



AB 50 installed in a Danish rendering plant



AB 20 to be rented for pilot plant tests



AB 70, fish meal plant, Denmark



AB 80, fish meal plant, Chile

# Double Screw Presses for Fish Meal and Rendering Plants

During the past 50 years, Atlas Industries has justified the reputation for modern design and the supply of reliable and durable equipment to the fish meal and rendering industries.

The combination of Atlas Industries' experience and Fratelli Babbini's specialist knowledge of screw presses manufacturing has resulted in – the "Atlas-Babbini Double Screw Press".

The presses are found today, operating not only in land based plants worldwide, but also fitted as "on-board" equipment in many ship borne installations.

The Atlas-Babbini Double Screw Press can be supplied as a single machine or as part of a complete plant delivery.

It is of primary economic consideration to the fish meal and rendering industries that the water and fat content of the resulting press cake are as low as possible. This will result in lower drier steam requirements and assist in improving overall plant performance.

The Atlas-Babbini Double Screw Press attains a condition of high compression resulting in very low water and fat content of the press cake.

For customers who prefer to verify the performance against their own specific raw material composition Atlas is pleased to offer assistance: An Atlas-Babbini type AB 20 can be rented for on-site pilot plant tests.

## The Atlas-Babbini Double Screw Press





#### Design

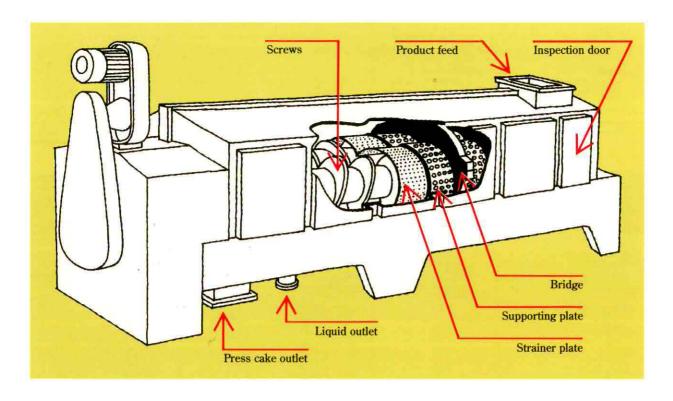
The design principle is illustrated in the figure on the next page.

- The press consists of two interlocking screws enclosed by a strainer shell and surrounded by a cover.
- The strainer shell and screws are designed for close fitting.
- The specially profiled screw flights are reinforced with a welded 5 mm thick stainless steel flat bar.
- The strainer shell is divided into sections.
- Each section of the strainer shell consists of perforated stainless steel plates surrounded by mild steel supporting plates which are supported by heavy steel bridges.

- The strainer plates have holes with diameters varying from inlet to outlet from 5 to 1 mm.
- There are inspection doors on both sides of the cover for its full length.
- The cover and the inspection doors are of stainless steel.
- The cover is equipped with a suction branch for connection to deodorization.
- The heavy base is designed as a mild steel frame supported on feet. The frame is bolted to the gear housing.
- At the inlet end the press screws are supported by selfaligning roller bearings.
- At the outlet end the shafts are flanged to the main gear shafts.
- An electronic process control system is supplied for observation of the press function. This also acts as an overload safeguard.

- Each press size has a special reduction gear coupled to the double screws.
- Supplied with helical cut reduction gear wheels.
- The gear box is equipped with a forced lubrication system which is safeguarded against lack in oil pressure and flow.
- The double screw press is supplied either with an electric motor, V-belt drive and variator, or a hydraulic motor drive with variable speed.
- Equipment for automatic control can be supplied.





AB Types	Fish meal		Meat-and-bone meal		Dimensions			Shipping data	
	Nominal capacity t/h	Motor effect kW	Nominal capacity t/h	Motor effect kW	Length m	Height m	Width	Weight t	Volume m³
20	2.5-3.8	5.5-7.5	1.6-2.5	7.5-11	2.6	1.2	0.8	2.4	2.5
30	3.6-5.4	7.5-11	2.4-3.5	11-15	3.2	1.3	1.0	3.3	4.2
40	8-12	18.5-22	5-8	30-37	4.1	1.4	1.3	7.5	7.5
50	12-18	22-37	8-12	37-55	4.9	1.5	1.5	12.0	11.0
60	19-29	45-75	12-19	75-90	5.8	1.8	1.8	18.0	18.8
70	26-39	75-110	17-25	100-160	7.0	2.0	1.9	26.0	26.6
80	43-65	132-200	28-42	200-280	7.8	2.2	2.2	37.0	37.8

The nominal capacities are based on normal raw material and on 4-6 RPM of the press screws.

### Operation

The Atlas-Babbini Presses are easy to operate, and performance is easy to inspect. The enclosed design provides for effective deodorization.

The combination of electronic control and instrumentation enables automatic safeguarding against overload. The press screws rotate in opposite directions, preventing the material from rotating with the screws.

The variable screw speed provides for the flexibility necessary to cope with various raw materials and capacities, this is valid for the hydraulic and for the variable gear drives.

### Maintenance

The sturdy construction of the Atlas-Babbini designed double screw presses needs only a minimum of maintenance and the helical reduction gear provides for a long life.

The stainless steel top of the flights protects against wear, prolonging operating time before rewelding.



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