



# EVALUATION CERTIFICATE

## No. DK0199-16.07 Revision 1


<b>Object name</b>	<b>Marel Secure Print</b>
<b>Object type</b>	Printing Device
<b>Issued by</b>	<b>DELTA Danish Electronics, Light &amp; Acoustics</b> EU - Notified Body No. 0199
<b>In accordance with</b>	The applicable requirements of the EU Directives 2014/31/EU and 2014/32/EU, WELMEC Guide 7.2:2015, EN 45501:2015 and OIML R51:2006.
<b>Issued to</b>	<b>Marel ehf</b> Austurhraun 9 210 Gardabaer Iceland
<b>Manufacturer</b>	Marel ehf
<b>Characteristics</b>	A legal printing software for both weight and price labeller to be used with both non-automatic and automatic weighing instruments and suitable for both direct and remote printing.
<b>Description and documentation</b>	The legal printing software is described and documented in the annex to this certificate.
<b>Remarks</b>	Summary of tests involved: see annex. This evaluation certificate cannot be quoted in an EU type examination certificate without permission of the holder of the certificate mentioned above.

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**The annex comprises 3 pages.**

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## 1. General

The printing device is designated Marel Secure Print and used to create and control the legal part of the label for weight labelling and price labelling non-automatic weighing instruments and automatic catch-weighing instruments. This printing service can be performed directly for one weighing instrument or for several weighing instruments either at location of weighing delayed by the time for transportation from weighing instrument to printer, or at a later time in which case it will normally be at a remote location.

## 2. Description

The Marel Secure Print consists of three software packages,

- Marel.SecurePrint.dll
- Marel.SecurePrint.Verification.exe
- Marel.SecurePrint.WmVerification.exe

When a weighing that shall be printed has been performed by a weighing instrument using Marel Secure Print for printing, the weighing instrument sends the weight record and its associated MAC (Message Authentication Code) to the non-legal packing software, which forward it to the non-legal part of the labelling software.

The legally relevant part of the weight record contains,

- Alibi number
- Date (format: Y-MM-DD)
- Time (HH:MM)
- Verification scale interval and unit
- Net weight
- Preset tare
- Tare weight
- Price (only for price labelling)
- Unit price (only for price labelling)
- Currency (only for price labelling)
- Globally unique device Id of the weighing instrument

The legally relevant part can optionally be followed by non-legal application data.

The algorithm used for the Message Authentication Code is HMAC with the MD5 algorithm used for hashing. MAC is a 128 bit code.

When the label is to be printed the non-legal part of the labelling software transfer the following to Marel.SecurePrint.dll: the weight record, MAC, bitmap for label which include all non-legal information, information about where the legal information shall be placed on the label, and printer settings.

### **Marel.SecurePrint.dll**

The Marel.SecurePrint.dll assembly is a stand-alone .NET Framework 4.0 assembly without references to any Marel or 3rd party libraries. It is located on the computer running the labeling application

When Marel.SecurePrint.dll receives a print request, it checks that the weight record has the correct format, and that it has a MAC identical to the one received. It then generates the bitmaps for the legal parts of the printout and merges them into the received non-legal bitmap and sends it to the printer using a TCP/IP socket.

If there is no weight field in the received weight record the text “No weight information” will be merged into the bitmap for the label.

### **Marel.SecurePrint.Verification.exe**

This program is to be run separately and is used to display the version number and the MVID of itself and of the two other software packages in order to verify that the installed software is identical to the certified.

MVID is a globally unique identifier generated by the compiler each time the software is compiled.

### **Marel.SecurePrint.WmVerification.exe**

This program is to be run separately. It is used on a PC to look-up weight records and their associated MAC, check the validity of the weight record and display this together with the fields of the weight record.

The barcode is used as the key for the look-up.

The program uses a web service for look-up of the weight records.

## **3. Measuring instruments to be connected**

Marel Secure Print is intended for use with automatic catchweighers and non-automatic weighing instruments.

## **4. Interfaces and peripheral devices**

The interfaces of the legal software Marel Secure Print are declared protective by the manufacturer.

## **5. Impositions and conditions**

The Marel Secure Print meets the requirements only when Marel.SecurePrint.dll is correctly loaded, and its identifications – version and MVID – are displayed in accordance to the table in Section 6 by Marel.SecurePrint.Verification.exe.

Only then Marel Secure Print may be used for purposes subject to legal control.

## 6. Inscriptions and sealing

The version and the MVID of the legally relevant program modules shall be the following, when displayed by the Marel.SecurePrint.Verification.exe.

Either:

Software	Version	MVID
Marel.SecurePrint.dll	1.0.7.0	9cdf7519-0d86-48d3-9c65-f7d5e34b5628
Marel.SecurePrint.Verification.exe	1.0.7.0	cc85ed15-3bdd-4a58-8805-766dcc3eb7a3
Marel.SecurePrint.WmVerification.exe	1.0.7.0	78e131a4-1b4e-4043-b85d-6b07321674fa

or:

Software	Version	MVID
Marel.SecurePrint.dll	1.0.7.4	6BC3256A-D4EF-4528-8A4C-38D971CCBFAF
Marel.SecurePrint.Verification.exe	1.0.7.4	5393EBF9-F326-4775-9BFC-F8E39F205651
Marel.SecurePrint.WmVerification.exe	1.0.7.4	244F8449-E46D-4C5A-AB74-A8CD846860AD

For all three software packages the public key shall be: 4d17399ff4d778e2.

No sealing of the Marel Secure Print software is to be performed, as Marel.SecurePrint.dll contains no type parameters (TP) or device parameters (DP).

## 7. Additional information for the EC verification

A copy of this evaluation certificate must be supplied at verification of a measuring instrument for which Marel Secure Print perform printout.

## 8. Documentation

The submitted documentation is filed at DELTA in file no. T211302.

## 9. Examinations performed

The following examinations were accomplished on a setup with weighing instrument, label printer and a PC:

- Examination of the submitted documentation.
- Examination of the software in accordance with WELMEC Guide 7.2 (2015), and Directive 2014/32/EU, Annex I, section 8.1 - 8.4 and 10.3.
- Examination of functional and operational behaviour.

The examination is reported in the following test reports:

- DANAK-1916853, dated 12 September 2016.