

coatmaster AG

coatmaster flex HTTP REST API

Samples

Get samples

Request URL

/api/v1/samples?configId={CONFIG_ID}

HTTP GET

Response

```
[{"id":268,"name":"0","isCurrent":true}]
```

Create sample

Request URL

/api/v1/samples?configId={CONFIG_ID}&sampleName={SAMPLE_NAME}

HTTP POST

Response

```
{"id":268,"name":"{SAMPLE_NAME}","isCurrent":true}
```

Remove samples

Request URL

/api/v1/samples?configId={CONFIG_ID}?sampleId={SAMPLE_ID}

HTTP DELETE

Response

200 OK

Applications

Get applications

Request URL

/api/v1/configurations

HTTP GET

Response

```
[  
  {  
    "id":337,  
    "name":"TEST-UPDATE",  
    "folderId":null,  
    "isMeasureValid":true,  
    "isReadOnly":false  
  }, ...  
]
```

Get application

Request URL

/api/v1/configurations/{ID}

HTTP GET

Response

```
{
  "id":2820,
  "templateId":-1,
  "name":"calibrationsample",
  "folderId":null,
  "flashPower":"FLASH_1",
  "thicknessBoundsGroup":{
    "warning":{
      "enabled":false,
      "lower":1.0,
      "upper":500.0
    },
    "error":{
      "enabled":false,
      "lower":1.0,
      "upper":500.0
    },
    "range":{
      "enabled":false,
      "lower":1.0,
      "upper":500.0
    }
  },
  "isMeasureValid":true,
  "referenceMeasurements":{
    "items":[
      {
        "id":2771,
        "name":"Ref29.08.19 17:18:01",
        "thickness":27.0,
        "created":"2019-08-29T15:18:01.000+0000",
        "units":"MICROMETRE"
      },
      {
```

```
"id":2772,
"name":"Ref29.08.19 17:18:13",
"thickness":56.0,
"created":"2019-08-29T15:18:13.000+0000",
"units":"MICROMETRE"
},
{
  "id":2773,
  "name":"Ref29.08.19 17:18:23",
  "thickness":81.0,
  "created":"2019-08-29T15:18:24.000+0000",
  "units":"MICROMETRE"
}
]
},
"isReadOnly":true,
"measureTime":0.1,
"coatingId":"POWDER_UNCURED",
"substrateId":"METAL",
"thicknessRange":"THICKNESS_RANGE_2",
"colourRange":"DARK"
}
```

Applications and blocks

Get applications and blocks

Request URL

/api/v1/config-sample

HTTP POST

Response

```
"configurations":[
  {
    "id":5008,
    "name":"Powder colour",
    "created":"2020-06-09T06:58:49.000+0000",
```

```
"samples":[
  {
    "id":9345,
    "name":"Blk 09.06.20 14:42:20",
    "created":"2020-06-09T08:42:22.000+0000"
  },
  {
    "id":9338,
    "name":"1",
    "created":"2020-06-09T06:58:49.000+0000"
  }
],
{
  "id":5009,
  "name":"Powder white",
  "created":"2020-06-09T06:58:49.000+0000",
  "samples":[
    {
      "id":9339,
      "name":"1",
      "created":"2020-06-09T06:58:49.000+0000"
    }
  ]
}
```

Measurements

Get measurements

Request URL

/api/v1/measurement/report

HTTP POST

```
{
  "query": {
    "configurationIds": [1, 2, 3],
    "sampleIds": [1, 2, 5],
    "minId": 999,
    "last": 100,
    "maxId": 10000,
    "minTime": "2021-02-04T09:23:30",
    "maxTime": "2021-03-05T09:23:30"
  },
}
```

All fields are optional except for configurationIds

Response

```
{
  "generatedDate": "2020-04-08T12:26:47.929+0000",
  "tuples": [
    "2820",
    "calibrationsample",
    "5599",
    "1",
    "266145",
    "2019-09-04T17:08:08",
    "158.0",
    "OK",
  ]
}
```

```
"40.656",  
"1",  
"500",  
"1",  
"500",  
"MICROMETRE"  
],  
[  
"2820",  
"calibrationsample",  
"5599",  
"1",  
"266257",  
"2019-09-25T17:11:13",  
"-.-",  
"ERROR_FIT",  
"  
"1",  
"500",  
"1",  
"500",  
"MICROMETRE"  
],  
[  
"2820",  
"calibrationsample",  
"5599",  
"1",  
"266258",  
"2019-09-25T17:19:53",
```

```
"-.-",  
"ERROR_FIT",  
"",  
"1",  
"500",  
"1",  
"500",  
"MICROMETRE"  
],  
[  
"2820",  
"calibrationsample",  
"5599",  
"1",  
"266259",  
"2019-09-25T17:22:40",  
"66.2",  
"WARNING_FIT",  
"",  
"1",  
"500",  
"1",  
"500",  
"MICROMETRE"  
]  
],  
"columnIds":[  
"application_id",  
"application_name",  
"sample_id",
```



```
"sample_name",  
"measurement_id",  
"timestamp",  
"thickness",  
"diffusivity",  
"measurement_status",  
"temperature",a  
"warning_lower",  
"warning_upper",  
"error_lower",  
"error_upper",  
"units"  
]  
}
```

coatmaster flex automation

Please contact coatmaster for the server address as it may be different.

Create automation instruction

Request URL

/api/v1/auto-config

Body:

```
{  
  configId: 123,  
  sampleId: 234  
}
```

HTTP POST

Response

HTTP 202

Reference

Authentication

All requests require a HTTP header. Requests without this header will result in an error. Please generate the API key using the Flex UI.

ApiKey-v1: <<API_KEY>>

For HTTP POST requests, please set the Content-Type header.

Content-Type: application/json

Rate limiting

Requests to the API are limited, generally speaking if the API determines that there have been too many requests, the API will respond with a HTTP code of 429

Response

429 Too Many Requests

API Endpoints

The following endpoints are used for the different Flex servers.

EU:

<https://api.coatmaster.cloud/flex-api/>

US:

<https://api-useast.coatmaster.cloud/flex-api/>

China:

<http://api.coatmaster.online:8080/flex-api/>

Local Server via WiFi

<http://10.10.0.1:9081/flex-api>

Local Server via LAN

http://192.168.10.146:9081/flex-api*

*If the static IP has been changed, the end point IP must be changed as well.