

TEST REPORT

CL2326C880

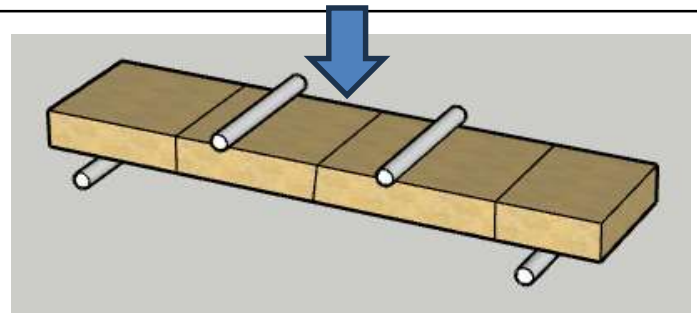
ASTM C880- STANDARD TEST METHOD FOR FLEXURAL STRENGTH OF DIMENSION STONE

CLIENT

PETROGRAPHIC NAME [ASTM C119]

TRADE NAME

**LOAD PARALLEL TO RIFT
VEIN CUT 2**



SPECIMENS LOT

TTC001 - block #718 from lot September 2025

SPECIMEN QUANTITIES

**5 DRY
5 WET**

TEST RESULTS

**FLEXURAL
STRENGTH**

DRY: 3,8 MPa [545 psi]

WET: 3,5 MPa [513 psi]

**MINIMUM VALUE REQUIRED
(ASTM C1527 Standard Specification
for Travertine Dimension Stone)**

EXTERIOR

3,4 MPa [500 psi]

INTERIOR

3,4 MPa [500 psi]

Carrara - March 24, 2026

Apparatus

The testing machine is a "servocontrolled" machine, controlled by a real time digital platform C-Rio with FPGA technology. The load is measured by a TCE load cell (5511 lbf of nominal load - linearity < 0.03%; hysteresis < 0.03%; repeatability < 0.01%). Load cell data acquisition (A/D) is performed by National Instruments NI 9237 24-Bit module. Sample frequency is 10 milliseconds.

Support blocks

The support for the specimens are of the rocker type while the load application block are installed on a special bearing which ensure that forces is applied without eccentricity. The portion of load application and support blocks contacting the stone are chromed steel rods with a nominal diameter of 1 in.

Measuring instruments

Specimen size has been measured by a digital caliber "Mitutoyo Absolute" model CD-15PKX (serial no. 13185236) with a precision of 0.01 mm (0.39 mil). Measurements have been made using the international system of units (SI).

Conditioning

Dry conditions - The specimens are dried in a ventilated oven at $140^{\circ}\text{F} \pm 4^{\circ}\text{F}$ ($60 \pm 2^{\circ}\text{C}$) for 48 h.

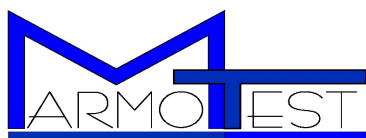
Wet conditions - before testing the specimens have been conditioned for 48 h at $72^{\circ}\text{F} \pm 4^{\circ}\text{F}$ [$22 \pm 2^{\circ}\text{C}$]

Load gradient

Strain gradient is kept under 600 psi/min [4 MPa/min] until specimen failure.

Laboratory supervisor
Brunello Forfori





Marmotest S.r.l.s.
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membership number
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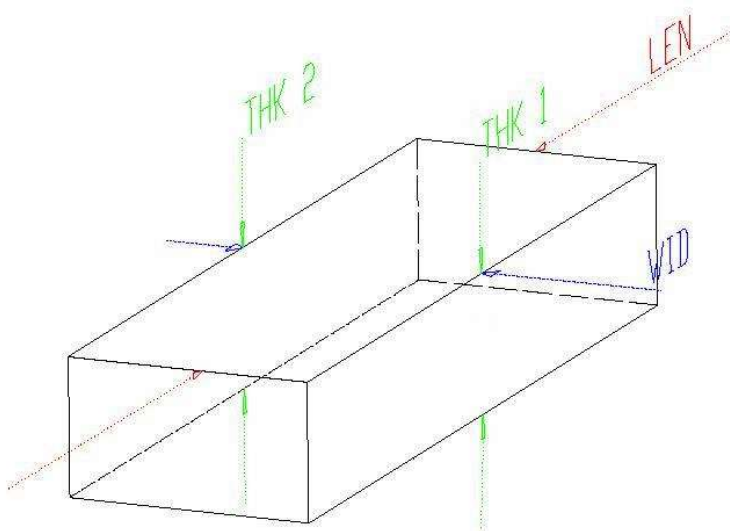
C 880

DRY

LOAD PARALLEL R

Number of specimens 5
Date of conditioning 09/03/2026
Date of measurement 11/03/2026
Date of test 11/03/2026

Conditioning operator 8
Measurement operator 8
Test operator 8



Name	LEN [in]	THK1 [in]	THK2 [in]	THK AVG [in]	WID [in]	BRK LOAD [lbf]	SPAN [in]	σ [psi]
CL2326C880D_01	13,780	1,253	1,252	1,253	3,93	410	11,811	589
CL2326C880D_02	13,780	1,220	1,218	1,219	3,93	452	11,811	686
CL2326C880D_03	13,780	1,219	1,221	1,220	3,92	203	11,811	308
CL2326C880D_04	13,780	1,251	1,247	1,249	3,93	540	11,811	781
CL2326C880D_05	13,780	1,252	1,255	1,254	3,93	251	11,811	361

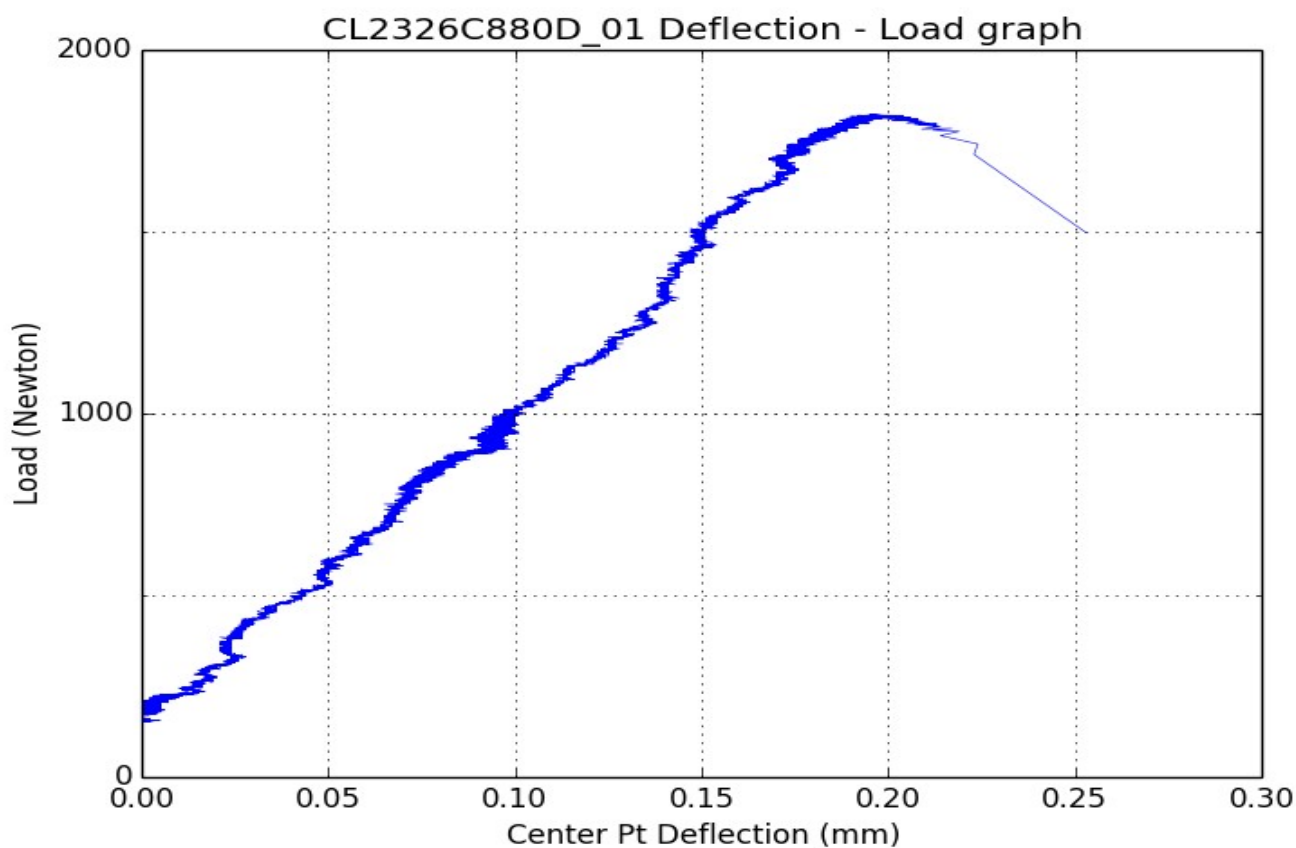
σ average 545 psi **σ std. dev.** 205 psi

Name	LEN [mm]	THK1 [mm]	THK2 [mm]	THK AVG [mm]	WID [mm]	BRK LOAD [N]	SPAN [mm]	σ [MPa]
CL2326C880D_01	350,00	31,82	31,81	31,81	99,87	1.825	300,0	4,06
CL2326C880D_02	350,00	30,99	30,93	30,96	99,80	2.011	300,0	4,73
CL2326C880D_03	350,00	30,96	31,01	30,99	99,62	903	300,0	2,12
CL2326C880D_04	350,00	31,78	31,68	31,73	99,76	2.403	300,0	5,38
CL2326C880D_05	350,00	31,81	31,88	31,84	99,77	1.118	300,0	2,49

σ average 3,76 MPa **σ std. dev.** 1,41 MPa

NOTES

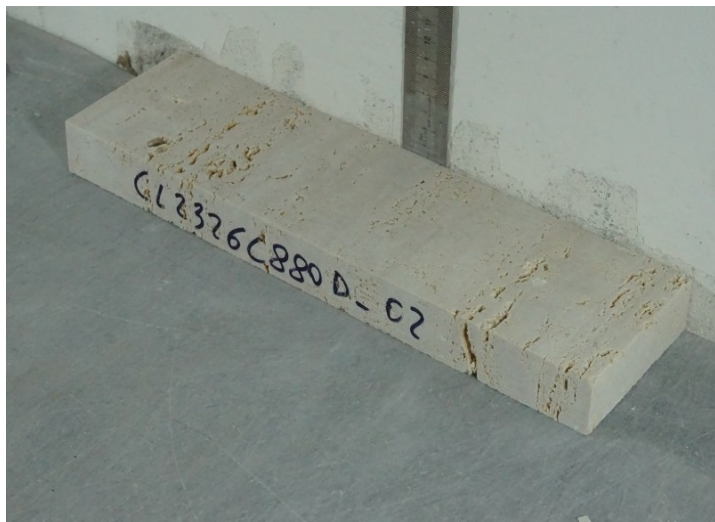
Specimen CL2326C880D_01 test result



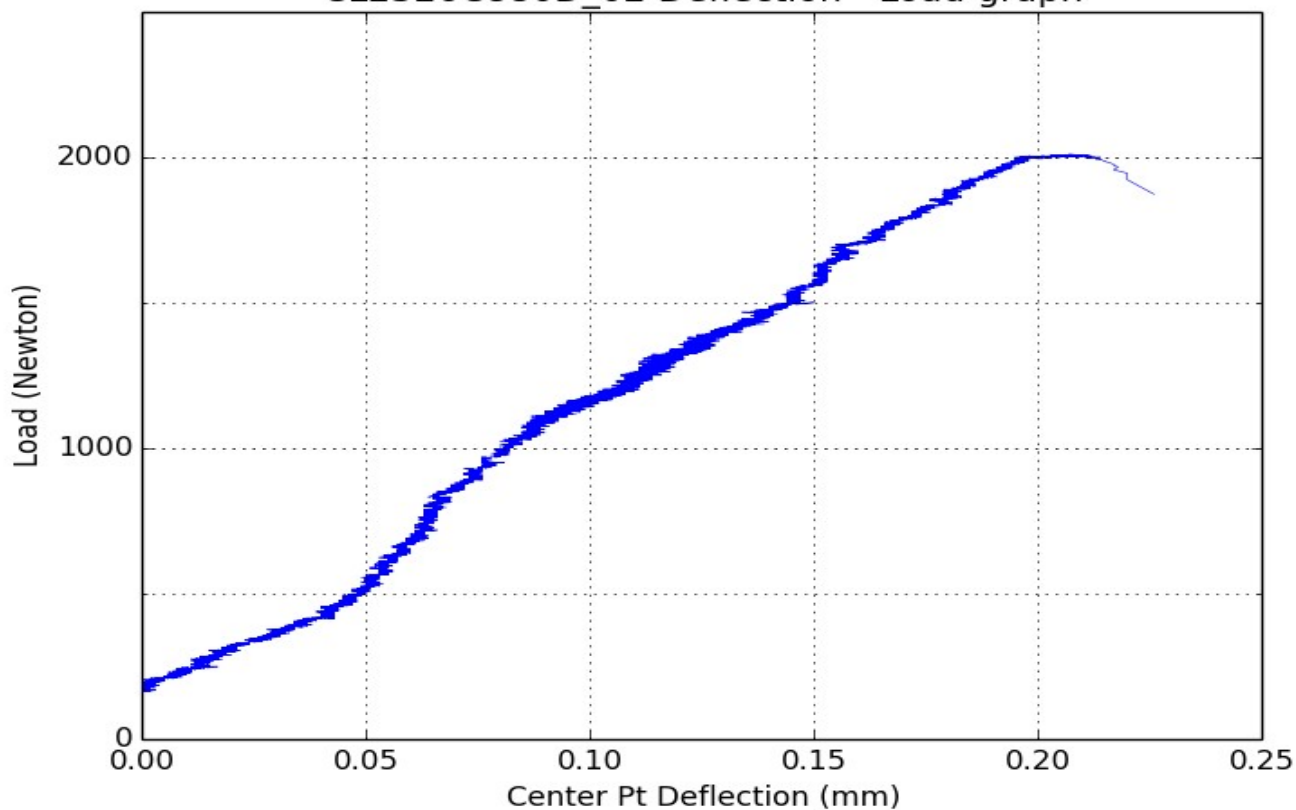
Name	LEN [in]	THK1 [in]	THK2 [in]	THK AVG [in]	WID [in]	BRK LOAD [lbf]	SPAN [in]	σ [psi]
CL2326C880D_01	13,780	1,253	1,252	1,25	3,932	410	11,811	589

Name	LEN [mm]	THK1 [mm]	THK2 [mm]	THK AVG [mm]	WID [mm]	LOAD [Kg]	LOAD [N]	SPAN [mm]	σ [MPa]
CL2326C880D_01	350,00	31,82	31,81	31,81	99,87	186	1.825	300,00	4,06

Specimen CL2326C880D_02 test result



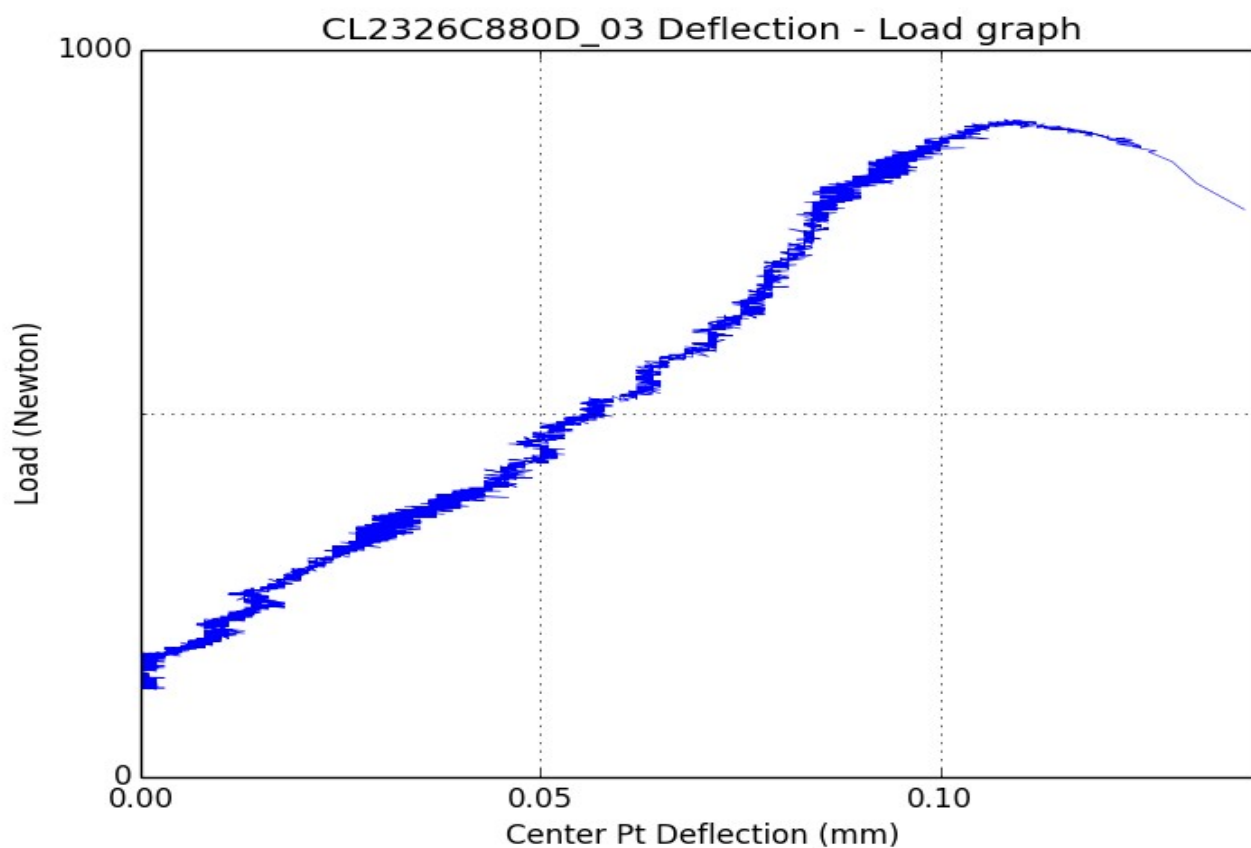
CL2326C880D_02 Deflection - Load graph



Name	LEN [in]	THK1 [in]	THK2 [in]	THK AVG [in]	WID [in]	BRK LOAD [lbf]	SPAN [in]	σ [psi]
CL2326C880D_02	13,780	1,220	1,218	1,22	3,929	452	11,811	686

Name	LEN [mm]	THK1 [mm]	THK2 [mm]	THK AVG [mm]	WID [mm]	LOAD [Kg]	LOAD [N]	SPAN [mm]	σ [MPa]
CL2326C880D_02	350,00	30,99	30,93	30,96	99,80	205	2.011	300,00	4,73

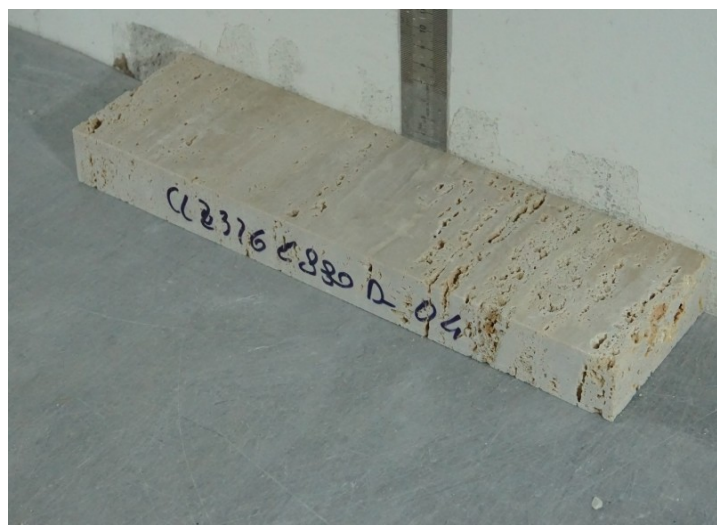
Specimen CL2326C880D_03 test result



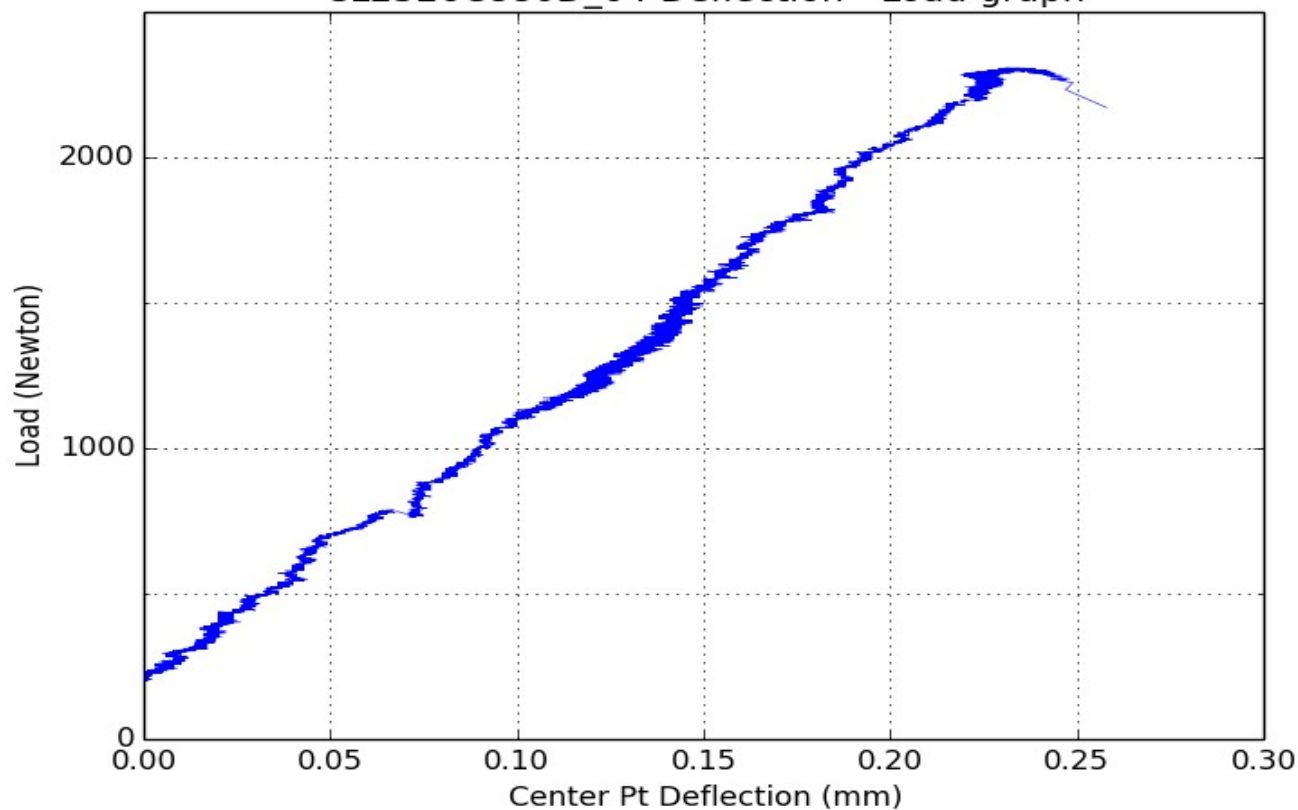
Name	LEN [in]	THK1 [in]	THK2 [in]	THK AVG [in]	WID [in]	BRK LOAD [lbf]	SPAN [in]	σ [psi]
CL2326C880D_03	13,780	1,219	1,221	1,22	3,922	203	11,811	308

Name	LEN [mm]	THK1 [mm]	THK2 [mm]	THK AVG [mm]	WID [mm]	LOAD [Kg]	LOAD [N]	SPAN [mm]	σ [MPa]
CL2326C880D_03	350,00	30,96	31,01	30,99	99,62	92	903	300,00	2,12

Specimen CL2326C880D_04 test result



CL2326C880D_04 Deflection - Load graph



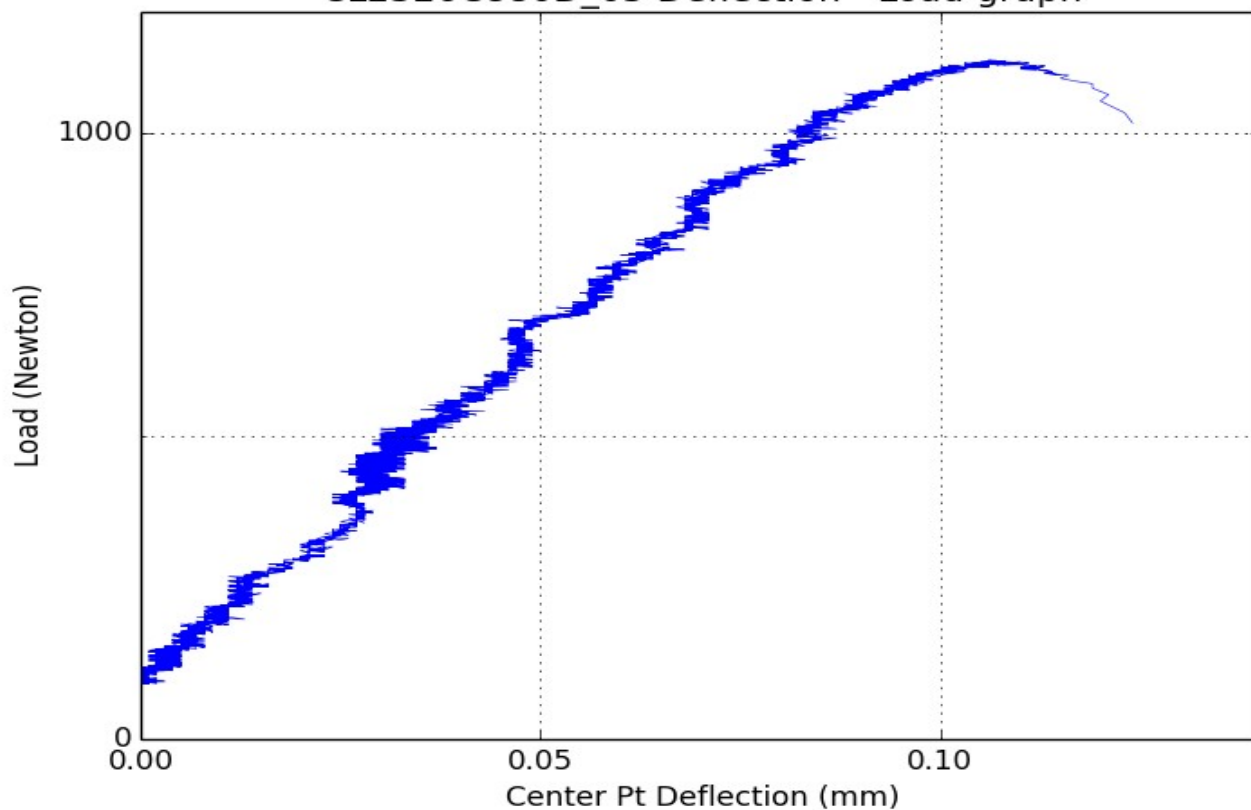
Name	LEN [in]	THK1 [in]	THK2 [in]	THK AVG [in]	WID [in]	BRK LOAD [lbf]	SPAN [in]	σ [psi]
CL2326C880D_04	13,780	1,251	1,247	1,25	3,928	540	11,811	781

Name	LEN [mm]	THK1 [mm]	THK2 [mm]	THK AVG [mm]	WID [mm]	LOAD [Kg]	LOAD [N]	SPAN [mm]	σ [MPa]
CL2326C880D_04	350,00	31,78	31,68	31,73	99,76	245	2.403	300,00	5,38

Specimen CL2326C880D_05 test result

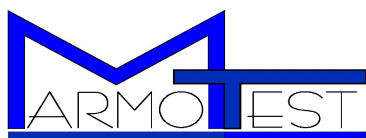


CL2326C880D_05 Deflection - Load graph



Name	LEN [in]	THK1 [in]	THK2 [in]	THK AVG [in]	WID [in]	BRK LOAD [lbf]	SPAN [in]	σ [psi]
CL2326C880D_05	13,780	1,252	1,255	1,25	3,928	251	11,811	361

Name	LEN [mm]	THK1 [mm]	THK2 [mm]	THK AVG [mm]	WID [mm]	LOAD [Kg]	LOAD [N]	SPAN [mm]	σ [MPa]
CL2326C880D_05	350,00	31,81	31,88	31,84	99,77	114	1.118	300,00	2,49



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1273310

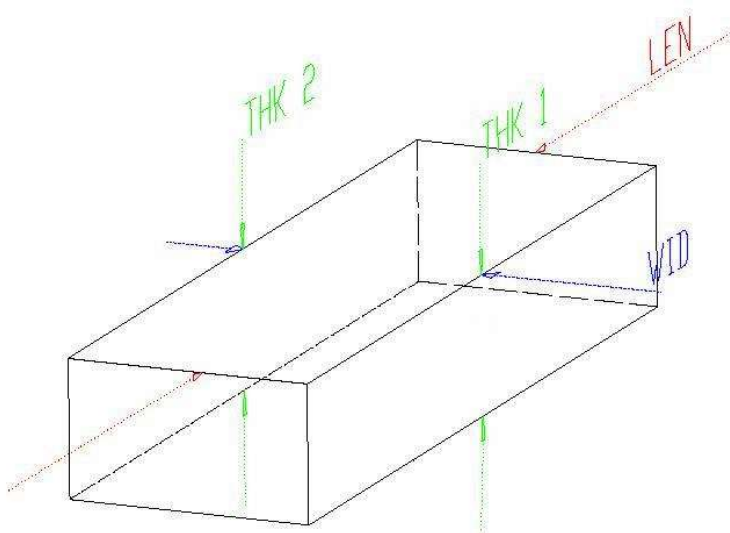
C 880

WET

LOAD PARALLEL R

Number of specimens 5
Date of conditioning 09/03/2026
Date of measurement 11/03/2026
Date of test 11/03/2026

Conditioning operator 8
Measurement operator 8
Test operator 8



Name	LEN [in]	THK1 [in]	THK2 [in]	THK AVG [in]	WID [in]	BRK LOAD [lbf]	SPAN [in]	σ [psi]
CL2326C880W_01	13,780	1,224	1,230	1,227	3,93	362	11,811	542
CL2326C880W_02	13,780	1,254	1,254	1,254	3,92	280	11,811	403
CL2326C880W_03	13,780	1,223	1,220	1,221	3,93	368	11,811	557
CL2326C880W_04	13,780	1,229	1,229	1,229	3,93	450	11,811	671
CL2326C880W_05	13,780	1,252	1,252	1,252	3,92	271	11,811	391

σ average 513 psi **σ std. dev.** 117 psi

Name	LEN [mm]	THK1 [mm]	THK2 [mm]	THK AVG [mm]	WID [mm]	BRK LOAD [N]	SPAN [mm]	σ [MPa]
CL2326C880W_01	350,00	31,08	31,25	31,17	99,79	1.609	300,0	3,73
CL2326C880W_02	350,00	31,86	31,86	31,86	99,50	1.246	300,0	2,78
CL2326C880W_03	350,00	31,06	30,98	31,02	99,80	1.638	300,0	3,84
CL2326C880W_04	350,00	31,21	31,22	31,22	99,88	2.001	300,0	4,63
CL2326C880W_05	350,00	31,80	31,79	31,80	99,68	1.207	300,0	2,69

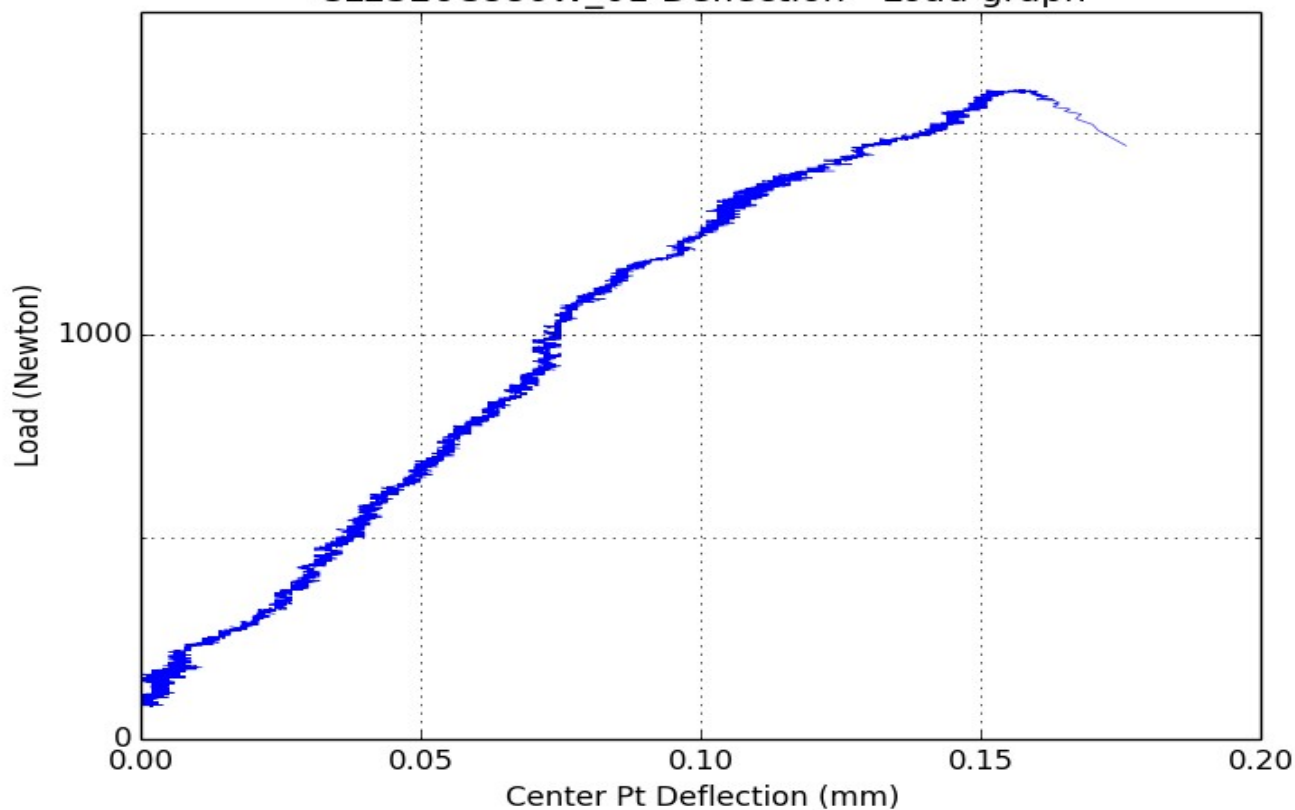
σ average 3,53 MPa **σ std. dev.** 0,81 MPa

NOTES

Specimen CL2326C880W_01 test result



CL2326C880W_01 Deflection - Load graph



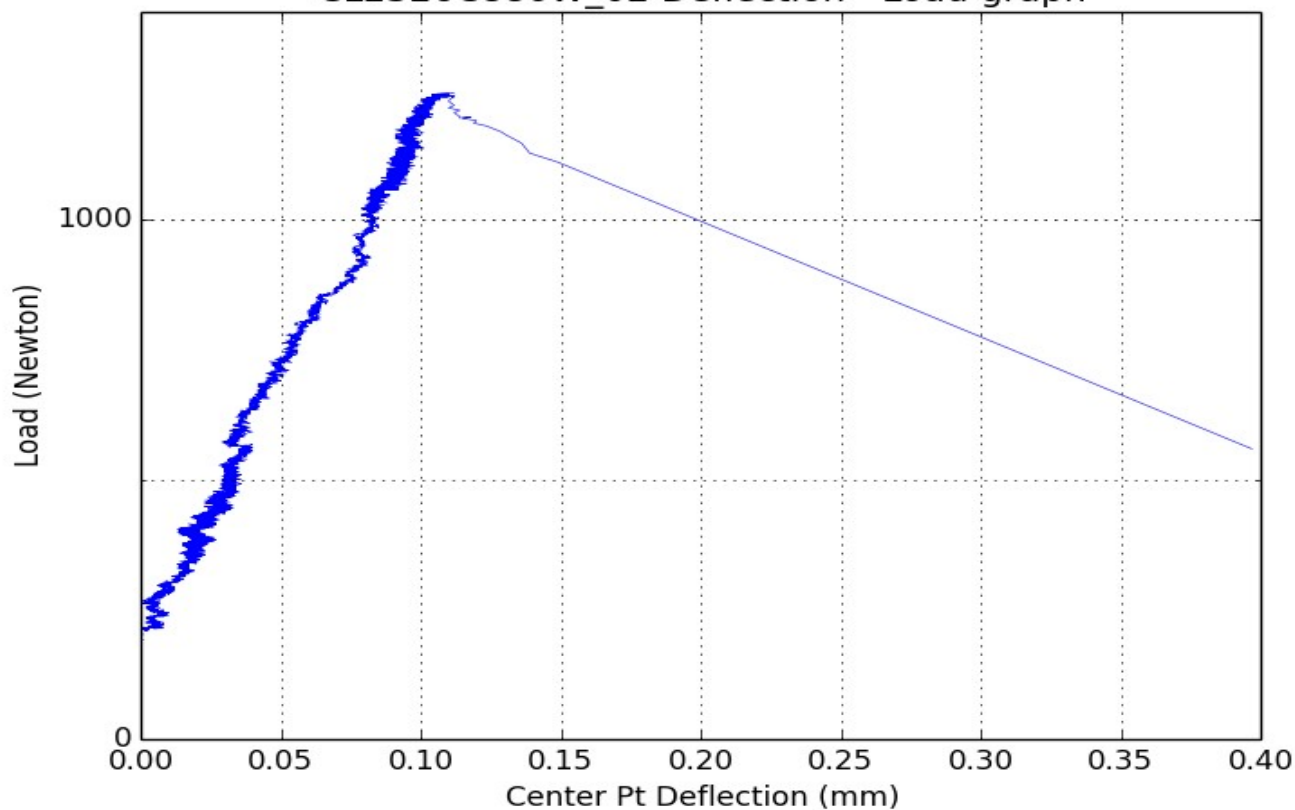
Name	LEN [in]	THK1 [in]	THK2 [in]	THK AVG [in]	WID [in]	BRK LOAD [lbf]	SPAN [in]	σ [psi]
CL2326C880W_01	13,780	1,224	1,230	1,23	3,929	362	11,811	542

Name	LEN [mm]	THK1 [mm]	THK2 [mm]	THK AVG [mm]	WID [mm]	LOAD [Kg]	LOAD [N]	SPAN [mm]	σ [MPa]
CL2326C880W_01	350,00	31,08	31,25	31,17	99,79	164	1.609	300,00	3,73

Specimen CL2326C880W_02 test result



CL2326C880W_02 Deflection - Load graph



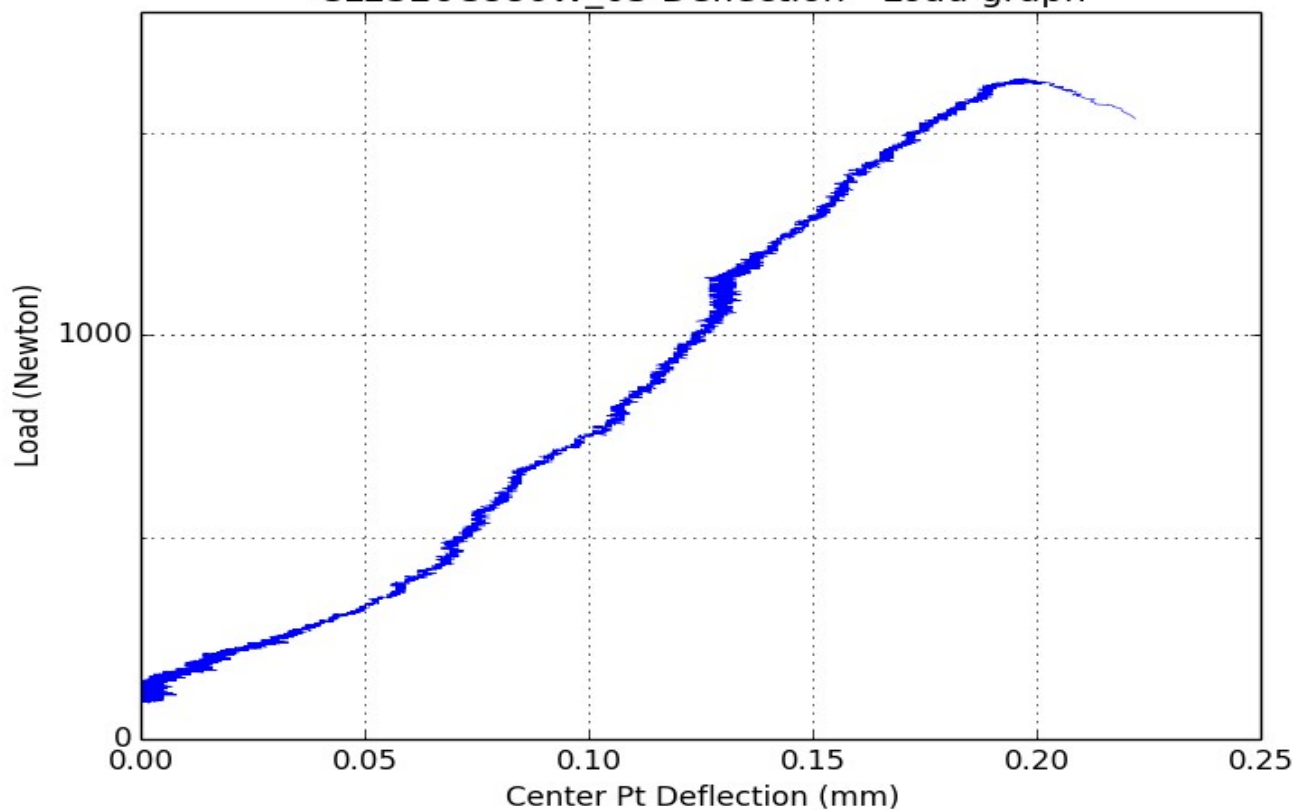
Name	LEN [in]	THK1 [in]	THK2 [in]	THK AVG [in]	WID [in]	BRK LOAD [lbf]	SPAN [in]	σ [psi]
CL2326C880W_02	13,780	1,254	1,254	1,25	3,917	280	11,811	403

Name	LEN [mm]	THK1 [mm]	THK2 [mm]	THK AVG [mm]	WID [mm]	LOAD [Kg]	LOAD [N]	SPAN [mm]	σ [MPa]
CL2326C880W_02	350,00	31,86	31,86	31,86	99,50	127	1.246	300,00	2,78

Specimen CL2326C880W_03 test result



CL2326C880W_03 Deflection - Load graph



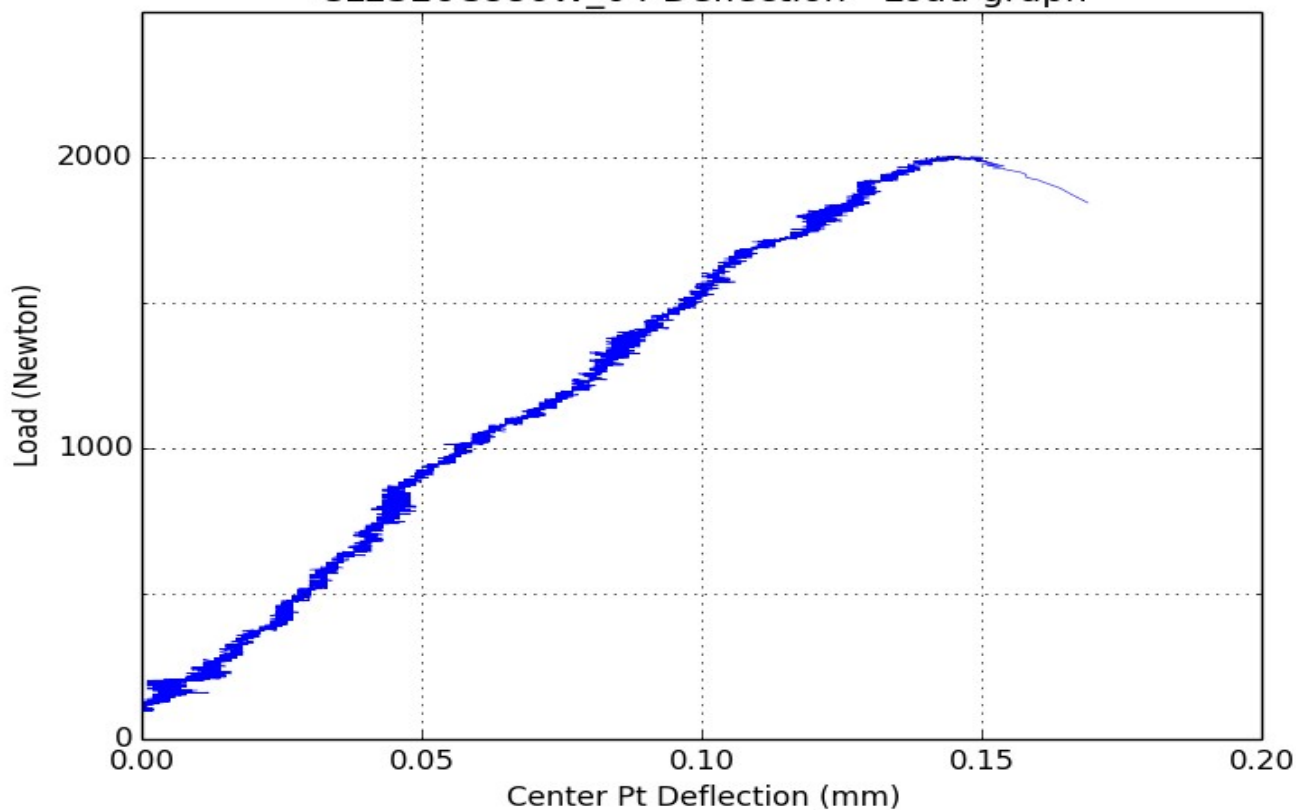
Name	LEN [in]	THK1 [in]	THK2 [in]	THK AVG [in]	WID [in]	BRK LOAD [lbf]	SPAN [in]	σ [psi]
CL2326C880W_03	13,780	1,223	1,220	1,22	3,929	368	11,811	557

Name	LEN [mm]	THK1 [mm]	THK2 [mm]	THK AVG [mm]	WID [mm]	LOAD [Kg]	LOAD [N]	SPAN [mm]	σ [MPa]
CL2326C880W_03	350,00	31,06	30,98	31,02	99,80	167	1.638	300,00	3,84

Specimen CL2326C880W_04 test result



CL2326C880W_04 Deflection - Load graph



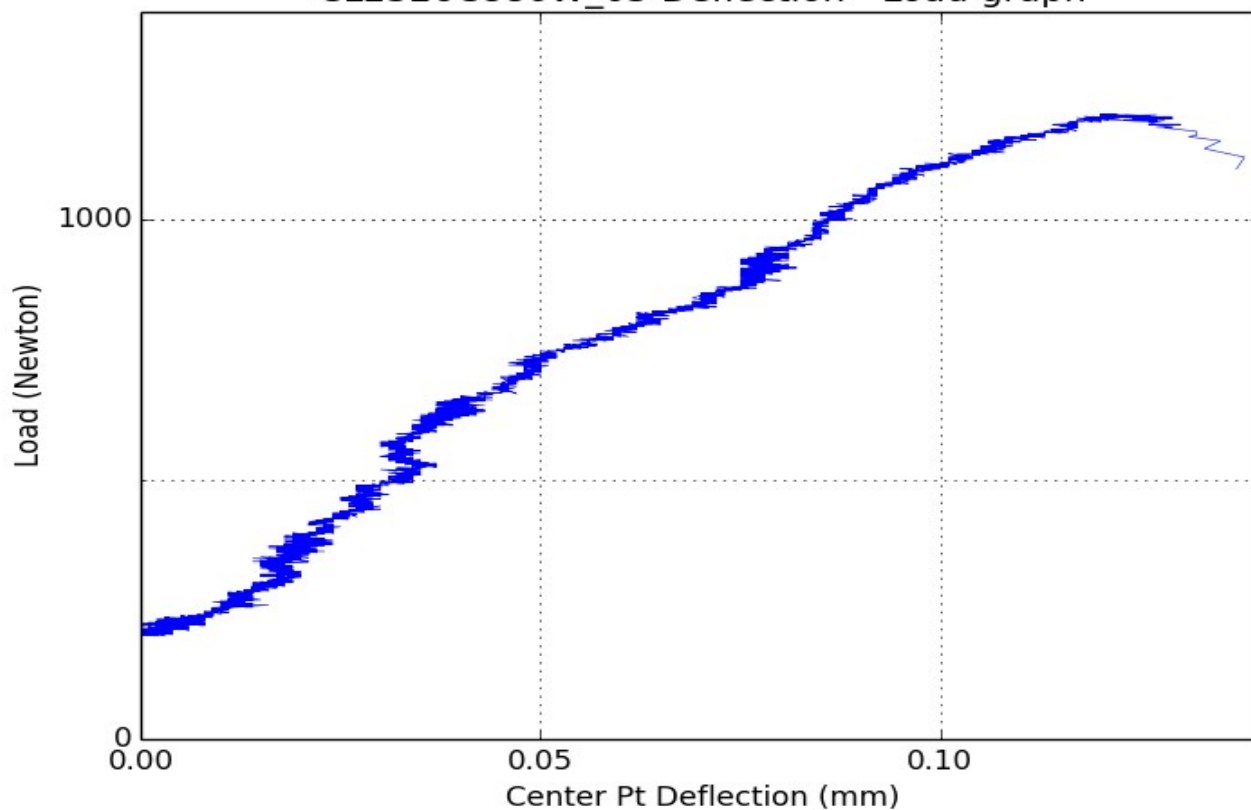
Name	LEN [in]	THK1 [in]	THK2 [in]	THK AVG [in]	WID [in]	BRK LOAD [lbf]	SPAN [in]	σ [psi]
CL2326C880W_04	13,780	1,229	1,229	1,23	3,932	450	11,811	671

Name	LEN [mm]	THK1 [mm]	THK2 [mm]	THK AVG [mm]	WID [mm]	LOAD [Kg]	LOAD [N]	SPAN [mm]	σ [MPa]
CL2326C880W_04	350,00	31,21	31,22	31,22	99,88	204	2.001	300,00	4,63

Specimen CL2326C880W_05 test result



CL2326C880W_05 Deflection - Load graph



Name	LEN [in]	THK1 [in]	THK2 [in]	THK AVG [in]	WID [in]	BRK LOAD [lbf]	SPAN [in]	σ [psi]
CL2326C880W_05	13,780	1,252	1,252	1,25	3,924	271	11,811	391

Name	LEN [mm]	THK1 [mm]	THK2 [mm]	THK AVG [mm]	WID [mm]	LOAD [Kg]	LOAD [N]	SPAN [mm]	σ [MPa]
CL2326C880W_05	350,00	31,80	31,79	31,80	99,68	123	1.207	300,00	2,69