

Svedala Holo-Flite[®] Processor



The Svedala Holo-Flite® Thermal Processor is an indirect heat exchanger for heating, cooling or drying bulk solids, filter cakes, pastes or sludges. It is a proven and efficient thermal processor with over 3000 installations worldwide.

Process Principle

In the Svedala Holo-Flite® processor, individual particles are heated or cooled as they come in contact with the surfaces of the hollow flights, shaft and trough. The product to be processed is continuously conveyed in an axial direction by means of the rotating screw flights along a jacketed trough.



The Holo-Flite's unique intermeshing screws are ideal for many difficult drying applications.



Holo-Flite® processor is used to cool sodium tripolyphosphate in a chemical plant.

Indirect Heat Exchange

The Holo-Flite® processor is an indirect heat exchanger where heat is transferred by conduction from a heat transfer medium through a heat transfer surface to the material being processed. The heat transfer fluid is normally water, steam or thermal oil. The material processed does not come in contact with the heat transfer medium resulting in no contamination of the product.

Excellent Product Temperature Control

Since the Holo-Flite® operator has control over heat transfer medium temperature and screw speed, the heat transfer process can be closely controlled. Because the heat transfer medium is normally recycled, heat losses are minimized and a high degree of efficiency is achieved.

Wide Range of Operating Temperature

The raising and lowering of product temperature beyond a narrow range can often exceed the expansion and contraction capabilities of metals and welded joint design. The unique twin pad design of the Svedala Holo-Flite® accommodates these extreme expansion and contraction variation and allows successful operation of up to 1 200 degree Celsius.

Effective Product Conveyance

The Svedala Holo-Flite® operates normally at screw speeds of five revolution per minute or less. Low horsepower drives are therefore sufficient and wear on screw and trough are virtually non-existent. At these slow speeds gentle mixing of the product occurs and particle degradation and agitation of fine particles causing dusting are therefore minimized.

Versatile Design

To meet the various application requirements, the Svedala Holo-Flite® can be supplied with single, double or quadruple screw configuration.

Additionally, Holo-Flite® units can be manufactured to operate under vacuum or pressure. All units are designed and fabricated per A.S.M.E. Code, Section VIII Unfired Pressure Vessels.

Laboratory and Rental Services

Svedala can test your product on both a preliminary feasibility or on a full-scale production basis with either a lab-size unit or a production-size Holo-Flite.

We can perform heating, cooling, drying, cooking and solvent evaporation tests quickly and accurately with your samples.

Svedala can also provide Holo-Flite rental units for in-plant testing. The units come with self-contained electrical hot oil heater.

All rental units are complete with vapour dome and variable speed drive and are on skids for ease of shipment and installation.

Applications

Chemical processing

- Cooling: Calcium Carbonate, Caustic Flakes, Iron Oxide, Sodium Tripolyphosphate.
- Drying: Alumina, Carbon Black, Sodium, Chloride, Plastics.
- Heating: Pesticides, Potassium Chloride.

Industrial power applications

- Heating: Limestone Filler, Petroleum Coke.
- Drying: Volume Reduction of Hazardous and Non-hazardous Wastes.
- Cooling: Incinerator Ash, Fluidized Bed Boiler Ash and Limestone, Coke from a Calciner.

Mineral processing & coal drying

- Drying: Molybdenum and Fine Coal.

Food processing and environmental

- Many "one of a kind" heating and drying applications.

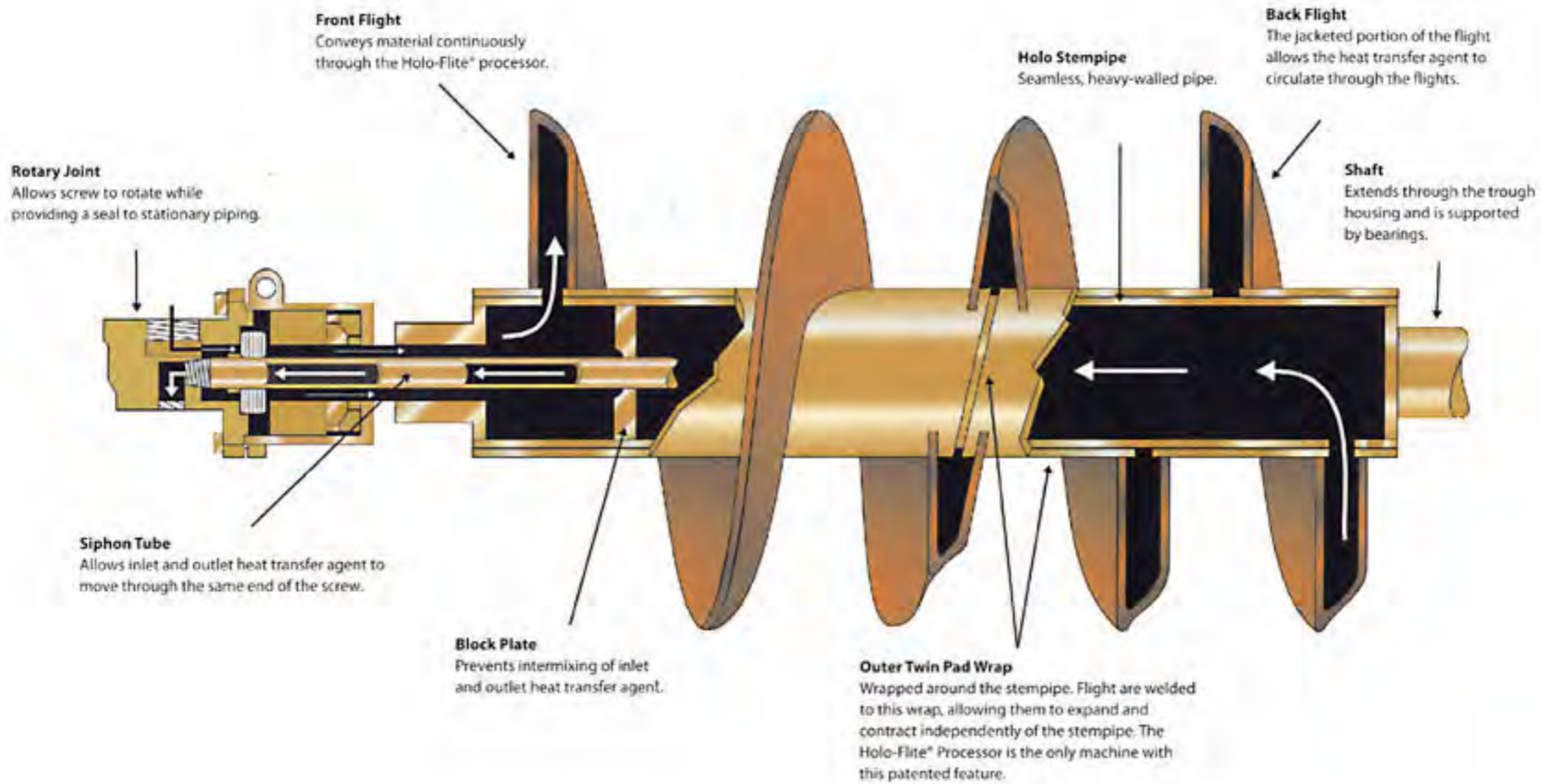


Svedala's 4" rental unit is available at a nominal charge for in-plant testing.

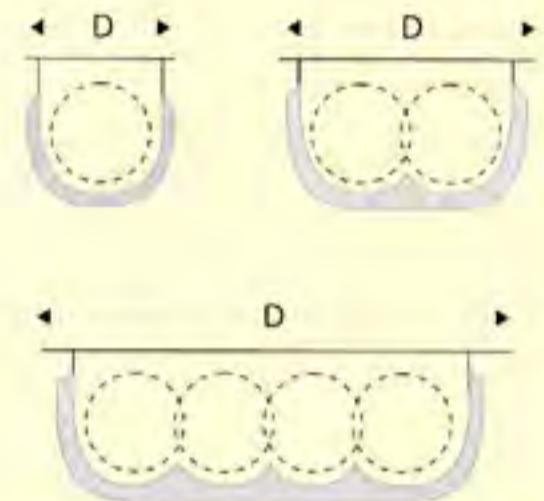
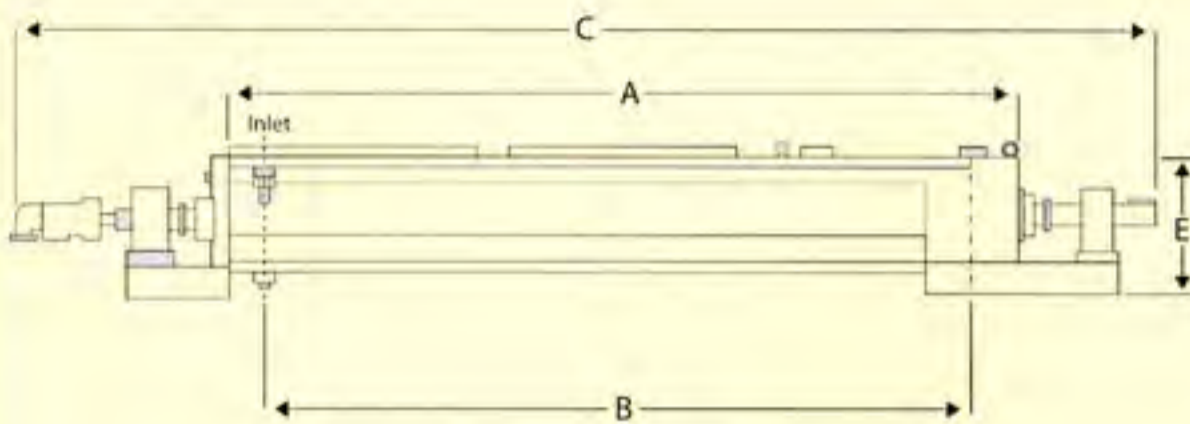


Svedala Holo-Flite® Processor

Screw Construction Specifications



Technical Specifications



Unit Size & Type Designation:

Each Holo-Flite processor is designated by a group of numbers and letters arranged to specifically identify the unit as indicated to the right.

D 12 10 - 5

- Pitch of screws – inches (cm)
- Nominal length of screws – feet (cm)
- Nominal diameter of screws – inches (cm)
- Number of screws in tier – S – single
D – double
Q – quadruple

Unit Size	A Nominal Length	B C/L Inlet to Outlet	C Overall Length	D Overall Width	E Overall Height	Screw Area (ft)	Screw Diameter
D404-2	4' (1219)	3' - 7" (1099)	7' - 9" (2362)	2' - 3" (686)	2' - 6" (762)	10	4" (102)
S710-4	10' (3048)	9' - 2 3/16" (2799)	13' - 7" (4140)	1' - 0" (305)	1' - 1 3/16" (335)	21	7 3/8" (187)
S714-4	14' (4267)	13' - 2 3/16" (4018)	17' - 7" (5359)	1' - 0" (305)	1' - 1 3/16" (335)	30	
D710-4	10' (3048)	9' - 2 1/16" (2799)	13' - 8" (4178)	1' - 6" (457)	1' - 1 3/16" (335)	42	
D714-4	14' (4267)	13' - 2 3/16" (4018)	17' - 8" (5398)	1' - 6" (457)	1' - 1 3/16" (335)	60	
S1210-5	10' (3048)	8' - 6 13/16" (2611)	14' - 8" (4470)	1' - 6" (457)	1' - 10" (565)	39	12" (318)
S1218-5	18' (5486)	16' - 6 13/16" (5050)	22' - 8" (6909)	1' - 6" (457)	1' - 10" (565)	74	
D1210-5	10' (3048)	8' - 6 13/16" (2611)	15' - 8" (4775)	2' - 4" (711)	1' - 10" (565)	78	
D1218-5	18' (5486)	16' - 6 13/16" (5050)	23' - 8" (7214)	2' - 4" (711)	1' - 10" (565)	148	
S1616-6	16' (4877)	14' - 6 9/16" (4434)	21' - 4 3/16" (6507)	1' - 10" (559)	2' - 1" (641)	91	16" (406)
S1618-6	18' (5486)	16' - 6 9/16" (5043)	23' - 4 3/16" (7117)	1' - 10" (559)	2' - 1" (641)	106	
D1616-6	16' (4877)	14' - 6 9/16" (4434)	22' - 10 9/16" (6974)	2' - 11" (889)	2' - 1" (641)	183	
D1618-6	18' (5486)	16' - 6 9/16" (5043)	24' - 10 9/16" (7583)	2' - 11" (889)	2' - 1" (641)	207	
S2414-6	14' (4267)	12' - 6 9/16" (3824)	20' - 2 9/16" (6161)	2' - 6" (762)	2' - 10 11/16" (881)	173	24" (610)
S2424-6	24' (7315)	22' - 6 9/16" (6872)	30' - 2 9/16" (9209)	2' - 6" (762)	2' - 10 11/16" (881)	307	
D2414-6	14' (4267)	12' - 6 9/16" (3824)	21' - 6 9/16" (6567)	4' - 0" (1219)	2' - 10 11/16" (881)	346	
D2424-6	24' (7315)	22' - 6 9/16" (6872)	31' - 6 9/16" (9615)	4' - 0" (1219)	2' - 10 11/16" (881)	614	
Q2416-6	16' (4877)	14' - 6 9/16" (4434)	23' - 6 9/16" (7177)	7' - 1" (2159)	2' - 10 11/16" (881)	800	30" (762)
Q2424-6	24' (7315)	22' - 6 9/16" (6872)	31' - 6 9/16" (9615)	7' - 1" (2159)	2' - 10 11/16" (881)	1227	
S3020-7	20' (6096)	18' - 4" (5601)	27' - 2 5/16" (8288)	3' - 2" (965)	3' - 7" (1092)	292	
S3028-7	28' (8534)	26' - 4" (8039)	35' - 2 5/16" (10727)	3' - 2" (965)	3' - 7" (1092)	416	
D3020-7	20' (6096)	18' - 4" (5601)	28' - 5 9/16" (8675)	5' - 3" (1600)	3' - 7" (1092)	585	30" (762)
D3028-7	28' (8534)	26' - 4" (8039)	36' - 5 9/16" (11114)	5' - 3" (1600)	3' - 7" (1092)	831	
Q3020-7	20' (6096)	18' - 4" (5601)	28' - 5 9/16" (8765)	8' - 11" (2718)	3' - 7" (1092)	1169	30" (762)
Q3028-7	28' (8534)	26' - 4" (8039)	36' - 5 9/16" (11114)	8' - 11" (2718)	3' - 7" (1092)	1663	