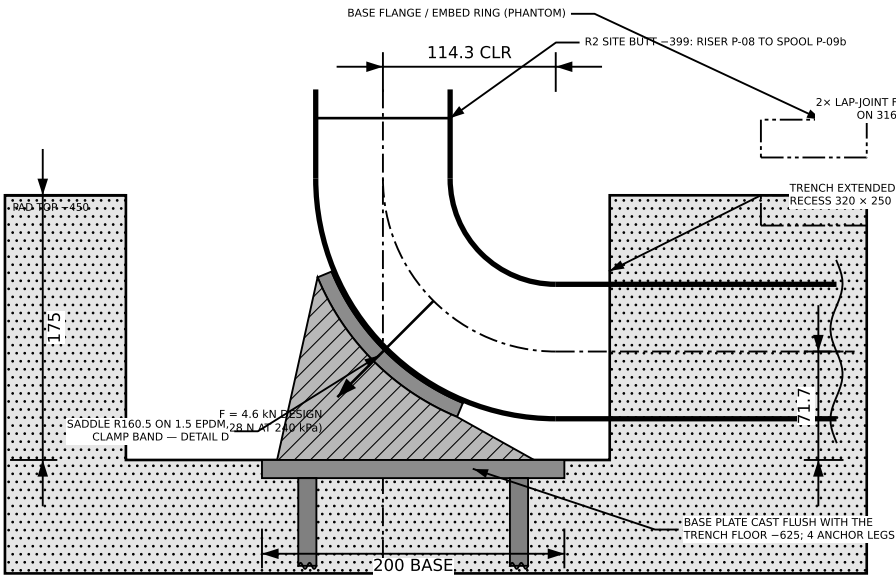
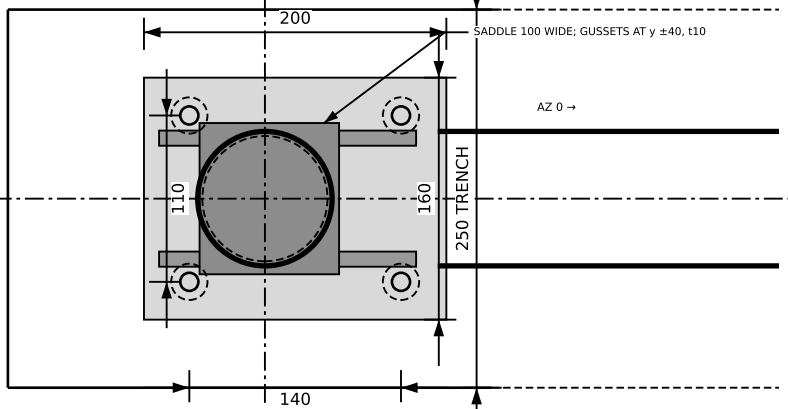


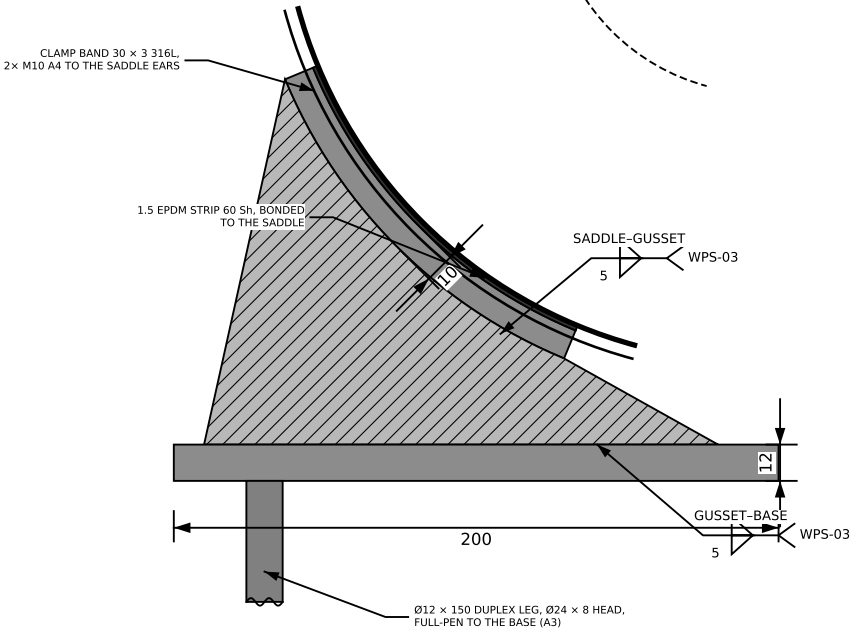
A — SECTION ON AZ 0: RISER FOOT, ELBOW, BRACKET · SCALE 1:5



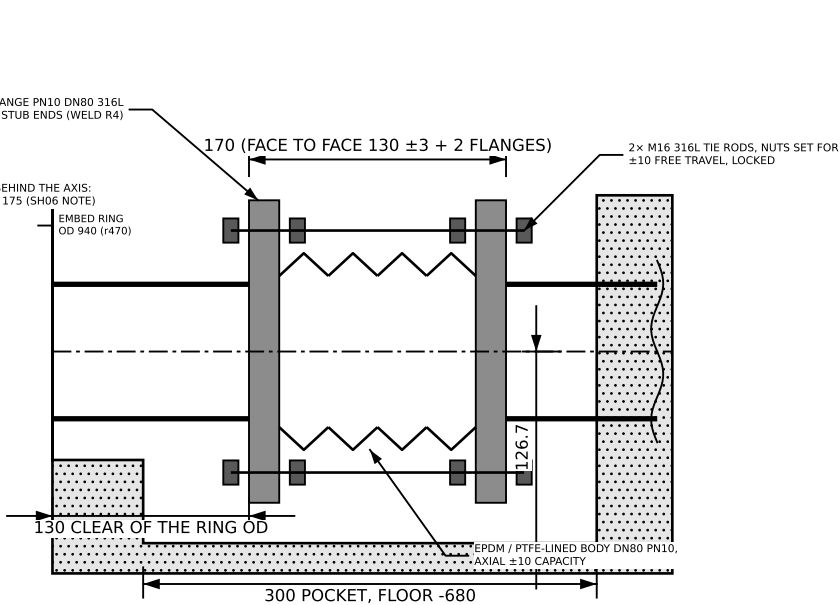
B — PLAN OF THE BRACKET IN THE TRENCH (PIPE OMITTED) · SCALE 1:5



D — SADDLE, GUSSET AND BASE — SECTION AT y = 40 · SCALE 1:2.5



C — TIED CONNECTOR IN ITS POCKET, OUTBOARD OF THE RING · SCALE 1:5



LOAD CHECK — 4.6 kN ALONG THE BISECTOR

CHECK	VALUE	CAPACITY	UTIL.
Thrust $\sqrt{2}$ p-A at 240 kPa	1828 N	—	—
Design load (x2.5)	4600 N at 225°	—	—
Components $F_x = F_z$	3253 N each	—	—
Saddle bearing 100 x 87 on EPDM	0.37 MPa	2.0 MPa	19 %
Overtuning about the -x edge	241 N·m	267 N·m (self-weight of load)	90 %*
Anchor tension (2 legs, 110 arm)	1 094 N	40 kN cone (h_{ef} 120, C35)	3 %
Anchor shear (4 legs)	813 N	30 kN steel	3 %
Gusset weld 5 fillet x 150 x 2	3 253 N	>100 kN	3 %

* THE VERTICAL COMPONENT ALONE NEARLY STABILISES THE BASE; THE LEGS ARE THE MARGIN, NOT THE MECHANISM.

PARTS ON THIS SHEET

MARK	ITEM	QTY	MATERIAL
P-09a	Anchor bracket: saddle, 2 gussets, base, 4 legs	1	Duplex 1.4462
P-09b	Spool DN80 sch10S x 40	1	A312 TP316L
P-09c	Elbow DN80 sch10S LR 90°, CLR 114.3	1	A403 WP316L
P-09d	Run DN80 sch10S to the pad edge (site)	≈0.8 m	A312 TP316L
P-09e	Tied connector DN80 PN10 + 2 lap flanges + ties	1	316L / EPDM

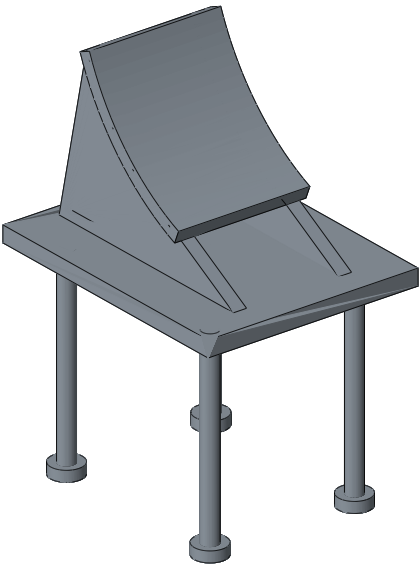
BRACKET P-09a — FABRICATION AND CASTING-IN

- Duplex 1.4462 throughout, EN 10204 3.1; ZERO carbon steel in the trench. Saddle 10 rolled to R160.5 concave, 60° about the bisector, 100 wide; gussets 10; base 200 x 160 x 12; legs Ø12 x 150 headed, full-pen to the base (WPS-03, ER2209).
- One shop weldment. Cast the base FLUSH with the trench floor -625 at x -80...+120 on AZ 0 (recess 320 x 250 x 175 behind and around the axis — SH06 note); survey the saddle centre at (x +2, z -551) ±3 before the pour sets.
- Elbow bedded on the 1.5 EPDM strip, held by the clamp band (snug — the thrust does the holding). Passivate; PT all welds.

TIED CONNECTOR P-09e — POSITION, SETTING, TEST

- Position x 600-770 on AZ 0, OUTBOARD of the embded ring: an Ø200 PN10 flange under the ring interferes with the -470 soffit by 17 mm (SH03 D5 placeholder superseded). Pocket 300 x 250, floor -680.
- EN 1092-1 PN10 DN80 lap-joint flanges 316L on 316L stub ends; EPDM body, PTFE-lined if the free-chlorine regime of SH09 applies; 2x M16 316L tie rods on the bolt PCD. SET: assemble finger-tight, back the nuts off to leave 10 free travel each side, lock with second nuts. MUST BE TIED — untied, 1702 N of surge thrust reaches the sphere.
- Bonding jumper 16 mm² 316L braid across the joint (SH08). Hydrotest riser + spool + elbow + run at 1.5 x 240 = 360 kPa (F-12).
- If the upstream run is PVC-U the surge celerity falls to ≈400 m/s and Δp to ≈75 kPa; the 4.6 kN design stands as the envelope.

3D — P-09a (parts3d/P-09a.step)



REV	DATE	DESCRIPTION	BY
D	2026-08-05	CONCEALED SKIRT ANCHORAGE, RESERVOIR + PLANT, PEBBLE COLLECTOR	NX
E	2026-08-20	REV D.2 ALIGNMENT + VISUAL QA CORRECTIONS	NX
F	2026-09-03	LOGO ENGRAVING ADDED (SH15); SHEET COUNT 14 -> 15	NX
G	2026-09-05	AUDIT CLOSE-OUT: CART 082 f8, SLOT 24, 24 TRAYS, DN80	NX
G.2	2026-09-06	PART DRAWINGS SH30-38; SLOTS AZ22.5; DOUBLER R995	NX
G.3	2026-09-06	SH37 BRACKET, SH42 WELD MAP, P-16 BELLOWS; IFF	NX

SPA FOUNTAIN — B7 SPA, MALDIVES

SPA-F-SH37 — P-09 ELBOW ANCHOR BRACKET AND TIED CONNECTOR

DRAWN: NaXief Eng.	CHECKED: NX 2026-09-06	APPROVED: I. NAZEEF 2026-09-06	STATUS: IFF REV G.3
DATE: 2026-09-06	REV: G.3	UNITS: mm	SCALE: AS NOTED
A3 · SHEET 23/25			
ISSUED FOR FABRICATION — REV G.3 · HOLD POINTS PER SH42			
WORK TO FIGURED DIMENSIONS · ISO 2768-mK U.O.S.			