



WIP FILTER PLATES

THE WESTERN INDIA PLYWOODS LIMITED

Technical Literature

Annexure No. IV

WIP FILTER PLATES - WIP'S DENSIFIED WOOD BASED LAMINATE FOR THE CHEMICAL INDUSTRY.

FEATURES

Only selected species of wood with proven qualities are used for filter plate manufacture.

- The selected logs are cut into thin veneers and impregnated with special synthetic resins based on odourless Phenol Formaldehyde.

The resin treated laminations are dried and then stabilised so that the molecular size of the resin in the veneer pores is brought to the required level and arranged in a particular manner to make the base material more homogeneous than natural timber i.e., the strength properties are uniformly distributed.

- Resin treated and stabilised laminations are arranged by adjusting, the grains of laminations at appropriate angles, and then pressing them under high pressure and temperature to get single plates, without joints. These are used for the manufacture of WIP filter plates.

Advantages of WIP Filter Plates over conventional filter plates manufactured from teak, etc.

- WIP Filter Plates have almost double the strength of timbers like teak, as a result of which the overall thickness of WIP Filter plates can be reduced to almost half that of filter plates manufactured from teak. For example, if the thickness of the

filter plates manufactured from teak is 2.3/4", then the thickness of WIP filter plates need not be more than 1 1/2". Therefore, without sacrificing any of the strength characteristics, the thickness can be reduced.

- By reducing the thickness of filter plates by using wood based densified laminated plastic, the capacity of filter presses can be enhanced considerably.

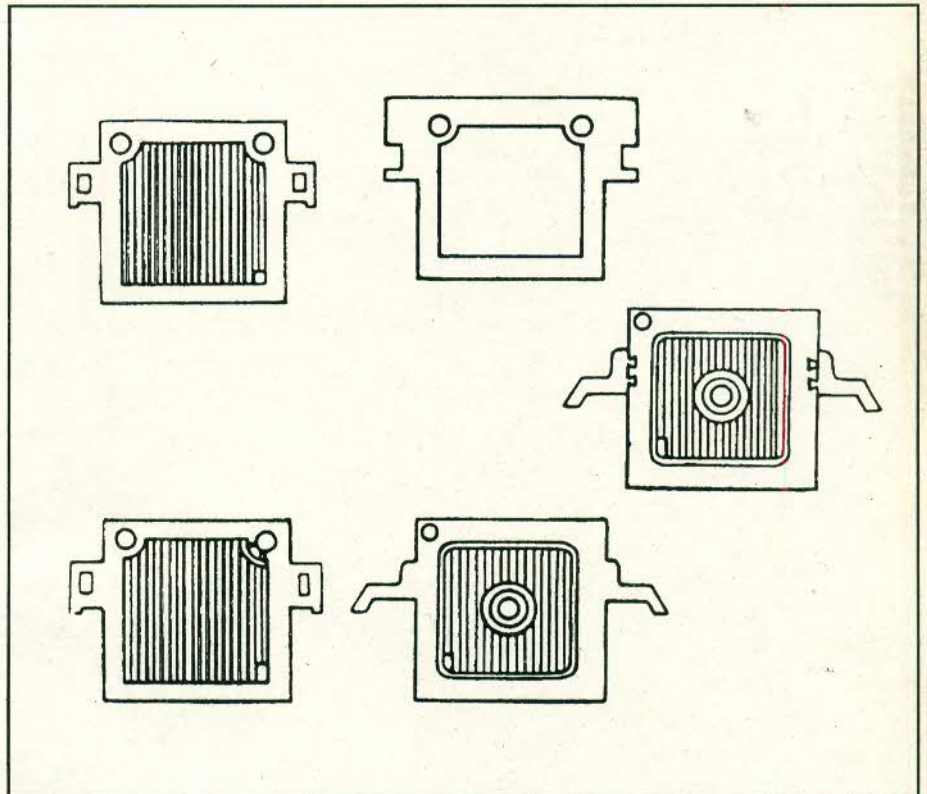
- WIP filter plates are jointless, and do not develop leaks under rigorous working conditions in chemical plants. This enables production to be carried out in an uninterrupted manner, under clean and

hygienic conditions.

- WIP filter plates do not incorporate any metallic fittings in their design, thereby eliminating problems of corrosion due to attack of various chemicals.

WIP filter plates are always supplied with specially designed compreg handles which are non-corrosive, unlike metallic handles.

WIP filter plates are supplied ready-to-use, and are ideally suited for application in chemical plants where high efficiency is expected. WIP filter plates find applications in fertilizer plants, solvent extraction plants, Zinc plants, vanaspati plants and many other developing chemical indus-



tries.

Types of filter plates and standard sizes:-

WIP filter plates are available in either plate and framework construction or in recessed construction with jointed or integral handles. These are available in the following sizes:

in mm	in inches
305 X 305	12 X 12
407 X 407	16 X 16
458 X 458	18 X 18
508 X 508	20 X 20
610 X 610	24 X 24
762 X 762	30 X 30
838 X 838	33 X 33
915 X 915	36 X 36
1016 X 1016	40 X 40
1067 X 1067	42 X 42
1220 X 1220	48 X 48
1270 X 1067	50 X 42

Surface coating with Epoxy lacquer is recommended at regular intervals during use, provided Epoxy lacquer is compatible with the filtration media. This must be ascertained by the user before employing Epoxy lacquer.

Application of WIP Filter Plate/ Frameworks for various chemical industries:

Reactive dyes
CPC blue
Vat dyes
A20 dyes
Coal tar dyes
Organic pigments
Inorganic pigments
Rare earth salts
Intermediates
Zinc salts
Copper salts
Cadmium salts
Pharmaceuticals
Glucose liquid
Chromates
Glycerine

Please furnish the following details along

with your enquiry:

- (1) Drawing or sample of Filter plate.
- (2) Nature of chemicals which come in contact with the filter plate during its working life.
- (3) Temperature of chemical solutions.
- (4) Approximate pressure per sq.inch.

The above information will enable us to recommend the right type of filter plate to suit your needs.

Apart from standard sizes we also undertake the manufacture of Filter plates as per customers requirement.

"WIP" FILTER PLATES & FRAMEWORKS in jointless construction or recessed construction are being used in filter presses meant for the following filtration conditions :

(a) PH value of the slurry	:	5 to 8
(b) Filtration Pressure	:	100 lbs. per sq. inch. Maximum (7.05 Kg/ cm ²)
(c) Temperature of the slurry	:	90° C maximum
(d) Washing of the plates	:	Low pressure steam or luke warm water can be used for washing purpose.
(e) Closing pressure of filter	:	Just sufficient pressure press is require to bring plates and frameworks in close contact with each other with out any gap, as plates and frames are supplied with machine finished sur faces.
(f) Surface Hardness	:	WIPFILTERPLATES & FRAME WORKS have surface hardness double that of natural timbers. How ever, these should not be rubbed against hard and pointed surface as this will lead to engravement of gaps in the plates and frames which may result in leakage of filtration under pressure.
(g) Flatwise compressive strength of WIP filter plate material	:	1600 Kg/ Cm ²
(h) Storage	:	When not in use, filter plates and frameworks should be kept tightly clamped in the filter press or when removed should be kept in the shade under pressure on a level, dry surface.

For further information, Please contact :



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