What is ticket-data.com?

1. General

During the last years, the demand for digitalization in the building materials industry (I would like to focus specifically on concrete and gravel) tremendously increased. But, what is meant with this? Simplified: producers provide delivery tickets/invoices etc. no longer printed on paper but digital (e.g. by e-mail). These digital delivery tickets will be signed on devices that are installed in the vehicles (concrete trucks, concrete pumps etc.) or in an app that is installed on a mobile device or on a pc.

So, what does the customer do with all these e-mails? How can these e-mails be archived? How is it possible to find e-mails as fast as possible when needed? Even if suppliers offer the possibility to download delivery tickets as a zip-file from a server, it still takes a high effort of time and cost to file the delivery tickets e.g. according to year and project. This type of digitalization is at the expense of the customers that purchase concrete/gravel. Not to mention, that each supplier has its own methods to provide the delivery ticket data.

The solution is ticket-data.com. Ticket-data.com provides the customers/carriers of concrete-/gravel-manufacturers the possibility to download the delivery ticket data via the **free software** "myTickets". "myTickets" can be downloaded and installed on every Windows-PC. Another advantage of myTickets is that delivery tickets will be filed automatically according to a predefined logic (year/project).

2. What are the requirements?

Every concrete-/gravel-manufacturer needs to sign up - at no charge - on ticket-data.com and saves the "URL" (computer address) from where delivery tickets can be downloaded.

Each customer/carrier signs up on ticket-data.com too and chooses the manufacturers from which he wants to receive delivery tickets (of course only those manufacturers can be chosen that provide this service and that are signed up on ticket-data.com).

Please note: no delivery ticket data is saved on ticket-data.com.

Several concrete-/gravel-manufacturers already have signed up on ticket-data.com. If you are a customer of these suppliers, you can start immediately. Sign up and find out which manufacturers provide this interface.

3. How to sign up for ticket-data.com?

Click "Register" on ticket-data.com. Fill in the information in the fields and enter the antispam-code (if the code is not clearly readable click on "New code" to generate a new code). Please note: You need to enter the letters in upper and lower case; you do not need to enter blank spaces. When you finished your input, click on "Register".

As soon as you have clicked "Register" the activation form opens. Do not close this form!! Wait until you have received an e-mail of ticket-data.com. This e-mail contains the activation-code. Fill in the activation code in the activation form and click on the activation button to complete your registration.

Information for suppliers: If you sign up as "Supplier" on ticket-data.com, you will receive an e-mail with your "USC" (unique supplier code). The "USC" contains the country code (always 2 digits and a

6-digit numeric code). We recommend printing this USC together with the delivery ticket number within a 2D barcode on each delivery ticket.

4. How to download delivery tickets from myTickets?
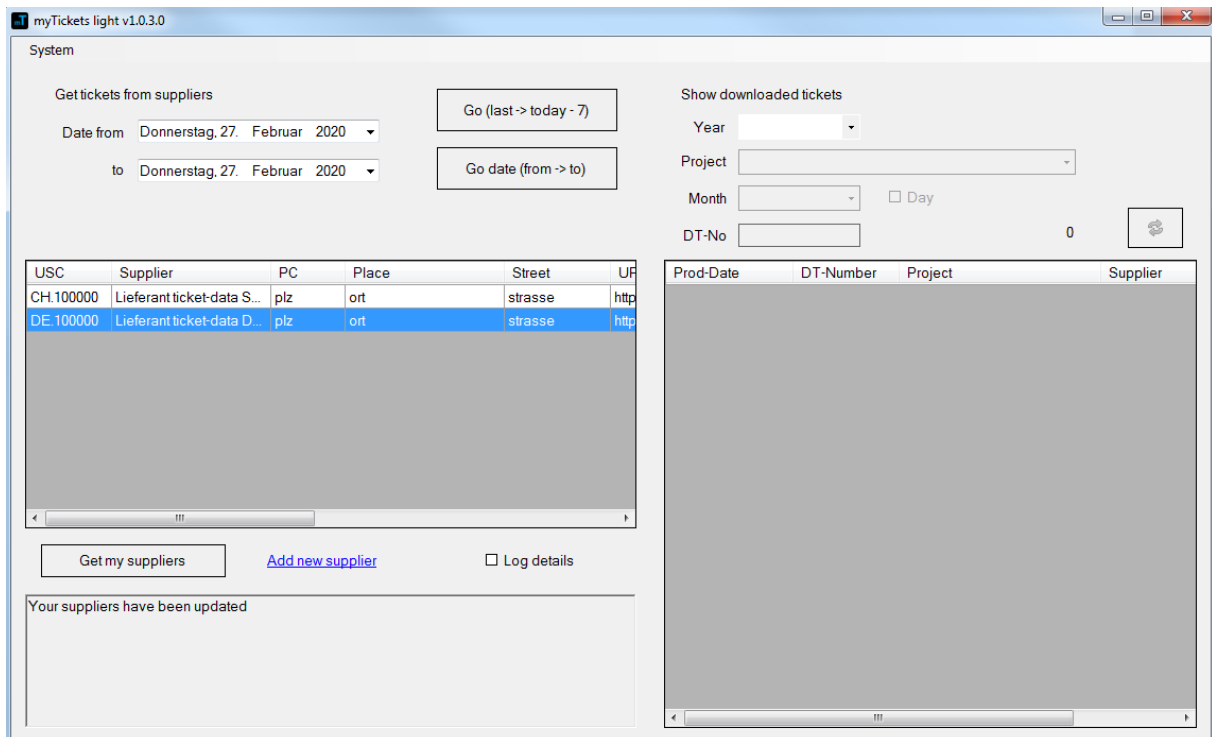
Download "myTickets" from this website (you will find the download link in "My Account" on ticket-data.com). You can either download a zip-file or use the Microsoft installation software (install now).

Installation with the zip-file: unpack zip-file and start mytickets.exe

Please note: When using Windows 10, you first need to unlock myTicket.exe (click right on myTicket.exe → Properties).

Install via Microsoft installation program: start setup.exe (after downloading the file can be found in the download folder on your PC.

Double-click on the program to start the software.

If you start myTickets for the first time, the settings will open automatically. Enter your user name and password (E-Mail, Password) with which you registered on ticket-data.com and choose the folder in which the delivery tickets shall be saved. Within this folder, the structure is pre-defined. The sub-folders will be created by myTickets.

Folder structure: <folder that you chose in settings>**\year\project (construction site)**

Save the settings and click on "**Get my suppliers**".

Click right on each of your suppliers, choose "Access data for this supplier" then fill in the access data that you have received from your supplier.

If you did not receive access data from your supplier, call the telephone number provided on ticket-data.com or send an e-mail to your supplier. Some suppliers will send you the access data automatically by e-mail after signing in as customer.

After entering your supplier credentials, you can download delivery tickets from the server of your supplier.

5. You want to test?

Go to: https://ticket-data.com

1. Login on ticket-data.com with your account
2. Click on "**My suppliers**" (then search in the box "**All available suppliers**" the supplier "ticket-data.com" (type in "ticket" in the search field).
3. Click on the line of this supplier, then click on "**Assign selected**".

In "myTickets"

1. Click on "System", then choose "Settings".
2. E-Mail: the e-mail address you used for signing up on ticket-data.com
3. Password: the password that you chose for on ticket-data.com
4. Save
5. Click on "Get my suppliers".
6. Shortly after, the supplier AT.100000 / ticket-data…will be shown in the left field.
7. Click right on this supplier and select "Access data for this supplier".
8. Use 1 as user name and password, then click on "Save".
9. Now click on "Go date (from -> to)"
10. A test delivery ticket will be received

Show saved delivery tickets in "myTickets"

1. Choose the **year**
2. Choose the **project**
3. Click on "**Load**" (button with two green arrows)
4. One delivery ticket should be found
5. Click right on this delivery ticket and choose "**Delivery ticket document**" to open the PDF (the PDF will only be opened if there is a PDF reader installed on your PC).
6. If you choose "**delivery ticket meta data**" the data contend of the delivery ticket

All functions that "myTickets" contain can be implemented easily in your ERP software (for more information about the implementation see chapter 6)

6. What does the concrete-/gravel-manufacturer has to provide, so you can download your delivery ticket data with "myTickets"? (Only for suppliers/software developers)

The supplier needs a REST-Server that can handle the following requests:

Queries interface version

GET https://<baseurl>/getDelTicket?command=getVersion

➔ Response JSON-object with version of the interface
   {status:'0' , msg:'' , version : <version number}

Queries number of delivery tickets for time range

GET
https://<baseurl>/getDelTicket?user=&password=&command=getCount&type=2&fromDate=2019-11-01T00:00:00&toDate=2019-11-03T00:00:00

type=2 (customer delivery tickets)

type=3 (carrier delivery tickets)

type=4 (trader delivery tickets)

➔ Response JSON-object with count of delivery tickets within this time range
   {status:'0' , msg:'' , type:'2' , count : '125'}

Query for specified delivery tickets from start data

GET
https://<baseurl>/getDelTicket?user=&password=&command=getData&type=2&fromDate=2019-11-01T00:00:00&skip=0&take=1

type=2 (customer delivery tickets)

type=3 (carrier delivery tickets)

type=4 (trader delivery tickets)

➔ Response JSON-object with PDF + delivery ticket meta data

The response must contain the PDF, the delivery ticket meta data (processible digital data of the delivery ticket) and – at least – the following fields with the pre-defined names.

```
[
  {
      'status' :' 0',
      'msg' : '',
      'dtId' : 'AT.123456.12000995789',
      'dtNo' : '12000',
```

‘dtType‘ : ‘2‘,
‘dtSupplDate‘ : ‘2019-12-30T13:34:17‘,
‘dtProject‘ : ‘my site‘,
‘dtcustorderno ‘ : ‘47B4326 ‘,
‘dtCustRemark‘:‘waiting time is not paid‘,
‘dtCustRemarkIntern‘:‘wrong calculation for concrete order‘,
‘dtSigned‘:true,
‘dtFileType‘ : ‘pdf‘,
‘dtFile‘ : pdf-data base64,
‘dtData‘ :
                {
                        ‘field1‘ : ‘value1‘,

                        ‘field2‘ : ‘value2‘

                        ………..
                }
    }
]

Specification Layer1 v1.0:

Data format delivery ticket: JSON Array
Data encoding: UTF-8

status, msg: ‘0‘ -> no error, not ‘0‘ -> msg includes error description

dtId: unique delivery ticket identification e.g. ‘AT.123456.12000995789‘
Par1(‘AT‘) = country code (2 digits Alpha)
Par2(‘123456‘)=USC-Code from ticket-data.com (max. 6 digits numeric)
Par3 = (‘12000995789‘) Unique delivery ticket-ID (max. 54 digits alphanumeric)
These 3 parameters need to be separated by a dot (‘.‘) each.
Max. length of "dtId" is 64 digits. Everything else will be cut off.

dtNo: (‘12345678‘) Delivery Ticket No (max. 16 digits alphanumeric)

dtType: (‘2‘) Delivery Ticket Type (‘2‘=customer, ‘3‘=carrier, ‘4‘=trader)

dtSupplDate : (‘2019-12-30T13:34:17‘) production date

dtProject: (‘my project‘) the project description" (64 digits are used)

dtcustorderno: (‘47B4326‘) Order Number Customer (max. 100 digits alphanumeric)

dtCustRemark: (‘waiting time is not paid‘) internal customer remark" (200 digits are used)

dtCustRemarkIntern: (‘wrong calculation for concrete order‘) internal customer remark"
(200 digits are used)

dtSigned: („true") delivery ticket has been signed by the customer

dtFileType: ('pdf') file type of dtFile (max. 8 digits alphanum.) – currently only ‚pdf'.

dtFile: delivery ticket image as PDF-File !!!base64 encoded!!!

dtData: {…} meta data of delivery ticket embedded in JSON Object

‚ticket-data.com' only specifies Layer 1 (Container with delivery ticket image) for the delivery ticket data set. Layer 2 (content of 'dtData' – digital delivery ticket data) depends on the producer (this data has to be embedded in a JSON object.

7. Recommendations for Layer 2 v1.0 (dtData) for concrete delivery tickets

Delivery Ticket Header					
No	Field	Type	Length	Description	
1	siteremark	String	200	Delivery Ticket Remark of Customer	Cannot be edited by supplier
2	dtdriverremark	String	200	Driver remark for the delivery ticket	
3	custremark	String	200	Internal customer remark for the delivery ticket	Cannot be changed by the supplier
4	dtsource	Int		Delivery ticket type	0: outgoing delivery 1: incoming delivery
5	proddate	DateTime		Delivery Date	
6	dtno	Int64		Delivery Ticket Number	
7	dtbarcode	String	100	Unique Delivery Ticket Barcode for this Delivery Ticket	
8	clientdesc	String	200	Supplier Name	
9	plantno	Int32		Supply Plant No --> Plant No	
10	plantdesc	String	200	Supply Plant Name	
11	custno	String	20	Customer Number at Supplier	
12	custtitle	String	100	Customer Address Number	
13	custname	String	100	Customer Address Name	
14	custname1	String	100	Customer Address Name Addition 1	
15	custname2	String	100	Customer Address Name Addition 2	
16	custstreet	String	100	Customer Address Street	
17	custcountrycode	String	20	Customer Address Countrycode	
18	custpostcode	String	20	Customer Address Postcode	
19	custcity	String	100	Customer Address City	
20	orderdate	DateTime		Order Date	
21	orderer	String	100	Orderer Name	
22	custorderno	String	100	Order Number Customer	
23	orderid	Int64		Supplier orderid	
24	custcostno	String	100	Order Customer Cost Center	
25	dttype	Int		Order Delivery Ticket Type	0: Standard 1: Customer specific
26	cashpayer	Boolean		Cash Payer	
27	invoiceid	Int64		Cash Payment Receipt No	

28	orderbarcode	String	200	Order Barcode Customer	
29	delno	String	20	Construction Site No. at Supplier	
30	delname	String	100	Site Name	
31	delname1	String	100	Site Name 1	
32	delname2	String	100	Site Name 2	
33	delstreet	String	100	Site Street	
34	delcountrycode	String	20	Site Countrycode	
35	delpostcode	String	20	Site Postcode	
36	delcity	String	100	Site City	
37	sitesec	String	100	Site Section	
38	part	String	100	Site Part	
39	zoneno	Int32		Zone	Available only in the customer delivery ticket
40	carrierzone	Int32		Carrier zone	Available only in the carrier delivery ticket
41	deliverytype	Int32		delivered / picked up 0 = delivered 1 = picked up	
42	tradno	String	20	Trader No	
43	tradtitle	String	100	Trader Address Title	
44	tradname	String	100	Trader Address Name	
45	tradname1	String	100	Trader Address Name Addition 1	
46	tradname2	String	100	Trader Address Name Addition 2	
47	tradstreet	String	100	Trader Address Street	
48	tradcountrycode	String	20	Trader Address Countrycode	
49	tradpostcode	String	20	Trader Address Postcode	
50	tradcity	String	100	Trader Address City	
51	carrierno	String	20	Carrier No	
52	carriername	String	100	Carrier Name	
53	vehno	String	20	Vehicle No	
54	vehlicpl	String	20	Vehicle License Plate	
55	vehdesc	String	100	Vehicle Description	
56	vehtype	String	10	Vehicle type ordered	Available only in the customer delivery ticket
57	variant	String	10	Vehicle Type	Available only in the carrier delivery ticket
58	driverno	String	20	Driver No	
59	drivername	String	100	Driver Name	
60	dtremark	String	200	Delivery Ticket Remark for Customer	
61	loadstart	DateTime		Time Loading Start	
62	sitearrival	DateTime		Time Arrival at Site	
63	dischstart	DateTime		Time Discharge Start	
64	dischend	DateTime		Time Discharge End	
65	siteleave	DateTime		Time Departure from Site	

Delivery Ticket Detail (Array)

No	Field	Type	Lenght	Description	
1	productno	String	20	Product No	
2	description	String	360	Product Description	
3	billqty	Double		Quantity m3/tons/pieces	

4	totspecqty	Double		Order Quantity Set	
5	totprodqty	Double		Order Quantity already delivered	
6	priceunit	String	10	Units m³/tons/pieces	