product attribute types:

Point of attention about product 'attributes' returned in the \$.attributes field

Machines and attachments have a lot of attributes about their technical characteristics and each machine or attachment exposes only its own fields.

Keep in mind that all attributes of products are exposed, but you probably don't need all attributes. If you have any doubt about which attribute you need, please contact the support.

All attributes are exposed with a code, label and value, with information about the associated group (with group code and group label). Each attribute has its own type depending on the accuracy of the information presented.

Here is a table summarizing the possible attribute types. We distinguish between simple types (code, label, value) and complex types (specific JSON structure).

Simple type		
type	description	example
string	Text or html value	base_unit_part_number
integer	Integer value	number_of_cylinders
decimal	Decimal value	Non applicable*
boolean	Boolean (true/false)	electrical_machine_model



Complex type			
type	description	example	
measure	Value with associate unit (metric or imperial)	wheelbase	
enum	Option among a list of possible options	tyres_model	
array[enum]	Multiple option among a list of possible options	steering_mode	
assetLinks	Different urls following type of view (original, preview)	machine_on_tyres_with_forks	
array[asset]	Different urls for downloading document	brochures	

The following charts lists an example of each possibility with json details

Product variants:

Point of attention about product 'variants' returned in the \$.variants field :

All attachments and several machines have variants, sometimes up to 2 levels of variants. For example, the 'Bucket 4 in 1' attachment has as many variants as capacities, and a truck mounted forklift machine has as many variants as compatible masts. All variants of a product are exposed as sub-products (e.g. with the same JSON structure) in a "variants" array of the uplevel product, so each variant has its own identifier and its own specific information, but keep in mind that you must only use the ID of the uplevel product in parameters of endpoints of the Machine & Attachment Information product.

product details - JSON data	Comments
"identifier": "mrt_123+", "name": "MRT 123",	ID and product name
"creationDate": "2021-01-22T08:34:51Z",	System dates
"updateDate": "2023-10-02T13:48:03Z",	



product details - JSON data	Comments
"productRanges": [Categories of the product
<pre>{ "parent": null, "code": "manitou_group", "label": "Manitou Group" },</pre>	<pre>> returned with all levels of category branches as a flat structure in the 'productRanges' field</pre>
"parent": "manitou_group", "code": "machine_families", "label": "Machines" },	> returned as an array of leaf categories in the 'categories' field
<pre>"parent": "machine_families", "code": "M0F101_telehandlers", "label": "Chariots télescopiques" }, { "parent": "M0F101_telehandlers", "code": "M0F101F2004_rotating_telehandlers", "label": "Chariots télescopiques rotatifs" }, { "parent": "rotating_telehandlers", "code": "mrt_manitou", "label": "MRT" }</pre>	> for main categories, visuals can be retrieved with the GET /machines/_categories and GET /attachments/_categories endpoints
],	
"preview": "https://views.manitou-group.com/tessa/329594?channel=medium", "thumbnail": "https://views.manitou-group.com/tessa/329594?channel=small",	Links of product main visual in different sizes
"markets": ["CONS", "RENT"],	Codes of markets of the product
"applications": ["elevation_people", "lift"],	Codes of specific applications covered by the product; this information is provided more for attachments than for machines
"isNew": false, "isOxygen": true,	Some flags about the product
"attributes": [List of <u>all attributes</u> of the product; below are examples of all attribute types



```
product details - JSON data
                                                                                 Comments
  "code": "base_unit_part_number",
                                                                        String attribute
  "label": "Numéro de configurable",
  "value": "52612392"
                                                                        > first example of string
                                                                        attribute with text as
  "group": {
                                                                        value
    "code": "cpq_information",
    "label": "Informations CPQ"
  "type" : "string"
},
  "code": "additional_information",
                                                                        String attribute
  "label": "Informations supplémentaires",
  "value": "E-reco 2 MRT : version dédiée aux marchés Amérique
               du nord, Australie et Nouvelle Zélande. <br > "
                                                                       > second example of string
                                                                       attribute with html as
  "group": { <ATTRIBUTE_GROUP_CODE/LABEL> },
"type" : "string"
                                                                       value
  "code": "electrical_machine_model",
                                                                        Boolean attributes
  "label": "Cette machine est toute électrique",
  "value": true,
                                                                        > value is simply a
  "group": { <ATTRIBUTE_GROUP_CODE/LABEL> }
                                                                        boolean
  "type" : "boolean"
  "code": "number_of_cylinders",
                                                                        Integer attributes
  "label": "Nombre de cylindres",
  "value": 4,
                                                                        > value is simply a number
  "group": { <ATTRIBUTE_GROUP_CODE/LABEL> },
"type" : "integer"
  "code": "wheelbase",
                                                                        Measure attributes
  "label": "Empattement",
  "value": {
                                                                        > conversion is applied to
    "raw": {
                                                                        return attribute value in
      "unit": "METER",
                                                                        each requested measurement
      "amount": "2.4300"
                                                                        system (according to the
                                                                        'unit' parameter)
    "metric": {
      "unit": "m",
      "amount": "2.4300"
    "imperial": {
      "unit": "in",
      "amount": "95.66929133858267716535433070866142"
  "group": { <ATTRIBUTE_GROUP_CODE/LABEL> },
  "type" : "measure"
```



```
product details - JSON data
                                                                                  Comments
      "code": "tyres_model",
                                                                         Enum attributes (options)
      "label": "Pneus standards",
      "value": {
                                                                         > value is an option among
        "code": "405 70 20",
                                                                         a list of possible options
        "label": "405/70-20"
                                                                         for this attribute ; this
                                                                         option is returned with a
      "group": { <ATTRIBUTE_GROUP_CODE/LABEL> },
  "type" : "enum"
                                                                         {code/label} json object
    }.
      "code": "steering_mode",
                                                                         List options attributes
      "label": "Mode de direction",
      "value": [
                                                                         > for attributes for which
                                                                         multiple options can be
          "code": "steering_mode_2_wheel_steer",
                                                                         set (ex : 'steering mode'
          "label": "2 roues directrices"
                                                                         attribute), 'value' field
                                                                         is an array of
        },
                                                                         {code/label} json objects,
          "code": "steering_mode_4_wheel_steer",
                                                                         even in the case of only
          "label": "4 roues directricess"
                                                                         one option
        <OTHER ITEMS OF ARRAY VALUE OF CURRENT ATTRIBUTE>
      "group": { <ATTRIBUTE GROUP CODE/LABEL> },
       "type" : "array[enum]"
      "code": "machine_on_tyres_with_forks",
                                                                         Asset attributes
      "label": "Machine sur pneus avec fourches",
      "value": {
                                                                         > for one asset attributes
        "original": "https://views.manitou-group.com/tessa/329594",
                                                                         (ex:
        "preview":
                                                                         'machine_on_tyres_with_fork
"https://views.manitou-group.com/tessa/329594?channel=medium",
                                                                         s' attribute), value is a
        "thumbnail":
                                                                         set of links to download
"https://views.manitou-group.com/tessa/329594?channel=small",
                                                                         the asset (original,
        "thumbnail_small":
                                                                         preview, thumbnail, ...) ;
"https://views.manitou-group.com/tessa/329594?channel=xsmall",
                                                                         in case of a picture, url
        "full": "https://views.manitou-group.com/tessa/329594",
                                                                         in different sizes are
        "small":
                                                                         included:
"https://views.manitou-group.com/tessa/329594?channel=small",
                                                                         - small: 300px
        "xsmall":
                                                                         - xsmall: 150px
                                                                         - medium: 768px
"https://views.manitou-group.com/tessa/329594?channel=xsmall",
        "medium":
                                                                         - large: 1024px
                                                                         (to get picture in its
"https://views.manitou-group.com/tessa/329594?channel=medium",
        "large":
                                                                         original size, use the
"https://views.manitou-group.com/tessa/329594?channel=large"
                                                                          'original' link)
      "group": { "code": "load chart", "label": "Abaques Metric" },
                                                                         > when array of assets
       "type" : "assetLinks"
                                                                         attribute (ex :
                                                                         'brochures' attribute),
   },
                                                                         value lists only urls to
      "code": "brochures",
                                                                         download each asset in its
      "label": "Brochures",
                                                                         original format
      "value": [
        "https://views.manitou-group.com/tessa/329598",
                                                                         A better way to get product
                                                                         assets, with resizing and
        "https://views.manitou-group.com/tessa/329596",
        "https://views.manitou-group.com/tessa/329590",
                                                                         localized links, is to use
        <OTHER ITEMS OF ASSET ORIGINAL LINK>
                                                                         the
                                                                         GET/machines/{machineId}/as
      "group": { <ATTRIBUTE_GROUP_CODE/LABEL> },
       "type" : "array[asset]"
                                                                         GET/attachments/{attachment
                                                                         Id}/assets endpoints.
```



product details - JSON data	Comments
<pre><other_atttributes_of_product>],</other_atttributes_of_product></pre>	
<pre>"variants": [</pre>	All enabled variants of the uplevel product, with their own information



2.2. Get a list of products

Let's focus on the way to get a list of filtered products.

The endpoint GET /api/v1/machines returns a list of machines The endpoint GET /api/v1/attachments returns a list of attachments

The following chart lists the fields exposed by the previous endpoints for any product, whether for a machine or an attachment.

products list - JSON data	Comments
{ "total": 53,	Count of results
"results": [{	List of filtered products
"identifier": "UtVER123ADUztIyO", "name": "78 SEC", "creationDate": "2018-12-07T14:57:32Z", "updateDate": "2023-09-26T14:54:05Z", "productRanges": [<categories_branches>], "categories": [<leaf_categories_codes>], "preview": <current_product_preview_link>, "thumbnail": <current_product_thumbnail_link>,</current_product_thumbnail_link></current_product_preview_link></leaf_categories_codes></categories_branches>	ID, name, and other information of current product (see previous chart for more detailed field values)
"markets": ["INDU"], "brand": ["MANITOU"], "applications": ["lift", "elevation_people"],	Markets, brands and specific applications of current product > codes are returned for markets and applications > /!\ labels are returned for brands
<pre>"enabled": true, "isNew": false, "isOxygen": false, "isOldSomewhere": false, "isOld": false, "isInnovation": false</pre>	Some flags of current product
}, <other_filtered_products>],</other_filtered_products>	
"facets": ["total": 53,	Facets
"isOxygen": {"false": 0, "true": 2}, "isInnovation": {"false": 3, "true": 0}, "isNew": {"false": 108, "true": 2}, "isOldSomewhere": {"false": 54, "true": 167}, "isOld": {"false": 0, "true": 67},	Facets on product flags



products list - JSON data	Comments
<pre>"market": { "AGRI": 55, "AERO": 5, <other_market_facets> }, "brand": { "ManitouATT": 0, "Manitou": 207, "Gehl": 32 }, "application": { "Manutentionner des palettes": 0, "Creuser": 0, <other_application_facets> },</other_application_facets></other_market_facets></pre>	Facets on markets, brands and specific applications > while brand labels are returned in results, bran codes are returned in facets
<pre>"category": { "warehousing": 9, "rs": 9, <other_category_facets> }</other_category_facets></pre>	Facets on product categories

2.3. Get a list of assets for a specific product

Let's focus on the way to get a list of assets linked to a product.

The endpoint GET /api/v1/machines/{machineId}/assets returns assets for specific machine
The endpoint GET /api/v1/attachments/{attachmentId}/assets returns assets for specific attachment

The following chart lists the fields exposed by the previous endpoints for any product, whether for a machine or an attachment.

How do I find specific assets for a product?

An asset is returned with the attribute by which it is associated with the product. You can use this attribute, along with its attribute group, to identify specific resources. The table below lists some examples (please contact support for a complete list of attributes and attribute groups), while the following table (product assets - JSON data) illustrates the data from a metric chart.

Specific assets	Attribute (code)	Attribute group (code)
Main visual	main_visual	
Metric charts		load_chart
Imperial charts		load_chart_imperial
Dimensional drawings		dimensional_drawing

Points of attention about assets with different translations:

- Be careful, keep in mind that a localized asset is returned only if the locale specified in the request is available or if an English default translation is available



product assets - JSON data	Comments
[List of assets linked to the product
<pre>"code": "load_chart_agriculture_telehandler_mlt630_115_115v_on_tyres_with_for ks_met.ai", "type": "ai", "mediaType": "Document", "label": "Mon produit en détail !", "clprCode": "703824", "creationDate": "2021-07-16", "updateDate": "2024-04-29",</pre>	General common information about assets > type examples: ai, jpeg jpg, pdf, png > mediaType examples: Document, Image
<pre>"attributeWithGroup": { "code": "machine_on_tyres_with_forks", "label": "Machine sur pneus avec fourches", "group": { "code": "load_chart", "label": "Abaques Metric" } },</pre>	Attribute for which asset and the product are linke Examples: machine_on_tyres_with_for s / brochures If the same asset is linke to a product through
	several attributes, it will be returned several times.
"locales": [], "localized": false,	Available locales > asset specific fields (links and metadata) contain an entry for each locale ('en_US',) if localized is true, or a unique 'no-locale' entry otherwise
<pre>"links": { "download": { "no-locale": 'https://views.manitou-group.com/tessa/dimensional_drawing_side_mlt_x 737.jpg/no-locale"</pre>	Links of assets > 'download' : links to assets download
}, "preview": { "no-locale": 'https://views.manitou-group.com/tessa-preview/dimensional_drawing_si	<pre>> 'preview' : links to assets preview > 'urlsset' : sets of ur.</pre>
<pre>de_mlt_x_737.jpg/no-locale"</pre>	in different sizes when assets are pictures (not returned if not)
Thttps://views.manitou-group.com/tessa/dimensional_drawing_side_mlt_x_737.jpg/no-locale?channel=small",	
_737.jpg/no-locale?channel=xsmall",	
<pre>"large": 'https://views.manitou-group.com/tessa/dimensional_drawing_side_mlt_x _737.jpg/no-locale?channel=large" }</pre>	
} },	



product assets - JSON data	Comments
<pre>"metadata": { "no-locale": { "fileSize": 103066, "clprCode": "703824", "creationDate": "2021-07-16", "updateDate": "2024-04-29" } },</pre>	Metadata of assets > fileSize is in bytes > for a localized group of assets, the clprCode may only be available for certain assets and not for others
"brands": ["Manitou"], "markets": ["AGRI"],	Markets, brands and tags associated to the assets
}, <other_assets_linked_to_the_product>]</other_assets_linked_to_the_product>	

2.4. Get available attachments for a specific machine / compatible machines for an attachment

Let's focus on the way to get attachments from a machine or, conversely, by obtaining a list of machines compatible with a specific attachment

The endpoint GET /api/v1/machines/{machineId}/attachments returns available attachments for a specific machine

The endpoint \mathtt{GET} /api/v1/attachments/{attachmentId}/machines returns compatible machines for a specific attachment

The following chart lists the fields exposed by the previous endpoints for any product, whether for a machine or an attachment.

Points of attention regarding the attachment variants available for a machine:

- The above endpoints return the top-level product ID, without the variant details. For example, if two variants of the "4-in-1 Bucket" attachment are available for a given MRT machine, out of the six variants offered by this bucket, the GET /api/v1/machines/{machineld}/attachments route will simply return the ID of the "4-in-1 Bucket".
- Conversely, it is possible to call these endpoints with the ID of a variant. Thus, if the GET /api/v1/attachments/{attachmentId}/machines route is called with the ID of each of the six variants of the "4-in-1 Bucket", it is possible to determine which bucket variants the MRT machine is compatible with.
- Eventually, these endpoints will evolve to directly return the details of availability/compatibility by variant.

Machines/Attachments compatibilities - JSON data	Comments
[List of available products for another. Old products are excluded.



Machines/Attachments compatibilities - JSON data	Comments
{ "code": "mrt_1645_400_115", "label": "MRT 1645 115",	Code/label of current available/compatible product
	<pre>> code: in case of compatible / available variants, 'code' is the identifier of the upmost product</pre>
"productRanges": [<categories_branches>],</categories_branches>	Categories of the product (see 'A product in detail' chart for more detailed field values)
<pre>"mainVisual": { "original": <main_visual_link_in_original_size>, "small": <main_visual_link_in_small_size>, "xsmall": <main_visual_link_in_xsmall_size>, "medium": <main_visual_link_in_medium_size>, "large": <main_visual_link_in_large_size> }</main_visual_link_in_large_size></main_visual_link_in_medium_size></main_visual_link_in_xsmall_size></main_visual_link_in_small_size></main_visual_link_in_original_size></pre>	Links of main visual of current available product, in different size
}, <other_available_products>]</other_available_products>	

2.5. Get products Categories

Let's focus on the way to obtain the MANITOU Group classification trees for machines and attachments.

The endpoint GET /api/v1/machines/_categories returns tree for machines
The endpoint GET /api/v1/attachments/_categories returns tree for attachments

The following chart lists the fields exposed by the previous endpoints for any product, whether for a machine or an attachment.

Notes regarding machine and attachment categories:

- Machine/attachment categories can be retrieved in a tree structure (default representation) or "flat" format, depending on the requested "structure" parameter.
- All machine (or attachment) categories are returned: your scope of activity may only concern a subset of these categories.

With structure=flat

product categories - JSON data - Flat categories	Comments
Ι	List of flat categories.



product categories - JSON data - Flat categories	Comments
<pre>{ "parent": "manitou_group", "code": "machine_families", "label": "Machines" },</pre>	A flat category, with code/label information, and its category parent code
	<pre>> be careful: the upmost parent ('manitou_group' here) does not exist as a category item (with code='manitou_group').</pre>
<pre>{ "parent": "machine_families", "code": "M0F101_telehandlers", "label": "Chariots télescopiques", "mainVisuals": [</pre>	A flat category, additionally with available main visuals > sometimes visuals can be branded, specially for machines categories; for a non-branded visual, the 'brand' field is not present > for each visual, download links for a preview and a thumbnail are returned
<pre><other_flat_category_items>]</other_flat_category_items></pre>	

With structure=tree (default)

product categories - JSON data - Categories tree	Comments
{ "code": "machine_families", "label": "Machines", "children": [Upmost category with code/label information, and its children categories.
"children": [categories.



product categories - JSON data - Categories tree	Comments
<pre>"code": "M0F101_telehandlers", "label": "Chariots télescopiques", "mainVisuals": [<main_visuals_links>], "children": [</main_visuals_links></pre>	First level category, with code/label information, and its own children categories, in a recursive schema
<pre>"code": "M0F101F2001_ultracompact_telehandlers", "label": "Chariots télescopiques ultra compacts", "mainVisuals": [<main_visuals_links>], "children": [</main_visuals_links></pre>	<pre>> if any, available visuals are returned, like in the 'flat' structure</pre>
<pre>"code": "ulm_manitou", "label": "ULM", "children": [] },</pre>	
<pre>"code": "gct_gehl", "label": "GCT", "children": [] }</pre>	
<pre> </pre> <pre> </pre> <pre> <pre> <pre> </pre> <pre> <pre> <pre> <pre> <pre> </pre> <pre> <pre> <pre> <pre> <pre> <pre> <pre> <pre> </pre> <pre> </pre> <pre> <pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre>	
<pre>{ "code": "M0F102_mobileelevatingworkplatforms", "label": "Nacelles élévatrices mobiles", "mainVisuals": [<main_visuals_links>], "children": [<m0f102_mobileelevatingworkplatforms_children_categories>] },</m0f102_mobileelevatingworkplatforms_children_categories></main_visuals_links></pre>	Another first level category
<pre><other_first_level_category_items>]</other_first_level_category_items></pre>	

2.6. Get Brochures and Technical Documents

The endpoint GET /api/v1/machines/{machineId}/datasheet returns the datasheet for a specific machine

The endpoint GET $/api/v1/attachments/{attachmentId}/datasheet$ returns the datasheet for a specific attachment

The endpoint \mathtt{GET} /api/v1/brochures/machine-book?[machineId] returns a machine book for a specific machine

The following table lists the fields exposed by the previous endpoints to obtain links for generating brochures and documents.



Notes regarding document generation links:

- If the requested parameters do not allow a document to be generated, a 404 Not Found error is returned by the above endpoints. This is the case, for example, if you request the generation link for a machine book for an old machine without including the 'old' products through the 'filter' parameter (see parameter details).
- It is recommended to always use the above routes to obtain the document generation links, and to use these links as is. For example, if you need to vary one of the parameters, it is better to query the Machine & Attachment Information API again to obtain the link that corresponds to this parameter, instead of directly modifying a previously obtained link.

Brochures / Datasheet links - JSON data	Comments
<pre>{ "link": "https://brochures.manitou-group.com/machine-book?machineId=52002065& locale=fr-FR&format=html&filter=.old&withDownloadLink=true" }</pre>	Link to generate the requested document

2.7. API parameters

This API allows the use of the following parameters:

Parameter name	Туре	Manda- tory	Usage
	(Se		oplicable for all endpoints JRLs" for parameter list of each endpoint)
machineId	Path	yes	Machine ID. Can be used as machineId:
	Query	see Usage	identifier values returned by GET /api/v1/machines code values returned by GET /api/v1/machines /api/v1/attachments/{attachmentId}/machines Query parameter: is required to get a Machine book
attachmentId	Path	yes	Attachment ID. Can be used as attachmentId:
	Query	no	 identifier values returned by GET /api/v1/attachments code values returned by GET /api/v1/attachments /api/v1/machines/{machineId}/attachments
locale	Query	no	Brochures, datasheets, and name and label values in JSON data are returned in the requested locale, and localized assets groups are returned only if the requested locale is available for this group. The code values returned by GET /api/v1/settings/locales can be used as locale parameters: they are composed of the ISO code of the language followed by the ISO2 code of the country (fr-FR, de-DE, de-AT,). If no locale is requested, en-US is applied (except for assets). Example: GET /api/v1/markets?locale=it-IT Result: ["code": "AGRI", "label": "Agricoltura" },]



Parameter name	Туре	Manda- tory	Usage
unit	Query	no	Whether to display measurement data in imperial (imperial), metric (metric), or both measurement systems (all - not applicable for Machine books), whether in brochures, datasheets or JSON data. Notice that in JSON data, the raw value is always returned in the base measurement system. If no unit is requested, all is applied if available, metric otherwise. Example: GET /api/v1/machines?q=MRT&unit=imperial Result: [] "minimalAttributes": ["code": "max_lifting_height", "value": { "display": { "imperial": "51 ft 10 in" }, "data": { "raw": { "unit": "METER", "amount": "15.8000" }, "imperial": { "unit": "in", "amount": "622.047244094488188976375" } } } []



Parameter name	Туре	Manda- tory		Usaç	је	
country / allowOld / isOld	Query	no	When a specific country is requested with the country parameter, the API returns only products that are or were available in that country, depending on the two other parameters. • only products currently available: when allowOld=0, or when allowOld=1 and isOld=0 • both products currently and no longer available: when allowOld=1 and isOld=1 and isOld is omitted • only products no longer available: when allowOld=1 and isOld=1 (uncommon usage of the API) Note: Except for the /brochures endpoints, the country parameter supports a comma-separated list of values, to get products relative to an area (e.g. country=ES, PT). When no country is requested, the API applies the other parameters considering a product is old when it was available in a country but it is no longer available in that country (the product is "old somewhere"). So the API returns • only products not old somewhere: when allowOld=0, or when allowOld=1 and isOld=0 • all products: when allowOld=1 and isOld is omitted • only products old somewhere: when allowOld=1 and isOld=1 Values which can be used are: • 0 or 1 for allowOld and isOld parameters • the iso2 country code for the country parameter (US, GB, FR, IT,) The following chart shows in parentheses the default value used by the API for each parameter, and when the parameter can be set set or not x.			
			URL	country	allowOld	isOld
			Get all machines	() 🕲	(0)	() 🕲
			Get attachments of a machine	()	(0) ×	() ×
			Get machine by ID	()	(1) ×	() ×
			Get all attachments	()	(0)	()
			Get compatible machines of an attachment	()×	(0) ×	() ×
			For brochures, allow01 filter parameter: see			
			Example: GET /api/v1/machines?country=FR Result: the API returns only machines currently available in France.			



Parameter name	Туре	Manda- tory		Usage		
category / machineCategory / attachmentCategory	Query	no	When using category parameters, the API only returns products from at least one of the requested categories (or subcategories), whether in JSON data or in brochures. Values which can be used are: • code returned by GET /api/v1/machines/_categories for the categories of machines • code returned by GET /api/v1/attachments/_categories for the categories of attachments Depending on the URL, a comma-separated list of category codes can be requested, or a unique code.			n JSON data or ies for the ategories for
			URL	parameter	categories of	code / list
				•	machines / att.	parameter
			Get all machines Get all	category	machines	list
			attachments	category	attachments	list
	0		F103F2005_compa Result: the API retu "Compact skid loade	rns only machines from rs" categories (and their	the "Backhoe loar r subcategories).	aders" and the
brand	Query	no	attachments) of at le in brochures. Can be used as bra • code values return	ned by GET /api/v1/ RL, a comma-separated	d brands, whethe	r in JSON data or
			URL	brand paran applied or		code / list parameter
			Get all machine			list
			Get all attachmer	nts attachme	ents	list
				hines?brand=Manit		
market	Query	no	or attachments) of at data or in brochures. Can be used as mar • code values return	ket: ned by GET /api/v1/ RL, a comma-separated	sted markets, who	ether in JSON
			URL	market para		code / list
			Get all machine	applied or machine		oarameter list
			Get assets of a mad			list
			Get all attachmer			list
			Get assets of ar			list
				chines?market=CONS		try markets.



Type	Manda- tory		Usage		
Query	no	When using the application parameter, the API only returns products that enable the requested application, as well as products without any specific application, whether in JSON data or in brochures. Can be used as application: code values returned by GET /api/v1/applications For this parameter, only a unique code can be requested.			
		LIDI	application parameter is	code / list	1
		URL	applied on	parameter	
		Get all machines	machines	code	
		Get all attachments	attachments	code	
		Result : the API returns a as well as attachments wi	ttachments where one of the application.	olications is to di	lig,
Applicable for the GET /api/v1/machines and the GET /api/v1/attachments URLs					
Query	no	 (only applicable on the GET /api/v1/machines URL) To filter the list of machines returned by the API. isOxygen: whether the machine has the Low emission label (1) or not (0); omitting this parameter will return all machines, whether with Low emission label or not isNew: whether the machine is new (1) or not (0); omitting this parameter will return all machines, whether new or not 			
Query	no	To filter the list of products returned by the API : ${\bf q}$ value is the product name (or partial name) to search (case and space unsensitive). <u>Example :</u> GET /api/v1/machines?q=2260 Result : machines returned by the API are "MRT 2260", "MRT 2260 e" and "MRT-X 2260".			
Query	no	Whether to use rich facet payloads with code, label and counts for each facet (1), or only result counts (0 or omitted). Example: GET /api/v1/machines?q=2260&richFacets=1 Result: [] "facets": { "market": { "AGRI": { "count": 0, "label": "Agriculture" }, []			
	Query le for the G Query Query	Query no Page Page	Query No When using the application, whether in JS Can be used as application, whether in JS Can be used as application C	Query No	Query no When using the application parameter, the API only returns products enable the requested application, as well as products without any specific application, whether in JSON data or in brochures. Can be used as application: • code values returned by GET /api/v1/applications For this parameter, only a unique code can be requested. URL application parameter is code / list applied on Get all machines machines code Example: GET /api/v1/attachments attachments code Example: GET /api/v1/attachments attachments where one of the applications is to do as well as attachments without any specific applications is to do as well as attachments without any specific applications is to do as well as attachments without any specific applications is to do as well as attachments without any specific applications is to do as well as attachments without any specific applications is to do as well as attachments without any specific applications is to do as well as attachments without any specific applications is to do as well as attachments without any specific applications is to do as well as attachments where one of the applications is to do as well as attachments where one of the applications is to do as well as attachments where one of the applications is to do as well as attachments where one of the applications is to do as well as attachments where one of the applications is to do as well as attachments where one of the applications is to do as well as attachments where one of the applications is to do as well as attachments where one of the applications is to do as well as attachments where one of the applications is to do as well as attachments where one of the applications is to do as well as attachments where one of the applications is to do as well as attachments where one of the applications is to do as well as attachments without any specific applications. Query no To filter the list of products returned by the API: q value is the product had (or partial name) to search (case and space unsensiti

 $\textbf{Applicable for the $\tt GET /api/v1/machines/\{machineId\}$ and the $\tt GET /api/v1/attachments/\{attachmentId\}$ URLs }$



Parameter name	Туре	Manda- tory	Us	age
fields	Query	no	s(-) &locale=fr-FR Result: { "name": "Godet 4 en 1", "identifier": "bucket_4_in "preview":	identifier and name. To get only value (e.g. "-"). e first level and nested fields of iants (attributes) "). f. just use "variants". To get only ants (-) ". in_1?fields=preview, variant in_1", c.com/tessa/499409?channel=me i3vo", i5oL / 2300"
		Applica	ble for datasheet and brochures	
filter	Query	no	(only applicable for brochures) filter expression sets the behavior regarding old products (machines or attachments). The expression must follow the repeating pattern <symbol><key> where supported symbols are '.' (include), '-' (exclude), and '-' (only/must-match), and the supported key is old (other keys may be added in future versions of the api). For missing keys, the default value is '-<missing_key>'. Like the allowOld and isOld parameters, the old filter is linked with the country parameter, considering that: • old is equivalent to allowOld=1 • -old is equivalent to allowOld=0 • ~old is equivalent to allowOld=1&isOld=1 (see country / allowOld / isOld parameters for more details) The following chart shows for each filter the filtered products, depending on the brochure.</missing_key></key></symbol>	
			Brochure Machine Book	old is applied on Machine (no attachments)
			iviacilifie book	iviacinne (no attachments)
format	Query	no	Output format (html or pdf). Omitting this parameter will generate an html document.	
watermark	Query	no	Whether to include an environment watermark (omitted or 1) or not (0). No watermark can be included in the production environment.	
forceDownload	Query	no	Whether to force generated PDF to be	downloaded (omitted or 1) or not (0).

Page 42 / 56



Parameter name	Туре	Manda- tory	Usage
withDownloadLink	Query	no	Whether to include a link to download the document as a PDF (1) or not (omitted or 0).

Please note that the filter parameters can be combined one with another, so one can retrieve all the machines of a given brand and for a given market, for example.

3. Understand the technical Machine & Attachment Information API design

3.1. Onboarding & Security through API manager



The base url to access data is:

https://api.manitou-group.com/marketing/

Here is a summary of the steps before calling APIs:

- 1. To start the integration, the IT Developer must ask the MANITOU client (dealer in most cases) to create a service account.
- 2. When first connecting to the MANITOU Group API Store with success, the user agrees to the terms of use proposed by MANITOU Group. This API is made available free of charge according to the terms of use proposed by MANITOU group, including versioning.
- 3. The user **must be authenticated** when performing a call to data APIs.

Parameter name	Туре	Manda- tory	Usage
Ocp-Apim-Subscriptio	Header	yes	Customer subscription key (primary or secondary)

3.2. Dynamic attributes, how does it work?



As illustrated in the "In details" section, the API is not based on a semantically rich JSON schema but on an attribute catalog. MANITOU made this "dynamic API" design choice in order to respond quickly to changes in its products and avoid having to publish new API versions each time.

Each product (machine, attachment) is accessible as a resource with its unique identifier and with an attributes catalog. When the value of these attributes changes, the API dynamically reflects the changes, but sometimes structural modifications are necessary (related to internal developments at MANITOU) such as adding, modifying, deleting attributes or attribute options...

Page 43 / 56



3.3. Best practices in terms of development strategy



Changes made to products impact the API's JSON payload, and it is important to distinguish between two types of changes (**Non-breaking changes** and **Breaking changes**).

Non-breaking changes : Any non-breaking changes made to our product will be communicated in the API Store and in a newsletter, indicating the date of application according to the column "Associated communication". See below.

	Non-breaking changes								
Use case	Type of change	Associated communication	Remark						
	Modifying values in a product by a MANITOU Data steward At the product level, MANITOU reserves the right to modify the value of a select or multi-select attribute (correction, additional information, product development, etc.). This refers to the life of the data without explicit communication.								
1	Changing the label of an attribute	Yes	Non-structural evolution						
2	Change the value of an attribute	No	Normal product life cycle						
3	Delete the value of an attribute	No	Normal product life cycle						
4	Modifying a product attribute option (from existing options)	No	Normal product life cycle						
	Structural modifications	of the data model							
5	Creating a new attribute	Yes	Structural evolution						
6	Changing the label of an attribute option	No	Structural evolution						
7	Changing the order of attributes	No	Normal product life cycle						
8	Deleting an empty attribute group	No	Only for internal, no impact						
9	Add a product compatibility	No	Normal product life cycle						
10	Adding a new category to the tree structure and adding new products	Yes	Normal product life cycle						
11	Modifying the label of an existing category	Yes	Structural evolution						

Below are some additional details related to certain use cases.

Use case 1: Changing the label of an attribute

An attribute is a code, a label, and a value and an attribute label may change (internal developments at MANITOU). It is important to integrate attribute codes rather than labels, or to provide a response in the event of a value change to avoid disrupting the display of data on your website..



Please note that when customizing the label, you must use the code to assign it a new label value, and never test the value of the attribute label.

Use case 4: Modifying a product attribute option (from existing options)

For business needs and data quality improvement, attribute options can be modified (addition, deletion, data split). These modifications must be managed dynamically on a product page.

Please note: avoid treating these options as hard filters in the development strategy; instead, use these lists of values dynamically.

Use case 5 : Creating a new attribute

If a new attribute is made available, you will be informed in the 'News' section of the API Store and by email about the new features. You will have the choice to integrate it or not, until a new version is released. In the case of a new version, you will need to adapt your integration according to the changes.

Use case 7: Changing the order of attributes

The order in which attributes appear in the payload is not fixed and may change. If you wish to display the attributes in a specific order, this development is your responsibility. (This refers to the life of the data without explicit communication.)

Breaking changes:

A **Breaking change** is any change that impacts the consumer and potentially requires them to make changes related to the development of their site (site down, loss of key information).

Important: Any breaking changes made to our product will be **systematically** communicated in the changelog/monthly newsletter, indicating the date of application.

	Breaking changes						
Use case	Type of change	Remark					
12	Deleting a code from a list of options	Structural evolution					
13	Deleting an attribute from a range	Normal product life cycle					
14	Deleting an attribute	Normal product life cycle					
15	Merge attributes (> n attributes streamlined into 1 new attribute)	Structural evolution					
16	Changing the type of an attribute	Structural evolution					
17	Change an attribute group attribute	Normal product life cycle					
18	Make an attribute invisible	Normal product life cycle					
19	Changing a product category	Normal product life cycle					
20	Changing a product ID	Technical evolution as internal migration					

Below are some additional details related to certain use cases.



Use case 14 : Deleting an attribute

An attribute value can also be deleted. In this case, the attribute is no longer exposed in the API's JSON payload. This situation must be taken into account dynamically during the integration, considering that an attribute can disappear without generating an error.

Use case 15 : Merge attributes

Example: Power attribute (= electric or diesel or lead) >> (= electric or lithium electric or diesel or lead) --> Selection of all previous ME machines, now ME under electric / ME LIFT under lithium electric. If power is a filter, then the addition of Lithium Electric must be automatically displayed as a new filter criterion without any changes in terms of development.

Use case 16: Changing the type of an attribute

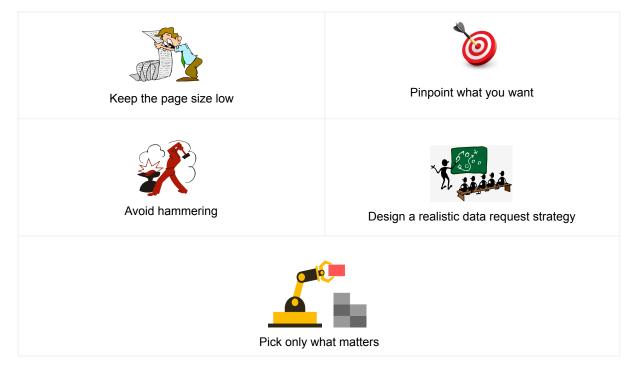
Use case 20: Changing a product ID

This change can be a problem if you use this information to filter a specific list of products. It is preferable not to rely on this information from a product filtering perspective.

In summary: As long as an attribute is not hard-coded, this breaking change should not impact the functioning of your website.

3.3. Best practices in terms of Query Strategy

When you call the endpoints of Machine & Attachment Information API, remember to keep an eye on these 5 best practices:



To use the API optimally, we recommend you the following rules:

- quota: N/A for the moment
- right limit: N/A for the moment

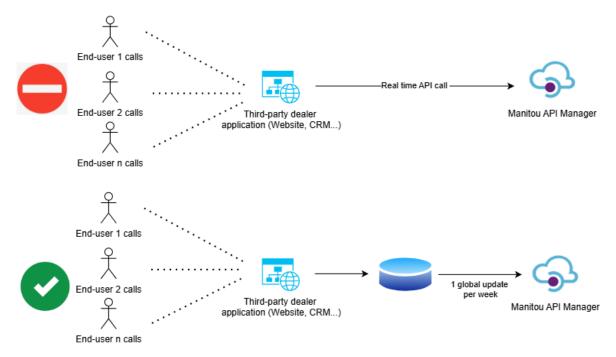


If you do not follow these rules, we may have to change them by introducing quotas.

3.4. Best practices in terms of Data Hosting

We recommend using an intermediate database that you feed from the MANITOU APIs, and it is your application (Dealer website, CRM, etc.) that queries this database with each end-user call in order to avoid APIs calls each time an end-user visits the dealer's website

We recommend updating your database weekly. This is sufficient to maintain an up-to-date product base.



Third-party dealer architecture



3.4. API error codes

Code	Response	Description
400	Bad Request	Bad unit parameter
401	Unauthorized	You have to provide a valid Api Key or token
403	Forbidden	Bad credentials, please contact dev team
404	Not Found	Product (machine or attachment) not found
429	Too many requests	Quota exceeded, please contact



	dev team!

Code 200: OK is returned for successful calls

3.5. Customer support

Customer support to operate the service:

If you encounter an issue not listed here, you can use our ASSIST ticketing tool to submit a request. Only authorized customers, i.e., those with a contract with MANITOU group, have access to ASSIST.

A specific workflow has been set up to respond to these requests. These requests will be handled by the dedicated API team.

This ASSIST customer support is available for API registration and tracking in English and French. Opening hours: French time UTC/GMT+2, from 9 a.m. to 6 p.m.

4. Appendices

4.1. Country codes (ISO 3166)

Country name	Country codes - 2 figures
Andorra	AD
United Arab Emirates	AE
Afghanistan	AF
Antigua and Barbuda	AG
Anguilla	Al
Albania	AL
Armenia	AM
Angola	AO
Antarctica	AQ
Argentina	AR
American Samoa	AS
Austria	AT
Australia	AU
Aruba	AW
Åland Islands	AX
Azerbaijan	AZ
Bosnia and Herzegovina	ВА
Barbados	BB



Country name	Country codes - 2 figures
Bangladesh	BD
Belgium	BE
Burkina Faso	BF
Bulgaria	BG
Bahrain	ВН
Burundi	ВІ
Benin	BJ
Saint Barthélemy	BL
Bermuda	ВМ
Brunei Darussalam	BN
Bolivia	ВО
Bonaire Sint Eustatius and Saba	BQ (BES)
Brazil	BR
Bahamas	BS
Bhutan	ВТ
Bouvet Island	BV
Botswana	BW
Belarus	BY
Belize	BZ
Canada	CA
Cocos (Keeling) Islands	CC
Republic of the Congo	CD
Central African Republic	CF
Congo	CG
Switzerland	СН
Côte d'Ivoire	CI
Cook Islands	CK
Chile	CL
Cameroon	CM
China	CN
Colombia	СО
Costa Rica	CR
Cuba	CU
Cape Green	CV
Curaçao	CW (CUW)
Christmas Island	СХ



Country name	Country codes - 2 figures
Cyprus	CY
Czech Republic	CZ
Germany	DE
Djibouti	DJ
Denmark	DK
Dominica	DM
Dominican Republic	DO
Algeria	DZ
Ecuador	EC
Estonia	EE
Egypt	EG
Western Sahara	EH
Eritrea	ER
Spain	ES
Ethiopia	ET
Finland	FI
Fiji	FJ
Hungary	HU
Micronesia	FM
Faroe Islands	FO
France	FR
Gabon	GA
Poland	PL
Grenada	GD
Georgia	GE
French Guiana	GF
Slovakia	SK
Ghana	GH
Gibraltar	GI
Greenland	GL
Gambia	GM
Guinea	GN
Guadeloupe	GP
Equatorial Guinea	GQ
Greece	GR
South Georgia and the South Sandwich	GS



Islands GT Guam GU Guinea-Bissau GW Guyana GY Hong Kong HK Heard Island and McDonald Islands HM Honduras HN Croatia HR Haiti HT Falkland Islands FK Indonesia ID United Kingdom GB Israel IL Guernsey GG India IN British Territory of Indian Ocean IO Iraq IQ Iran IR Iceland IS Italy IT Ireland IE Jamaica JM Jordan JO Japan JP Kenya KE Kyrgyzstan KG Cambodia KH Kiribati KI Comoros KM Saint Kitts and Nevis KN Noth Korea <t< th=""><th>Country name</th><th>Country codes - 2 figures</th></t<>	Country name	Country codes - 2 figures
Guam GU Guinea-Bissau GW Guyana GY Hong Kong HK Heard Island and McDonald Islands HM Honduras HN Croatia HR Haiti HT Falkland Islands FK Indonesia ID United Kingdom GB Israel IL Guernsey GG India IN British Territory of Indian Ocean IO Iraq IQ Iran IR Iceland IS Italy IT Ireland IE Jamaica JM Jordan JO Japan JP Kenya KE Kyrgyzstan KG Cambodia KH Kiribati KI Comoros KM Saint Kitts and Nevis KN North Korea KR South Korea	Islands	
Guinea-Bissau GW Guyana GY Hong Kong HK Heard Island and McDonald Islands HM Honduras HN Croatia HR Haiti HT Falkland Islands FK Indonesia ID United Kingdom GB Israel IL Guernsey GG India IN British Territory of Indian Ocean IO Iraq IQ Iran IR Iceland IS Italy IT Ireland IE Jamaica JM Jordan JO Japan KE Kyrgyzstan KG Cambodia KH Kiribati KI Comoros KM Saint Kitts and Nevis KN North Korea KR Kuwait KW Cayman Islands	Guatemala	GT
Guyana GY Hong Kong HK Heard Island and McDonald Islands HM Honduras HN Croatia HR Haiti HT Falkland Islands FK Indonesia ID United Kingdom GB Israel IL Guernsey GG India IN British Territory of Indian Ocean IO Iraq IQ Iran IR Iceland IS Italy IT Ireland IE Jamaica JM Jordan JO Japan KE Kyrgyzstan KG Cambodia KH Kiribati KI Comoros KM Saint Kitts and Nevis North Korea KP South Korea KR Kuwait KM	Guam	GU
Hong Kong HK Heard Island and McDonald Islands HM Honduras HN Croatia HR Haiti HT Falkland Islands FK Indonesia ID United Kingdom GB Israel IL Guernsey GG India IN British Territory of Indian Ocean IO Iraq IQ Iran IR Iceland IS Italy IT Ireland IE Jamaica JM Jordan JO Japan KE Kyrgyzstan KG Cambodia KH Kiribati KI Comoros KM Saint Kitts and Nevis KN North Korea KP South Korea KR Kuwait KM Cayman Islands	Guinea-Bissau	GW
Heard Island and McDonald Islands HM Honduras HR Haiti HT Falkland Islands FK Indonesia ID United Kingdom GB Israel IL Guernsey GG India IN British Territory of Indian Ocean IO Iraq IQ Iran IR Iceland IS Italy IT Ireland IE Jamaica JM Jordan JO Japan KE Kyrgyzstan KG Cambodia KH Kiribati KI Comoros KM Saint Kitts and Nevis KN North Korea KP South Korea KR Kuwait KM Cayman Islands	Guyana	GY
Honduras HN Croatia HR Haiti HT Falkland Islands FK Indonesia ID United Kingdom GB Israel IL Guernsey GG India IN British Territory of Indian Ocean IO Iraq IQ Iran IR Iceland IS Italy IT Ireland IE Jamaica JM Jordan JO Japan KE Kyrgyzstan KG Cambodia KH Kiribati KI Comoros KM Saint Kitts and Nevis KN North Korea KR Kuwait KM Cayman Islands HR IHR IHR IHR IHR IHR IHR IHR IHR IHR	Hong Kong	HK
Croatia HR Haiti HT Falkland Islands FK Indonesia ID United Kingdom GB Israel IL Guernsey GG India IN British Territory of Indian Ocean IO Iraq IQ Iran IR Iceland IS Italy IT Ireland IE Jamaica JM Jordan JO Japan KE Kyrgyzstan KG Cambodia KH Kiribati KI Comoros KM Saint Kitts and Nevis KR Kuwait KW Cayman Islands	Heard Island and McDonald Islands	НМ
Haiti HT Falkland Islands FK Indonesia ID United Kingdom GB Israel IL Guernsey GG India IN British Territory of Indian Ocean IO Iraq IQ Iran IR Iceland IS Italy IT Ireland IE Jamaica JM Jordan JO Japan KE Kyrgyzstan KG Cambodia KH Kiribati KI Comoros KM Saint Kitts and Nevis KR Kuwait KW Cayman Islands ID ID HTT ID HTT IT Int	Honduras	HN
Falkland Islands FK Indonesia ID United Kingdom GB Israel IL Guernsey GG India IN British Territory of Indian Ocean Iraq Iran Iran Iran Ireland Italy Irt Ireland Jordan Jordan Jordan Jordan Jordan Jordan Kenya Kenya Kenya Kenya Kenya Kenya Kenya Kiribati Comoros Saint Kitts and Nevis North Korea Kuwait Kur Cayman Islands ID IL IL IC GG GG Int IL IL IC	Croatia	HR
Indonesia ID United Kingdom GB Israel IL Guernsey GG India IN British Territory of Indian Ocean IO Iraq IQ Iran IR Iceland IS Italy IT Ireland IE Jamaica JM Jordan JO Japan KE Kyrgyzstan KG Cambodia KH Kiribati KI Comoros KM Saint Kitts and Nevis KN North Korea KR Kuwait KY	Haiti	HT
United Kingdom Israel IL Guernsey GG India British Territory of Indian Ocean Iraq Iran Iran Ireland Ireland Jamaica Jo Japan Kenya Kenya Keya Keya Kiribati Comoros Saint Kitts and Nevis North Korea Ky South Korea Ky Cayman Islands IL IL GG GB IL IL GB IL IL GG GG IN IN IN IN IN IN IO IO IPA IR IR IR IR IR IR IR IR IR I	Falkland Islands	FK
Israel IL Guernsey GG India IN British Territory of Indian Ocean IO Iraq IQ Iran IR Iceland IS Italy IT Ireland IE Jamaica JM Jordan JO Japan JP Kenya KE Kyrgyzstan KG Cambodia KH Kiribati KI Comoros KM Saint Kitts and Nevis KP South Korea KR Kuwait KW Cayman Islands	Indonesia	ID
Guernsey GG India IN British Territory of Indian Ocean IO Iraq Iran IR Iceland Italy IT Ireland IE Jamaica JM Jordan JO Japan Kenya Kenya Kenya Kenya Kiribati Comoros KM Saint Kitts and Nevis North Korea Kyman Islands KY Cayman Islands IN	United Kingdom	GB
India British Territory of Indian Ocean IO Iraq Iq Iran IR Iceland Is Italy IT Ireland IE Jamaica JM Jordan JO Japan Kenya Kenya Ke Kyrgyzstan KG Cambodia KH Kiribati KI Comoros KM Saint Kitts and Nevis North Korea Ky Kuwait KW Cayman Islands	Israel	IL
British Territory of Indian Ocean IO Iraq IQ Iran IR Iceland IS Italy IT Ireland IE Jamaica JM Jordan JO Japan JP Kenya KE Kyrgyzstan KG Cambodia KH Kiribati KI Comoros KM Saint Kitts and Nevis KN North Korea KP South Korea KR Kuwait KW Cayman Islands	Guernsey	GG
Iraq IQ Iran IR Iceland IS Italy IT Ireland IE Jamaica JM Jordan JO Japan JP Kenya KE Kyrgyzstan KG Cambodia KH Kiribati KI Comoros KM Saint Kitts and Nevis KP South Korea KR Kuwait KW Cayman Islands	India	IN
Iran IR Iceland IS Italy IT Ireland IE Jamaica JM Jordan JO Japan JP Kenya KE Kyrgyzstan KG Cambodia KH Kiribati KI Comoros KM Saint Kitts and Nevis KN North Korea KP South Korea KR Kuwait KW Cayman Islands	British Territory of Indian Ocean	Ю
Iceland IS Italy IT Ireland IE Jamaica JM Jordan JO Japan JP Kenya KE Kyrgyzstan KG Cambodia KH Kiribati KI Comoros KM Saint Kitts and Nevis KN North Korea KR Kuwait KW Cayman Islands KY	Iraq	IQ
Italy IT Ireland IE Jamaica JM Jordan JO Japan JP Kenya KE Kyrgyzstan KG Cambodia KH Kiribati KI Comoros KM Saint Kitts and Nevis KN North Korea KR Kuwait KW Cayman Islands KY	Iran	IR
Ireland IE Jamaica JM Jordan JO Japan JP Kenya KE Kyrgyzstan KG Cambodia KH Kiribati KI Comoros KM Saint Kitts and Nevis KN North Korea KP South Korea KR Kuwait KW Cayman Islands KY	Iceland	IS
Jamaica JM Jordan JO Japan JP Kenya KE Kyrgyzstan KG Cambodia KH Kiribati KI Comoros KM Saint Kitts and Nevis KN North Korea KP South Korea KR Kuwait KW Cayman Islands KY	Italy	IT
Jordan JO Japan JP Kenya KE Kyrgyzstan KG Cambodia KH Kiribati KI Comoros KM Saint Kitts and Nevis KN North Korea KP South Korea KR Kuwait KW Cayman Islands	Ireland	IE
Japan JP Kenya KE Kyrgyzstan KG Cambodia KH Kiribati KI Comoros KM Saint Kitts and Nevis KN North Korea KP South Korea KR Kuwait KW Cayman Islands KE	Jamaica	JM
Kenya KE Kyrgyzstan KG Cambodia KH Kiribati KI Comoros KM Saint Kitts and Nevis KN North Korea KP South Korea KR Kuwait KW Cayman Islands KE	Jordan	JO
Kyrgyzstan KG Cambodia KH Kiribati KI Comoros KM Saint Kitts and Nevis KN North Korea KP South Korea KR Kuwait KW Cayman Islands	Japan	JP
Cambodia KH Kiribati KI Comoros KM Saint Kitts and Nevis KN North Korea KP South Korea KR Kuwait KW Cayman Islands KH	Kenya	KE
Kiribati KI Comoros KM Saint Kitts and Nevis KN North Korea KP South Korea KR Kuwait KW Cayman Islands KY	Kyrgyzstan	KG
Comoros KM Saint Kitts and Nevis KN North Korea KP South Korea KR Kuwait KW Cayman Islands KY	Cambodia	KH
Saint Kitts and Nevis KN North Korea KP South Korea KR Kuwait KW Cayman Islands	Kiribati	KI
North Korea KP South Korea KR Kuwait KW Cayman Islands KY	Comoros	KM
South Korea KR Kuwait KW Cayman Islands KY	Saint Kitts and Nevis	KN
Kuwait KW Cayman Islands KY	North Korea	KP
Cayman Islands KY	South Korea	KR
	Kuwait	KW
Kazakhstan KZ	Cayman Islands	KY
	Kazakhstan	KZ



Country name	Country codes - 2 figures
Laos	LA
Lebanon	LB
Saint Lucia	LC
Liechtenstein	LI
Sri Lanka	LK
Liberia	LR
Lesotho	LS
Lithuania	LT
Luxembourg	LU
Latvia	LV
Libyan Arab Jamahiriya	LY
Morocco	MA
Monaco	MC
Moldova	MD
Serbia and Montenegro	ME
Saint Martin (Northern Part)	MF (MAF)
Madagascar	MG
Marshall Islands	MH
North Macedonia	MK
Mali	ML
Myanmar	MM
Mongolia	MN
Macao	MO
Northern Mariana Islands	MP
Martinique	MQ
Mauritania	MR
Montserrat	MS
Malta	MT
Mauritius	MU
Maldives	MV
Malawi	MW
Mexico	MX
Malaysia	MY
Mozambique	MZ
Namibia	NA
New Caledonia	NC



Country name	Country codes - 2 figures
Niger	NE
Norfolk Island	NF
Nigeria	NG
Nicaragua	NI
Netherlands	NL
Norway	NO
Nepal	NP
Nauru	NR
Niue	NU
New Zealand	NZ
Oman	OM
Panama	PA
Peru	PE
French Polynesia	PF
Papua New Guinea	PG
Philippines	PH
Pakistan	PK
Isle of Man	IM
Saint Pierre and Miquelon	PM
Pitcairn Islands	PN
Puerto Rico	PR
Palestinian Territories occupied	PS
Portugal	PT
Palau	PW
Paraguay	PY
Qatar	QA
Reunion	RE
Romania	RO
Serbia	RS
Russia	RU
Rwanda	RW
Saudi Arabia	SA
Solomon Islands	SB
Seychelles	SC
Sudan	SD (SDN)
Sweden	SE



Country name	Country codes - 2 figures
Singapore	SG
Jersey	JE
Slovenia	SI
Svalbard and Jan Mayen	SJ
Saint Helena	SH
Sierra Leone	SL
San Marino	SM
Senegal	SN
Somalia	SO
Suriname	SR
South Sudan	SS (SSD)
São Tomé and Príncipe	ST
El Salvador	SV
Sint Maarten (southern part)	SX (SXM)
Syria	SY
Swaziland	SZ
Turks and Caicos Islands	TC
Chad	TD
French Southern and Antarctic Lands	TF
Togo	TG
Thailand	TH
Tajikistan	TJ
Tokelau	TK
Timor-Leste	TL
Turkmenistan	TM
Tunisia	TN
Tonga	ТО
Turkey	TR
Trinidad and Tobago	TT
Tuvalu	TV
Taiwan	TW
Tanzania	TZ
Ukraine	UA
Uganda	UG
United States Minor Outlying Islands	UM
United States	US



Country name	Country codes - 2 figures
Uruguay	UY
Uzbekistan	UZ
Vatican City	VA
Saint Vincent and the Grenadines	VC
Venezuela	VE
British Virgin Islands	VG
U.S. Virgin Islands	VI
Vietnam	VN
Vanuatu	VU
Wallis and Futuna	WF
Samoa	WS
Yemen	YE
Mayotte	YT
South Africa	ZA
Zambia	ZM
Zimbabwe	ZW



4.2. Language codes (ISO 639)

Language	Language code - Country code
German	de-DE
English	en-US
Spanish	es-ES
French	fr-FR
Italian	it-IT
Japanese	ja-JP
Dutch	nl-NL
Polish	pl-PL
Portuguese	pt-PT
Brasilian	pt-BR
Russian	ru-RU
Chinese	zh-CN