1.2 MAJOR SCOPE OF SUPPLY

PART NUMBER	QTY.	DESCRIPTION
M612609	1	1.0M SMX-S8P Belt Filter
M612609-VM	1	4" Venturi Mixer
E-612609-12	1	Pneumatic Panel (Mounted on Belt Press)
E-612609-1	1	Electrical Control Panel w/Touch Screen
E-612609-1A	1	Remote PLC Rack
---	1 set	Dewatering Fabrics
DMF1116B	4	Foundation Plates
---	12	Instruction Manuals
5 days/1 trip		Field Service
Freight		F.O.B. Millsite

L3 MATERIALS OF CONSTRUCTION

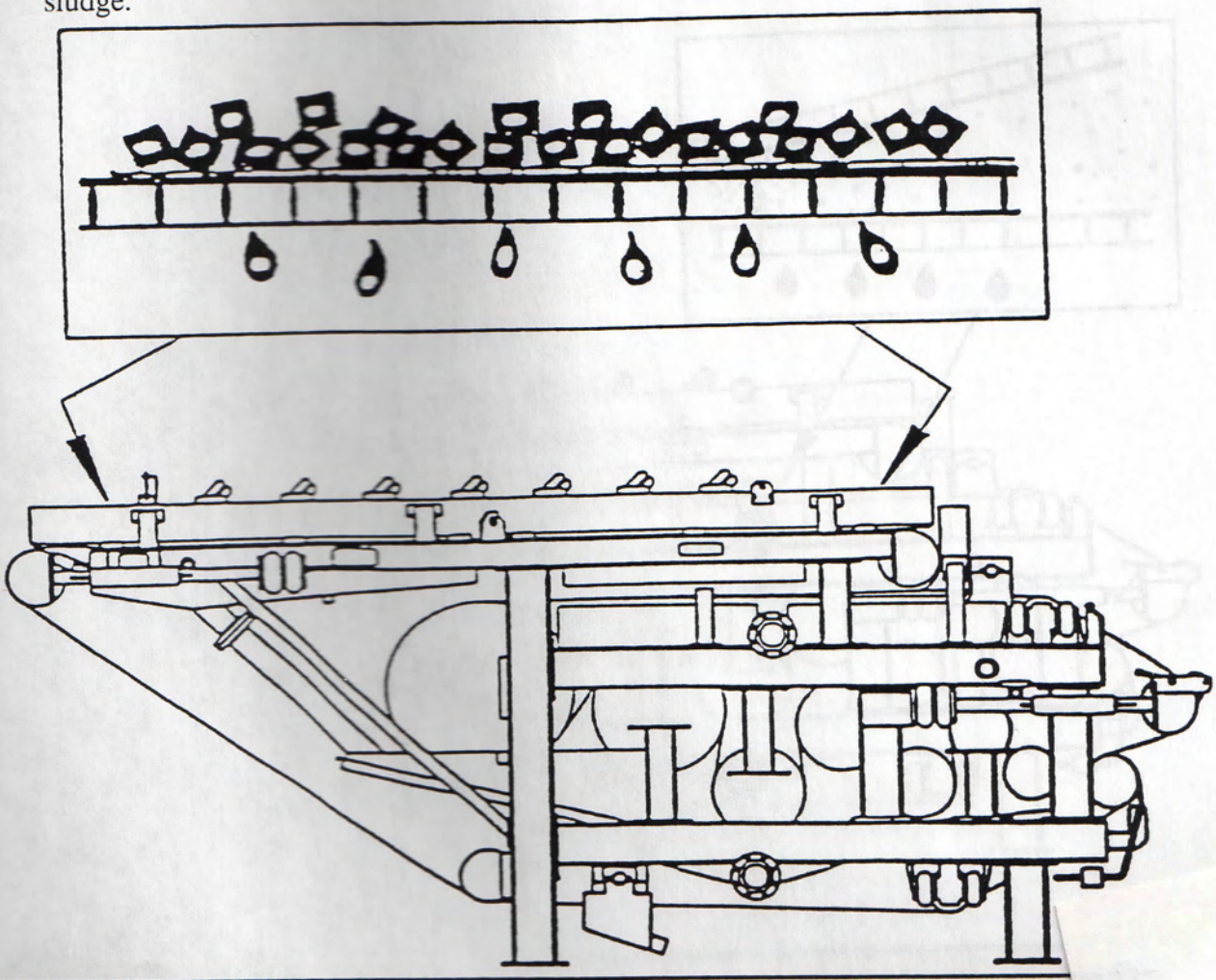
COMPONENTS	MATERIAL
Frame	ASTM A36 Steel
Splash Guards	Type 304 SS
Rollers	Type 304 SS (Perforated Roller Only)
	A519 Mechanical Tubing
	1045 Journals
Roller Coatings	Buna-N Rubber
Flows & Sludge Dist. Equip.	High Density Polyethylene & Type 304 Stainless Steel
Belt Filter Cloth	Polyester
Spray Headers	Type 304 SS
Spray Nozzles	Type 304 SS
Belt Wash Housings	Type 304 SS
Drainage Pans	Type 304 SS
Drain Piping	Sch 80 PVC
Anchor Bolts	Type 304 SS
Tank Mixer	Type 304 SS
Doctor Blades	High Density Polyethylene
Pneumatic Piping (Machine Only)	Polyethylene Tubing
Bearings	Self aligning horizontal split case pillow block housings with triple seal seals.

2.3 GRAVITY ZONE

The Gravity Zone is the area on the SMX®-S8P where the drainage of "free" water occurs. Its limits are defined by the tensioning roller at the inlet feed end, the fixed roller at the transition end, and the stainless steel containment walls on either side. Polyurethane seals are integrated into the side-walls to assist in confining the sludge to within the dewatering zone.

Several rows of horizontal chicanes are used in the gravity zone to facilitate drainage. The plow-like shape of the *ANDRITZ* chicanes actually causes the sludge to roll over, and because the chicane actually rests on the belt surface, the sludge is continually exposed to clean belt. The chicane mounting hardware allows the chicanes to lift from the belt should an object in the sludge create an obstruction.

The gravity zone should remain viewable at all times during operation. This is where the operator can determine whether proper sludge conditioning and other press parameters are being maintained. Adjustments are made based on the appearance and feel of the sludge.

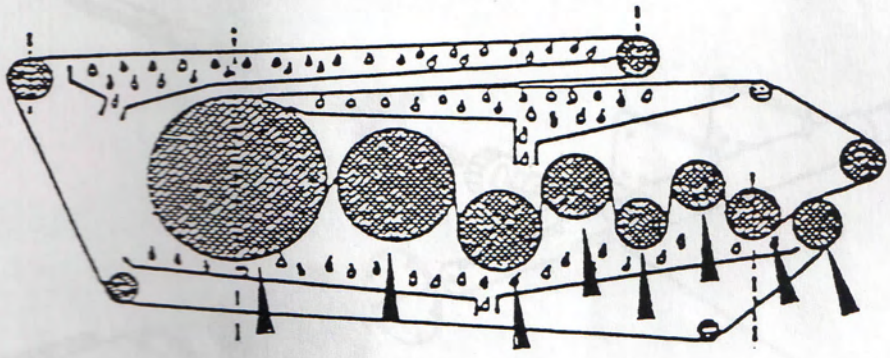


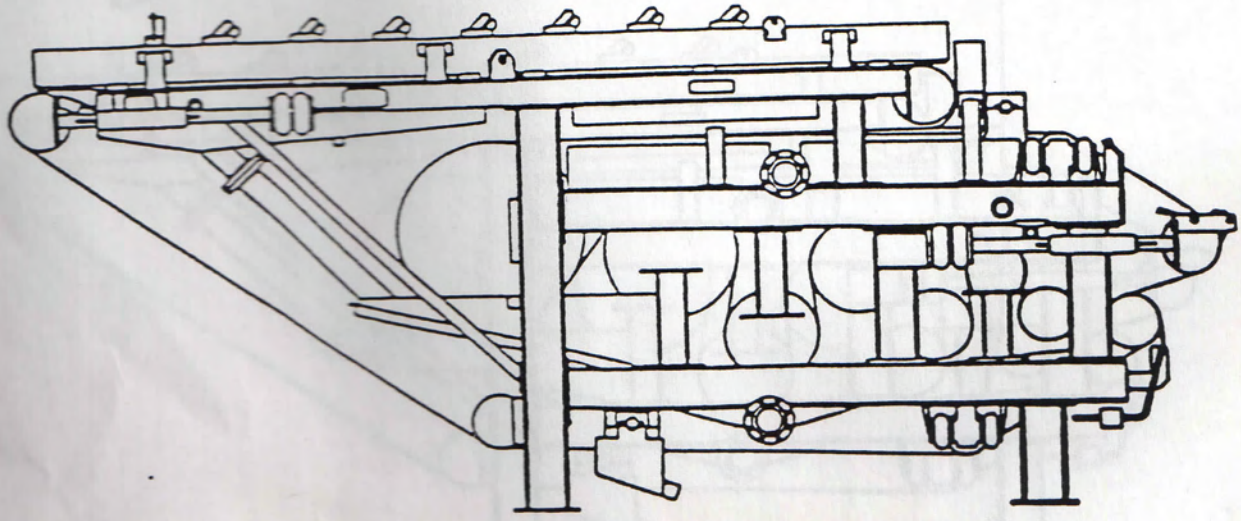
2.5 HIGH PRESSURE ZONE

The High-Pressure Zone on the SMX®-S8P is the area where the sludge is subjected to the maximum allowable pressure. Its limits are defined by the point where the belts are fully-converged and the point where they separate to discharge the cake. There are no deckle seals in the High-Pressure Zone, as the cake must be stable enough by this point to not extrude under pressure.

The pressure in this phase is generated by wrapping the belts in a serpentine fashion around a series of decreasing diameter rollers (i.e., each subsequent roller having a smaller diameter than the previous one). Adjustment to belt tension will determine the amount of pressing force generated on each roller.

Finally, the belt-cake-belt sandwich is passed between two converging rollers, which applies linear pressure, or nip pressure, along the length of the rollers. The amount of pressure is independently adjustable.





Refer to Figure 4.1 for steps 4, A-G

4. Lower Belt (Short)

Place the rolled belt at the discharge end of the machine.

Pick-up the end of the clipper seam belt and slide it.

A. over the lower tension roll
B. over the tracking roll
C. through the upper shower box
D. through the wedge section
E. around the perforated drum
F. through the "S" rolls
G. back to the lower tension roll where the belt clipper seam is joined.

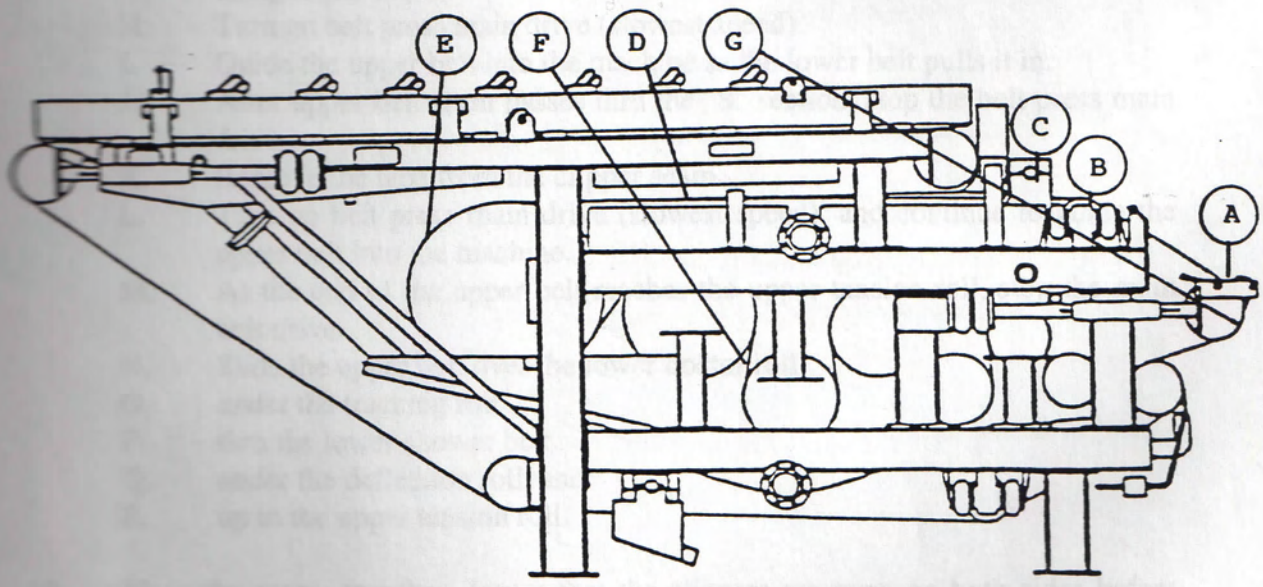


FIGURE 4.1

5. Place the seams together. Insure that the clippers are even on both sides before proceeding.

6. Insert clipper seam wire through the seam.

7. Trim seam wire to approximately 3/4" at each end and fold under belt.

8. Insure that the belt tracks properly before placing the upper belt.