



CELCURE

CELBRITE MT

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Description

Celbrite MT has been specially developed to prevent the disfiguring of timber by sapstain, bluestain and mould fungi.

Applications include all timber with a high moisture content, such as freshly felled logs, sawn timbers after conversion, and timber after treatment with water-borne preservatives. Treatment is essential unless the timber is dried rapidly, and even where this is possible the use of Celbrite MT ensures complete protection of the timber surface.

The Celbrite MT formulation was selected as a result of intensive research, providing a product which is highly effective, easy-to-use, and of low mammalian toxicity.

Availability

Celbrite MT is manufactured as a concentrate, for dilution by addition to water to produce the working solution. It is supplied in 25 or 200 litre drum.

Storage

Store drums of Celbrite MT concentrate in a secure place away from the general public, (particularly children) and livestock. Avoid extremes of temperature, both high and low (flash point = 47°C (116°F)). The prepared working solution is non-flammable.

Working Solution

The concentrate must be slowly added to water stirring thoroughly, to prepare the working solution. Do not mix by adding water to the concentrate as this may cause excessive foaming. Celbrite MT does not contain suspended solids so settling-out does not occur, and is not an emulsion so that the problem of components separating out is avoided.

Dilution Rates

The risk of timber being disfigured by sapstain fungi and moulds varies considerably; from region to region, according to the season and weather conditions, and depending on timber species and stacking and drying methods. Celbrite MT users can adjust for these differences quite easily, by simply changing the concentration of the working solution.

It is recommended that users start treatment with the solution at a concentration of 2% Celbrite MT. This is obtained by adding 2 parts of the concentrate to 98 parts of water.

If the risk of sapstain and moulds is very high, then the concentration of the working solution can be increased as follows:

Solution Strength, %	25 litres Celbrite MT to be diluted with solvent to:—	200 litres Celbrite MT to be diluted with solvent to:—
2.0	1250 litres	10,000 litres
3.0	833 litres	6,666 litres
4.0	625 litres	5,000 litres
5.0	500 litres	4,000 litres
6.0	416 litres	3,333 litres

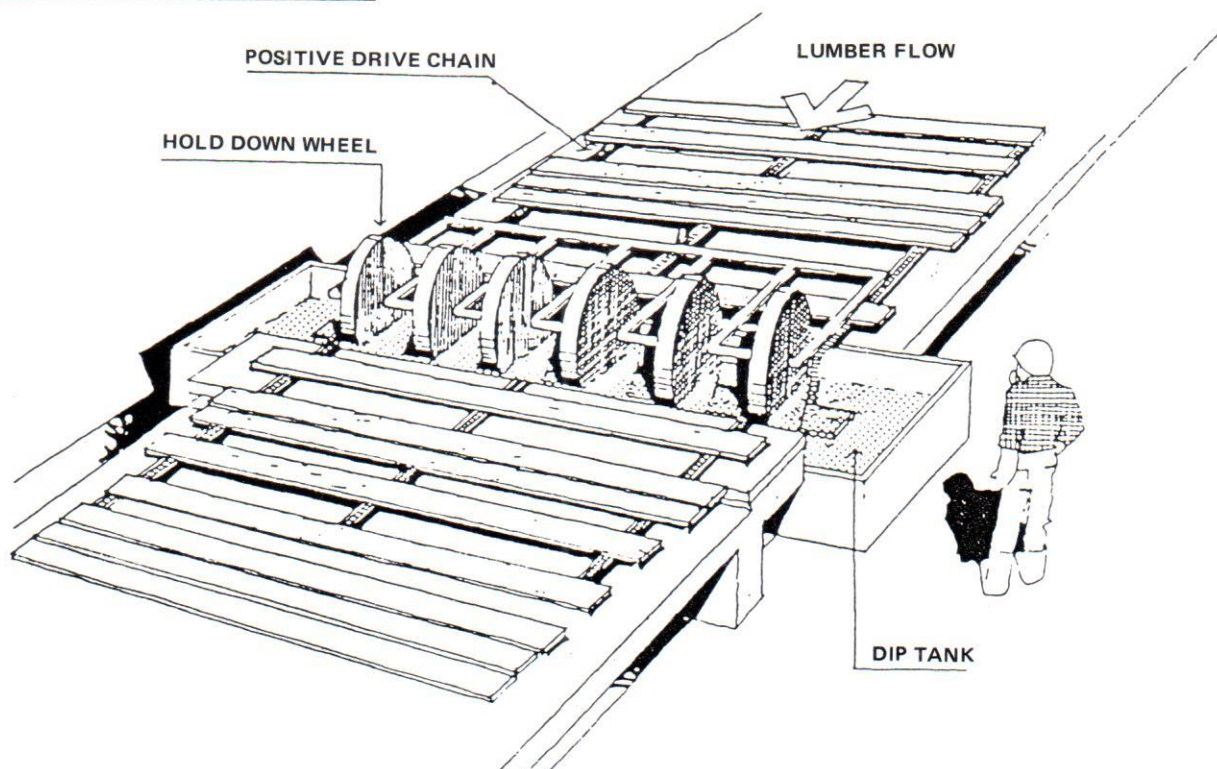
Application Method

Immediately after de-barking round wood or after converting sawn timber, the working solution should be applied to the moist timber by immersion or coarse-spray deluge. Ensure that all surfaces are thoroughly wetted with Celbrite MT solution. We recommend dipping, with each piece remaining immersed for 1 minute, since by this method complete coverage and adequate uptake are assured. If timber is dipped in pack form, then longer immersion times are required, for open stacked pieces 10 minutes, and up to 20 minutes for close-packed timber. After immersion, the most effective protection is achieved by open stacking of the pieces of treated timber.

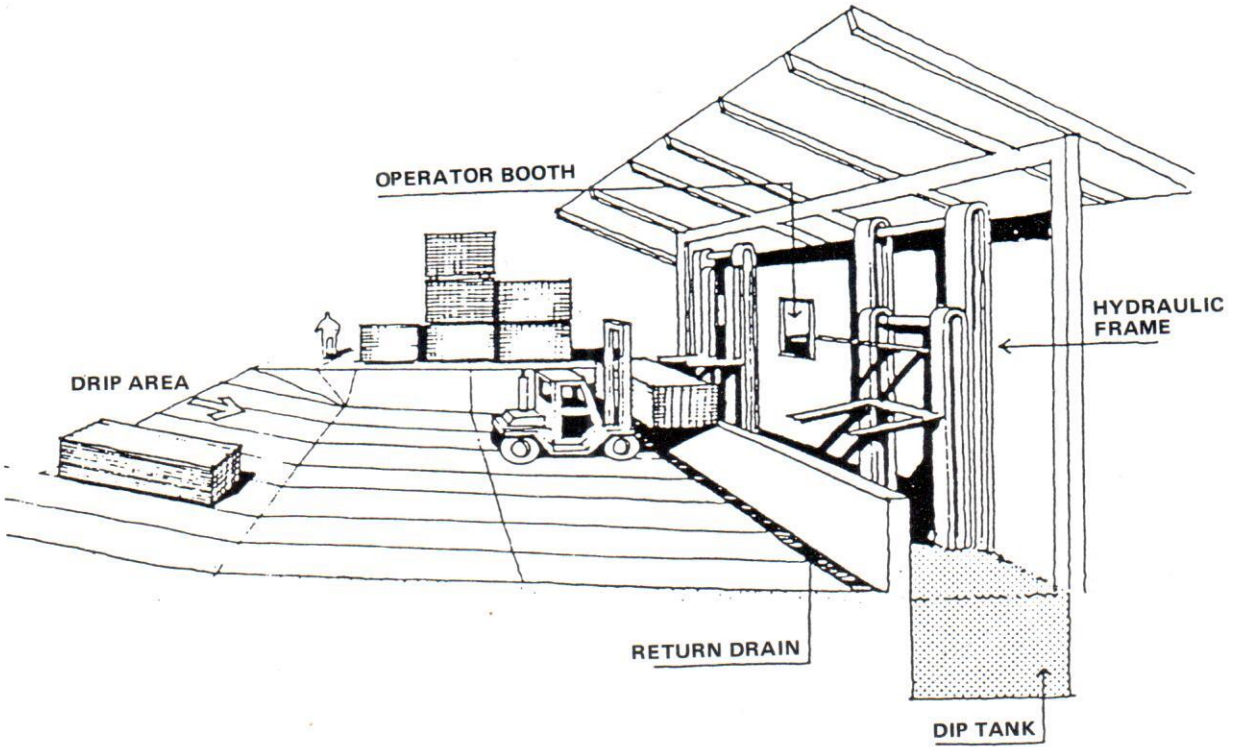
Different types of equipment, suitable for large-scale application of Celbrite MT, are illustrated on the following pages. Such installations allow very high through-put and may incorporate sophisticated safety features. For smaller operations much simpler equipment will carry out treatment just as effectively, and in perfect safety if simple rules are followed. (See 'safety' below)

CELBRITE MT – APPLICATION SYSTEMS

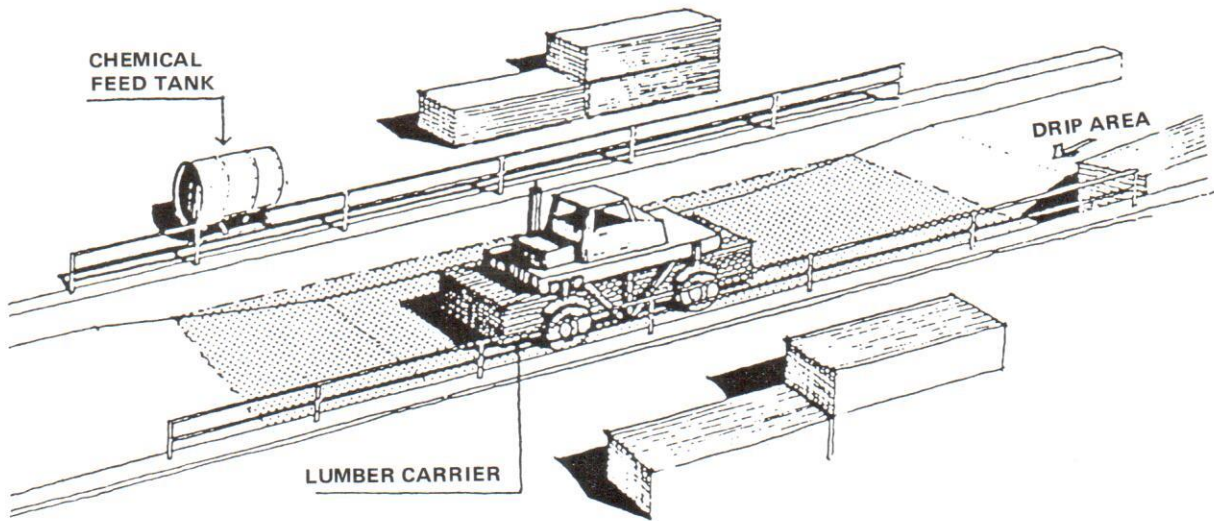
A) SORTING-CHAIN DIP TANK



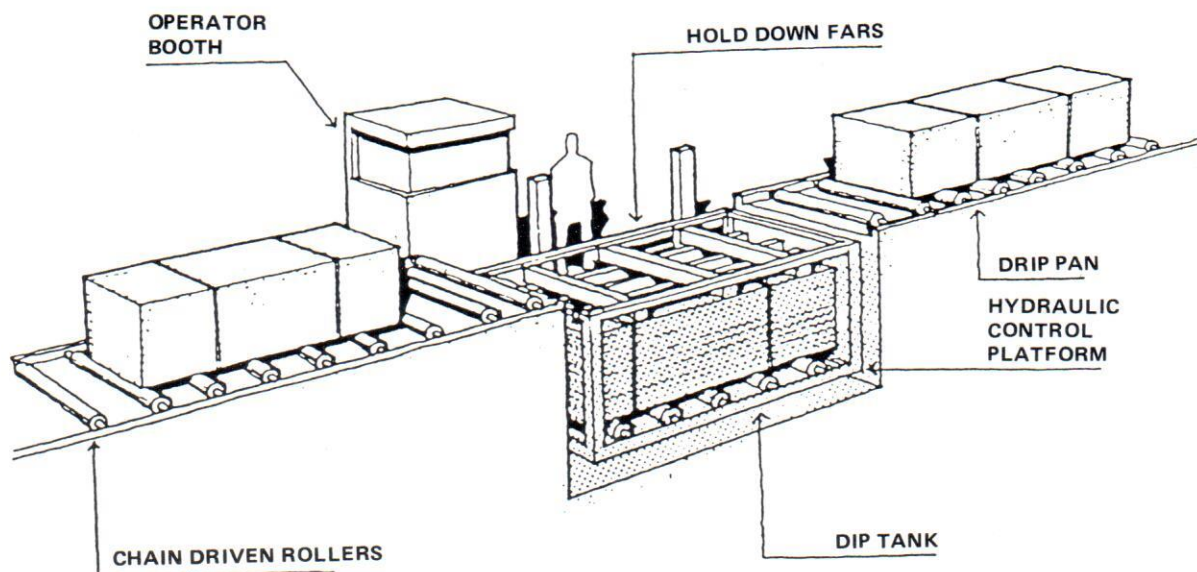
B) FORKLIFT-MECHANICAL DIP TANK



C) DRIVE-IN (CARRIER) DIP TANK



D) AUTOMATIC ELEVATOR DIP TANK



Uptake of Solution

The volume of treatment solution taken up by the timber will vary according to the method of application, and the dimensions and surface roughness of the timber. Typically, 15 – 20 litres of working solution is absorbed per cubic metre of timber.

Performance

The different active ingredients of Celbrite MT have been identified individually by researchers as effective chemicals against sapstain and mould, and have proved to be effective, both separately and as mixtures, in laboratory and field trials. These trials generally involve extreme conditions of temperature and humidity, with either introduction of large amounts of a particular fungus, or exposure to a wide range of fungi under natural conditions.

Celbrite MT acts by killing any fungal spores already present on the timber, and preventing future infection and growth. Some of the active chemicals become fixed onto the wood surface and so are concentrated where any spores and mould growth occur. Another active ingredient diffuses into the wood to a depth of several millimetres, and therefore prevents stain fungi developing internally where moisture conditions may be more favourable than at the surface.

In addition to preventing sapstain and mould development, one of the ingredients of Celbrite MT has proved to be active against decay fungi. Success has also been found against thermotolerant moulds in drying kilns, and against attack by insect borers that often attack unseasoned hardwoods. For full protection against insect attack however, Celbrite MT should be used in conjunction with insecticides in wettable powder or emulsion concentrate form. For advice on compatibility with Celbrite MT, consult Celcure.

Celbrite MT has been used in practical mill trials in different parts of the world, including regions where there is a very high risk of sapstain and mould growth. The results of these trials have confirmed the performance of Celbrite MT and have demonstrated the cost effectiveness of the Celbrite MT formulation in comparison with traditional anti-sapstain products.

Safety

All the active ingredients of Celbrite MT are highly suitable on safety grounds for surface treatments of timber. They have relatively low mammalian toxicity and have been used safely for many years as solutions in water, for example in household hygiene and in mould and slime control in the packaging and paper industries. However, as with all biologically active materials, care is needed and particularly when they exist in concentrated form.

When working with Celbrite MT, you should follow the recommended safety precautions listed on the drum label. These apply mainly to the handling of the concentrate itself. The working solution and freshly-treated timber are much safer, and the treated timber once dry can be handled normally.

Waste Disposal

Spillages of concentrate or solution should be mopped up with sawdust which is then incinerated. Small spillages of solution may be washed down with large amounts of water. Empty containers should be washed with water which is then used to prepare new solution. Dispose of debris from dip tanks by adding clean sawdust, drying, and then incinerating.

Empty containers should be thoroughly washed out and then rendered unfit for further use of by puncturing or crushing.

Do not contaminate ponds, waterways or ditches with chemical or used containers, dangerous to fish.

Preservative Treated Timber

Timber treated with water-borne preservatives, by pressure impregnation or dip-diffusion, may be susceptible to staining and mould growth. Celbrite MT can be used by post-treatment dip or coarse-spray deluge for prevention of sapstain and mould in timber treated with these preservatives.

Handling Precautions

— To be used only by trained operators —

Skin Contact

Wear suitable protective clothing, namely overalls and synthetic rubber/PVC gloves when handling. Wash splashes from skin immediately. Wash hands and exposed skin before meals and after work.

Launder overalls regularly and take off immediately all heavily contaminated clothing.

Eye Contact

Avoid contact with eyes.

Wear eye protection when diluting and spraying. Wash splashes from eye immediately with plenty of water.

Storage

Keep original container tightly closed and stored in a dry, safe place. Keep out of reach of children, and away from food, drink and animal feeding stuffs.

Medical Treatment

If you feel unwell, seek medical advice (show label where possible).

Other CELCURE products:-

CELCURE TIMBER IMPREGNATION PLANT:

A complete, self-contained and ready-to-use vacuum-pressure impregnation plant with simple operation, low maintenance features.

CELCURE-AP

A water-borne copper chrome arsenate wood preservative which gives long-lasting protection against fungi, insects and termites, but adds little to the cost of the timber. It is applied by vacuum pressure impregnation which forces the preservative deep into the wood. The chemicals become fixed in the wood after treatment and do not wash out. All timber treated with **CELCURE-AP** should be handled and used in accordance with Celcure's recommendations.

CELCURE-AP complies with British Standard 4072; American Wood Preserving Association Standard P5-81 CCA Type C; Nordic Wood Preservation Council Approval Certificate No. 5/1980; Malaysian Standard 733; Singapore Standard 72 and many other Standards throughout the world. Its preservative efficacy has been confirmed by continuing field trials and increasing international applications.

CELBOR

A water-borne boron based wood preservative. It is highly toxic to wood destroying insects and decay fungi. **CELBOR** is applied by vacuum pressure impregnation which forces the preservative deep into the wood. **CELBOR** has found increasing use and prominence in the treatment of Rubberwood in Malaysia, Thailand and the rest of South East Asia.

CELPRUF-PK

A light organic solvent preservative which gives lasting protection against fungi, insects and termites. It is applied by deluging, immersion or the Celvac vacuum/low pressure process. **CELPRUF-PK** is colourless and quick-drying, and is ideal for structural timbers and joinery where dimensional stability is of great importance. All timber treated with **CELPRUF-PK** should be handled and used in accordance with Celcure's recommendations.

CELCIDE

A highly effective contact insecticide in the form of emulsion concentrate liquid for safe handling without dust hazard **CELCIDE** is a potent insecticide controlling a wide range of insects attacking sawn logs and freshly sawn timber. It kills insects on contact with solution and is a stomach poison against chewing and biting insects. It is easily applied by deep treatment for the short-term protection of freshly sawn timber eg: ramin, rubber-wood, jelutong, and white meranti against borers.

CELGARD

A water-borne, combined flame retardant and wood preservative. **CELGARD** applied to timber, plywood and other timber-based board material by vacuum-pressure impregnation in accordance with Rentokil Specification, achieves Class 1 Spread Of Flame rating (BS 476 : Part 7).