

USER MANUAL

Labeling Software

LABEL-2020



- Barcodes
- Numbering functionality
- Graphics
- Automatic cutting device
- Connection to electronic balances
- Connection to other applications

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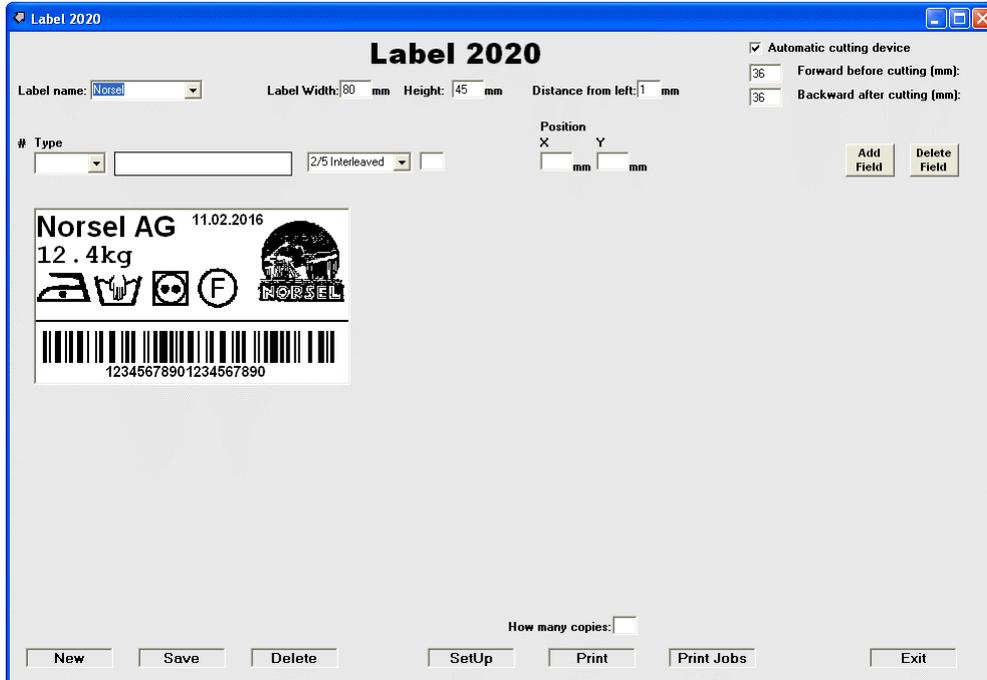
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Software Description

1. General

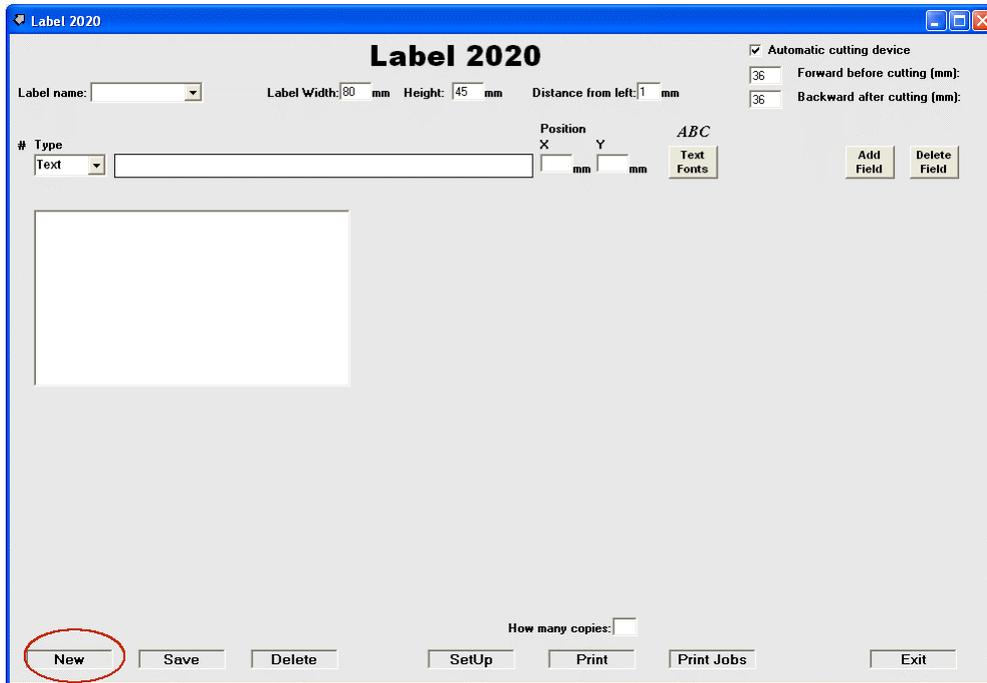
When the program is started, the last label, that was worked on, is shown.
If it is started the first time, the Norsel demo label is loaded.



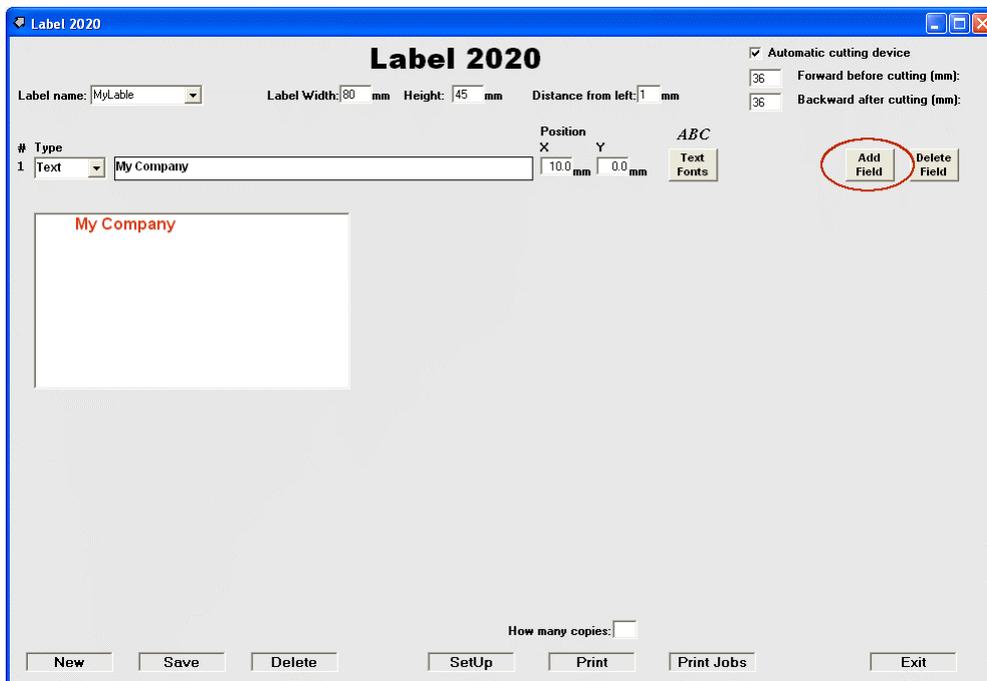
2. Printing Text , Barcodes , Graphics / Logos, Weight

Make a new Label

Click on [New] to begin with a new Label



Choose a new Label name , type in a text and define the X- Y- position of this text.
Then click [Add Field]

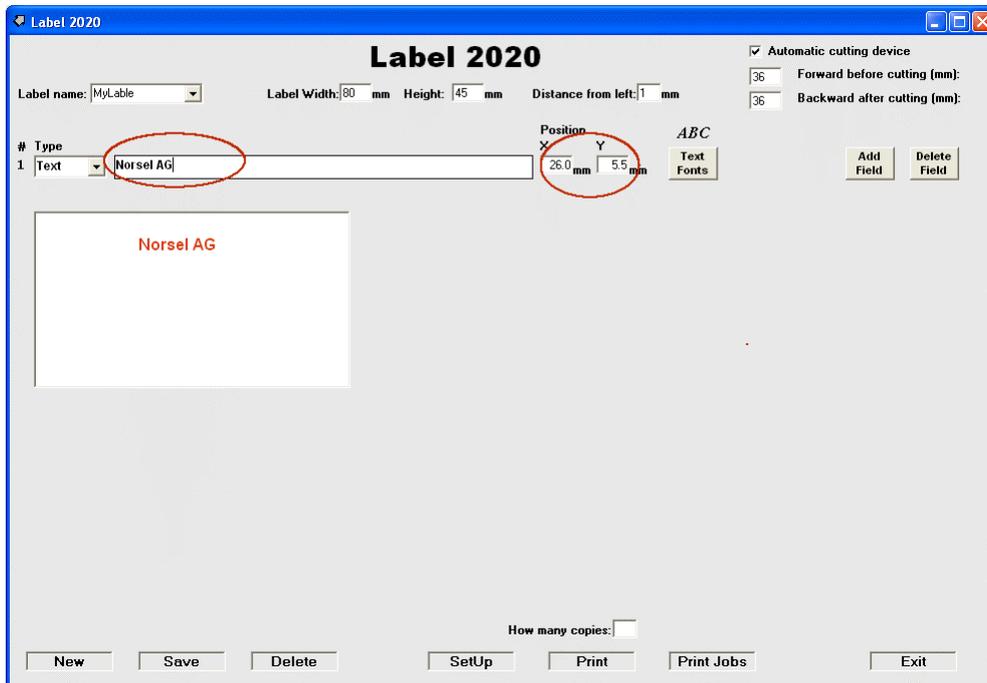


The text 'My Company' is shown on the label.
The red color indicates that this text is currently edited.

If you want to change the text, simply change it in the Field above the Label.

Move the Text with the Mouse

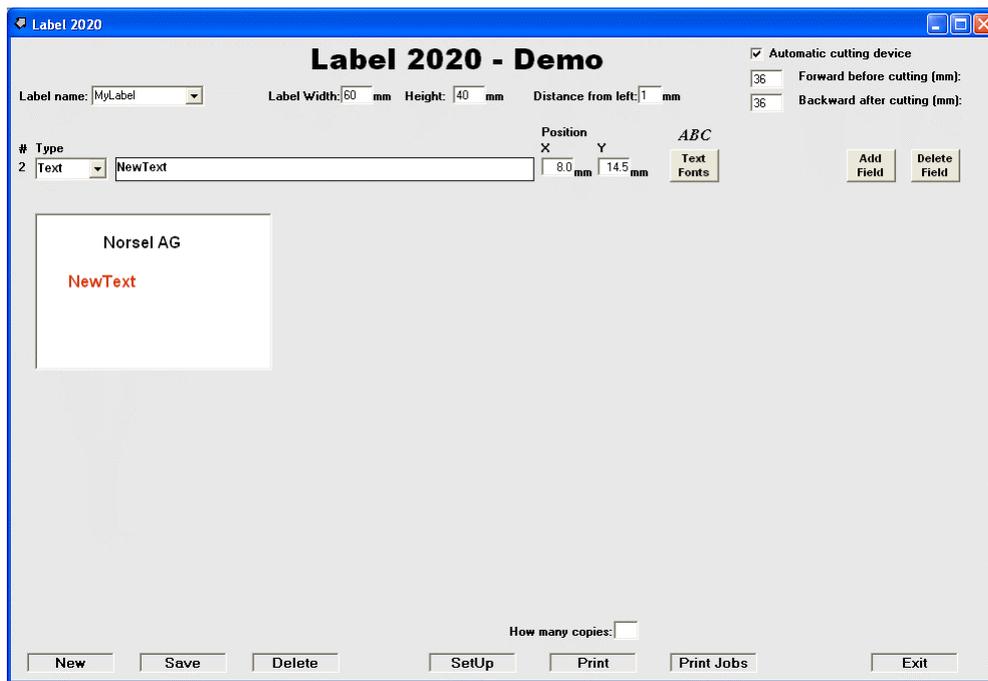
Click onto the Text on the Label and keep the left Mouse Button pressed. Now you can move the Text until you release the left Mouse Button. While moving, the X- and Y-Position Field are updated.



Add Field with the Mouse

An other way to add a new Field onto the Label is done with the Mouse.

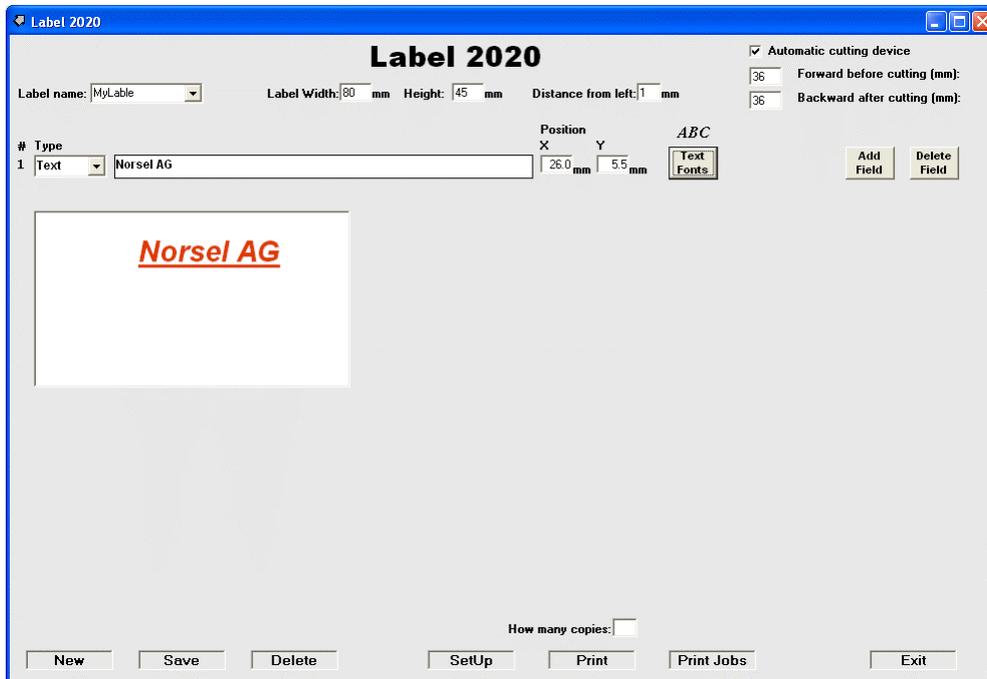
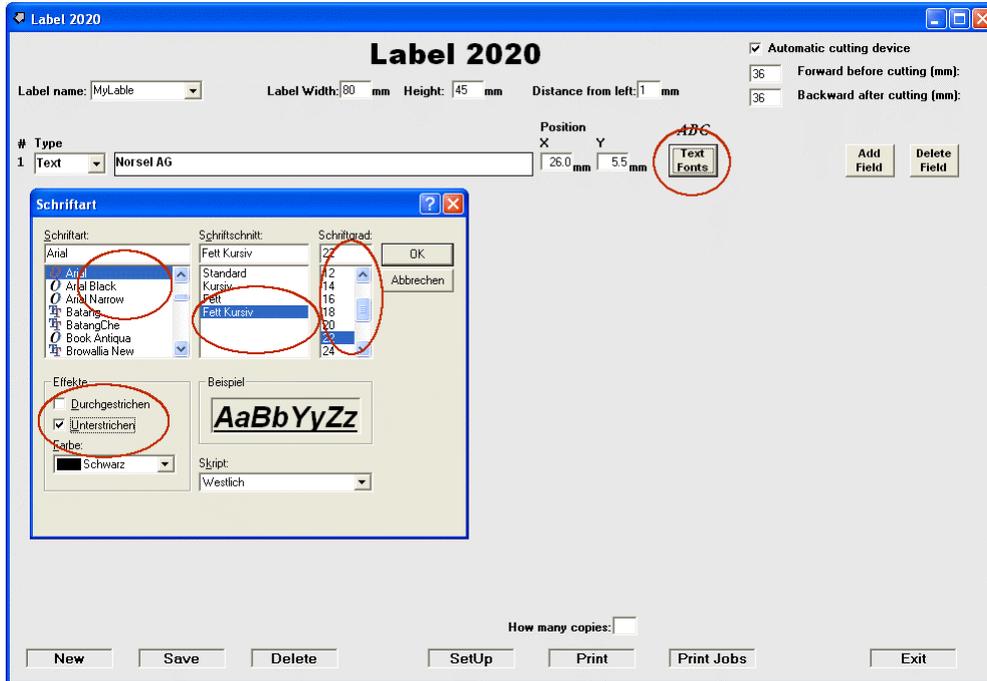
Move the Mouse to where you want to have the next Text, Barcode, Image, etc. Then double-click on this position.



The standard 'NewText' is inserted at this position and can then be changed as you like.

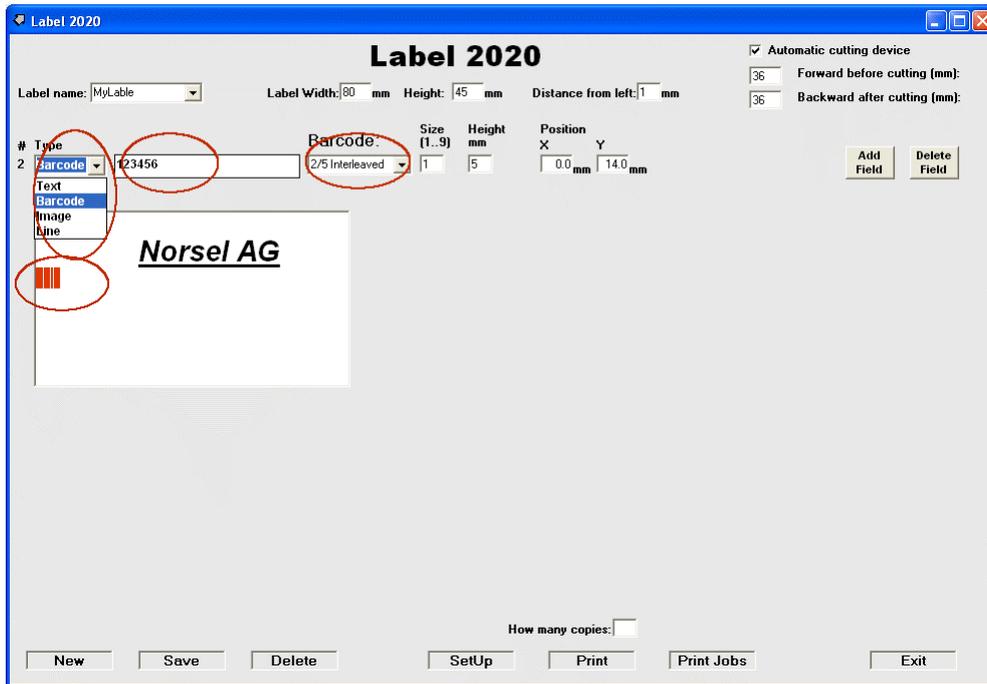
Change the Size and Font of the Text

Click on [Text Fonts] and then select the size and Font that you want.

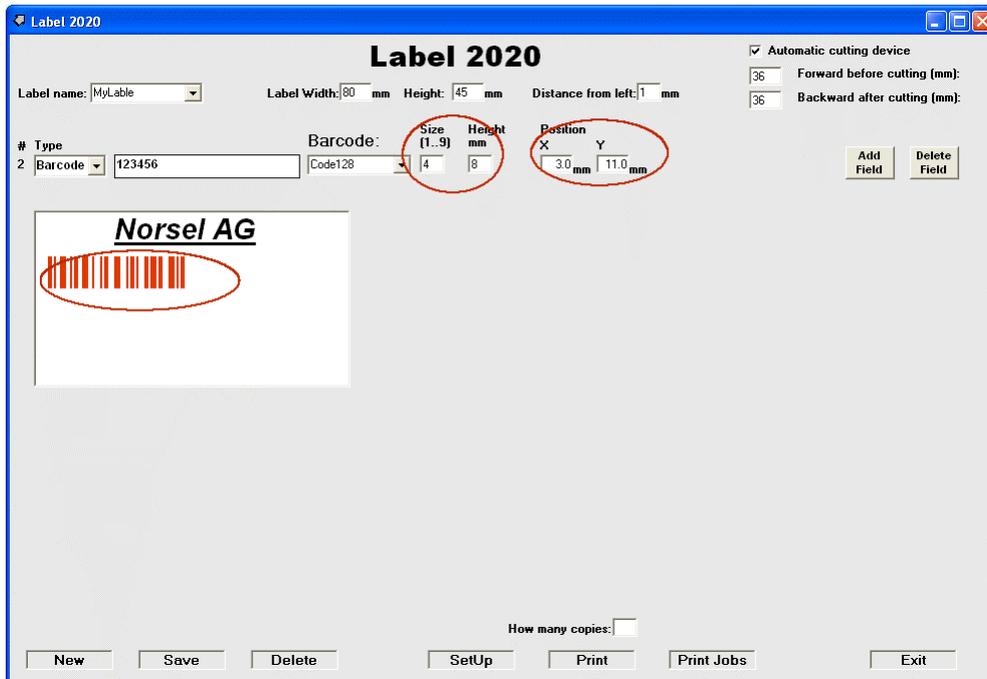


Add a Barcode

Click on [Add Field] and then click on the [Type] Field and select [Barcode]
Type in the Barcode-No into the Text Field and select the Barcode Type you want.



Change the Size and Height of the Barcode.
Move the Barcode to the right Position with the Mouse or by typing in the X- Y-Position .

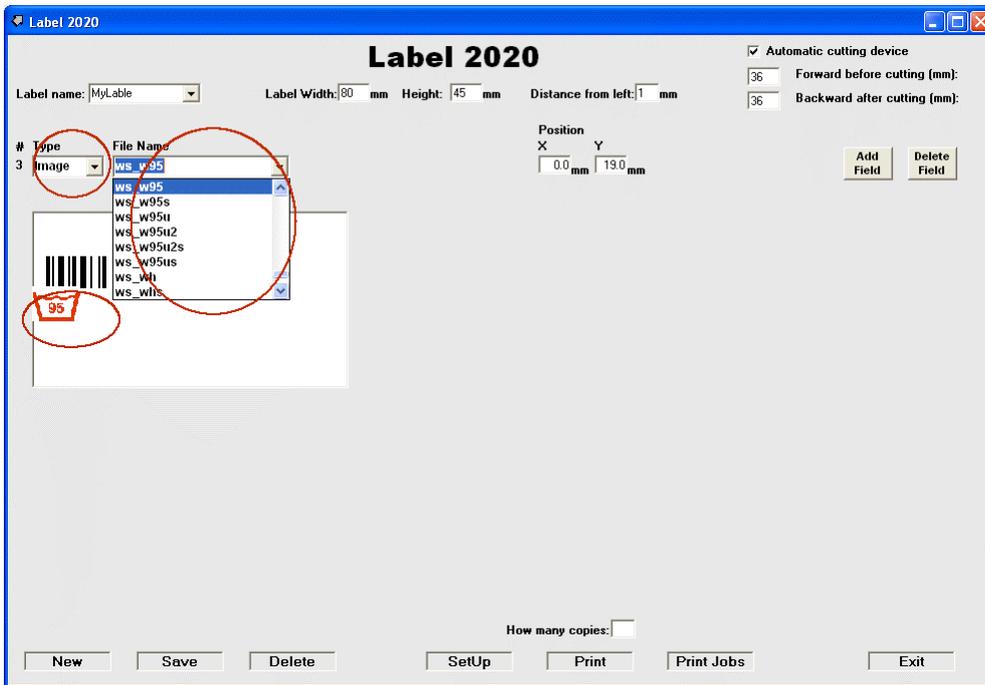


Add an Image

Click on [Add Field] and then click on the [Type] Field and select [Image]

Click on the 'File Name' Field and select the Image you want.

Move the Image to the right Position with the Mouse or by typing in the X- Y-Position .



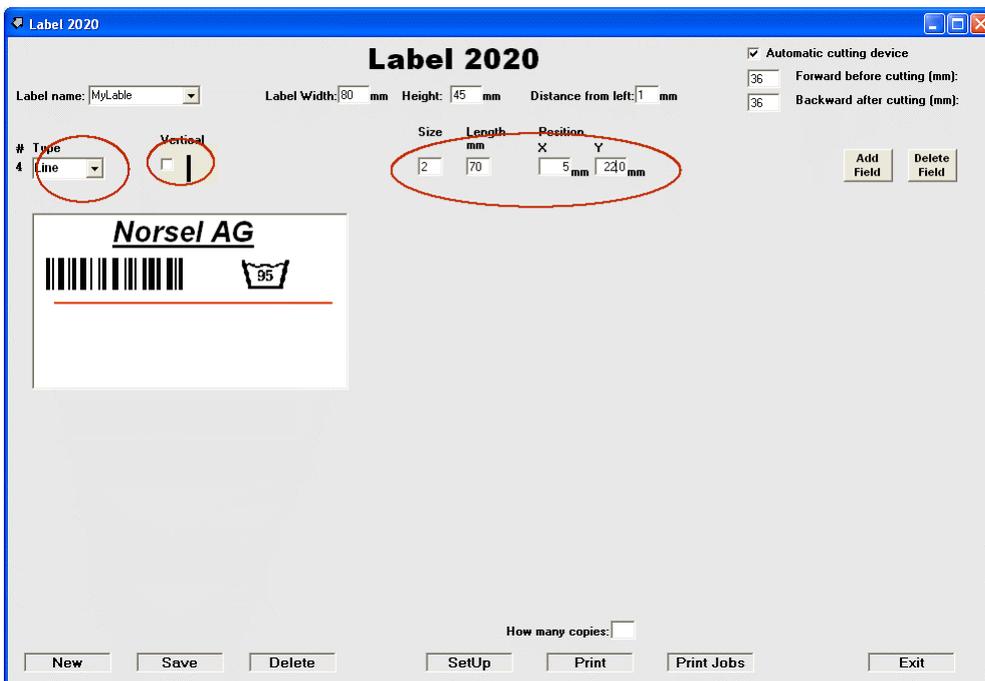
Add a Line

Click on [Add Field] and then click on the [Type] Field and select [Line]

Type in the Size (points) and the Line Length (mm).

Mark the [Vertical] Field, if needed.

Move the Line to the right Position with the Mouse or by typing in the X- Y-Position .



Special Functions

Self-incrementing numbers:

If you set ++ directly behind a number, this number is automatically incremented by one after each print.

Example: 'Piece n° 471104++ ==> Piece n° 471105++

This is valid for Text Fields and for Barcode Fields.

Weight

When an electronic weighing scale is connected, the weight is read and printed. The text <WEIGHT> is replaced by the actual scale value (e.g. 12.4)

Time Stamp

The text <TIMESTAMP> is replaced by the time (e.g. "10:47")

Time

The text <TIME> is replaced by the time in local format (e.g. "13:47:20" , "01:47:20 pm")

Date

The text <DATE> is replaced by the date in local format

<DATE> and <TIME> are displayed according to the Windows configuration.

The screenshot shows the 'Label 2020' software interface. At the top, the title bar reads 'Label 2020'. The main window has a blue header with the title 'Label 2020'. Below the header, there are configuration fields: 'Label name: MyLabel', 'Label Width: 80 mm', 'Height: 45 mm', and 'Distance from left: 1 mm'. On the right side, there are checkboxes for 'Automatic cutting device' (checked), 'Forward before cutting (mm): 36', and 'Backward after cutting (mm): 36'. Below these are 'Add Field' and 'Delete Field' buttons. In the center, there is a table for field configuration:

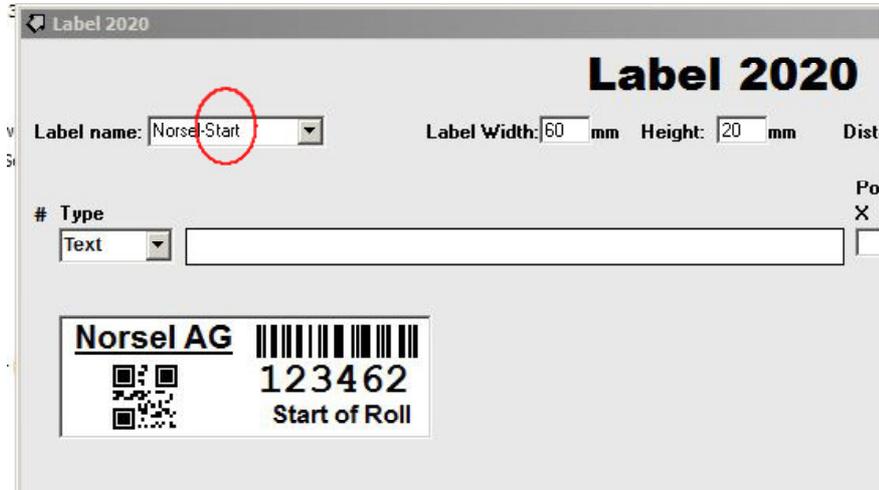
#	Type	Content	Position X	Position Y	Font
5	Text	<WEIGHT>kg	49.0 mm	10.5 mm	Text Fonts

Below the table, there is a preview of a label. The label contains the following information: 'Norsel AG', '11.02.2016', '16:29:59', a barcode with the number '123456', and a red circle containing '12.4kg'. At the bottom of the label are icons for a scale, a printer, and a circle with the letter 'F'. At the bottom of the software window, there are buttons for 'New', 'Save', 'Delete', 'Setup', 'Print', 'Print Jobs', and 'Exit'. A 'How many copies:' field is also present.

Printing 2 Labels for both Ends of Rolls

This example shows how to print 2 Labels at once, with the same numbers on both Labels, so you can attach one Label at the beginning of a roll and one Label at the end.

First, create a Label that you want to attach at the Start and give it a name, that has '-Start' at the end



Then create a Label that you want to attach at the End and give it a name, that has '-End' at the end



Now, when you print the Start-Label then the End-Label will be printed automatically afterwards. The self-incrementing numbers will be set for both Labels.

Making your own Images, Graphics, Logos

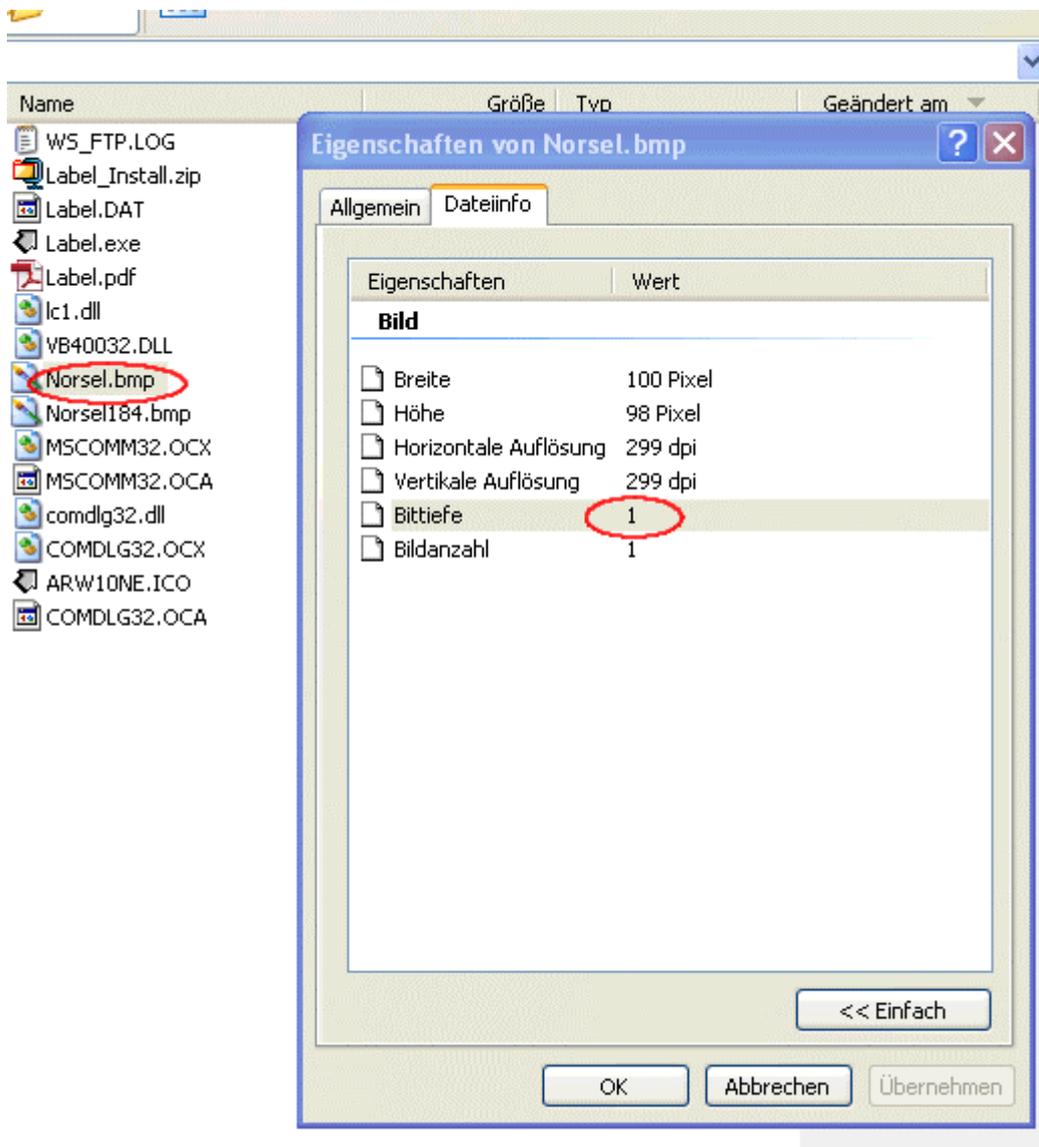
The graphic files must be in "Bitmap-Format" (.bmp) black/white with no color or grey tones. They must be located in the installation folder of the label software or in the one defined as "Location of Import Files"

Steps for creating graphic files for the Label software:

1. Start your Image Processing software (e.g. Photoshop, etc.)
2. Edit your image file and adjust size etc.
3. Convert the image to black/white i.e. with 1-bit monochrome color depth
4. Save the image as an Windows Bitmap file (.bmp)

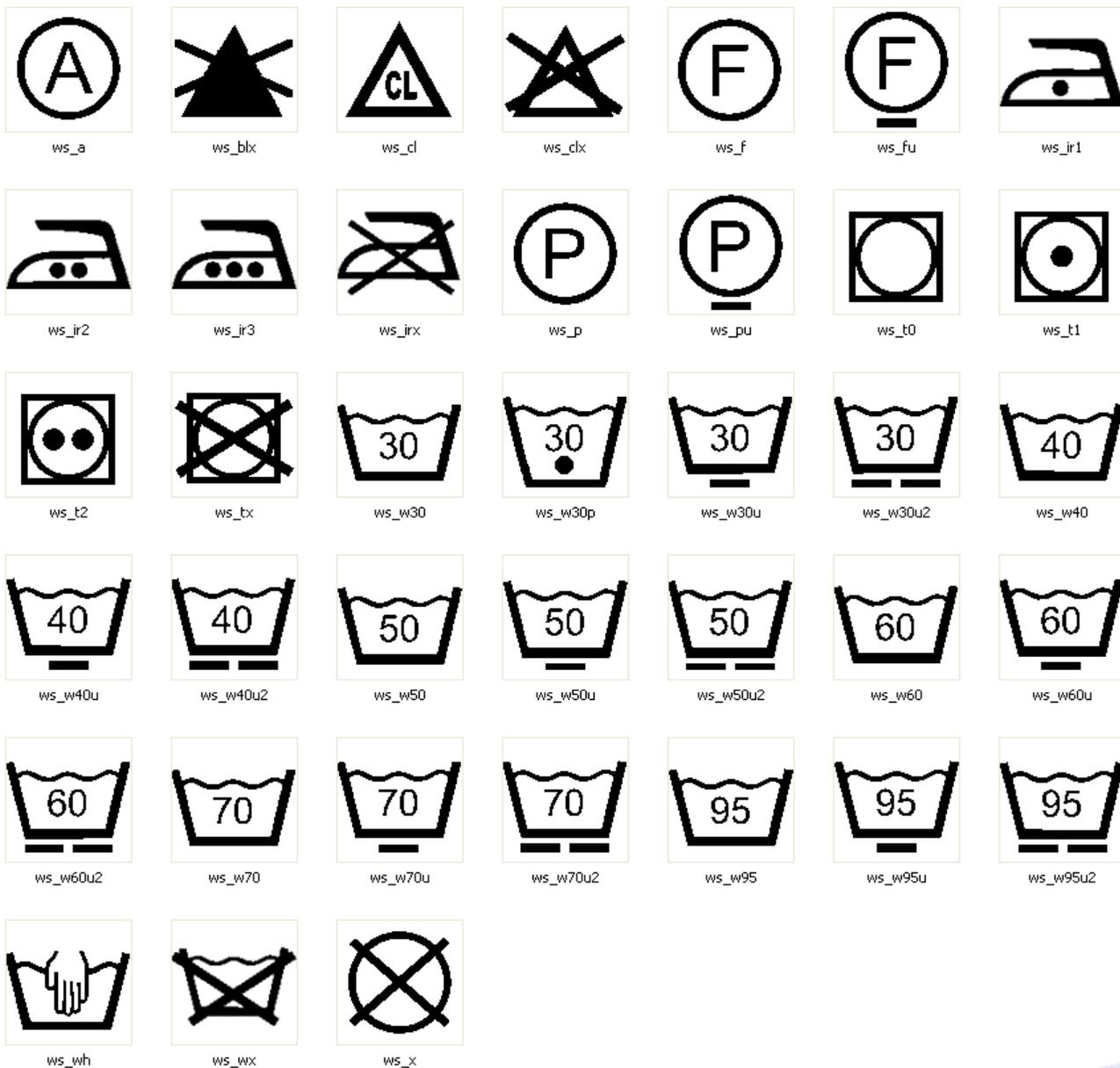
You may check, if your image file is OK, when you start Windows Explorer and right-click on the file and select 'File properties'

The color depth must be set to '1'



2.1 Graphic symbols included

Washing symbols (big) , Height: ca. 10 mm



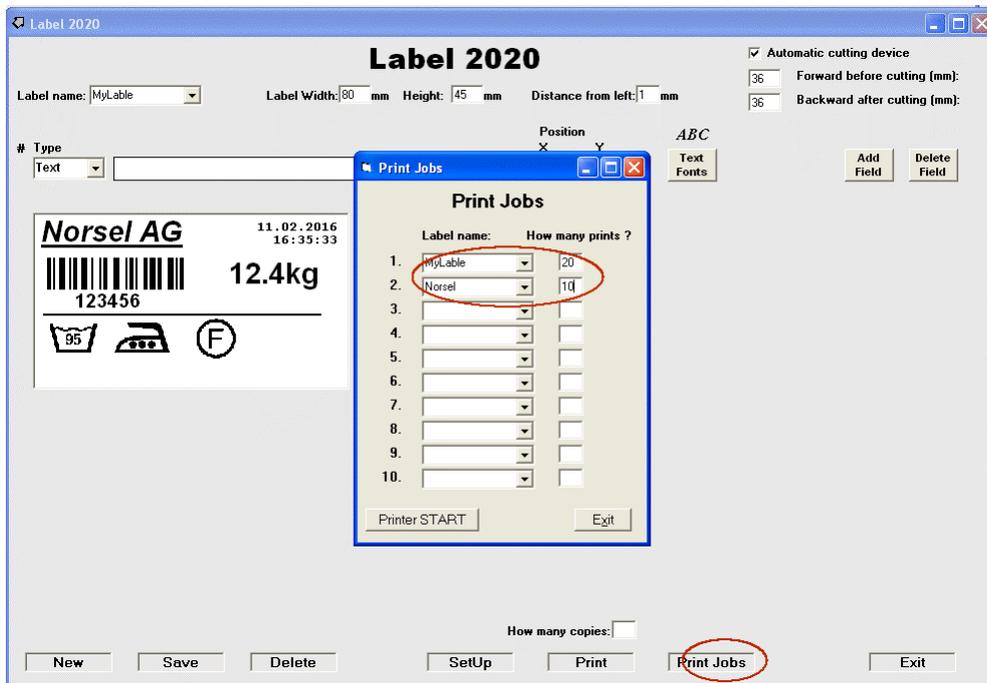
Washing symbols (small), Height: ca. 6 mm

The name of the symbols is the same as before, but with a 's' attached at the end.

					
ws_as	ws_cls	ws_clxs	ws_fs	ws_fus	ws_ir1s
					
ws_ir2s	ws_ir3s	ws_irxs	ws_ps	ws_pus	ws_t0s
					
ws_t1s	ws_t2s	ws_txs	ws_w30s	ws_w30u2s	ws_w30us
					
ws_w40s	ws_w40u2s	ws_w40us	ws_w50s	ws_w50u2s	ws_w50us
					
ws_w60s	ws_w60u2s	ws_w60us	ws_w70s	ws_w70u2s	ws_w70us
					
ws_w95s	ws_w95u2s	ws_w95us	ws_whs	ws_wxs	ws_xs

3. PRINT JOBS / Batch Printing

Here you define, which label is to be printed how many times.



You can cancel the printing with [Exit] at any time.
(you might turn the printer off and on to stop the printing of buffered labels)

Before printing, make sure the printer is on line and there is enough label material.

4. SET UP

Scales Model: When using an electronic weighing machine (provided by Norsel), please define here
Supported Models are from METTLER-TOLEDO , DINI ARGEO and ESSAE

Scales Port: the model and where it is connected (usually COM1).

Printer: Choose the Windows printer here.

Printer Port: The port where the printer is connected (USB , LPT1 , LPT2 , LPT3).

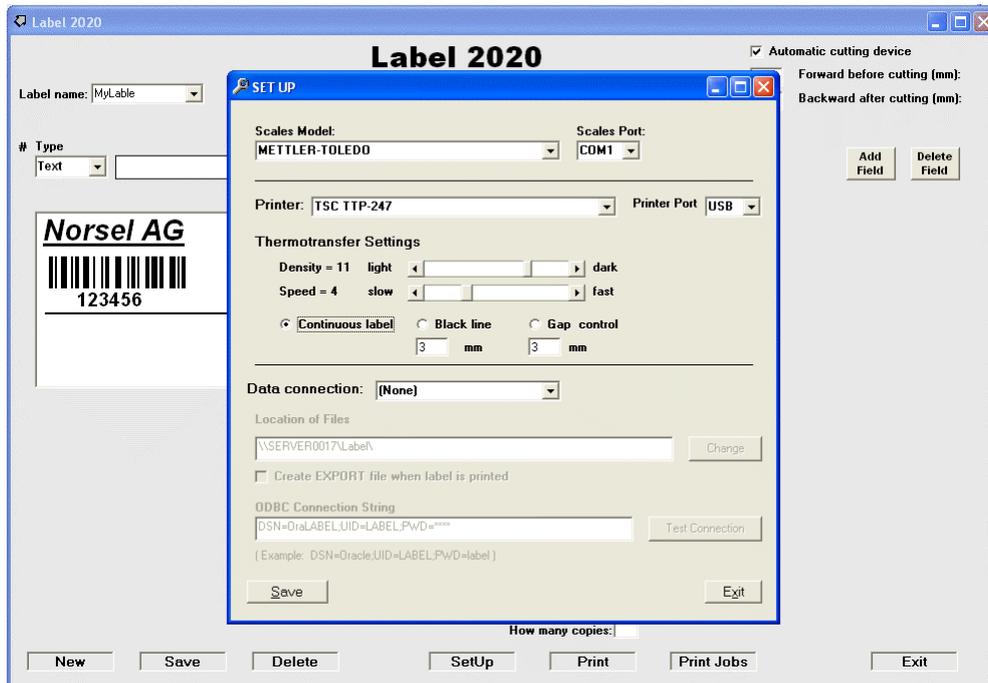
Thermotransfer Settings: Following data are used, when printing with a thermotransfer printer.

Density: Darkness of the printout.

Speed: Printing speed

Note: You may adjust density and speed to get best results for the printout

Data Connection: When combining the LABEL software with other software (e.g. ERP systems, remote control via Intranet, Tablets etc.) choose here, how the data are transferred (via Databases or text files)
Please refer to section. 6 (Connecting with other software)



5. DATA BACKUP

The folder, where the label software is installed, should be included into your routine backup procedure

6. Connecting with other Software

(There are some **video tutorials** on www.norsel.com)

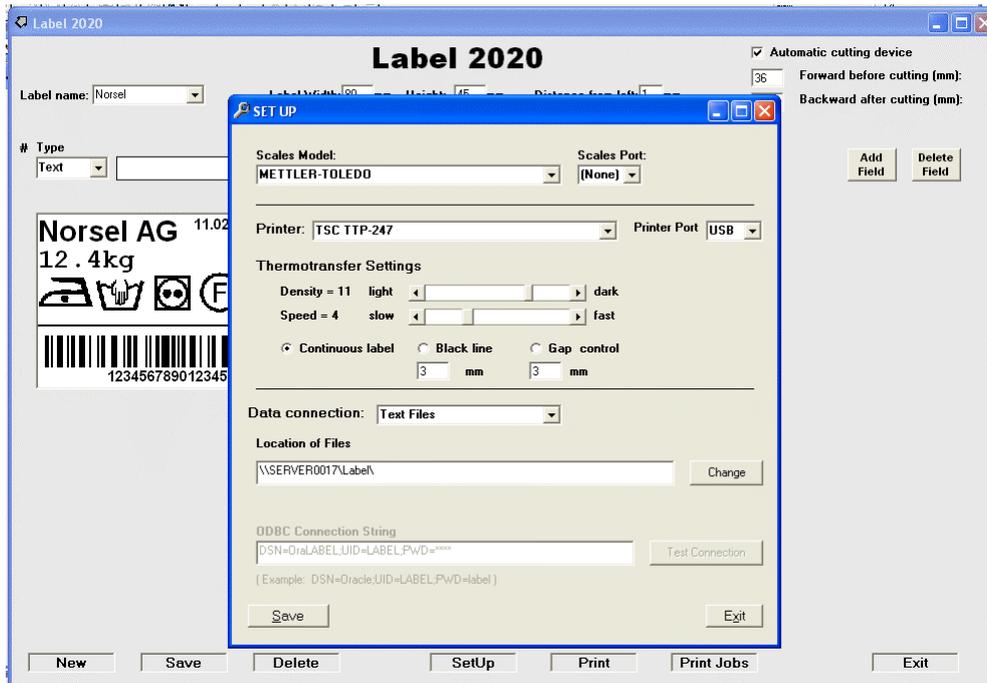
The LABEL software can be combined with other software , e.g. ERP systems, Data Warehouse, or any other software that can write data to text files or into data bases.

So you can start the LABEL printing from within the other Software.

Also you can change the Field Data of the Label from within the external Software.

6.1 Data Connection by Text Files

In the [Setup] program select ‘Text Files’ in the Data connection field



The LABEL software will check continuously, if there is a **IMPORT** text file in the folder where the LABEL software is installed.

If the text files are stored in another location, you can define this in the **Location of Files** field. By clicking on [Change] you can browse through your computer environment

When **Create EXPORT file when label is printed:** is marked, there will be written a file under the same location, that contains the label text data.

Format of the IMPORT Text Files

The files are plain ASCII text files and must have the word ‘IMPORT’ in the file name (e.g. NORSEL-IMPORT.TXT)

The data are written in lines

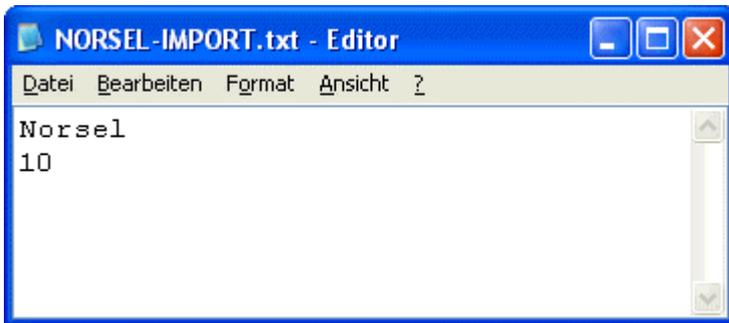
- Line 1: Name of the label as used in the LABEL program.
- Line 2: Quantity of labels to be printed.
- Line 3, Line 4, ... etc All other lines may contain Data of Label Fields (see below)

When such a file exists, the program reads it, the labels are printed and afterwards the file is deleted.

Example 1:

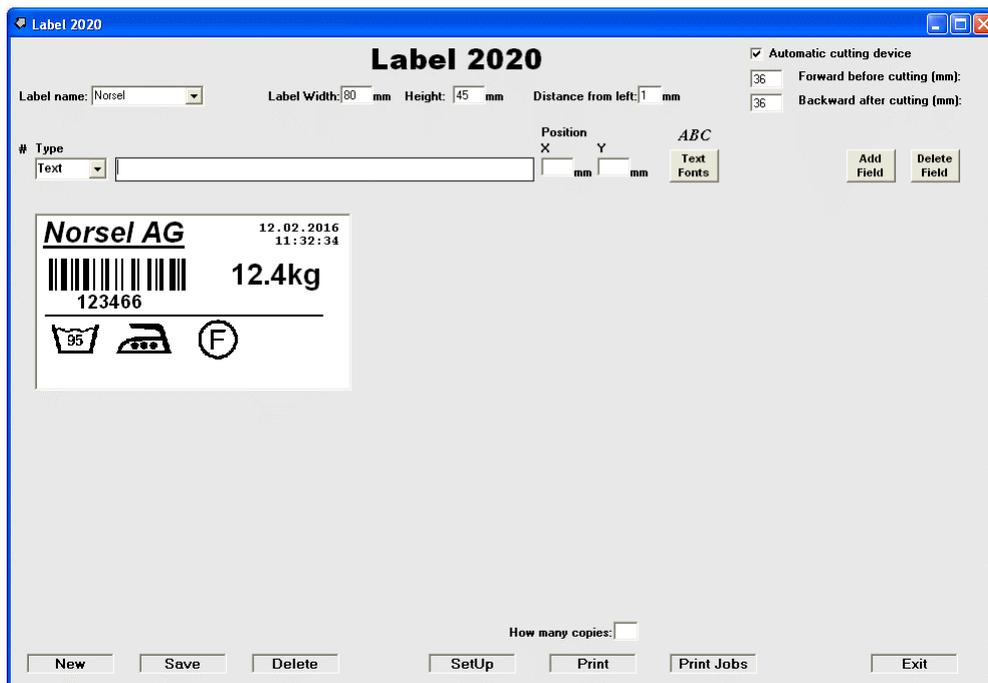
Print 10 Labels

Open a Text Editor (e.g. Windows NOTEPAD) and write these 2 Lines and save this Text File as NORSEL-IMPORT.TXT



Norsel = name of the label
10 = Print 10 labels

Immediately after that, the Norsel Label will be printed 10 times
The self-incrementing numbers will go from 123456, 123457,.. to 123465



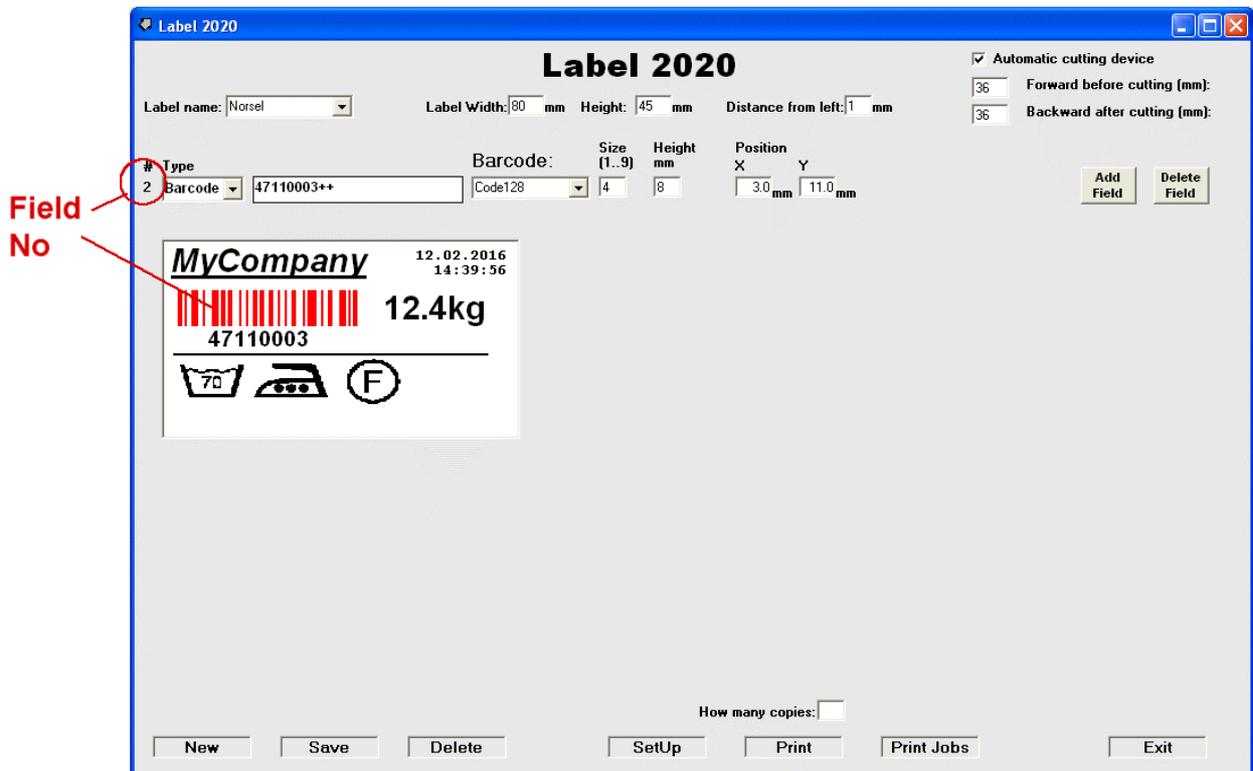
Example 2:

Print Label and change Text , Barcode Number an Image

Open a Text Editor (e.g. Windows NOTEPAD) and write these 2 Lines and save this Text File as NORSEL-IMPORT.TXT



Norsel	= name of the label
2	= Print 2 Labels
1=MyCompany	= Replace Field #1 with the Text 'MyCompany'
2=47110001++	= Replace Field #2 (Barcode) with 47110001
6=47110001++	= Replace Field #6 (Number under Barcode) with 47110001
3=ws_w70	= Replace Field #3 (Washing Symbol 95°) with 70°



The Field No of each Data Field is shown on the left side, when you click on a Field in the Label.

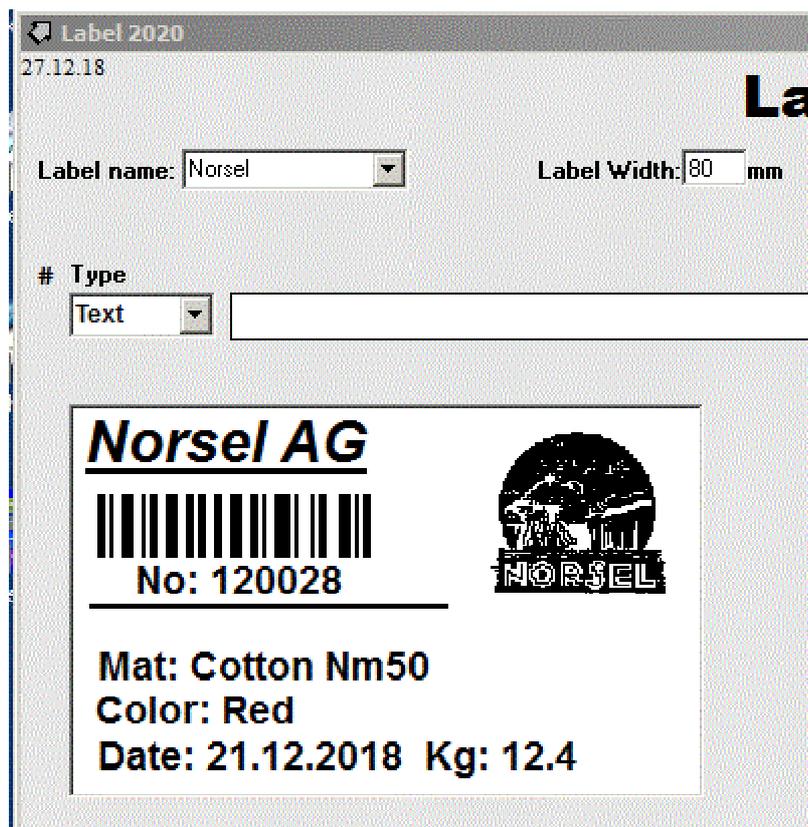
With the Fields #2 and #6 used as self-incrementing Numbers (47110001++)
the Labels will be printed as 47110001 and 47110002

6.2 EXPORT Text Files and EXCEL Files

When activated in the SETUP, data are written into a TEXT File or into an EXCEL File

Write data in TEXT file after label is printed
 Write data in EXCEL file after label is printed

Example:



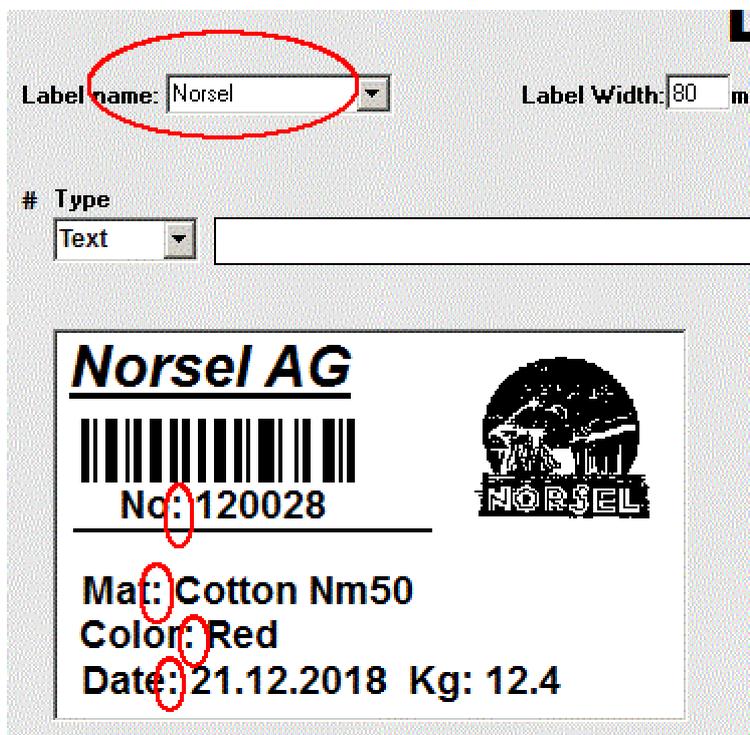
The resulting TEXT file EXPORT_Norsel.txt is:

```
EXPORT_Norsel.txt - Editor
Datei Bearbeiten Format Ansicht ?
No;Mat;Kg;Date;
120021;Nm50;12.4;21.12.2018;
120022;Nm50;12.4;21.12.2018;
120023;Nm50;12.4;21.12.2018;
120024;Nm50;12.4;21.12.2018;
120025;Nm50;12.4;21.12.2018;
120026;Nm50;12.4;21.12.2018;
120027;Nm50;12.4;21.12.2018;
```

The data are separated by semicolon ';', so they can be easily processed by other software.

The resulting EXCEL file EXPORT_Norsel.xlsx is:

	A	B	C	D	E
1	No	Mat	Kg	Date	
2	120021	Nm50	12,4	21.12.2018	
3	120022	Nm50	12,4	21.12.2018	
4	120023	Nm50	12,4	21.12.2018	
5	120024	Nm50	12,4	21.12.2018	
6	120025	Nm50	12,4	21.12.2018	
7	120026	Nm50	12,4	21.12.2018	
8	120027	Nm50	12,4	21.12.2018	
9					
10					



The name of the File is EXPORT_ + [Label name] + .txt (=TEXT) or .xlsx (EXCEL)

The data for EXPORT are made with a colon ':'
[Data name] + Colon ':' + [Data] e.g. No:120028

The data are written in the order of the 1.Line.of the TEXT file or EXCEL file

If there is no existing TEXT file or EXCEL file , the LABEL software will create a new one .

Note: You will have to install the Microsoft Excel software for this
Do not open the Excel File on another Computer at the same time.

6.3 Database Connection (Oracle , MySql , Microsoft QL Server)

The LABEL software can be used to print labels by writing data into a database table using the most popular data bases (Oracle, MySql and Microsoft SQL Server).

For the Database Connection , following steps are needed to be done in advance:

- Create a new database user or use an existing login
- Create the table LABEL_OUT
- Install and configure the ODBC driver for the database on the PC where the LABEL software runs.

Create Database User

The user only needs access to the tables LABEL_OUT

The following example (Oracle) code is for documentation purpose and should be adjusted accordingly.

Example code for creating user:

```
CREATE USER LABEL IDENTIFIED BY label;  
GRANT CONNECT, CREATE TABLE TO "LABEL";  
  
ALTER USER LABEL  
DEFAULT TABLESPACE USERS  
QUOTA UNLIMITED ON USERS  
TEMPORARY TABLESPACE TEMP  
ACCOUNT UNLOCK;
```

Create Database Table

Log in as the new user and create the table LABEL_OUT

Example code

```
CREATE TABLE LABEL_OUT (LABEL_NAME VARCHAR(20), QTY DECIMAL(3,0),  
I1 VARCHAR(100), I2 VARCHAR(100), I3 VARCHAR(100), I4 VARCHAR(100), I5 VARCHAR(100),  
I6 VARCHAR(100), I7 VARCHAR(100), I8 VARCHAR(100), I9 VARCHAR(100), I10 VARCHAR(100),  
I11 VARCHAR(100), I12 VARCHAR(100), I13 VARCHAR(100), I14 VARCHAR(100), I15 VARCHAR(100));
```

Data Base Table

LABEL_OUT

```
LABEL_NAME QTY I1 I2 I3 I4 I5 I6 I7 I8 I9 I10 I11 I12 I13 I14 I15
```

Label_Name is that of a label that is made within the LABEL software

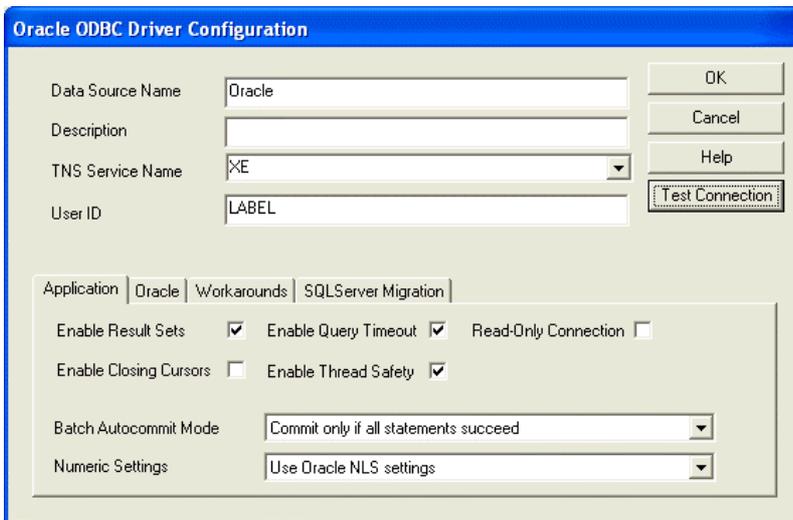
QTY is the amount of labels to be printed

I1, .. I15 are data that can be used within a label

ODBC Driver

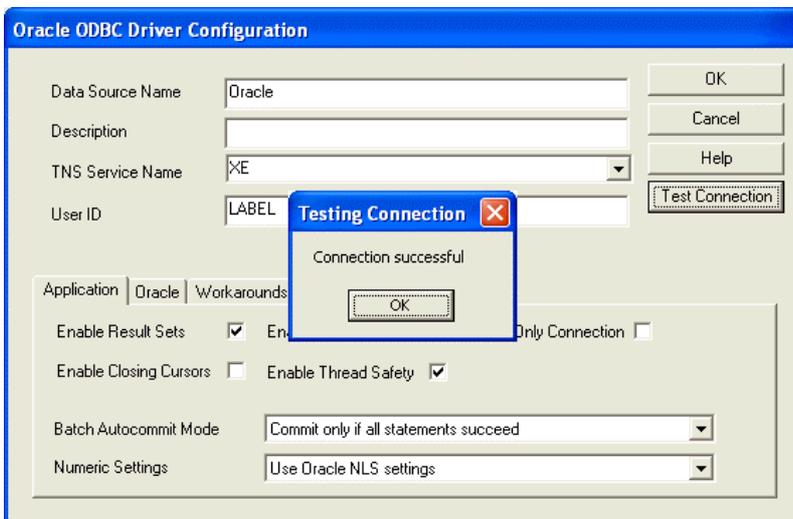
If not already done, install the ODBC database driver on the LABEL PC.

The following is an example for Oracle database. Others are similar.



The screenshot shows the 'Oracle ODBC Driver Configuration' dialog box. The 'Data Source Name' is 'Oracle', 'Description' is empty, 'TNS Service Name' is 'XE', and 'User ID' is 'LABEL'. There are buttons for 'OK', 'Cancel', 'Help', and 'Test Connection'. Below the input fields are tabs for 'Application', 'Oracle', 'Workarounds', and 'SQLServer Migration'. The 'Oracle' tab is selected, showing options for 'Enable Result Sets' (checked), 'Enable Query Timeout' (checked), 'Read-Only Connection' (unchecked), 'Enable Closing Cursors' (unchecked), and 'Enable Thread Safety' (checked). There are also dropdown menus for 'Batch Autocommit Mode' (set to 'Commit only if all statements succeed') and 'Numeric Settings' (set to 'Use Oracle NLS settings').

Click on [Test Connection] and use here username and password of the new created user (in this example: 'LABEL' and password: 'label')



This screenshot shows the same 'Oracle ODBC Driver Configuration' dialog box as above, but with a 'Testing Connection' dialog box overlaid on top. The 'Testing Connection' dialog box has a title bar with a close button (X) and contains the text 'Connection successful' and an 'OK' button. The 'Test Connection' button in the background dialog is highlighted with a dashed border.

Configuration settings in the LABEL software

In the LABEL Software, click on [SetUp]

SET UP

Scales Model: Scales Port:

Printer: Printer Port:

Thermotransfer Settings

Density = 8 light dark

Speed = 5 slow fast

Continuous label Black line Gap control

mm mm

Data connection:

Location of Files

Create EXPORT file when label is printed

ODBC Connection String

(Example: DSN=Oracle,UID=LABEL,PWD=label)

Select Data Base as 'Data connection' and fill in the ODBC Connection String:

Example:

DSN=Oracle;UID=LABEL;PWD=label

DSN=Oracle must match with the Data Source Name, that was used in the ODBC Configuration before.
UID = user name , PWD = Password.

Click on [Save] and then [Test Connection]

The LABEL software tests the connection and the configuration of the data base table

SET UP

Connecting ODBC.DSN=Oracle,UID=LABEL,PWD=label ... OK

SELECT * FROM LABEL_OUT;
LABEL_NAME | QTY | I1 | I2 | I3 | I4 | I5 | I6 | I7 | I8 | I9 | I10 |
0 Records ... OK

SELECT * FROM LABEL_IN;
LABEL_NAME | DATE_TIME | WEIGHT | LINE1 | LINE2 | LINE3 | LINE4 | LINE5 | LINE6 | LINE7 | LINE8 | I |
1 Records ... OK

Label
Data Base Connection OK

Location of Files

Create EXPORT file when label is printed

ODBC Connection String

(Example: DSN=Oracle,UID=LABEL,PWD=label)

Example 1:

Print 10 Labels

Log into your Data Base and make a single Table Entry

```
INSERT INTO LABEL_OUT (LABEL_NAME, QTY) VALUES ('Norsel', 10);
```

Norsel = name of the label

10 = Print 10 labels

Immediately after that, the Norsel Label will be printed 10 times

The self-incrementing numbers will go from 123456, 123457,.. to 123465

The screenshot shows the 'Label 2020' software interface. At the top, the title bar reads 'Label 2020'. The main window has a title 'Label 2020' and several configuration fields: 'Label name: Norsel', 'Label Width: 80 mm', 'Height: 45 mm', and 'Distance from left: 1 mm'. On the right, there are checkboxes for 'Automatic cutting device' (checked), 'Forward before cutting (mm): 36', and 'Backward after cutting (mm): 36'. Below these are fields for 'Position X' and 'Y' in mm, and a 'Text Fonts' button. At the bottom, there are buttons for 'New', 'Save', 'Delete', 'SetUp', 'Print', 'Print Jobs', and 'Exit', along with a 'How many copies:' input field.

The central preview area shows a label with the following content:

- Norsel AG**
- 12.02.2016
11:32:34
- Barcode
- 12.4kg
- 123466
- Icons: 95, a printer, and a circled F.

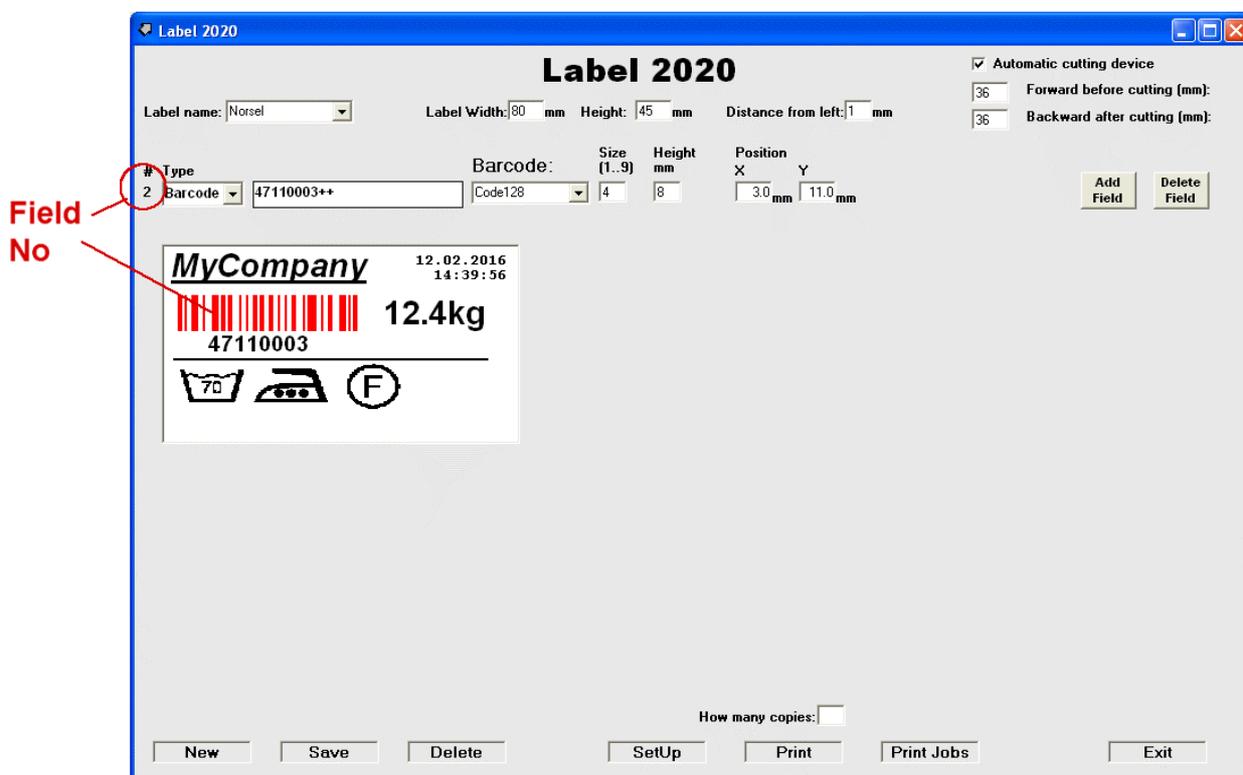
Example 2:

Print Label and change Text , Barcode Number an Image

Log into your Data Base and make a single Table Entry

```
INSERT INTO LABEL_OUT (LABEL_NAME, QTY, I1, I2, I3, I4)  
VALUES ('Norsel', 2, '1=MyCompany', '2=47110001++', '6=47110001++', '3=ws_w70');
```

Norsel = name of the label
2 = Print 2 Labels
1=MyCompany = Replace Field #1 with the Text 'MyCompany'
2=47110001++ = Replace Field #2 (Barcode) with 47110001
6=47110001++ = Replace Field #6 (Number under Barcode) with 47110001
3=ws_w70 = Replace Field #3 (Washing Symbol 95°) with 70°



The Field No of each Data Field is shown on the left side, when you click on a Field in the Label.

With the Fields #2 and #6 used as self-incrementing Numbers (47110001++)
the Labels will be printed as 47110001 and 47110002

Software Installation

(There is a **video tutorials** on www.norsel.com)

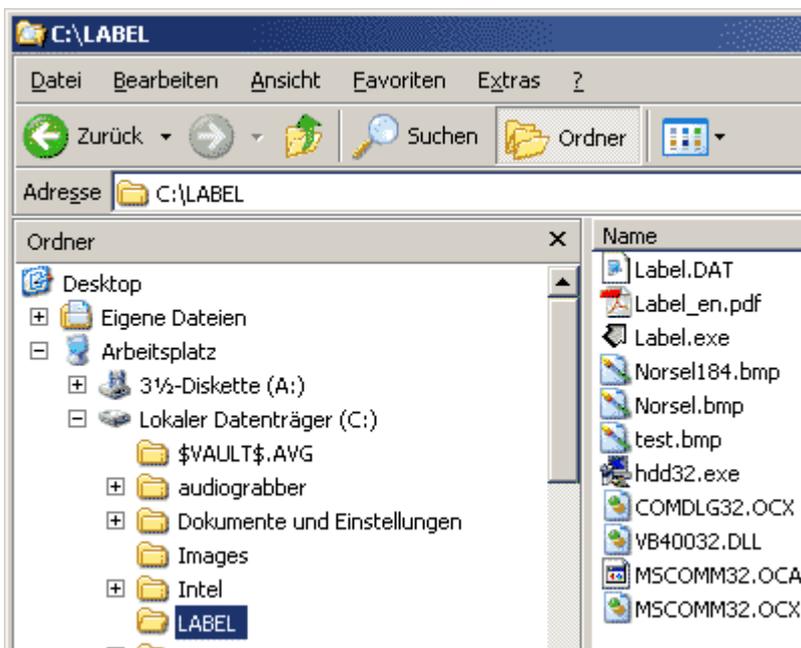
7. Local Installation on a PC

Step 1

Insert the protection key (dongle), that is shipped with the software , into an USB port.

Step 2

Create a local directory (e.g. C:\LABEL) and copy the content of the CD into this directory



Step 3

Download the newest Software Version from

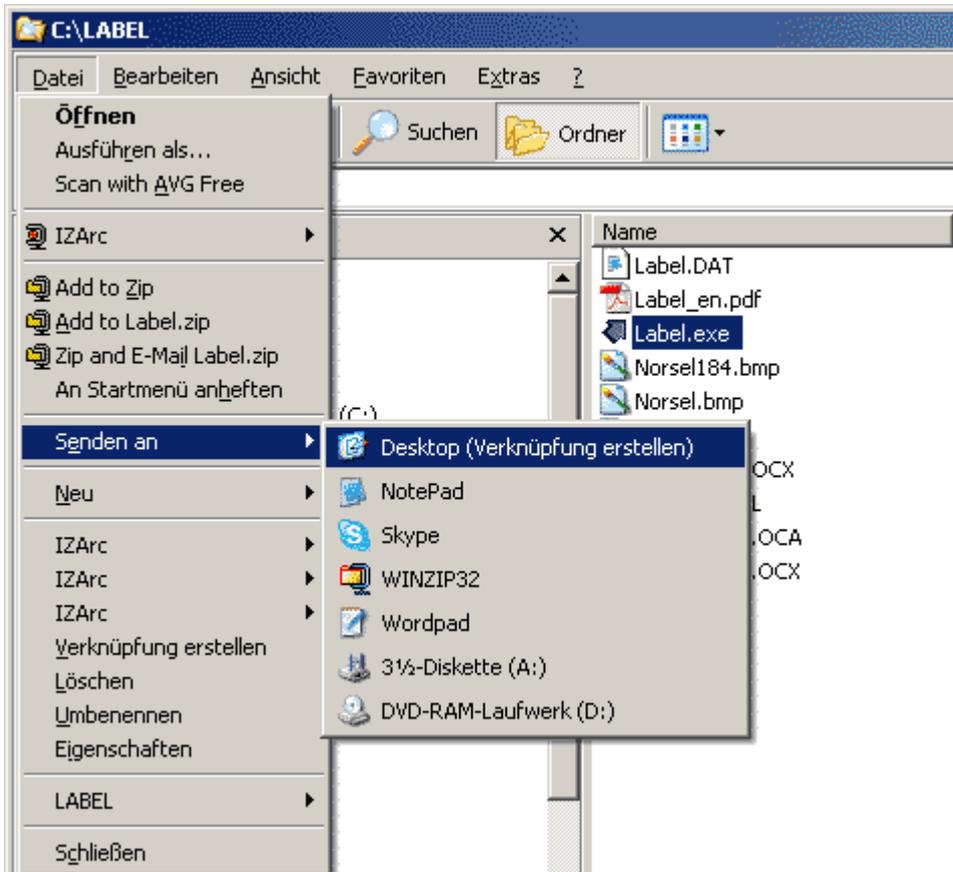
<http://norsel.com/software.htm>

and then extract this .zip File into this directory

Step 4

Create a shortcut of the program onto the desktop, so you can start the LABEL software by clicking on the desktop icon.

(File → Send To → Desktop (Create Shortcut))



Step 5

Start the LABEL Software as Administrator on the first time.
(Right-click on the File Label-2020.exe --> 'Run as Administrator')

Afterwards the Administrator Start mode is not needed anymore.

7.1. Installation in a Network

The downloaded .zip File can also be extracted into a directory on a server and the shortcut may be created as described above.

Be sure this directory is writable by the PC.

The protection key (dongle) has to be plugged into the PC.