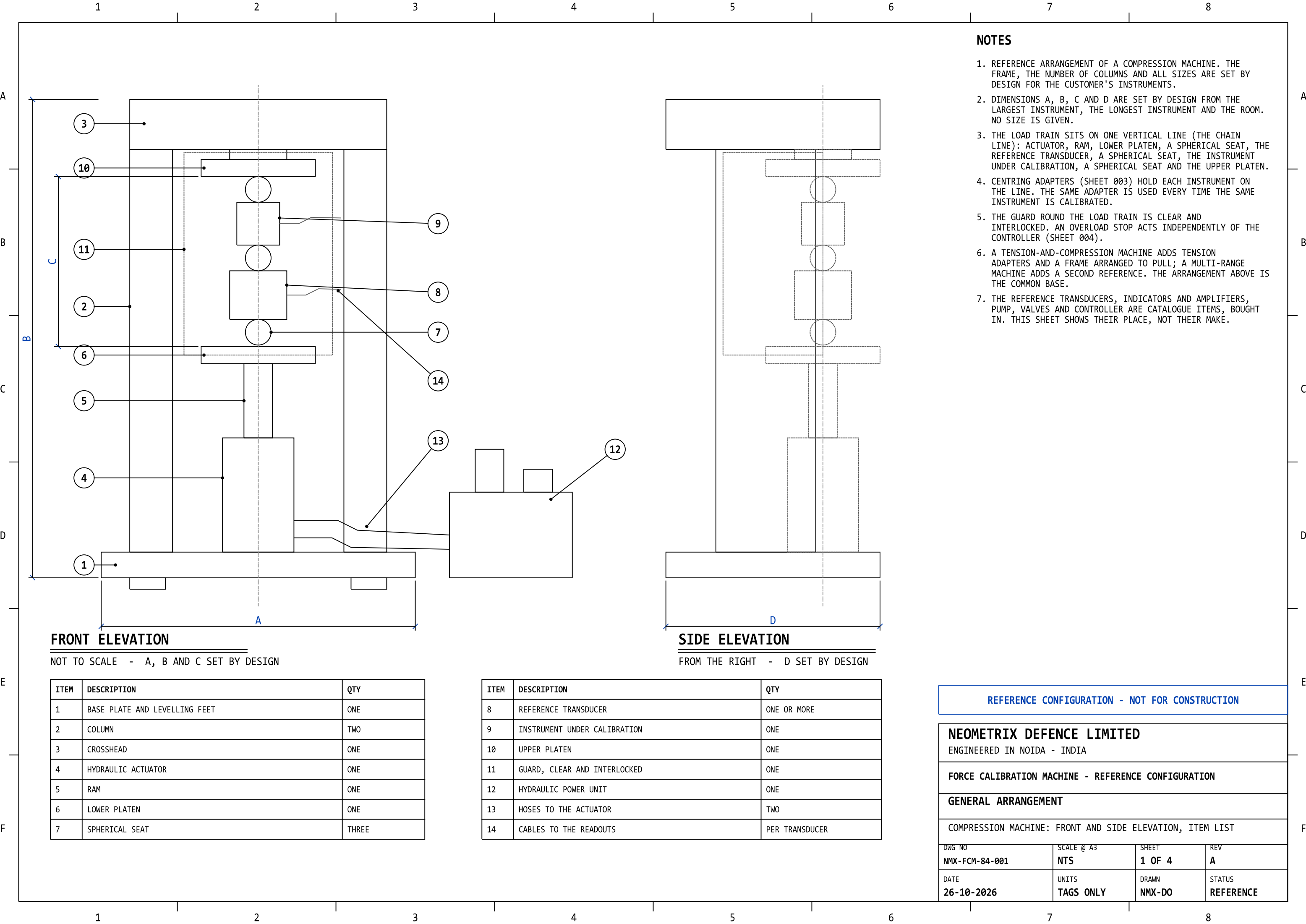




NOTES

- 1. REFERENCE ARRANGEMENT OF A COMPRESSION MACHINE. THE FRAME, THE NUMBER OF COLUMNS AND ALL SIZES ARE SET BY DESIGN FOR THE CUSTOMER'S INSTRUMENTS.
- 2. DIMENSIONS A, B, C AND D ARE SET BY DESIGN FROM THE LARGEST INSTRUMENT, THE LONGEST INSTRUMENT AND THE ROOM. NO SIZE IS GIVEN.
- 3. THE LOAD TRAIN SITS ON ONE VERTICAL LINE (THE CHAIN LINE): ACTUATOR, RAM, LOWER PLATEN, A SPHERICAL SEAT, THE REFERENCE TRANSDUCER, A SPHERICAL SEAT, THE INSTRUMENT UNDER CALIBRATION, A SPHERICAL SEAT AND THE UPPER PLATEN.
- 4. CENTRING ADAPTERS (SHEET 003) HOLD EACH INSTRUMENT ON THE LINE. THE SAME ADAPTER IS USED EVERY TIME THE SAME INSTRUMENT IS CALIBRATED.
- 5. THE GUARD ROUND THE LOAD TRAIN IS CLEAR AND INTERLOCKED. AN OVERLOAD STOP ACTS INDEPENDENTLY OF THE CONTROLLER (SHEET 004).
- 6. A TENSION-AND-COMPRESSION MACHINE ADDS TENSION ADAPTERS AND A FRAME ARRANGED TO PULL; A MULTI-RANGE MACHINE ADDS A SECOND REFERENCE. THE ARRANGEMENT ABOVE IS THE COMMON BASE.
- 7. THE REFERENCE TRANSDUCERS, INDICATORS AND AMPLIFIERS, PUMP, VALVES AND CONTROLLER ARE CATALOGUE ITEMS, BOUGHT IN. THIS SHEET SHOWS THEIR PLACE, NOT THEIR MAKE.

FRONT ELEVATION

NOT TO SCALE - A, B AND C SET BY DESIGN

SIDE ELEVATION

FROM THE RIGHT - D SET BY DESIGN

ITEM	DESCRIPTION	QTY
1	BASE PLATE AND LEVELLING FEET	ONE
2	COLUMN	TWO
3	CROSSHEAD	ONE
4	HYDRAULIC ACTUATOR	ONE
5	RAM	ONE
6	LOWER PLATEN	ONE
7	SPHERICAL SEAT	THREE

ITEM	DESCRIPTION	QTY
8	REFERENCE TRANSDUCER	ONE OR MORE
9	INSTRUMENT UNDER CALIBRATION	ONE
10	UPPER PLATEN	ONE
11	GUARD, CLEAR AND INTERLOCKED	ONE
12	HYDRAULIC POWER UNIT	ONE
13	HOSES TO THE ACTUATOR	TWO
14	CABLES TO THE READOUTS	PER TRANSDUCER

REFERENCE CONFIGURATION - NOT FOR CONSTRUCTION

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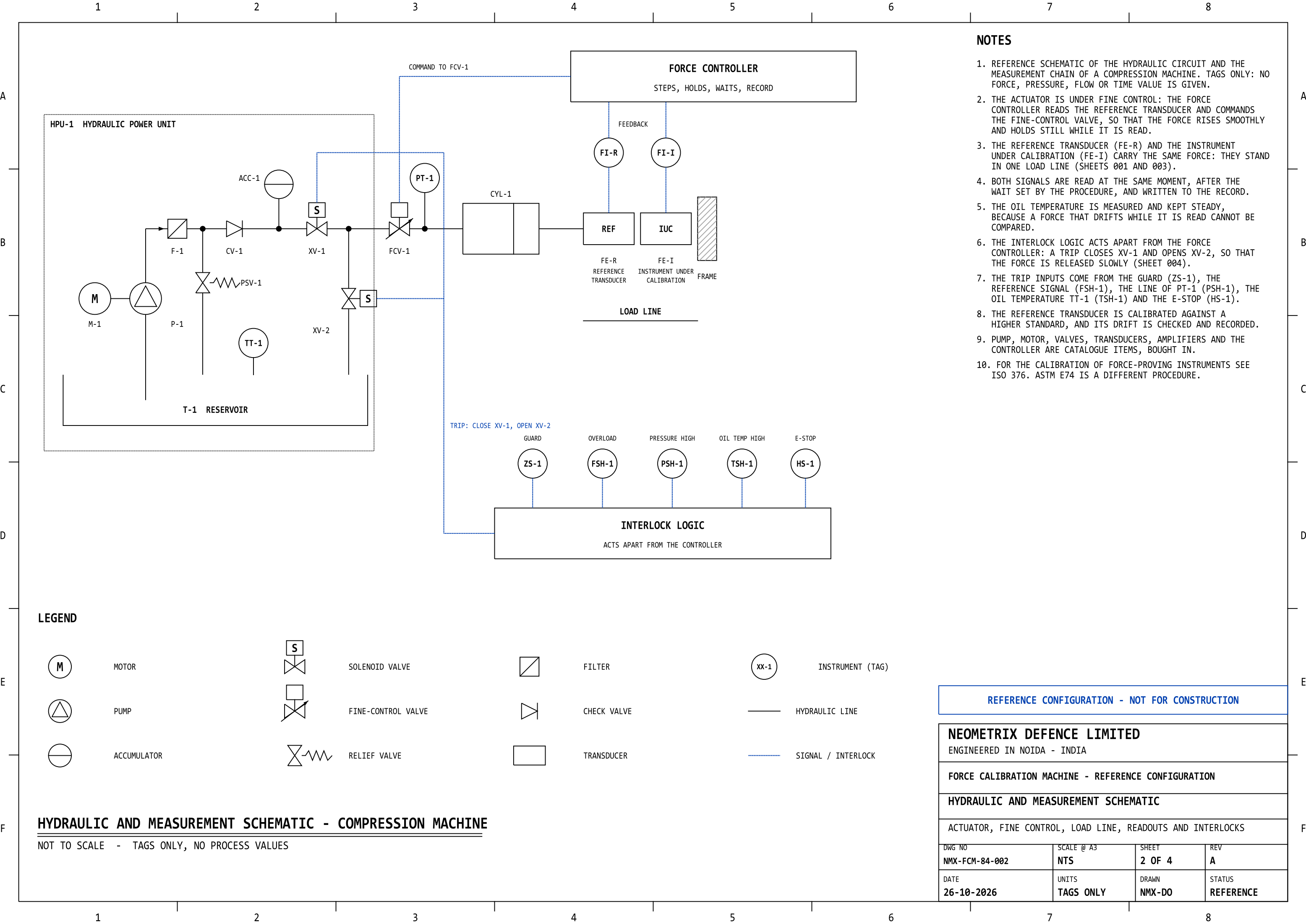
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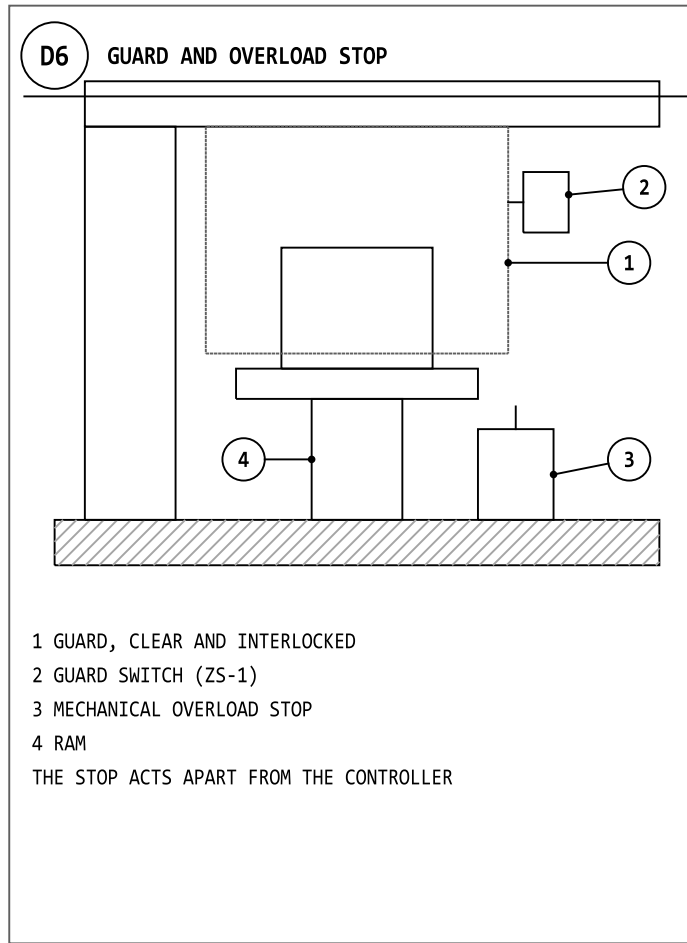
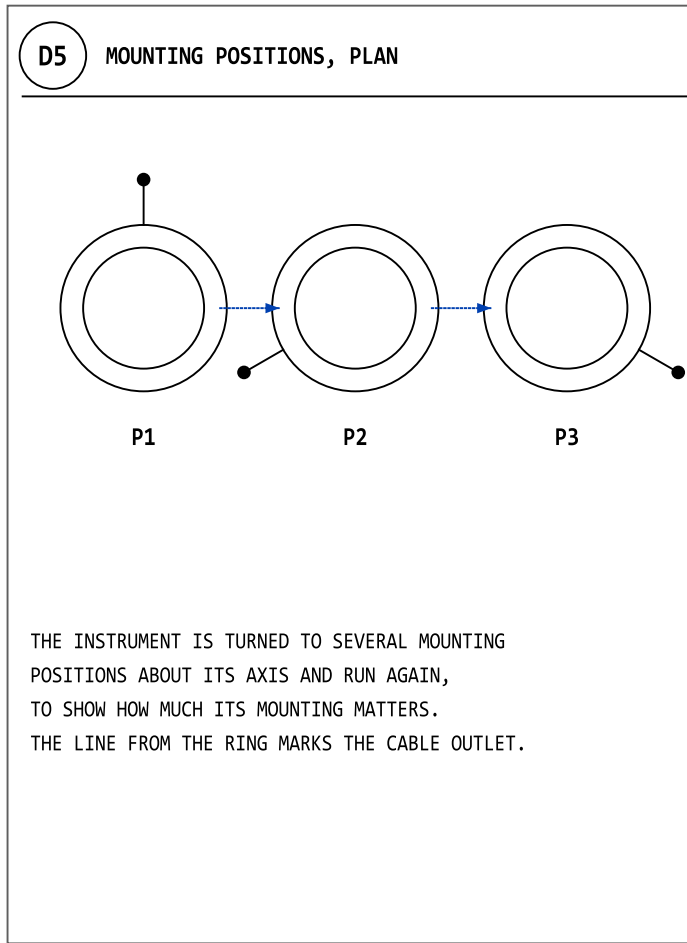
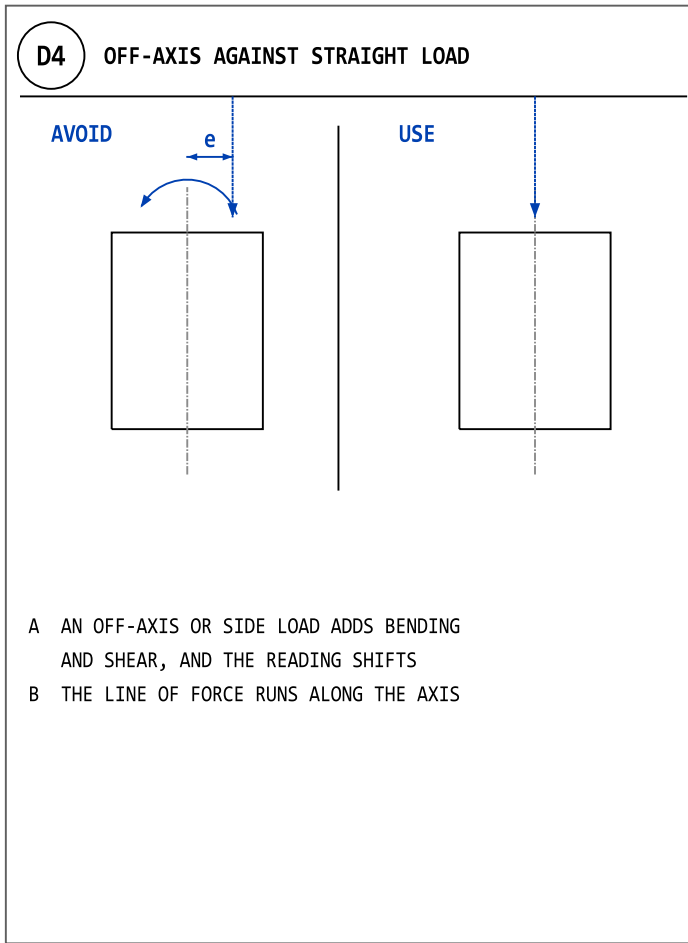
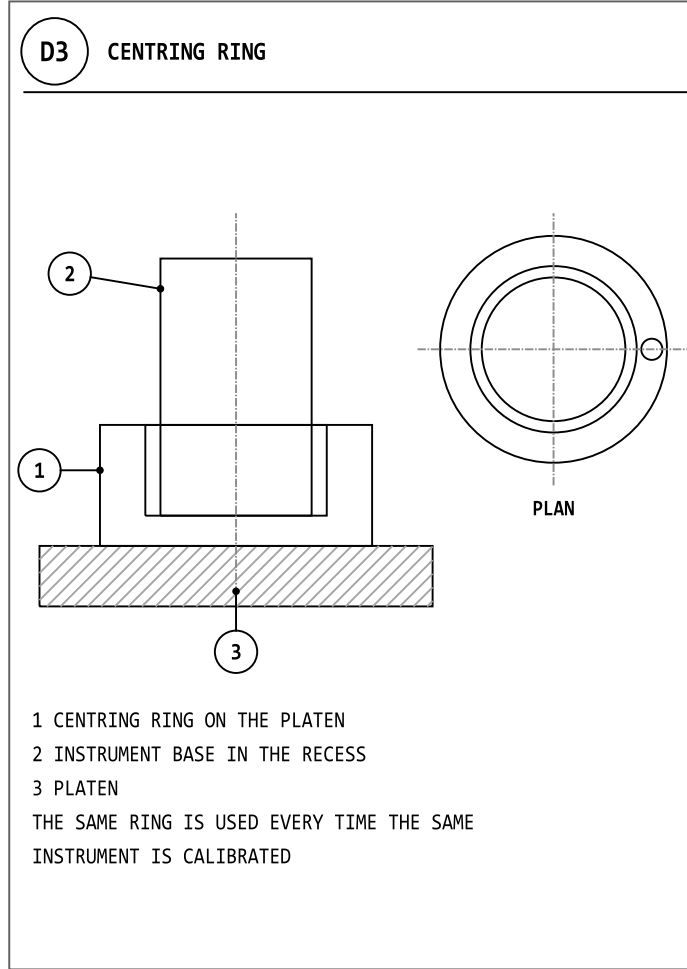
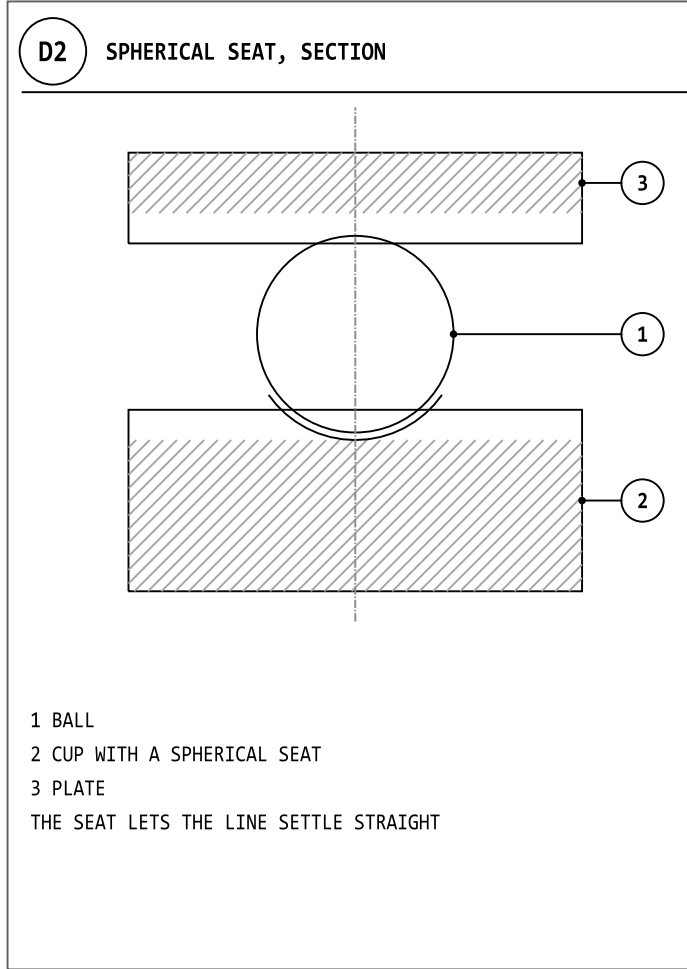
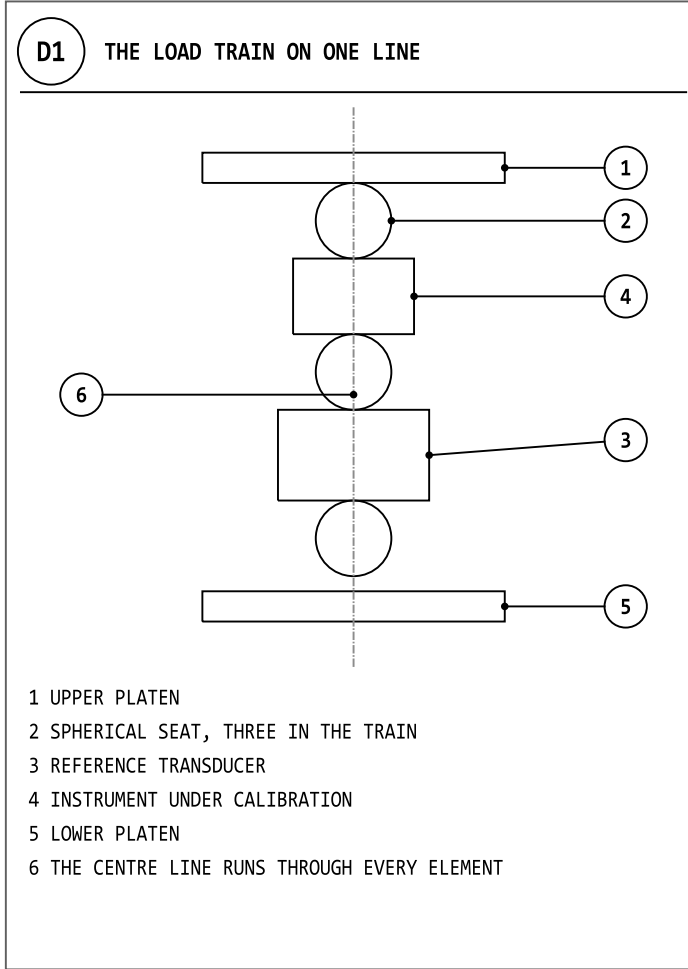
FORCE CALIBRATION MACHINE - REFERENCE CONFIGURATION

GENERAL ARRANGEMENT

COMPRESSION MACHINE: FRONT AND SIDE ELEVATION, ITEM LIST

DWG NO NMX-FCM-84-001	SCALE @ A3 NTS	SHEET 1 OF 4	REV A
DATE 26-10-2026	UNITS TAGS ONLY	DRAWN NMX-DO	STATUS REFERENCE





NOTES

1. DETAILS ARE DIAGRAMMATIC AND NOT TO SCALE. NO SIZE, FORCE OR CLASS VALUE IS GIVEN.
2. THE LOAD LINE RUNS THROUGH THE CENTRE OF EVERY ELEMENT OF THE LOAD TRAIN (D1).
3. SPHERICAL SEATS LET THE LINE SETTLE STRAIGHT (D2). CENTRING RINGS HOLD EACH INSTRUMENT ON THE AXIS, AND THE SAME RING IS USED EVERY TIME THE SAME INSTRUMENT IS CALIBRATED (D3).
4. AN OFF-AXIS OR SIDE LOAD ADDS BENDING AND SHEAR AND SHIFTS THE READING (D4).
5. THE INSTRUMENT IS TURNED TO SEVERAL MOUNTING POSITIONS AND RUN AGAIN, AS THE PROCEDURE THE CUSTOMER NAMES REQUIRES (D5).
6. THE OVERLOAD STOP ACTS APART FROM THE CONTROLLER (D6).
7. THE BOUGHT-IN ITEMS ARE SHOWN FOR THEIR PLACE, NOT THEIR MAKE.

REFERENCE CONFIGURATION - NOT FOR CONSTRUCTION

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FORCE CALIBRATION MACHINE - REFERENCE CONFIGURATION

DETAILS D1 TO D6

THE LINE, THE SEAT, THE RING, THE POSITIONS AND THE STOP

DWG NO NMX-FCM-84-003	SCALE @ A3 NTS	SHEET 3 OF 4	REV A
DATE 26-10-2026	UNITS TAGS ONLY	DRAWN NMX-DO	STATUS REFERENCE

LABORATORY PLAN - FORCE CALIBRATION MACHINE

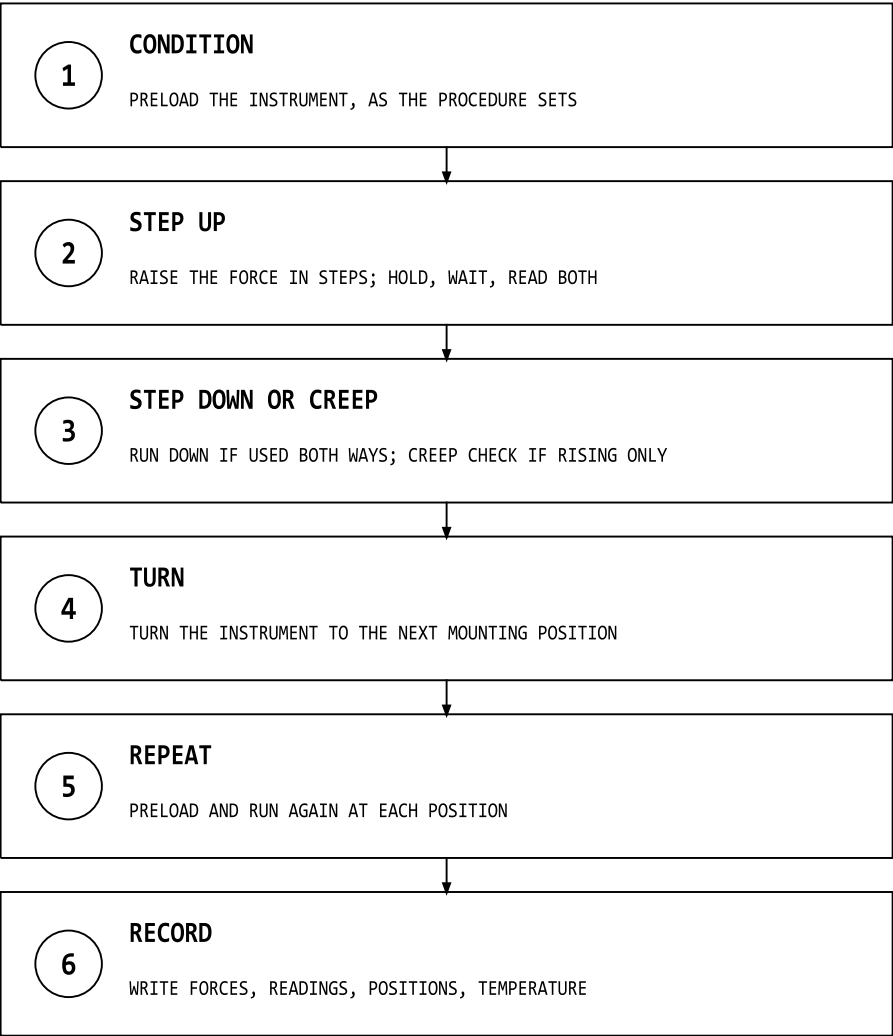
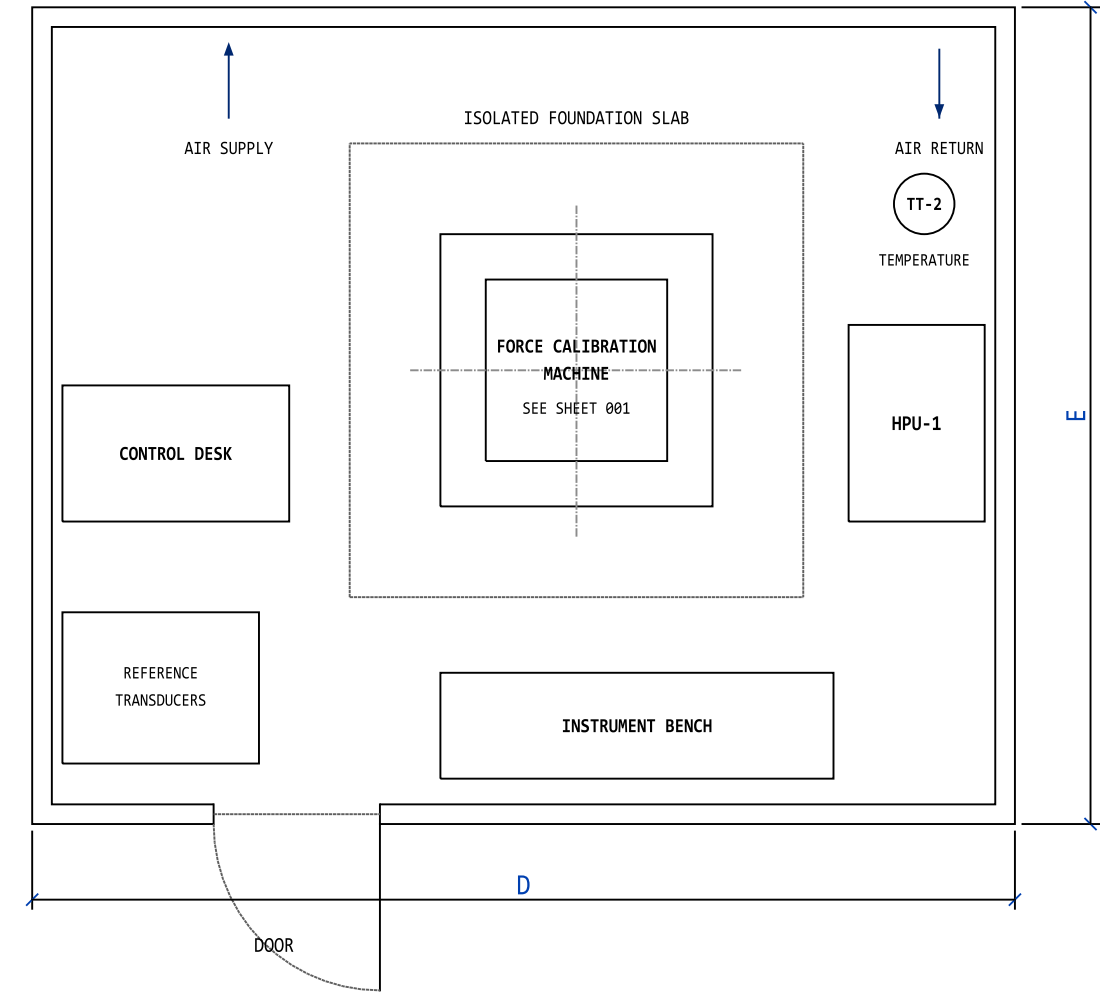
NOT TO SCALE - D AND E SET BY DESIGN

CALIBRATION SEQUENCE

EVERY INSTRUMENT, IN THIS ORDER

NOTES

1. REFERENCE LABORATORY ARRANGEMENT, SEQUENCE AND TRIPS FOR A FORCE CALIBRATION MACHINE. DIMENSIONS D AND E ARE SET BY DESIGN: NO SIZE IS GIVEN.
2. THE MACHINE STANDS ON A FOUNDATION SLAB SET APART FROM THE FLOOR OF THE ROOM, SO THAT THE REACTION OF THE FORCE AND THE VIBRATION OF THE POWER UNIT DO NOT REACH THE LOAD LINE. THE SLAB IS SET BY DESIGN.
3. THE ROOM IS HELD AT A STEADY TEMPERATURE, AND THE TEMPERATURE IS RECORDED WITH EVERY CALIBRATION, BECAUSE A TRANSDUCER AND THE OIL RESPOND TO TEMPERATURE.
4. THE SEQUENCE FOLLOWS THE PROCEDURE THE CUSTOMER NAMES, FOR EXAMPLE ISO 376 OR ASTM E74, WHICH ARE DIFFERENT PROCEDURES. THE STEPS, HOLDS, WAITS AND POSITIONS ARE SET BY THAT PROCEDURE: NO VALUE IS GIVEN HERE.
5. WHERE THE INSTRUMENT IS USED IN BOTH DIRECTIONS THE SEQUENCE RUNS DOWN AS WELL AS UP. WHERE IT IS USED ONLY WHILE THE FORCE RISES, A CREEP CHECK TAKES THE PLACE OF THE RUN DOWN.
6. TRIPS ARE LATCHED AND ACT APART FROM THE CONTROLLER. A PERSON RESETS THEM AFTER CHECKING THE CAUSE.
7. APPROVAL OF THE ARRANGEMENT RESTS WITH THE CUSTOMER AND THE AUTHORITY THEY NAME. NONE IS CLAIMED HERE.



A TRIP AT ANY STEP GOES TO THE TABLE BELOW.

CAUSE AND EFFECT - TRIPS

TRIPS ARE LATCHED AND ACT APART FROM THE CONTROLLER; A PERSON RESETS THEM AFTER CHECKING THE CAUSE

CAUSE (TAG)	CLOSE XV-1	OPEN XV-2, SLOW RELEASE	STOP THE STEPS	SOUND ALARM	MARK READING INVALID
GUARD OPENED (ZS-1)	X	X	X	X	X
FORCE ABOVE THE LIMIT (FSH-1)	X	X	X	X	X
HYDRAULIC PRESSURE HIGH (PSH-1)	X	X	X	X	X
OIL TEMPERATURE HIGH (TSH-1)			X	X	X
REFERENCE SIGNAL LOST (FE-R)	X	X	X	X	X
EMERGENCY STOP PRESSED (HS-1)	X	X	X	X	X

X = ACTION TAKEN. A BLANK CELL = NO ACTION FOR THAT CAUSE.

REFERENCE CONFIGURATION - NOT FOR CONSTRUCTION

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FORCE CALIBRATION MACHINE - REFERENCE CONFIGURATION

LABORATORY, SEQUENCE AND TRIPS

PLAN, CALIBRATION SEQUENCE, CAUSE AND EFFECT

DWG NO NMX-FCM-84-004	SCALE @ A3 NTS	SHEET 4 OF 4	REV A
DATE 26-10-2026	UNITS TAGS ONLY	DRAWN NMX-DO	STATUS REFERENCE