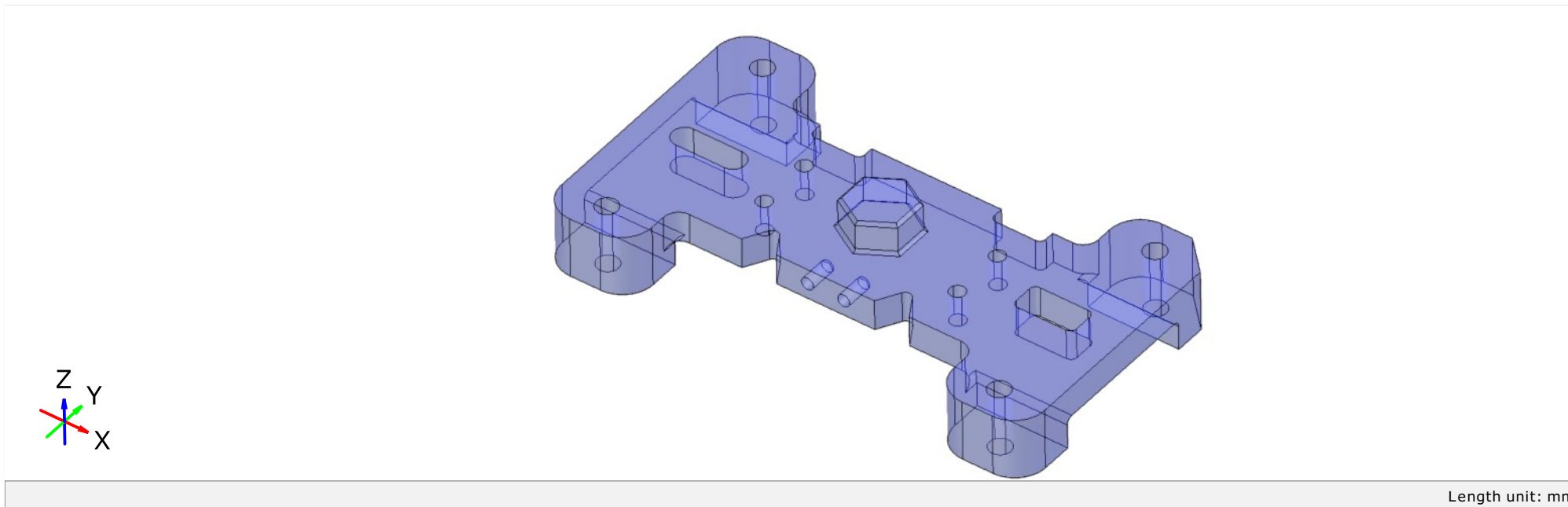


Plastic Part Inspection Report



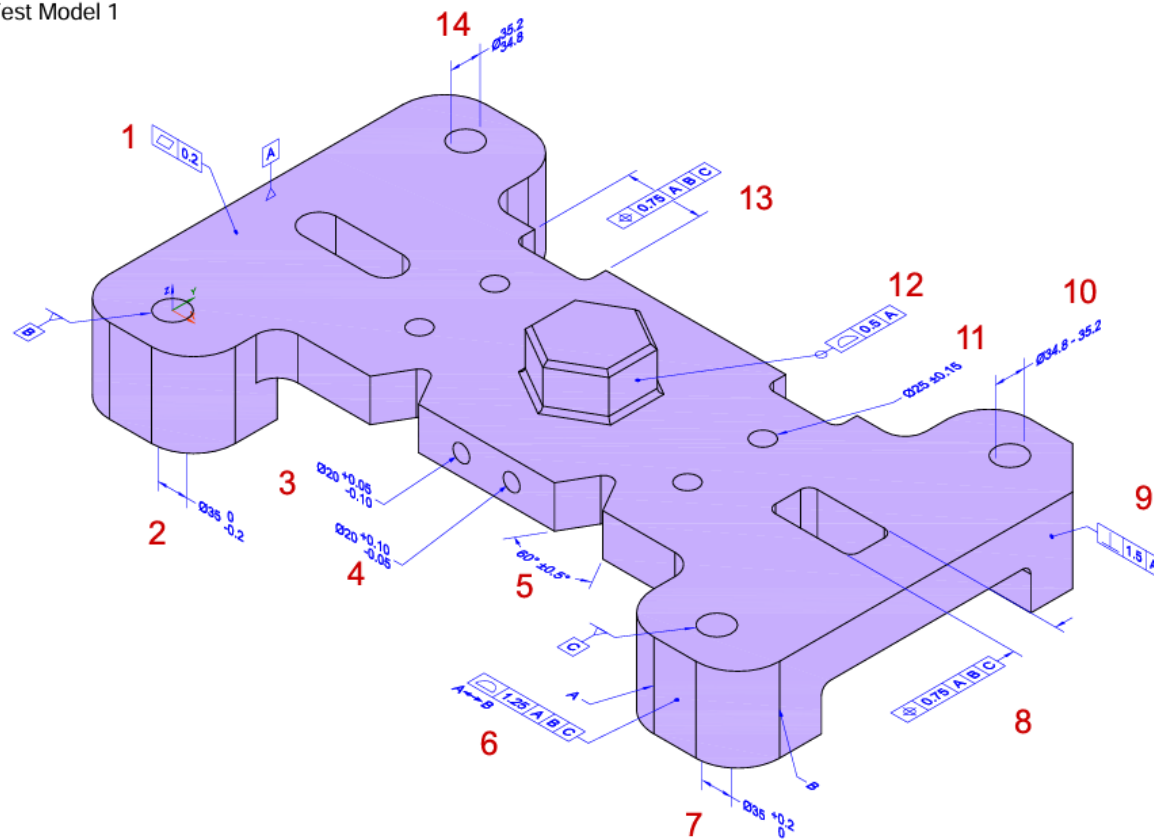
Inspector: bAlgar
Company: -
Department: 3D Scanning & Metrology
Location: Czech Republic
Date: 16.09.2026
Project: Beyond the Mesh

Part: nist_ctc_01_asme1_rd
Part no.: 01
Version: 1.0
Charge no.:
System: Zeiss Inspect 2026

Drawing

NIST PMI Test Models - 2012

Test Model 1

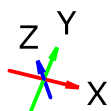


PMI Complex Test Case 1

Includes Atomic Test Cases - 1, 2, 3, 4, 7, 8, 17, 21, 33, 48

Rev D

nist_ctc_01_asme1_rd



Length unit: mm



Datum Reference Frame A|B|C

Create Datum System (Nominal Only)

NameABC

Datum 1A

☒ [PL] ☐ [SL] ☐ [PT] ☐ >< ☐ MMR ☐ LMR

Datum 2B

☐ [PL] ☒ [SL] ☐ [PT] ☐ >< ☐ MMR ☐ LMR

Datum 3C

☐ [PL] ☒ [SL] ☐ [PT] ☐ >< ☐ MMR ☐ LMR

☐ Release indirect degree of freedom

☐ Use nominal angle

☐ Use nominal distance

StandardISO 5459:2011

Remaining degrees of freedomNone

Expert parameters

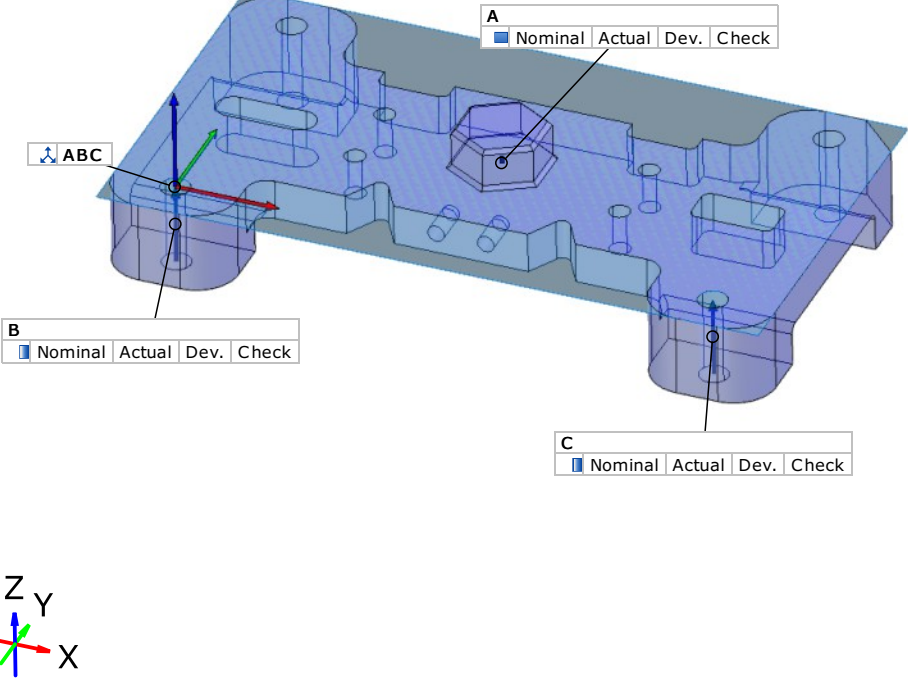
Cylinders or cones: Position result planeOn first element

Planes: Position result planeOn first element

Rotate ABCX'Angle0.00°

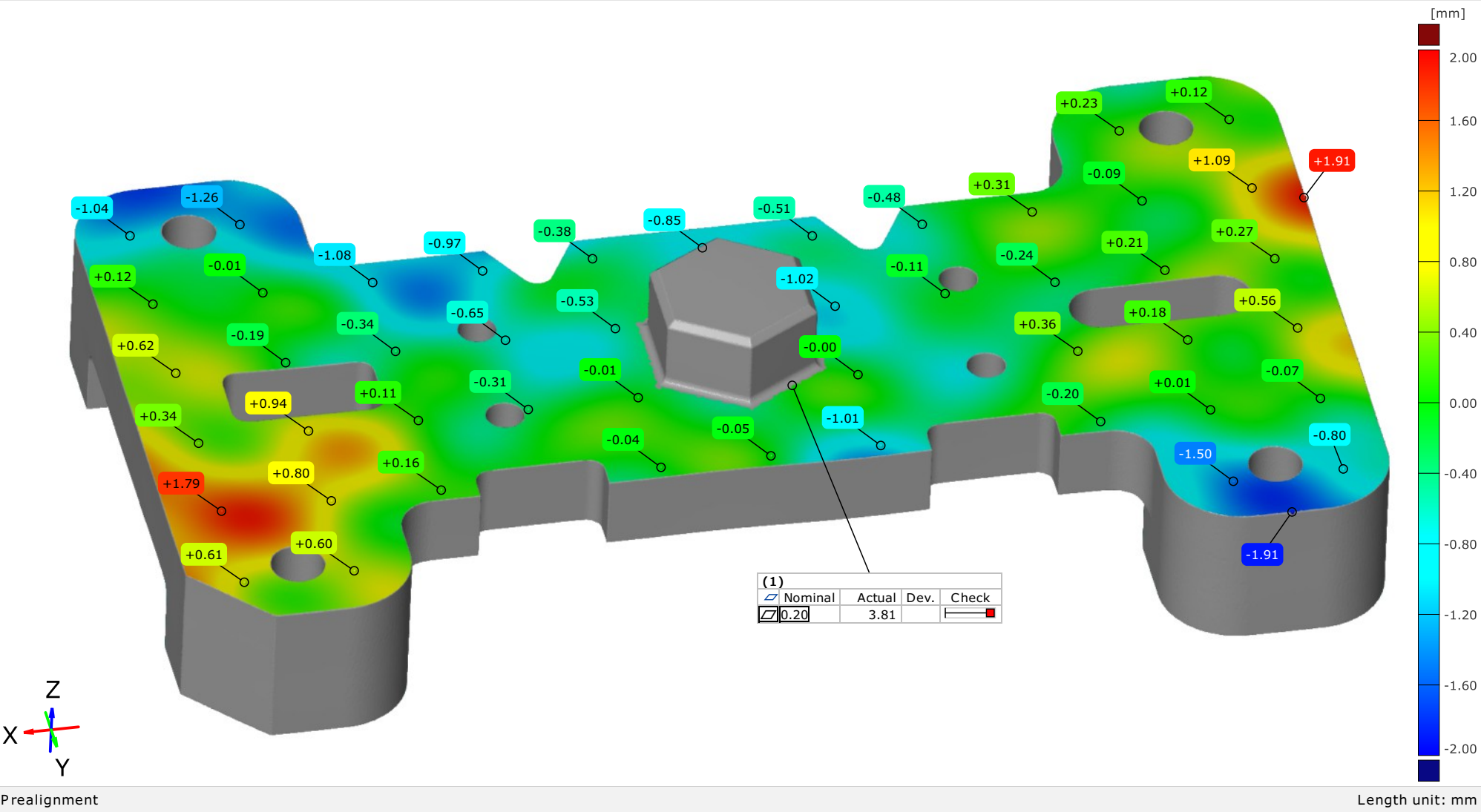
☒ Use fixed opening angle

OKCancel



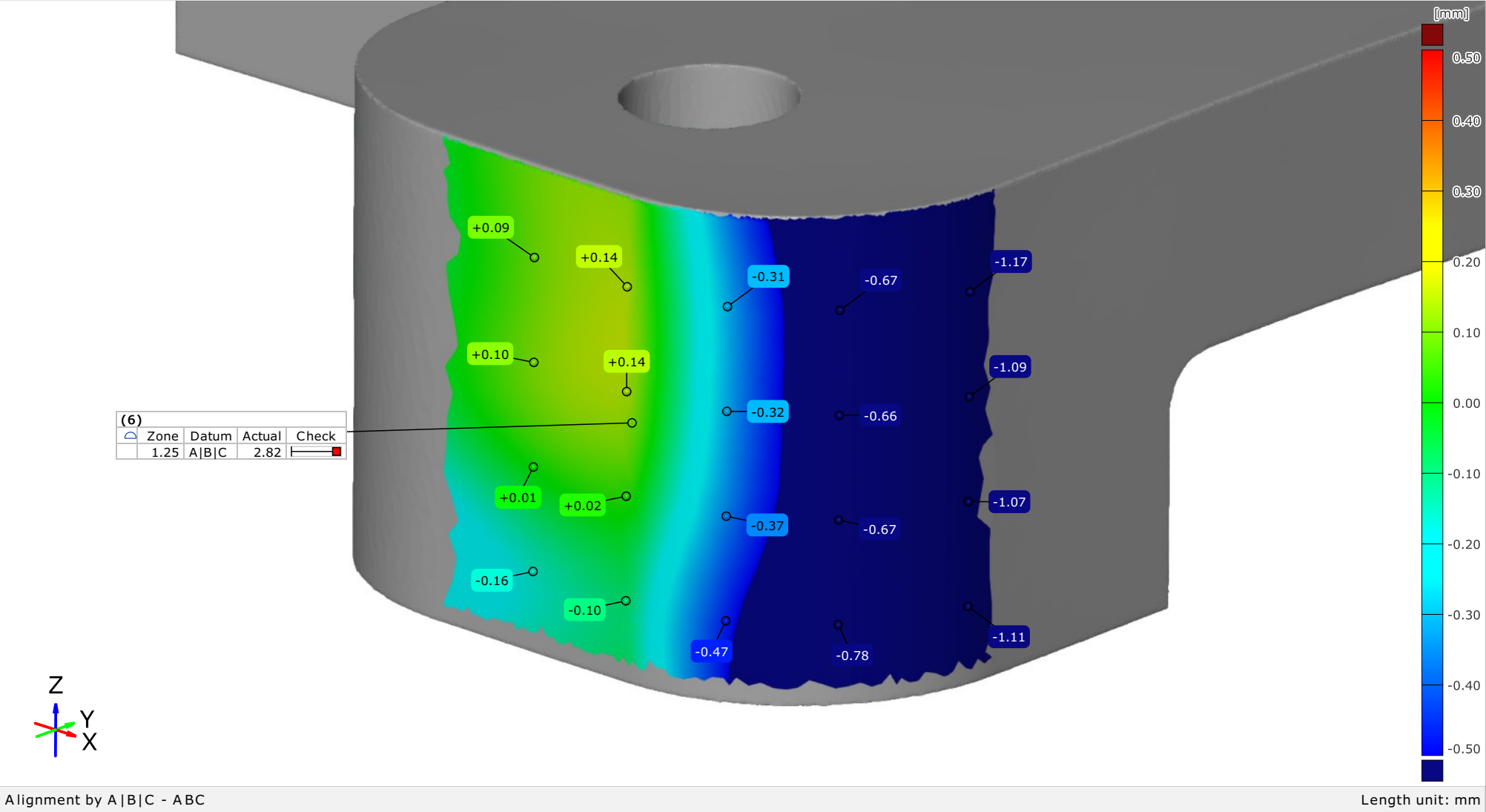


Characteristic number (1)



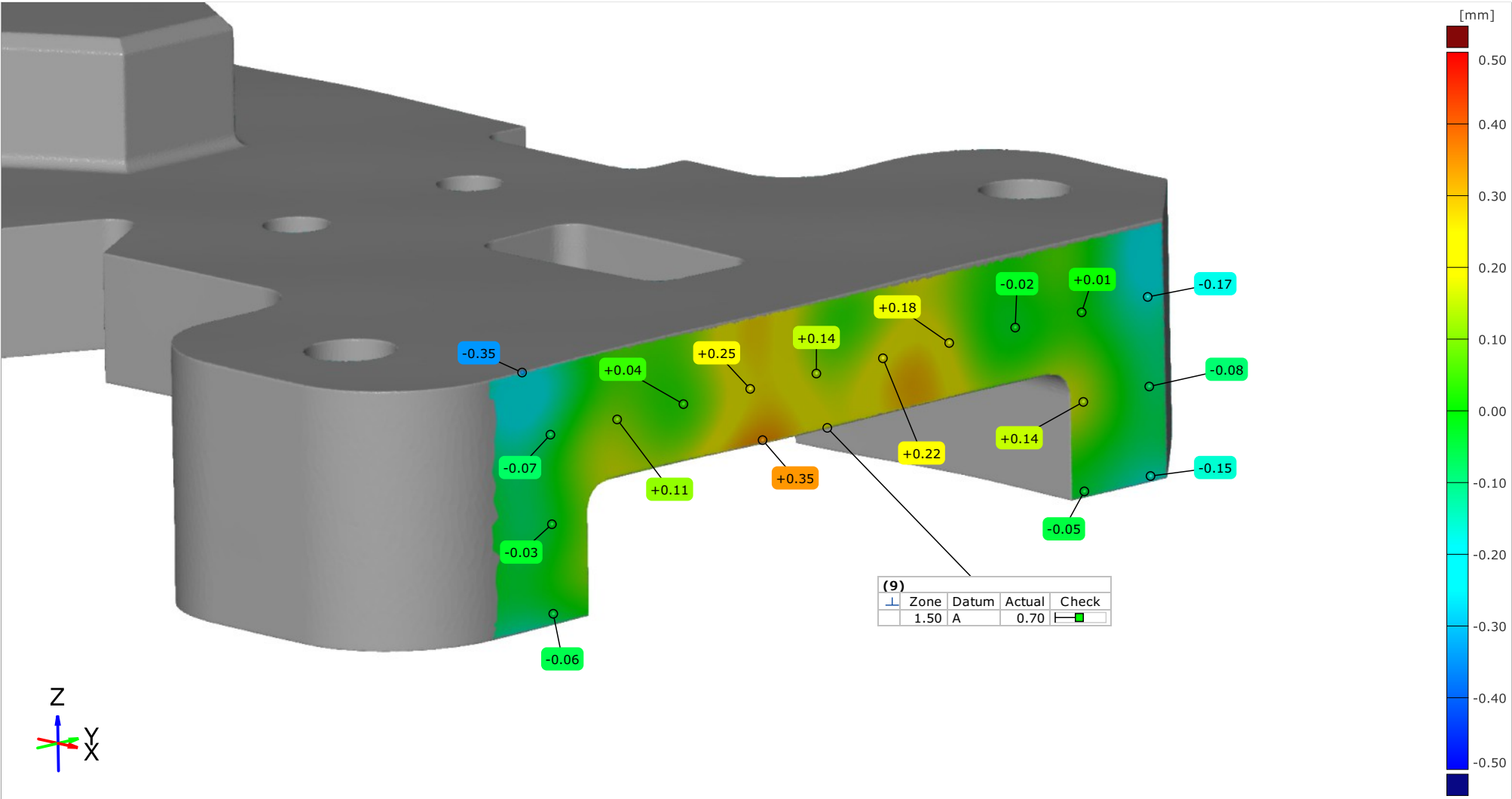


Characteristic number (6)





Characteristic number (9)

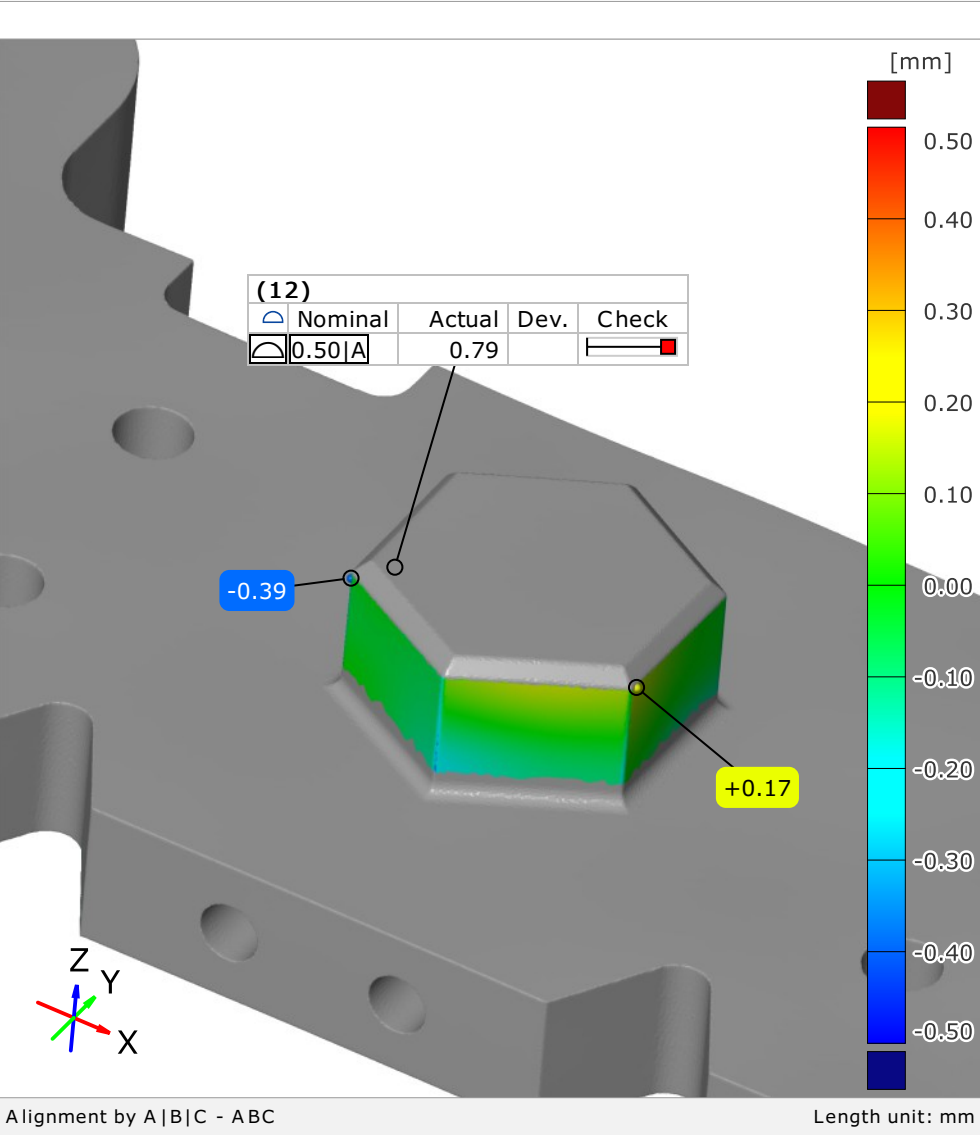
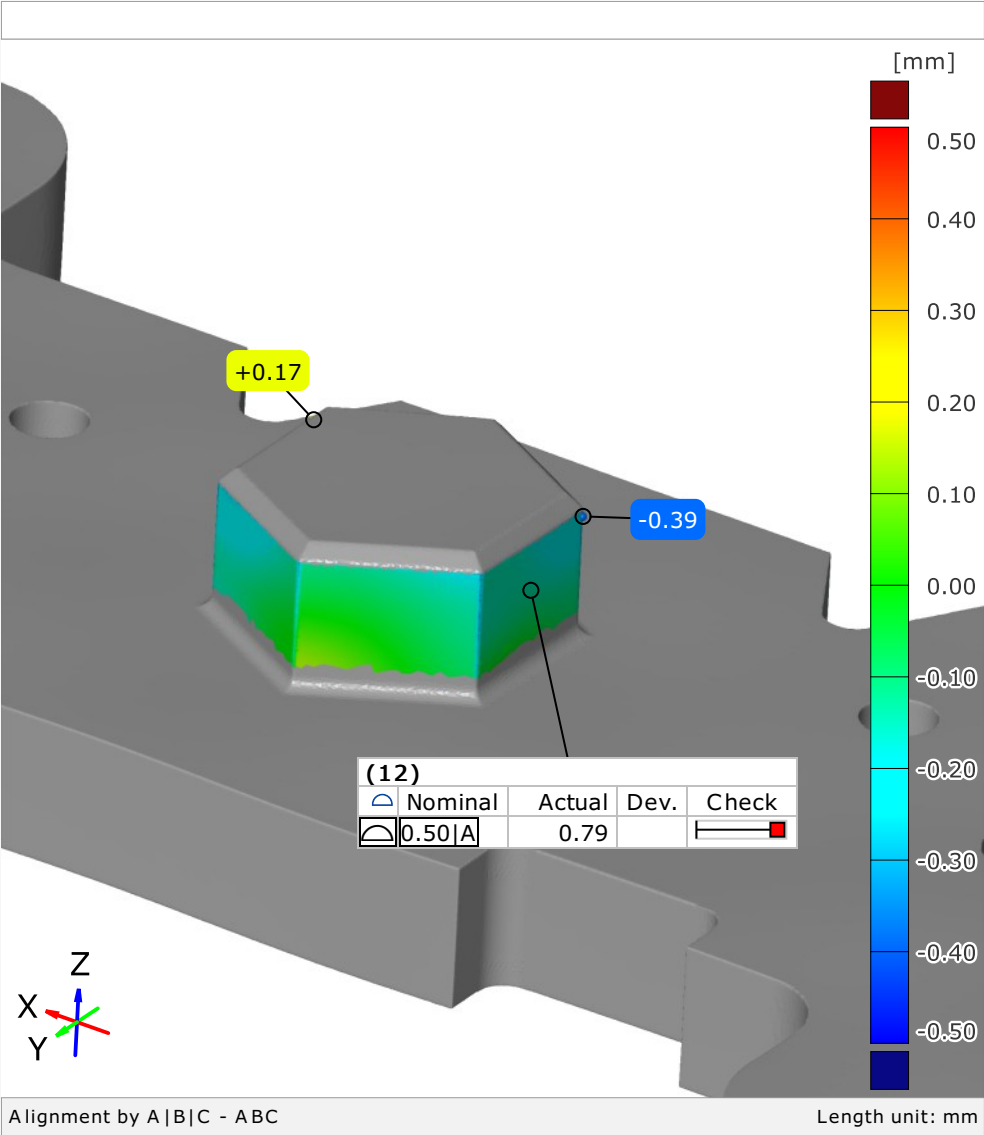


Alignment by A|B|C - ABC

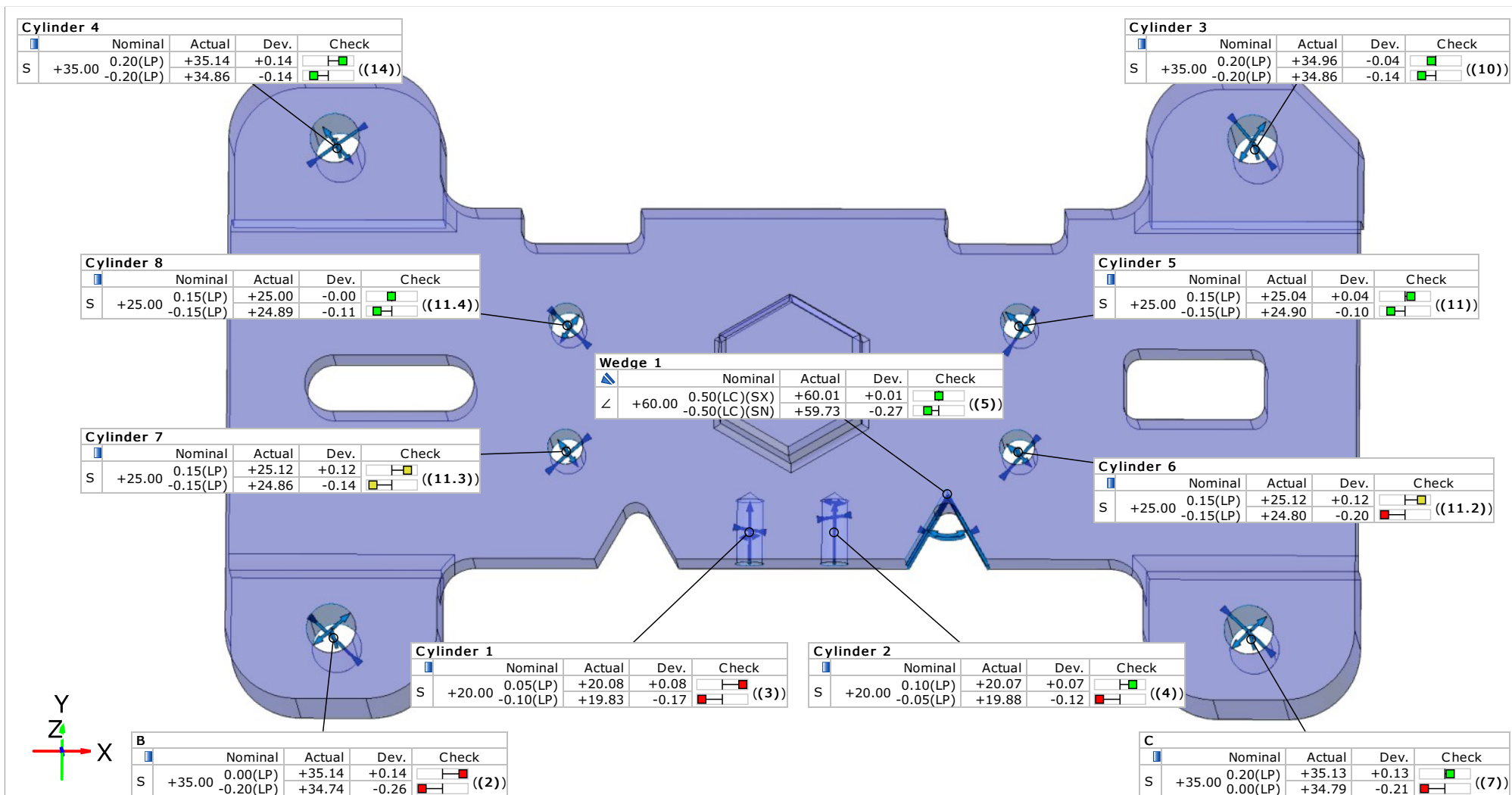
Length unit: mm



Characteristic number (12)

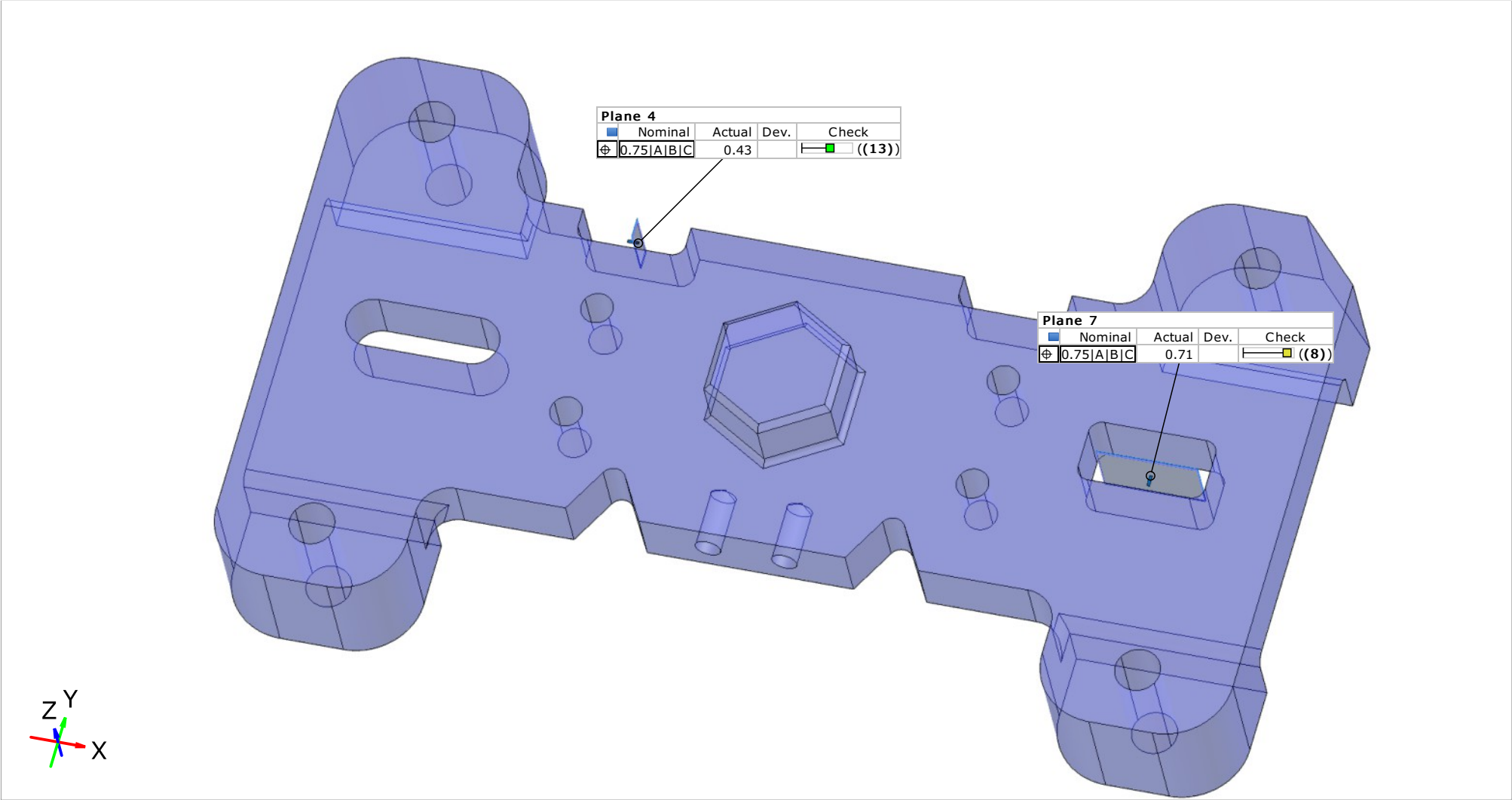


Dimensions





Positions



Plane 4				
	Nominal	Actual	Dev.	Check
Φ 0.75 A B C		0.43		((13))

Plane 7				
	Nominal	Actual	Dev.	Check
Φ 0.75 A B C		0.71		((8))

Alignment by A | B | C - ABC

Length unit: mm



Inspection Results

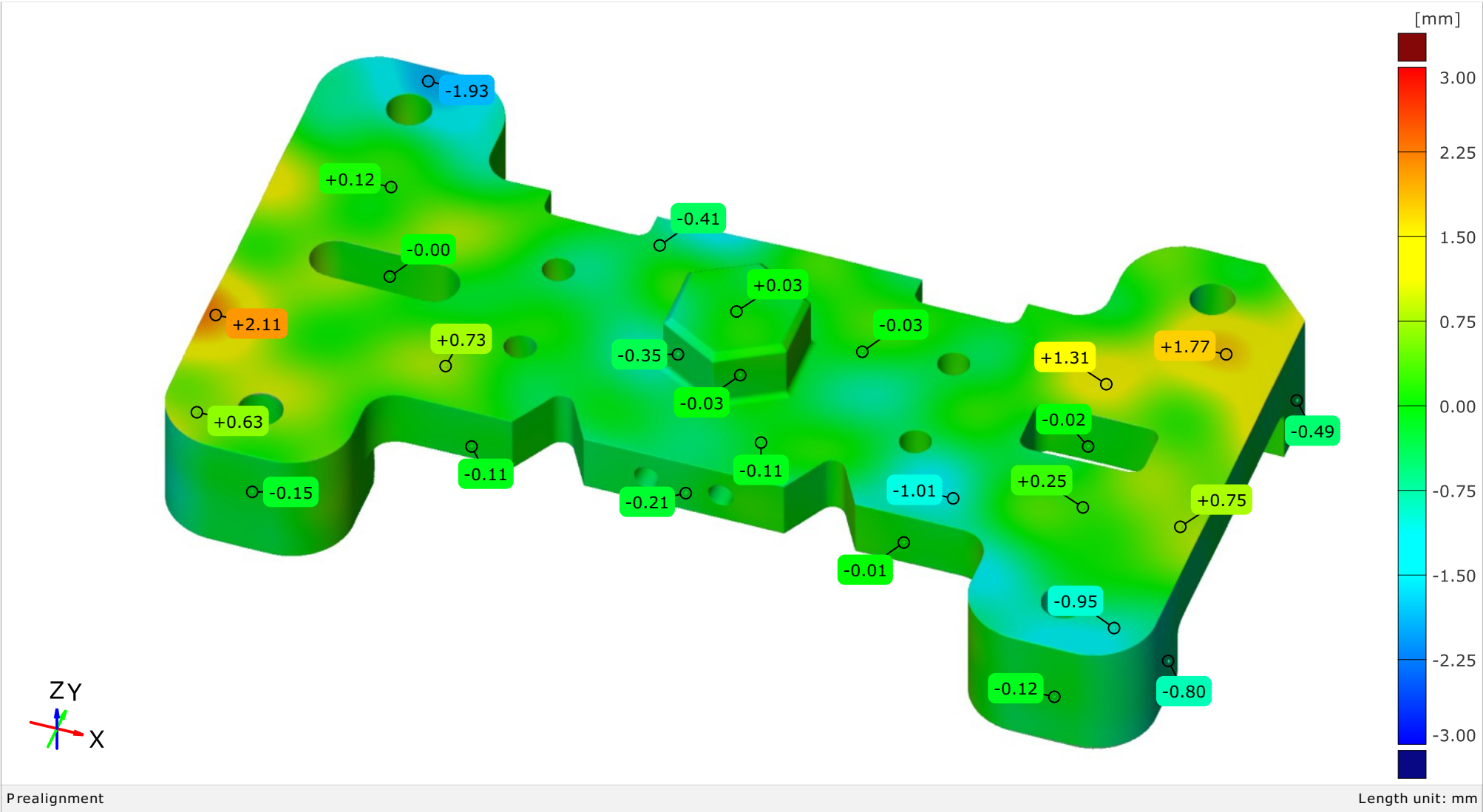
CHARACTERISTIC NUMBER	Element	Datum	Property	Nominal	Actual	Tol -	Tol +	Dev	Check	Out
(1)	A			+0.00	+3.81	+0.00	+0.20	+3.81		+3.61
(2)	B		(I)	+35.00	+35.14 / +34.74	-0.20	+0.00	+0.14 / -0.26		
(3)	Cylinder 1		(I)	+20.00	+20.08 / +19.83	-0.10	+0.05	+0.08 / -0.17		
(4)	Cylinder 2		(I)	+20.00	+20.07 / +19.88	-0.05	+0.10	+0.07 / -0.12		
(5)	Wedge 1		(LC)(SX) (LC)(SN)	+60.00	+60.01 / +59.73	-0.50	+0.50	+0.01 / -0.27		
(6)	Surface 2	A B C		+0.00	+2.82	+0.00	+1.25	+2.82		+1.57
(7)	C		(I)	+35.00	+35.13 / +34.79	+0.00	+0.20	+0.13 / -0.21		
(8)	Plane 7	A B C		+0.00	+0.71	+0.00	+0.75	+0.71		
(9)	Plane 2	A		+0.00	+0.70	+0.00	+1.50	+0.70		
(10)	Cylinder 3		(I)	+35.00	+34.96 / +34.86	-0.20	+0.20	-0.04 / -0.14		
(11)	Cylinder 5		(I)	+25.00	+25.04 / +24.90	-0.15	+0.15	+0.04 / -0.10		
(11.2)	Cylinder 6		(I)	+25.00	+25.12 / +24.80	-0.15	+0.15	+0.12 / -0.20		
(11.3)	Cylinder 7		(I)	+25.00	+25.12 / +24.86	-0.15	+0.15	+0.12 / -0.14		
(11.4)	Cylinder 8		(I)	+25.00	+25.00 / +24.89	-0.15	+0.15	-0.00 / -0.11		
(12)	Surface 1	A		+0.00	+0.79	+0.00	+0.50	+0.79		+0.29
(13)	Plane 4	A B C		+0.00	+0.43	+0.00	+0.75	+0.43		
(14)	Cylinder 4		(I)	+35.00	+35.14 / +34.86	-0.20	+0.20	+0.14 / -0.14		

Prealignment

Length unit: mm



All surface Best-fit deformation





ABC deformation

