

Horizon Premium Applications



▲ Setting of 2-point bore gages using 54-196-107 and 54-196-021



▲ Setting of 2-point bore gages using 54-190-805, 54-190-829 and 54-196-040



▲ Trimos Heavy Duty Table 54-197-019



▲ Checking of ring gages from .473 to 10" (12 to 250mm) using No. 54-196-160, 54-197-162 and 54-197-142



▲ Checking of snap gages from .473 to 6" (12 to 150mm) using No. 54-196-160, 54-190-815 and 54-197-162

Horizon Premium Applications



▲ Checking and setting of external micrometers from 3" to 120" (75 to 3050mm) using 54-190-805 & 54-190-825



▲ Checking of plugs 4" diameter (100mm), 11" length (280mm) part number 54-197-107



▲ Checking of depth calipers using 54-190-805 & 54-190-827



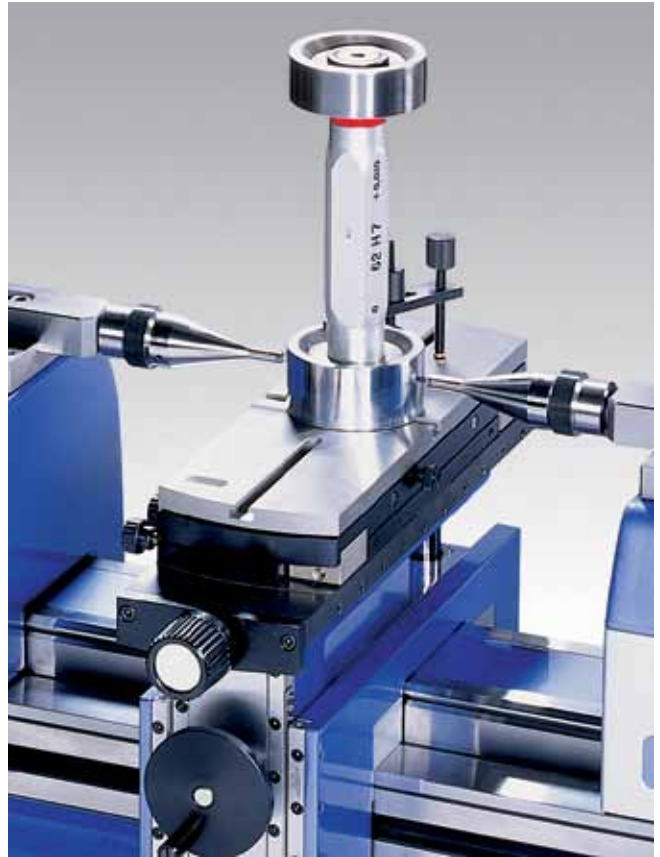
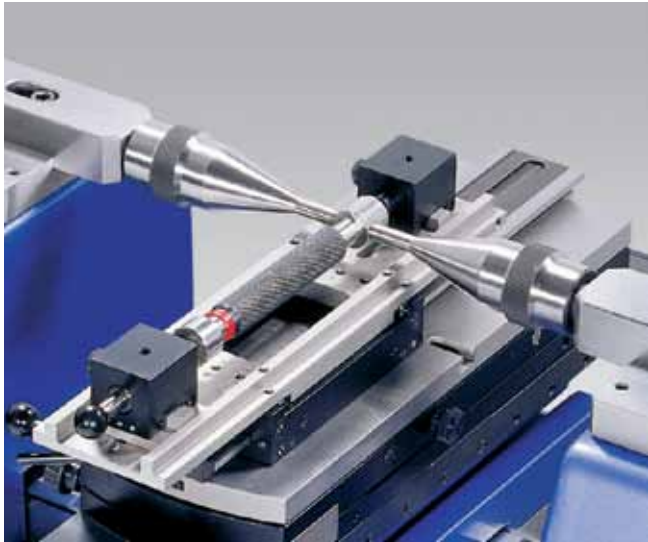
▲ Checking of 8mm dial indicators above range of 50mm using holder 54-190-824 Checking of 3/8" dial indicators up to 2" range using 54-190-823



▲ Checking of calipers using 54-196-006

Horizon Premium Applications

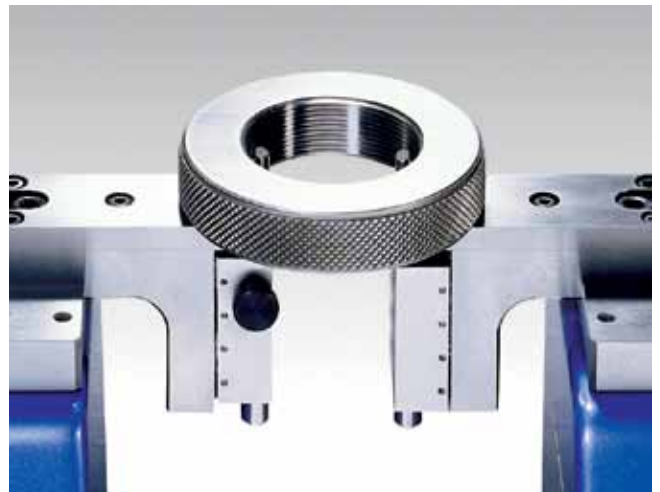
▼ Setting of plug gages between centers up to maximum diameter of 1.18"(30mm), maximum length 6"(150mm) using 54-196-160, 54-190-806 and 54-197-106



▼ Checking of threaded ring gages from pitch 48 to 4 threads per inch/0.7 to 6mm (maximum internal diameter of 7.08"/180mm) using 54-196-160, 54-197-142, 54-197-075 and 54-197-074 or 54-197-070 & 073

▲ Setting of plug gages from diameter of 1.18" to 10"(30 to 250mm) using 54-196-160, 54-197-142 and 54-190-806

Checking of ring gages from diameter of .04 to 4"(1 to 100mm) using 54-196-160, 54-197-142, 54-197-070, 54-190-076 and 54-197-074 or 54-197-070 & 073



▲ Checking of threaded ring gages (low cost method) from minimum internal diameter of .70"(18mm), pitch from 0.25 to 5mm (4-80) thread per inch using 54-190-818, 54-190-804 and 54-190-826

Horizon Premium

Length Measuring & Setting Instrument

Willrich Precision
 Ph 866-945-5742
 email: sales@willrich.com



Shown with optional Quadra-Chek display

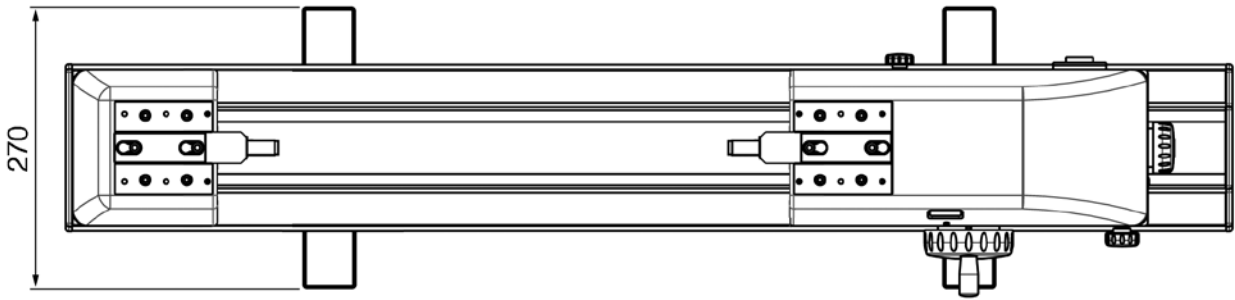
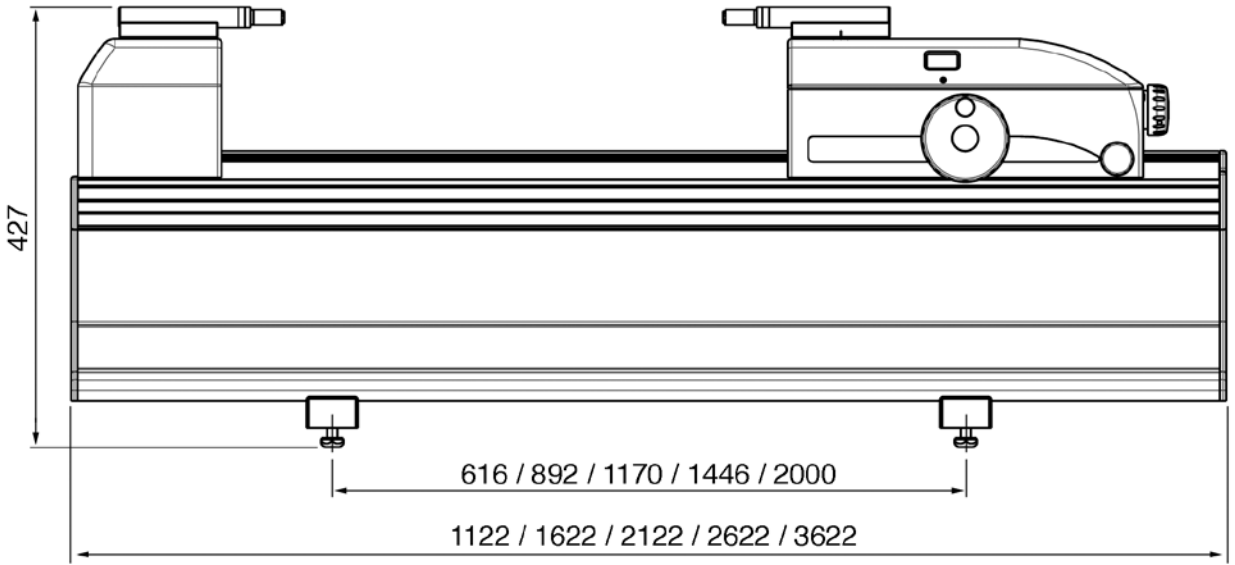
System Specifications (all models)

Resolution (analog)	.001", .0001", .00001" (.01, .001, .0001mm)
Resolution (digital)	.00005", .00002", .00001", .000005" (.01, .001, .0001mm)
Repeatability (\pm 2s)	.000008"/.0002mm
Measuring Force	0—43 ounces/12N (adjustable) - Constant measuring force of the floating probe movement with digital indication
Displacement speed	60"/sec. - 1.5 m/sec.
Fine adjustment range	.394"/10mm
Operational temperature limit	10°—40°C
Operational humidity limit	30—80%
Accuracy	0.7 μ m + (L(mm)/1000)



Order Number	Description	Weight
ANALOG		
54-196-050	0—21.5" (550mm) Horizon Premium	176 lbs (80 kg.)
54-196-110	0—41" (1050mm) Horizon Premium	264 lbs (120 kg.)
54-196-260	0—61" (1550mm) Horizon Premium	352 lbs (160 kg.)
54-196-280	0—80.5" (2050mm) Horizon Premium	440 lbs (200 kg.)
54-196-320	0—120" (3050mm) Horizon Premium	616 lbs (279 kg.)
DIGITAL		
54-196-750	0—21.5" (550mm) Horizon Premium	176 lbs (80 kg.)
54-196-800	0—41" (1050mm) Horizon Premium	264 lbs (120 kg.)
54-196-815	0—61" (1550mm) Horizon Premium	352 lbs (160 kg.)
54-196-820	0—80.5" (2050mm) Horizon Premium	440 lbs (200 kg.)
54-196-850	0—120" (3050mm) Horizon Premium	616 lbs (279 kg.)

Specifications subject to change without notice.



Horizon Premium

Length Measuring & Setting Instrument

Order No.	Description
Measuring tables and supports	
54-196-160	Universal measuring table
54-197-132	Holding device for indicator, fits on 54-196-160 table for displacement
54-196-107	Set of vertically adjustable supports
54-196-108	Adjustable support (one only)
54-196-022	Set of L-shaped supports to fit No. 54-196-107/108
54-196-021	Set of V-shaped supports to fit No. 54-196-107/108
54-197-001	Premium temperature compensation package for digital Horizon
54-197-003	Standard temperature compensation package for digital Horizon
54-197-019	Heavy duty universal measuring table
Accessories for setting and checking of comparative measuring instruments and indicators	
54-190-805	Set of carbide gage block attachments 1" (2" total)
54-196-006	Set of carbide gage block attachments for checking calipers
54-190-823	Dial indicator holder (for 3/8" and 8mm stems)
54-197-015	Dial indicator holder for max range of 2"/50mm (for 3/8" and 8mm stems)
54-197-115	Adjustable holding device for lever dial indicator
54-190-825	Set of V-shaped blocks for checking external micrometers over 2.36"/60mm requires 54-190-805
54-197-114	Holding device for external micrometers from .48"—4"/12—100mm requires 54-196-160
54-190-820	Holding device for setting of 2 point bore gages (fits on standard probes)
54-190-817	Set of supporting plates for setting of 2 point bore gages total length of 13"/330mm
54-190-829	Set of supporting plates for setting of 2 point bore gages total length of 7.08"/180mm
54-196-040	Adjustable support for setting of the reversal point requires 54-190-817 or 54-190-829
54-190-807	Set of anvils with Tungsten carbide balls for flat measuring surfaces
Accessories for external measurements	
54-190-806	Set of anvils with tungsten carbide tipped measuring surface diameter 0.256"/6.50mm
54-197-806	Set of anvils with tungsten carbide tipped measuring surface diameter 0.315"/8mm
54-190-865	Set of knife shaped anvils with tungsten carbide measuring surfaces
54-190-807	Set of anvils with tungsten carbide balls for flat measuring surfaces
54-197-007	Set of wires on holders for checking pitch diameters of external threads, pitch of 72-5 threads per inch/0.25-5mm
54-197-107	High accuracy plug measuring fixture for plugs up to 4" diameter, 11" length
Accessories for internal measurements	
54-197-162	Set of L-shaped probes (minimum internal measurement: .475"/12mm) for height of 1.57"/40mm
54-190-815	Clamping device for snap gages from .475" to 6"(12 to 150mm)
54-197-143	Set of quick clamping attachments
54-197-142	Set of clamping attachments for height of 2.36"/60mm - use with 54-196-160
54-190-818	Set of measuring devices for checking of pitch diameters of internal threads (minimum internal diameter of .475"/12mm) requires No. 54-190-826
54-190-826	Set of cones, 60°, for pitch of 64-5 threads per inch/ 0.4 to 5mm. Use ring No. 54-190-804
54-190-804	Setting ring, 60° for use with 54-190-826
54-197-070	Measuring device for checking of internal diameters from .04"/1mm upwards and pitch diameters of internal threads from M4/32UNC-NC upwards for analog system - requires 54-197-073
54-197-073	Analog display for measuring device for No. 54-197-070
54-197-074	Measuring device for checking of internal diameters from .04"/1mm upwards and pitch diameters of internal threads from M4/32UNC-NC upwards for digital system
54-197-075	Set of T-shaped measuring inserts with ruby balls for pitch from 56 threads per inch/0.7mm upwards for use with 54-197-070 & 074
54-197-913	T-shaped measuring insert with ruby balls, dia. 0.01319"/.335mm for use with 54-197-070 & 074
54-197-076	Set of ruby ball measuring inserts for checking internal diameters from .04"/1mm upwards for use with 54-197-070 & 074
Reference gages	
54-197-050	Master plug gage, dia 1.9685"/50mm includes calibration certificate
54-197-040	Master ring gage, dia. 1.5748"/40mm includes calibration certificate