

Mini Mills

A complete small scale plant



Duty: The De Smet Rosedowns Mini Mill is capable of pressing most Oil bearing materials, and is designed to be a completely self contained processing unit. However some larger sized feed materials, such as Copra, may require Pre-Breaking before being fed to the Mill. The process has been designed to give good quality products, be simple to operate and occupy a small floor area. The Mill can be supplied in single or double Press Arrangements. A Double Pressing Mill is normally the preferred arrangement as it gives the lower residuals and more consistent performance. Foots removal and Filtration is included to give a Filtered Crude oil as the final Oil product from the Mill.

Typical Performance: based on Rape Seed (Canola), Sunflower, Linseed

Input:

10 - 12 TPD,

Exact quantities vary with material,

Output:

~7.5 TPD Cake at 8% - 12% OIC.

~4.5 TPD Crude Oil

Equipment List:

Part No,	Qty	Description	Part No,	Qty	Description
2700	1	Press Feed Hopper	2700P	1	Electrical Control Panel
2725A	1	Mini 500 Pre Press	2700EC	1	Set of Electrical Cabling and Fittings
2725B	2	Mini 200 2 nd Press.			
2782	1	Screened Oil Tank	2771	1	Set of Access Platforms and supporting Steelwork
2782	1	Filter Feed Pump			
2716	1	Vertical Tank Filter	2753	1	Set of Piping, Valves & Fittings.
2766	1	Air Compressor & Receiver	2700	1	Set of Interconnecting Chutes.

Approximate Delivery: Ex Works, Hull UK : 3 Months from Order



Science Behind Technology

Mini Mills

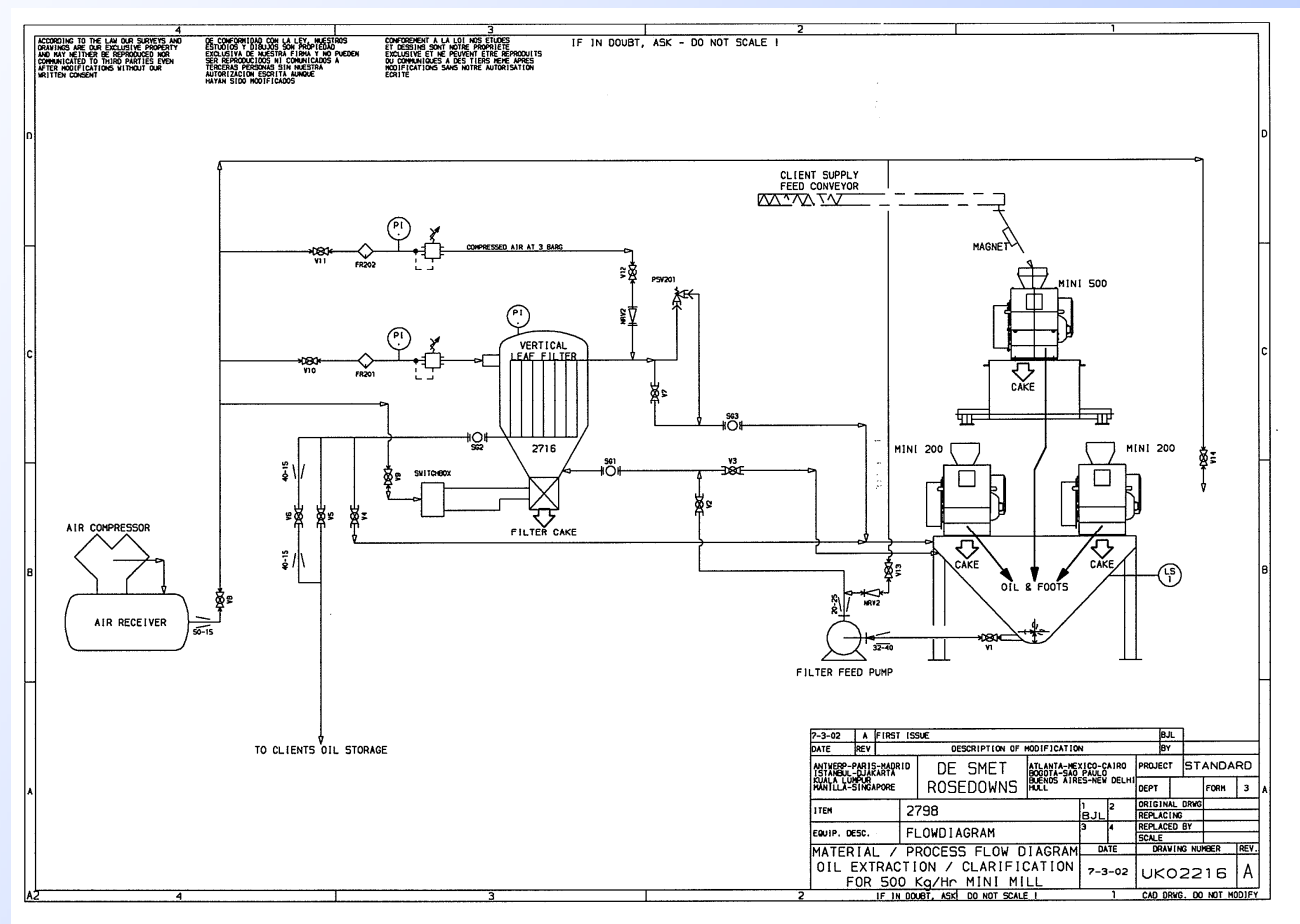
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Process Description:

The De Smet Rosedowns Mini Mill is a two stage Extraction Process. Initially the seed is fed into the plant via the Feed Hopper of the Mini 500 Pre-Press. This Press crushes the Seed, releasing some of the oil and warming the feed material.

The Pre-Pressed Cake is discharged into a hopper beneath the Mini 500. This is ingeniously arranged with a dual screw bottom. The feed rate to the Mini 200 second presses is controlled by varying the speed of the discharge screws. These screws discharge into the Mini 200 Presses on the lower level which further press the material and extract the remaining oil. The finished cake is discharged from the Mini 200s for bagging off.

The oil and fine solids within it, is collected from both the Mini 200s and the Mini 500 and cascades into the oil tank situated beneath the Presses. From this crude oil tank the Oil is pumped to the Vertical Tank Filter, where it is filtered under pressure. The filtered oil is discharged to the clients oil collection system. The solids from the oil build up on the leaves of the filter and periodically it is necessary to clean the leaves by "Blowing Down" the filter. For this reason the mill includes an Air compressor and Receiver.



Services:

Electric Supply : 75 kW, 380 V 50 Hz (Absorbed 80 kW Hrs / Tonne Seed Input)
 Compressed Air : 600 L/Min @ 6 Bar g