# sylvac

ReflexScan+

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
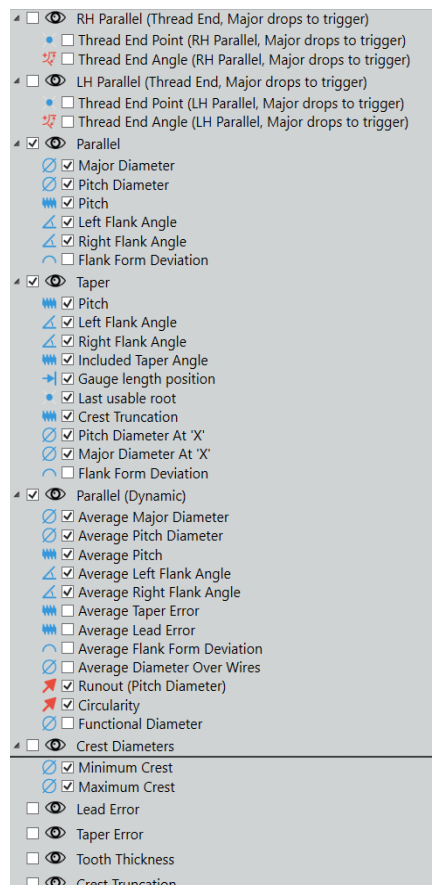
II. MACHINES WITHOUT TILTING SYSTEM

1. STANDARD option

a. Parallel threads (static or dynamic), conical threads (static)
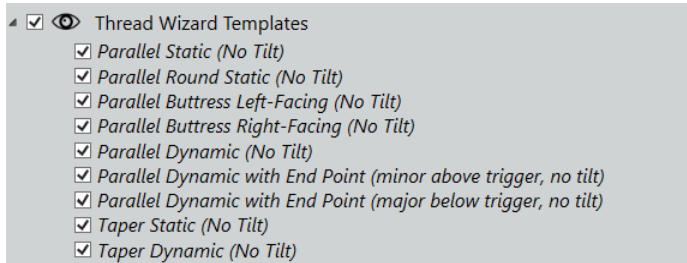b. Example of the standards available for parallel threads:
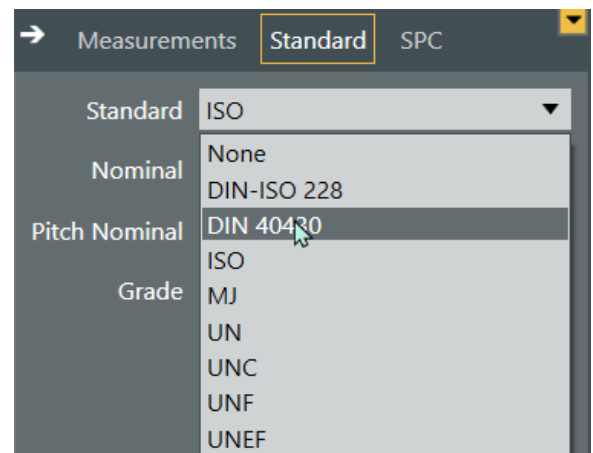
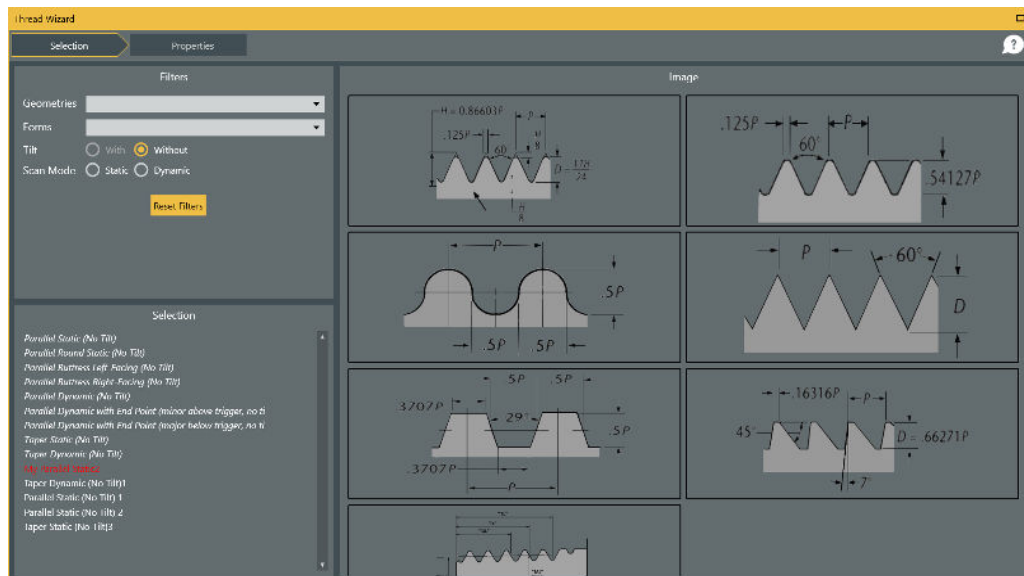c. List of available measurements on threads (all options displayed, not only the marked ones)
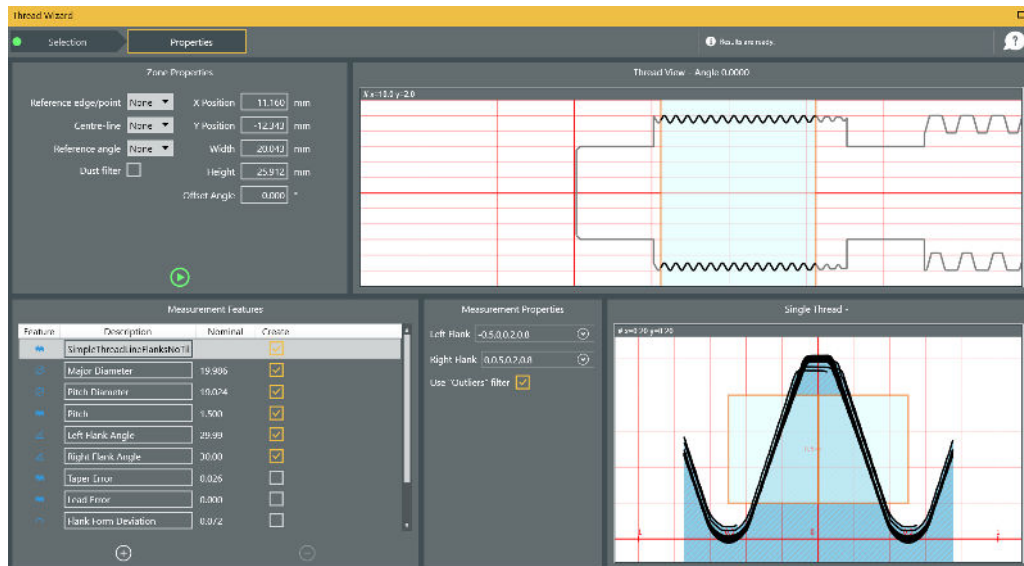
2. PRO option

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
    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

∅	Major Diameter	19.986	☑
∅	Pitch Diameter	19.024	☑
⋙	Pitch	1.500	☑
∡	Left Flank Angle	29.99	☑
∡	Right Flank Angle	30.00	☑
⋙	Taper Error	0.026	☐
⋙	Lead Error	0.000	☐
⌒	Flank Form Deviation	0.072	☐
∅	Diameter over wires	17.725	☐

  ii. Special measurements

☐	⊕	⊖	⋙	Addendum
☐	⊕	⊖	⋙	Crest Truncation
☐	⊕	⊖	∡	Included Taper Angle
☐	⊕	⊖		LANG_FEAT_THREAD_CENTRE_LINE
☐	⊕	⊖		LANG_FEAT_THREAD_CENTRE_LINE_MAJOR
☐	⊕	⊖	⋙	Tooth Thickness
0	⊕	⊖	∅	Diameter over wires
0	⊕	⊖	→|	Gauge length position
0	⊕	⊖		LANG_FEAT_THREAD_CENTRE_LINE_MAJOR_AT_X
0	⊕	⊖		LANG_FEAT_THREAD_CENTRE_LINE_PITCH_DIA_AT_X
0	⊕	⊖	∅	LANG_FEAT_THREAD_PITCH_DIAMETER_AT_X
0	⊕	⊖	⋙	Lead Error
0	⊕	⊖	∅	Major Diameter At 'X'
0	⊕	⊖	✕	Point over wire
0	⊕	⊖	—	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:
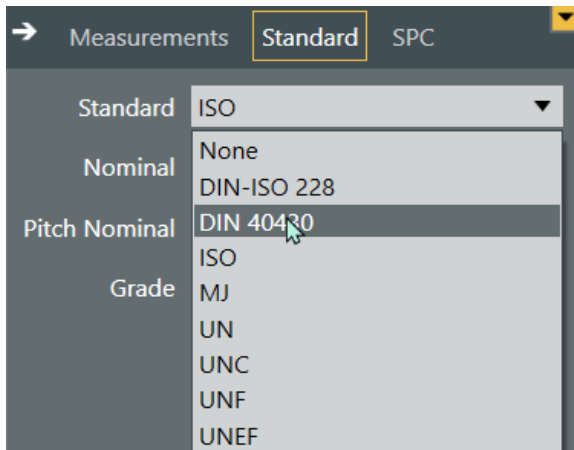
    e. List of available measurements on threads (e.g. right-hand thread)
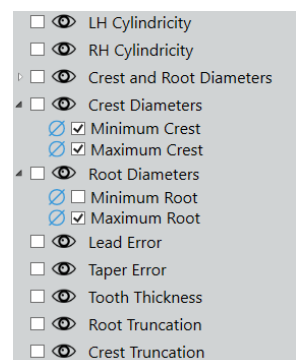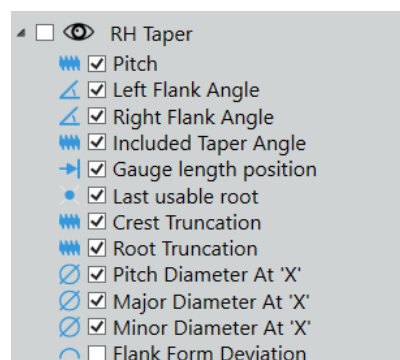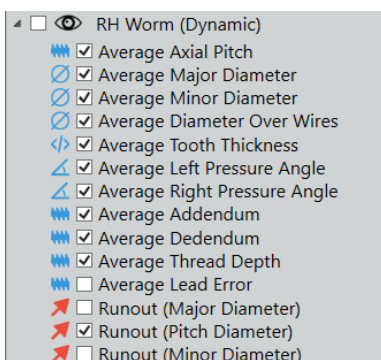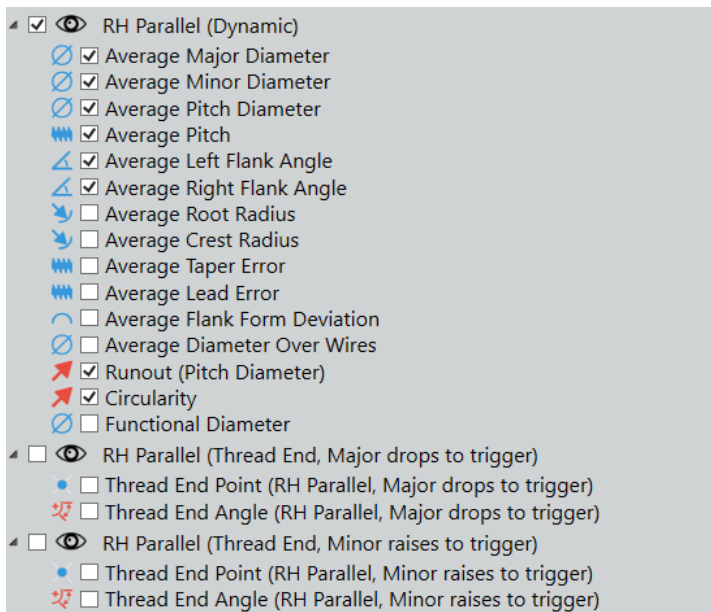
2. Option PRO

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

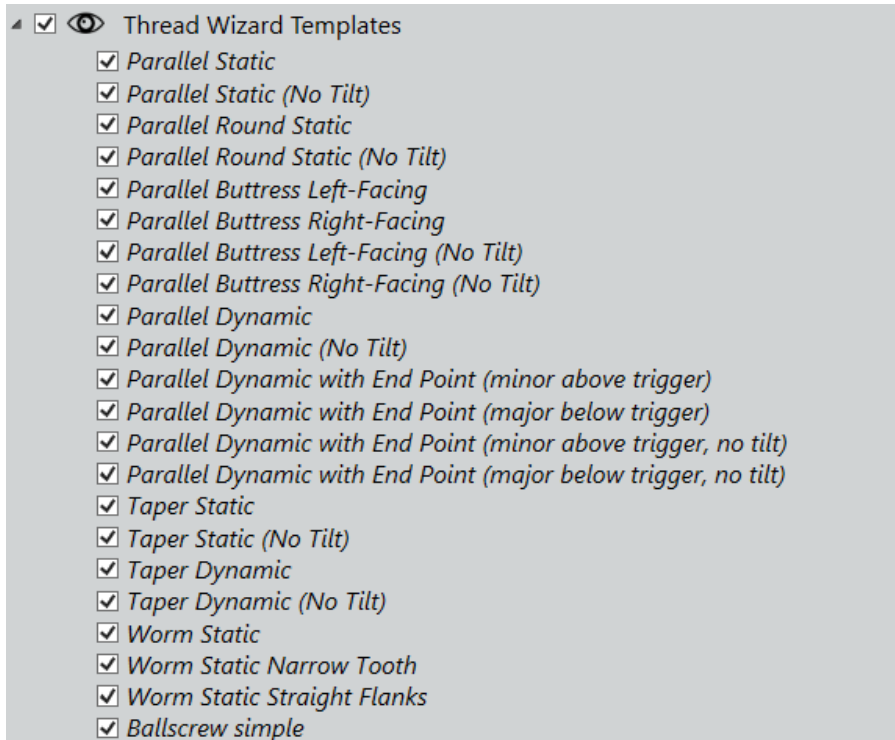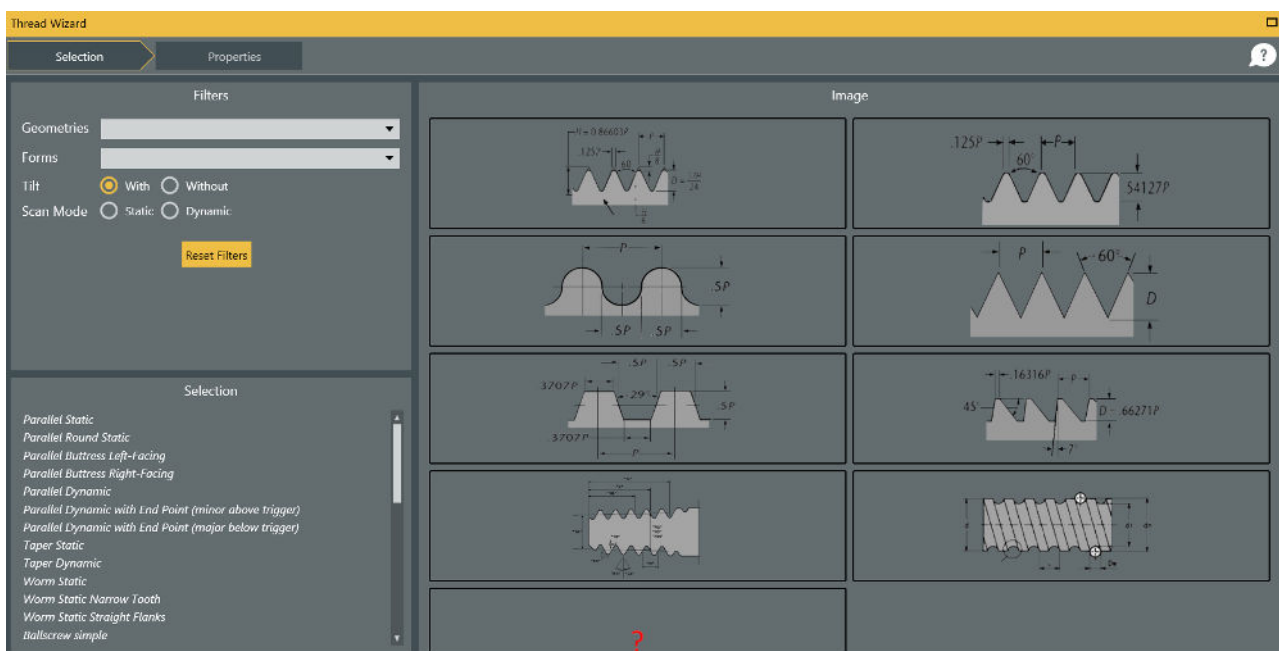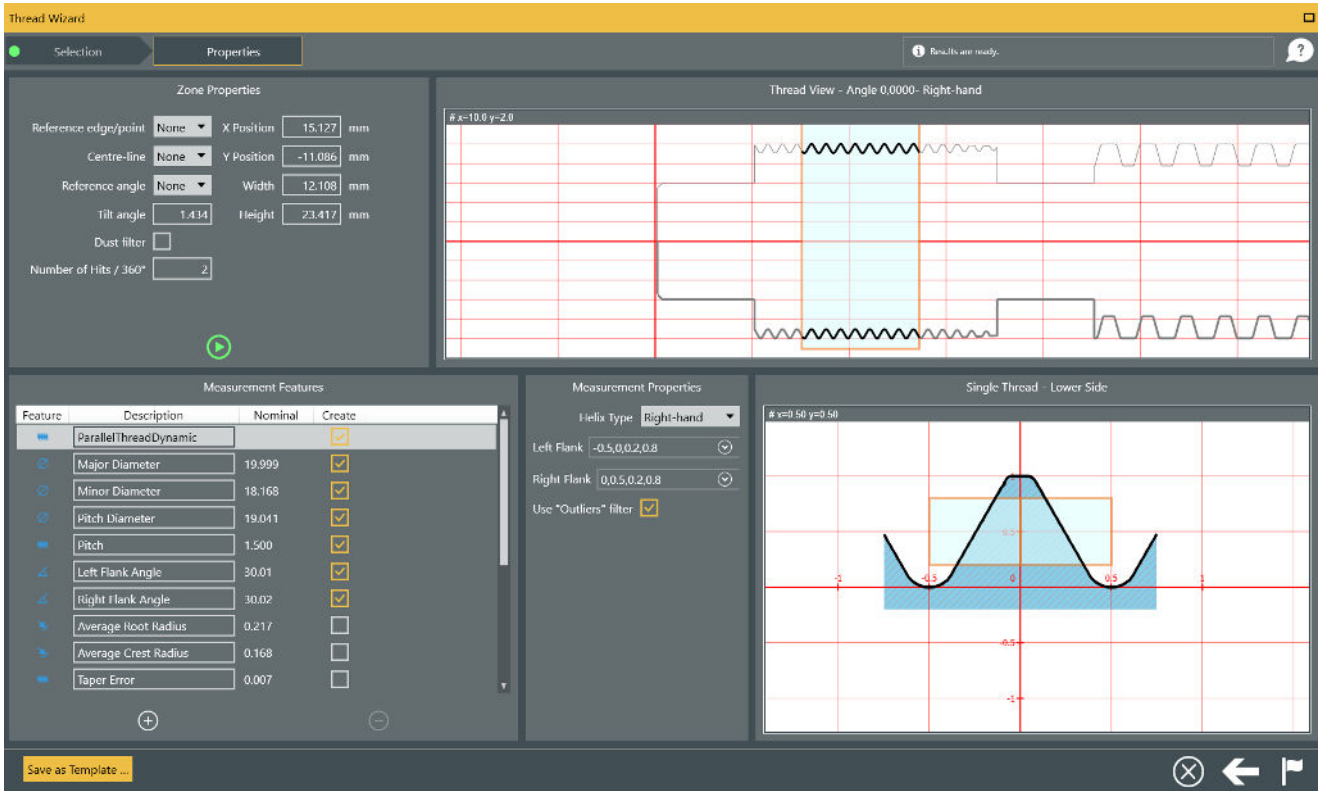ii.   Measurements selection window and customisation of flank or radius areas, etc.


c.   Example of available measurements for dynamic parallel threads :
   i.   Basic measurements

Ø	Major Diameter	19.999	☑
Ø	Minor Diameter	18.168	☑
Ø	Pitch Diameter	19.041	☑
ᙃ	Pitch	1.500	☑
⊿	Left Flank Angle	30.01	☑
⊿	Right Flank Angle	30.02	☑
⤵	Average Root Radius	0.217	☐
⤵	Average Crest Radius	0.168	☐
ᙃ	Taper Error	0.007	☐
ᙃ	Lead Error	0.000	☐
⌒	Flank Form Deviation	0.006	☐
Ø	Diameter over wires	17.744	☐
↗	Runout (Pitch Diameter)	0.000	☐
↗	Circularity	0.000	☐
Ø	Functional Diameter	19.041	☐

ii. Special measurements

- ☐ ⊕ ⊖ 〜〜 Addendum
- ☐ ⊕ ⊖ 〜〜 Crest Truncation
- ☐ ⊕ ⊖ 〜〜 Dedendum
- ☐ ⊕ ⊖ ∡ Included Taper Angle
- ☐ ⊕ ⊖ ⊀ LANG_FEAT_THREAD_CENTRE_LINE
- ☐ ⊕ ⊖ ⊀ LANG_FEAT_THREAD_CENTRE_LINE_MAJOR
- ☐ ⊕ ⊖ 〜〜 Root Truncation
- ☐ ⊕ ⊖ 〜〜 Thread Depth
- ☐ ⊕ ⊖ 〜〜 Tooth Thickness
- 0 ⊕ ⊖ ❧ Average Crest Radius
- 0 ⊕ ⊖ ❧ Average Root Radius
- 0 ⊕ ⊖ ∅ Diameter over wires
- 0 ⊕ ⊖ ∅ Functional Diameter
- 0 ⊕ ⊖ ⊣ Gauge length position
- 0 ⊕ ⊖ ⊀ LANG_FEAT_THREAD_CENTRE_LINE_MAJOR_AT_X
- 0 ⊕ ⊖ ⊀ LANG_FEAT_THREAD_CENTRE_LINE_PITCH_DIA_AT_X
- 0 ⊕ ⊖ ∅ LANG_FEAT_THREAD_PITCH_DIAMETER_AT_X
- 0 ⊕ ⊖ 〜〜 Lead Error
- 0 ⊕ ⊖ ∅ Major Diameter At 'X'
- 0 ⊕ ⊖ ∅ Minor Diameter At 'X'
- 0 ⊕ ⊖ ✕ Point over wire
- 0 ⊕ ⊖ ❧ Single Crest Radius
- 0 ⊕ ⊖ ❧ Single Root Radius
- 0 ⊕ ⊖ — 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..

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