

## TC OPTICAL BENCH KITS

# Excellence in TC optics for easy measurements



**TC Optical Bench Kits** are full optical benches tailored for a hassle-free development of demanding measurement applications.

Each kit integrates:

- 1 Bi-Telecentric Lens for 2/3" detectors
- 1 LTCL Telecentric Illuminator (green)
- 2 CMHO clamping mechanical holders
- 1 CMPT base-plate
- 1 Chrome-on-Glass Calibration Pattern
- 1 Adjustable Pattern Holder
- 1 CVTClib calibration software demo CD

The benches come pre-assembled and pre-aligned to assure the best accuracy that a telecentric measurement system can deliver.

The collimating source is set in order to optimize both the illumination homogeneity and all the other relevant parameters (distortion, telecentricity, resolution).

Opto Engineering® tests the optical performances of the whole opto-mechanical assembly, also providing a Test Report certifying the measurement accuracy of the entire system.

The coupling of a LTCL illuminator with a Telecentric Lens increases the natural field depth of the lens itself; this is particularly true for 2/3" detector lenses where the acceptance ray cones angle is much larger than the divergence of the collimating source.

For this reason these benches feature unpaired image resolution and field depth. TC Optical Bench Kits also benefit from a special price policy, combining high-end performances with cost effectiveness.

part number	detector type						optical specs				dimensions					
	magn. (x)	1/2"		1/1.8" (7)		2/3"		measurement accuracy (micron)	measurement accuracy (%)	field depth (mm)	CTF @ 70 lp/mm (%)	mount	length (mm)	width (mm)	height (mm)	weight (g)
		w (mm)	x (mm)	w (mm)	h (mm)	w (mm)	h (mm)									
<b>TCBENCH09</b>	1,000	6,4	4,8	7,1	5,4	8,8	6,6	5	0,06%	1,2	> 35	C	282	56	78,5	900
<b>TCBENCH16</b>	0,528	12,1	9,1	13,5	10,2	16,7	12,5	8	0,05%	3	> 40	C	297	65,5	81,2	1200
<b>TCBENCH24</b>	0,350	18,3	13,7	20,4	15,3	25,1	18,9	13	0,05%	7	> 55	C	391	65,5	78,5	1340
<b>TCBENCH36</b>	0,243	26,3	19,7	29,3	22,1	36,2	27,1	22	0,06%	14	> 50	C	529	103	140,5	4150
<b>TCBENCH48</b>	0,184	34,8	26,1	38,8	29,2	47,9	35,9	31	0,06%	24	> 50	C	636	117	147,5	5600
<b>TCBENCH56</b>	0,157	40,7	30,6	45,4	34,2	56,0	42,0	36	0,06%	33	> 55	C	701	122	150,0	7300
<b>TCBENCH64</b>	0,138	46,5	34,9	51,8	39,0	64,0	48,0	40	0,06%	43	> 66	C	845	143	160,5	8700
<b>TCBENCH80</b>	0,110	58,0	43,5	64,6	48,7	79,8	59,8	55	0,07%	67	> 55	C	915	158	168,0	11100
<b>TCBENCH96</b>	0,093	68,5	51,4	76,3	57,5	94,2	70,7	70	0,07%	94	> 50	C	1053	206,5	185,0	15300

## KEY ADVANTAGES

- 1 Pre-assembled set-up:** just attach your camera, the bench is ready for measurement
- 2 Best Optical Performances:** the bench is set so as to provide unpaired measurement accuracy
- 3 Certified System:** the bench you receive is quality tested as a whole
- 4 Convenient Price:** the bundle costs less than the sum of the single components.