



**sylvac**

**English**

# **ReflexScan+**

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## **Thread**





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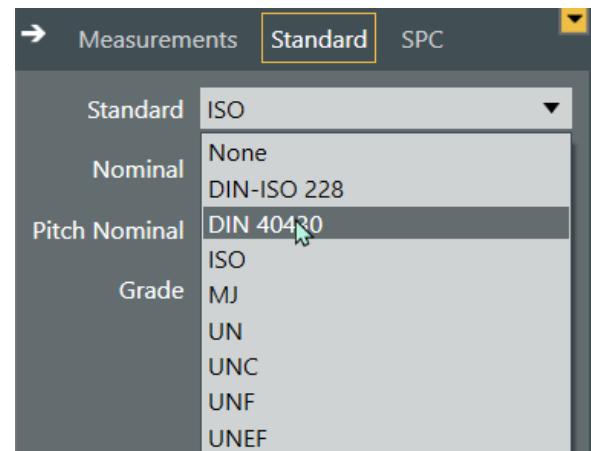
## I. GENERAL INFORMATION

This document offers an overview of the list of threads available for ReflexScan version 4.6 and above on a SCAN machine without tilting system (F60, F60L, S145, S145L), a SCAN machine with tilting system (F60T, F60LT, S25T) and according to the license option: STANDARD/PRO

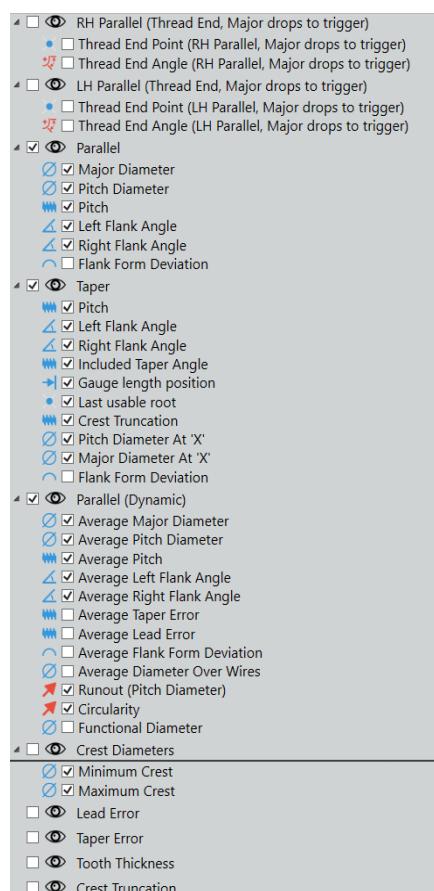
## II. MACHINES WITHOUT TILTING SYSTEM

### 1. STANDARD option

- a. Parallel threads (static or dynamic), conical threads (static)
- b. Example of the standards available for parallel threads:



- c. List of available measurements on threads (all options displayed, not only the marked ones)

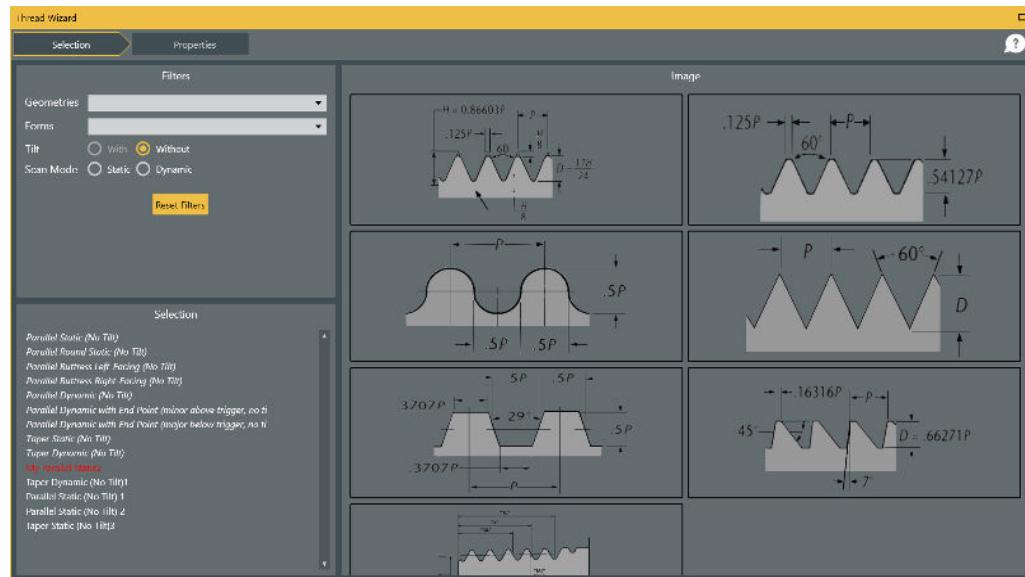


## 2. PRO option

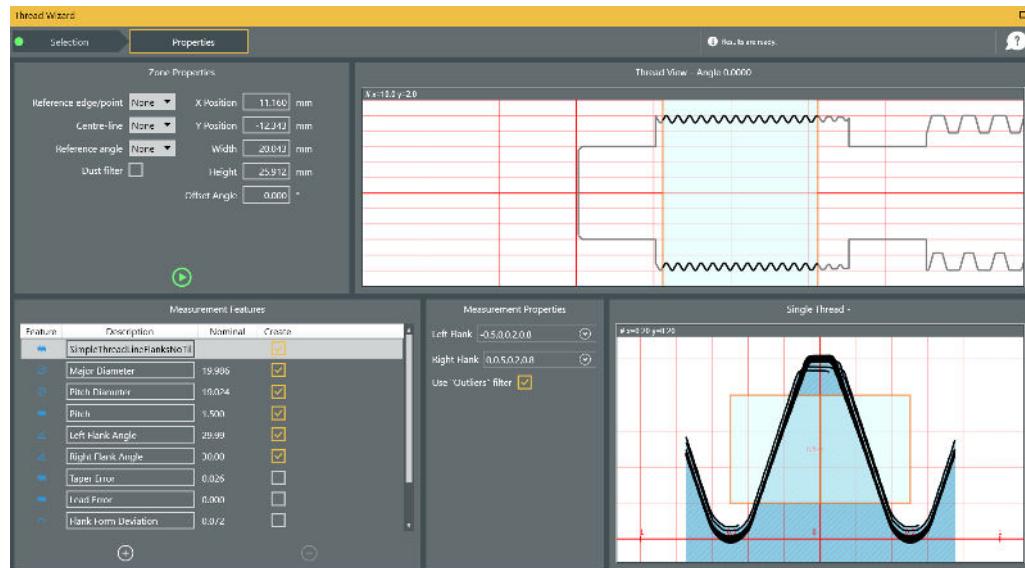
- a. Includes all the threads of the STANDARD option, plus some special threads : round thread, saw tooth. Also includes additional measurements for each thread.



- b. Thread wizard to create custom threads
- Thread type selection window



- Measurements selection window and customisation of flank or radius areas, etc.



c. Example of available measurements for dynamic parallel threads :

i. Basic measurements

$\emptyset$	Major Diameter	19.986	<input checked="" type="checkbox"/>
$\emptyset$	Pitch Diameter	19.024	<input checked="" type="checkbox"/>
$\text{---}$	Pitch	1.500	<input checked="" type="checkbox"/>
$\angle$	Left Flank Angle	29.99	<input checked="" type="checkbox"/>
$\angle$	Right Flank Angle	30.00	<input checked="" type="checkbox"/>
$\text{---}$	Taper Error	0.026	<input type="checkbox"/>
$\text{---}$	Lead Error	0.000	<input type="checkbox"/>
$\curvearrowright$	Flank Form Deviation	0.072	<input type="checkbox"/>
$\emptyset$	Diameter over wires	17.725	<input type="checkbox"/>

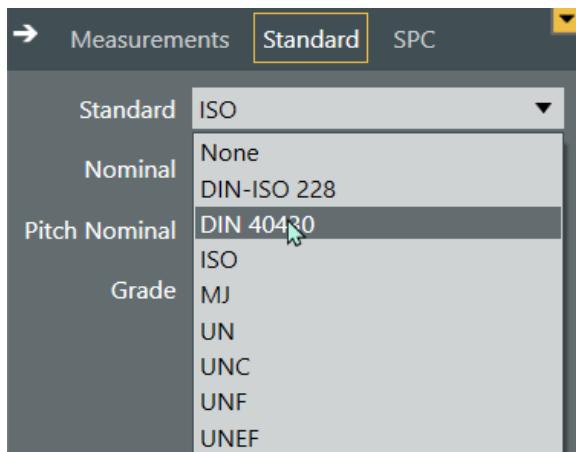
ii. Special measurements

<input type="checkbox"/>	$(+)$	$(-)$	$\text{---}$	Addendum
<input type="checkbox"/>	$(+)$	$(-)$	$\text{---}$	Crest Truncation
<input type="checkbox"/>	$(+)$	$(-)$	$\angle$	Included Taper Angle
<input type="checkbox"/>	$(+)$	$(-)$	$\text{---}$	LANG_FEAT_THREAD_CENTRE_LINE
<input type="checkbox"/>	$(+)$	$(-)$	$\text{---}$	LANG_FEAT_THREAD_CENTRE_LINE_MAJOR
<input type="checkbox"/>	$(+)$	$(-)$	$\text{---}$	Tooth Thickness
0	$(+)$	$(-)$	$\emptyset$	Diameter over wires
0	$(+)$	$(-)$	$\rightarrow$	Gauge length position
0	$(+)$	$(-)$	$\text{---}$	LANG_FEAT_THREAD_CENTRE_LINE_MAJOR_AT_X
0	$(+)$	$(-)$	$\text{---}$	LANG_FEAT_THREAD_CENTRE_LINE_PITCH_DIA_AT_X
0	$(+)$	$(-)$	$\emptyset$	LANG_FEAT_THREAD_PITCH_DIAMETER_AT_X
0	$(+)$	$(-)$	$\text{---}$	Lead Error
0	$(+)$	$(-)$	$\emptyset$	Major Diameter At 'X'
0	$(+)$	$(-)$	$\times$	Point over wire
0	$(+)$	$(-)$	$\text{---}$	Thread Flank Line

### III. MACHINES WITH TILTING SYSTEM

#### 1. STANDARD option

- a. Parallel threads (static or dynamic), conical threads (static), worms (dynamic)
- b. Right- or left-hand thread
- c. Properties related to the «internal» shape of the screw. Examples: root diameter, root truncation, root radius, tooth depth, etc.
- d. Example of the standards available for parallel threads:



- e. List of available measurements on threads (e.g. right-hand thread)

RH Parallel (Dynamic)

- Average Major Diameter
- Average Minor Diameter
- Average Pitch Diameter
- Average Pitch
- Average Left Flank Angle
- Average Right Flank Angle
- Average Root Radius
- Average Crest Radius
- Average Taper Error
- Average Lead Error
- Average Flank Form Deviation
- Average Diameter Over Wires
- Runout (Pitch Diameter)
- Circularity
- Functional Diameter

RH Parallel (Thread End, Major drops to trigger)

- Thread End Point (RH Parallel, Major drops to trigger)
- Thread End Angle (RH Parallel, Major drops to trigger)

RH Parallel (Thread End, Minor raises to trigger)

- Thread End Point (RH Parallel, Minor raises to trigger)
- Thread End Angle (RH Parallel, Minor raises to trigger)

RH Worm (Dynamic)

- Average Axial Pitch
- Average Major Diameter
- Average Minor Diameter
- Average Diameter Over Wires
- Average Tooth Thickness
- Average Left Pressure Angle
- Average Right Pressure Angle
- Average Addendum
- Average Dedendum
- Average Thread Depth
- Average Lead Error
- Runout (Major Diameter)
- Runout (Pitch Diameter)
- Runout (Minor Diameter)

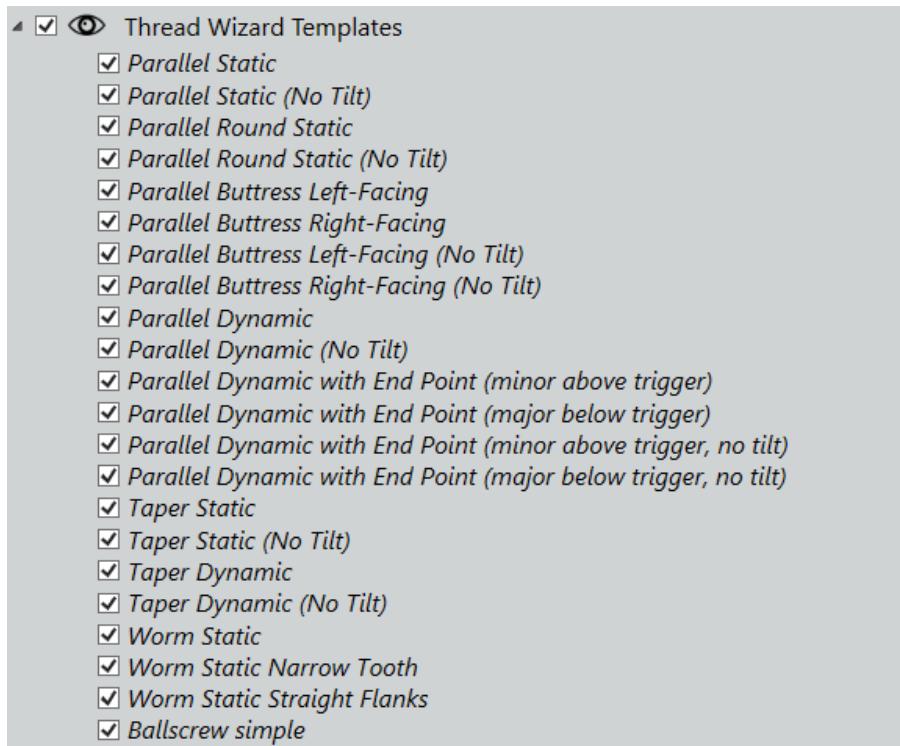
RH Taper

- Pitch
- Left Flank Angle
- Right Flank Angle
- Included Taper Angle
- Gauge length position
- Last usable root
- Crest Truncation
- Root Truncation
- Pitch Diameter At 'X'
- Major Diameter At 'X'
- Minor Diameter At 'X'
- Flank Form Deviation

- LH Cylindricity
- RH Cylindricity
- Crest and Root Diameters
- Crest Diameters
  - Minimum Crest
  - Maximum Crest
- Root Diameters
  - Minimum Root
  - Maximum Root
- Lead Error
- Taper Error
- Tooth Thickness
- Root Truncation
- Crest Truncation

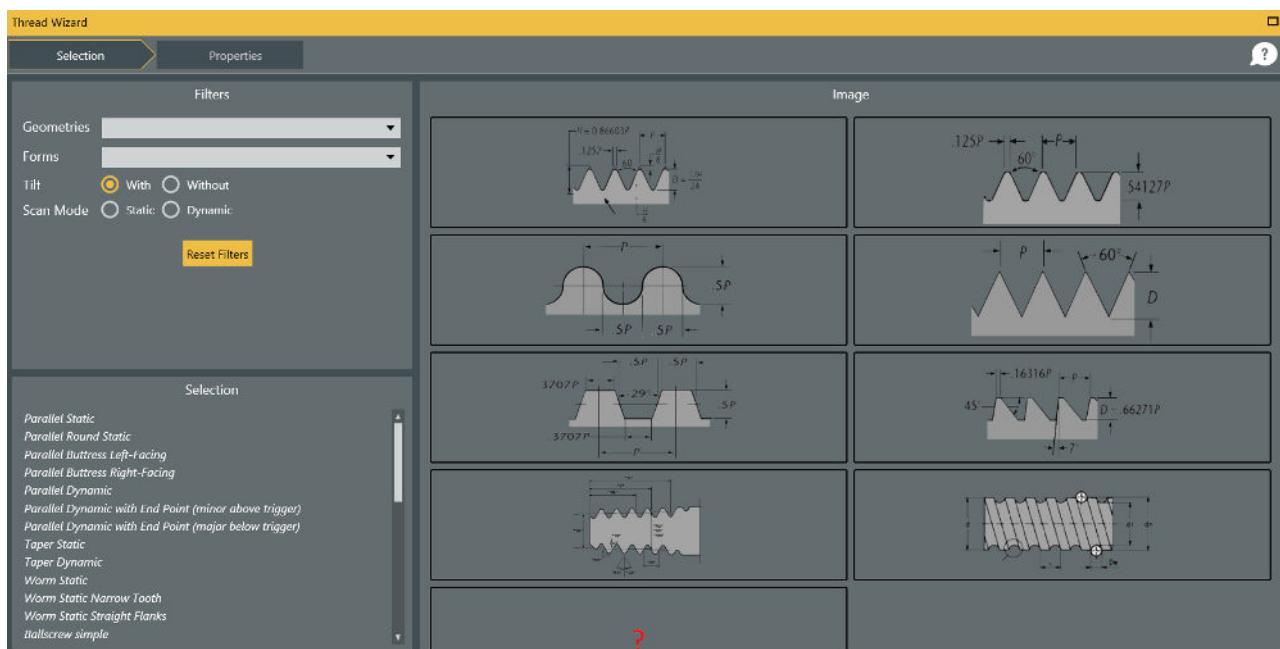
## 2. Option PRO

- a. Includes all threads of the STANDARD option, plus special threads: round thread, saw tooth, worm (standard, narrow tooth, steep flanks) and ball screw. Also includes additional measurements for each thread.

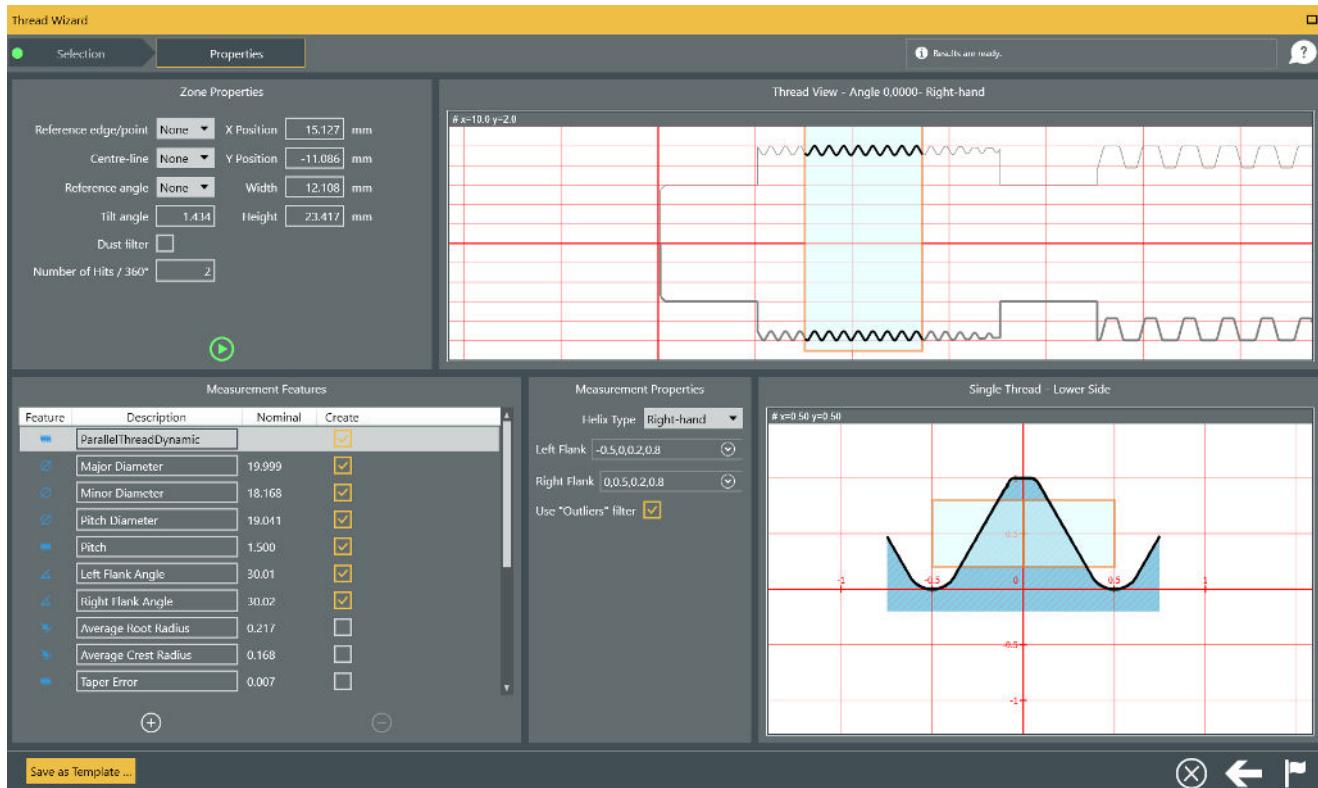


- b. Thread wizard to create custom threads

i. Thread type selection window



ii. Measurements selection window and customisation of flank or radius areas, etc.



c. Example of available measurements for dynamic parallel threads :

i. Basic measurements

Ø	Major Diameter	19.999	<input checked="" type="checkbox"/>
Ø	Minor Diameter	18.168	<input checked="" type="checkbox"/>
Ø	Pitch Diameter	19.041	<input checked="" type="checkbox"/>
#	Pitch	1.500	<input checked="" type="checkbox"/>
↖	Left Flank Angle	30.01	<input checked="" type="checkbox"/>
↖	Right Flank Angle	30.02	<input checked="" type="checkbox"/>
↘	Average Root Radius	0.217	<input type="checkbox"/>
↘	Average Crest Radius	0.168	<input type="checkbox"/>
#	Taper Error	0.007	<input type="checkbox"/>
#	Lead Error	0.000	<input type="checkbox"/>
~	Flank Form Deviation	0.006	<input type="checkbox"/>
Ø	Diameter over wires	17.744	<input type="checkbox"/>
↗	Runout (Pitch Diameter)	0.000	<input type="checkbox"/>
↗	Circularity	0.000	<input type="checkbox"/>
Ø	Functional Diameter	19.041	<input type="checkbox"/>

## ii. Special measurements

<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	Addendum
<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	Crest Truncation
<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	Dedendum
<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	Included Taper Angle
<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	LANG_FEAT_THREAD_CENTRE_LINE
<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	LANG_FEAT_THREAD_CENTRE_LINE_MAJOR
<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	Root Truncation
<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	Thread Depth
<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	Tooth Thickness
0	<input checked="" type="radio"/>	<input type="radio"/>	Average Crest Radius
0	<input checked="" type="radio"/>	<input type="radio"/>	Average Root Radius
0	<input checked="" type="radio"/>	<input type="radio"/>	Diameter over wires
0	<input checked="" type="radio"/>	<input type="radio"/>	Functional Diameter
0	<input checked="" type="radio"/>	<input type="radio"/>	Gauge length position
0	<input checked="" type="radio"/>	<input type="radio"/>	LANG_FEAT_THREAD_CENTRE_LINE_MAJOR_AT_X
0	<input checked="" type="radio"/>	<input type="radio"/>	LANG_FEAT_THREAD_CENTRE_LINE_PITCH_DIA_AT_X
0	<input checked="" type="radio"/>	<input type="radio"/>	LANG_FEAT_THREAD_PITCH_DIAMETER_AT_X
0	<input checked="" type="radio"/>	<input type="radio"/>	Lead Error
0	<input checked="" type="radio"/>	<input type="radio"/>	Major Diameter At 'X'
0	<input checked="" type="radio"/>	<input type="radio"/>	Minor Diameter At 'X'
0	<input checked="" type="radio"/>	<input type="radio"/>	Point over wire
0	<input checked="" type="radio"/>	<input type="radio"/>	Single Crest Radius
0	<input checked="" type="radio"/>	<input type="radio"/>	Single Root Radius
0	<input checked="" type="radio"/>	<input type="radio"/>	Thread Flank Line

## IV. CERTIFICATES OF CONFORMITY AND CALIBRATION

### 1. Certificate of conformity

#### **CERTIFICATE OF CONFORMITY**

Sylvac certifies that this instrument has been manufactured in accordance with our Quality Standard and tested with reference to masters of certified traceability by the Federal Institute of Metrology.

#### **CERTIFICAT DE CONFORMITÉ**

Sylvac certifie que cet instrument a été fabriqué et contrôlé selon ses normes de qualité et en référence avec des étalons dont la traçabilité est reconnue par l'Institut fédéral de métrologie.

#### **QUALITÄTSZEUGNIS**

Sylvac bestätigt, dass dieses Gerät gemäss seinen internen Qualitätsnormen hergestellt wurde und mittels Normalen mit anerkannter Rückverfolgbarkeit, kalibriert durch der Eidgenössischen Institut für Metrologie, geprüft worden ist.

## 2. Certificate of calibration

### **Calibration certificate**

Because we make our Sylvac instruments in batches, you may find that the date on your calibration certificate is not current. Please be assured that your instruments are certified at point of production and then held in stock in our wa-rehouse in accordance with our Quality Management System ISO 9001. Re-calibration cycle should start from date of receipt..

### **Certificat d'étalonnage**

En raison de la fabrication de nos instruments par lots de production, il est possible que la date de votre certificat d'étalonnage ne soit pas actuelle. Nous garantissons que nos instruments sont certifiés au moment de leur fabrication puis stockés conformément à notre système de gestion de la qualité ISO 9001. Le cycle de réétalonnage peut commencer à partir de la date de réception.

### **Zertifikat**

Da wir unsere Instrumente in Serien herstellen, kann es sein, dass das Datum auf dem Zertifikat nicht aktuell ist. Die Instrumente sind jedoch ab der Herstellung zertifiziert und werden dann gemäß unserem Qualitätsmanagementsystem ISO 9001 in unserem Lager aufbewahrt. Der Nachkalibrierungszyklus kann ab dem Empfangsdatum beginnen..

**UK  
CA**

**CE**



Changes without prior notice  
Sous réserve de toute modification  
Änderungen vorbehalten

Edition :

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