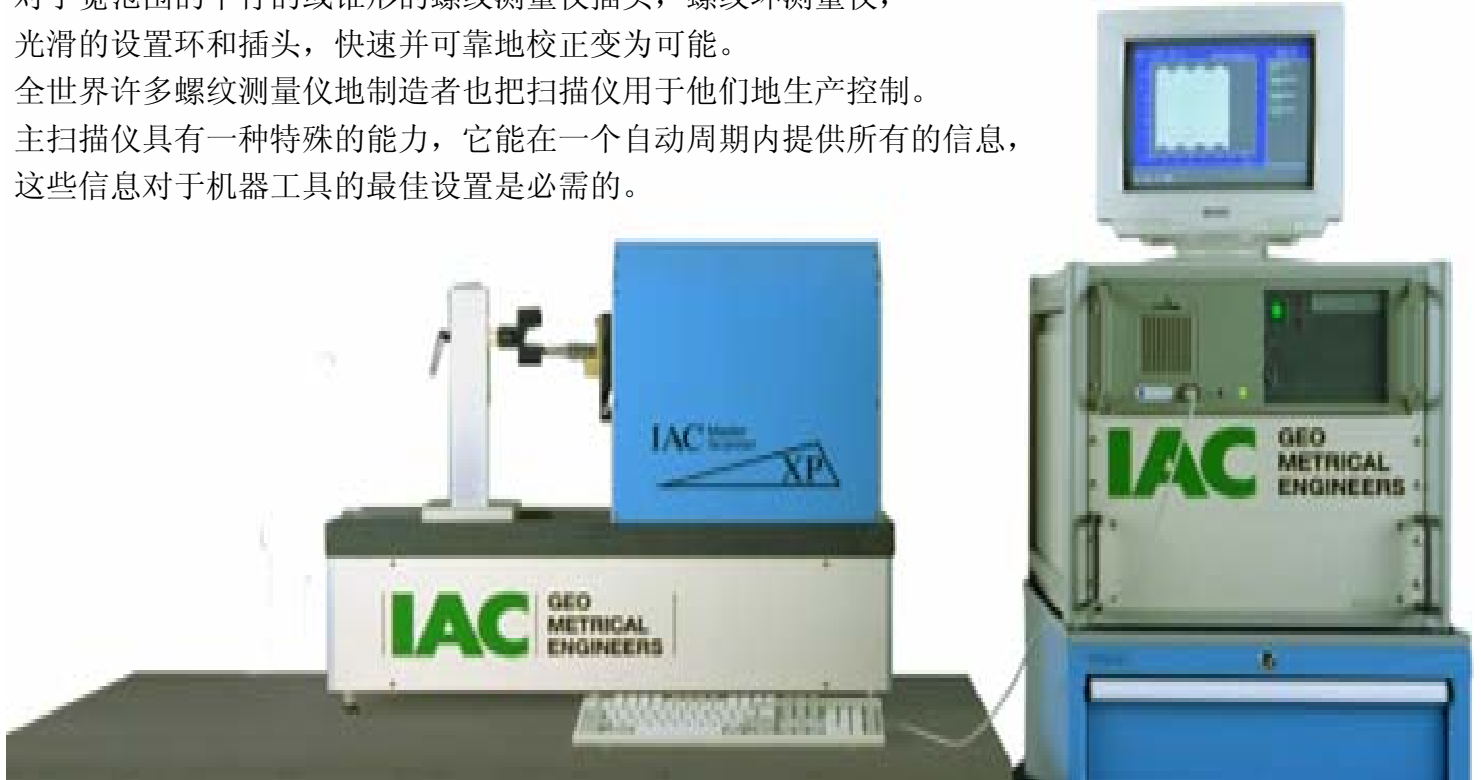


The **IAC** Master Scanner XP

Series 6025/6060/10025/10060

主扫描仪完成今天所有的工业需求，用做有效的光面和螺纹测量。
它的优秀的测量不确定性和复杂的特征使主扫描仪成为校正实验室理想的仪器。
对于宽范围的平行的或锥形的螺纹测量仪插头，螺纹环测量仪，光滑的设置环和插头，快速并可靠地校正变为可能。
全世界许多螺纹测量仪地制造者也把扫描仪用于他们地生产控制。
主扫描仪具有一种特殊的能力，它能在一个自动周期内提供所有的信息，这些信息对于机器工具的最佳设置是必需的。



通过新的专利测量技术，获得了优秀的准确性。

通过参考轴，带有一个精确平面的块表面完全的二维空间的交点由随后的两种相对的周线组成，而周线是由带有两个指针的探针构成的。一个特殊的特征是两个指针中每个的实际形状是多方向自动绘制的，用于探针系统的最优校正。在扫描中，每秒有数千个2-d周线点用高分辨率储存在计算机的内存中。

在扫描后，测量力的第一个周线方向被翻转，探针被置换用于第二个周线的扫描。对于两轴中的每个轴，它的每个周线点拥有0,01 μ m的分辨率，它们被存储下来用做数据处理。在定下扫描方案和主扫描仪计算机后，立刻提供以下参数：有效直径、简单有效直径、主要直径、次要直径、齿距、局部侧面角，剖面亏度，锥度等等。



IAC

GEOMETRICAL ENGINEERS B.V.

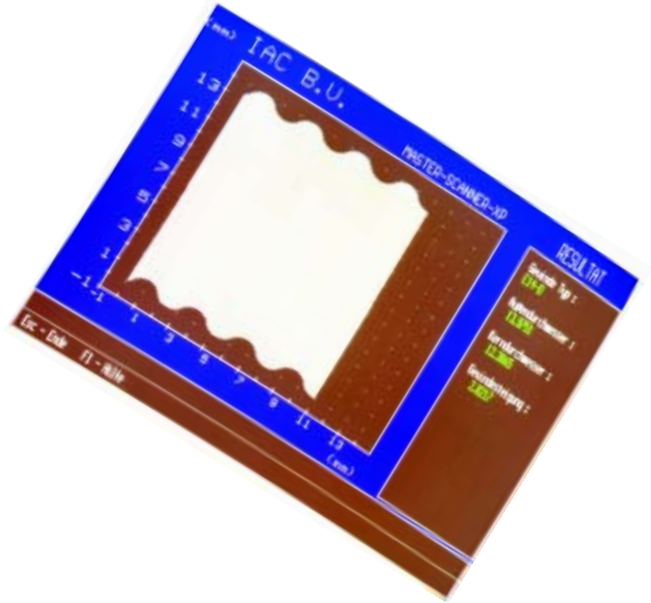
The **IAC** Master Scanner XP

Series 6025/6060/10025/10060

对于结果的鉴定和评估，测量学家可借助于键盘获得非常详细的公差图书馆IACLIB，它涵盖了数千种不同的螺纹和光面的测量仪的公差极限值。

主扫描仪遵循ISO-17025 所描绘的所有要求。
仅当机器进行过成功的初始化和校正后，它才能继续进行校正测量。
交叉检验自动监视操作者。

通过CAD系统方式，如AutoCad，所有测量的周线能被转化为DXF格式，用于进一步的评估和分析。



IACLIB is the fully integrated Tolerance Library for gages and pieces for automatic comparison with the standards.

ANSI/ASME B1.2 Unified
ANSI/ASME B1.20 NPT
BS 21 Pipe threads
BS 919/1 Unified
BS 919/2 Whitworth
BS 919/3 ISO Metric
ISO 7/2 Pipe threads
ISO 228 Pipe threads
ISO 286 Plain bores and shafts
ISO 1502 Metric
DIN 13 Metric
DIN 2999 Pipe threads
DIN 7162 Plain rings and plugs
DIN 40401 Edison
and more

Measured dimensions are:

- Effective pitch diameter
- Simple effective pitch diameter
- Effective diameter equivalent
- Major diameter
- Minor diameter
- Pitch
- Accumulated Pitch deviation
- Flank angles
- Partial Flank angles
- Taper
- Profile deficiencies



The Master Scanner is accredited In Italy, Germany, Switzerland, Sweden, Holland, Belgium, UK and Denmark by the partner organizations of PTB for the calibration of thread gages.

Main Office

P.O. Box 2115, NL-7801 CC Emmen; Jules Verneweg 13-17, NL-7821 AD Emmen, Holland
Phone +31 591 644 103, Fax +31 591 648 064

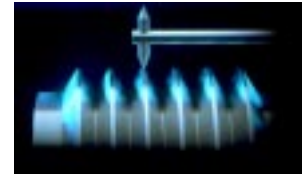
German Branch

Wallotstraße 8, D-66123 Saarbrücken
Phone/Fax +49 681 390 4314
www.iac-instruments.com



GEOMETRICAL ENGINEERS B.V.

The **IAC** Master Scanner XP



The Master Scanner is available in four models.

Model	6025	6060	10025	10060
Range external measurements	1,0 - 50 mm	1,0 - 50 mm	1,0 - 90 mm	1,0 - 90 mm
Range internal measurements	2,5 - 60 mm	2,5 - 60 mm	2,5 - 100 mm	2,5 - 100 mm
Max. Scan range	25 mm	60 mm	25 mm	60 mm
Min pitch	0,1 mm	0,1 mm	0,1 mm	0,1 mm
Weight	150 kg	155 kg	155 kg	160 kg

Technical Data

Transducer system	Opto-electronic glass scales
Resolution	0,01 μm
Linear bearing	Air bearings
Actuators	Controlled DC actuators
Measuring force system	Computer controlled in 2 directions
Computer	Industrial measurement computer in 19" cabinet
Air supply	6 bar, oil and water free
Electric power	220V, 50Hz

Measurement uncertainty

Thread ring gages parallel or tapered (minor diameter over 10 mm, partial flank angles $\geq 27^\circ$)

Minor diameter	$2,0 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$2,5 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$2,5 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$3,0 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$
Effective pitch diameter	$2,0 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$2,5 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$2,5 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$3,0 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$
Pitch	$1,0 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$1,5 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$1,0 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$1,5 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$

Thread ring gages parallel or tapered (minor diameter 2,5 to 10 mm, partial flank angles $\geq 27^\circ$)

Minor diameter	$2,5 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$3,0 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$3,0 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$3,5 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$
Effective pitch diameter	$2,5 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$3,0 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$3,0 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$3,5 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$
Pitch	$1,5 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$1,5 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$1,0 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$1,5 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$

Thread plug gages parallel or tapered (major diameter over 1 mm, partial flank angles $\geq 27^\circ$)

Major diameter	$1,5 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$2,0 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$2,0 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$2,5 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$
Effective pitch diameter	$1,5 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$2,0 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$2,0 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$2,5 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$
Pitch	$1,0 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$1,5 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$1,0 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$1,5 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$

Plain gages parallel or tapered (diameter over 10 mm)

Internal diameter ring gages	$1,0 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$1,5 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$1,5 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$2,0 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$
External diameter plug gages	$1,0 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$1,5 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$1,5 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$2,0 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$

Plain gages parallel or tapered (diameter 1 to 10 mm)

Internal diameter ring gages	$2,0 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$2,5 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$2,5 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$3,0 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$
External diameter plug gages	$2,0 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$2,5 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$2,5 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$	$3,0 \mu\text{m} + 5 \cdot 10^{-6} \cdot l$

Main Office

P.O. Box 2115, NL-7801 CC Emmen; Jules Verneweg 13-17, NL-7821 AD Emmen, Holland

Phone +31 591 644 103, Fax +31 591 648 064

German Branch

Wallotstraße 8, D-66123 Saarbrücken

Phone/Fax +49 681 390 4314

www.iac-instruments.com