

Dencam specialises in the design and production of plugs for manufacturing moulds for BLADE production. We ensure a quick and economical solution - from prototyping to the delivery of the finished plug.

PLUGS - STEEL BASE



- Plugs, steel base for:
- Wind turbine blade
- Spar caps
- Shear webs
- Gluing flanges
- Root sections
- Others etc Lower logistics costs for road and sea transport

Technical:

Dencam manufactures a rigid and solid plug in non-organic materials-ensuring a safe production and storage environment.

PASTE

- PU paste available in various TG's ranging from 46°C to 65°C without post curing.
- Epoxy paste for tasks which need additional hardness and temperature resistance (TG). Temperatures range from 45°C to 72°C.

LAMINATE LAYER

- Vacuum-tight laminate.
- A vacuum line in the perimeter of the blade surface, supporting the RIM process.

PUR FOAM

- PUR foam forms the basis of the plug, giving the basic structure in which the basic form is produced.
- The sandwich construction ensures a solid and rigid plug structure.

LAMINATE

Laminate layer to be applied on the steel plate base.

SUBSTRUCTURES

Substructures are designed to accommodate the individual loads and tasks of a plug

- A steel plate is used as the base for the first layer of fibre, ensuring a solid base stringers and templates are manufactured in high-strength steel, thereby creating a durable and safe structure throughout the mould process.
- Using high-strength steel profiles minimises the weight and increases the rigidity in the whole substructure.
- Box profiles are the basis of the plug, designed to withstand the high load of the mould structure.
- Every substructure is fitted exactly to the plug, leaving no overhang or internal extension weakening the structure or limiting access to the surface.
- Calculated to the loads specified.

FINISHING

Our plugs are finished at a high finishing level, ensuring a smooth and clean mould surface

- Final standard finish grain 220.
- Extra finish can be grained up to 320.
- Finish above that can be achieved through additional top coating procedures.

INTEGRATED HEAT SENSORS

- Facilitate measuring the temperature within the plug during moulding.

GEOMETRY

Tolerance

- We strive to accommodate a tolerance of +/- 0,5 mm, normally achieving a far better result on standard geometries.

Prism nests

- Prism nests ensure a number of reference points throughout the plug, providing a fail-safe and swift installation. Subsequent alignments can be assisted by the very same nests.

HANDLING

Adjustable levelling bolts

- Adjustable floor supports to adjust deviations in straightness on the floor plan. 20 mm thread for height adjustment of the substructure.
- Shock sensors will be fitted on the plug for G testing, controlling the shipment to its final destination.
- Permanent fixtures for lifting device, incorporated into the base structure. Lifting points are defined
- Water line on steel frame for ease of alignment. Ensures a trouble-free and fast realignment once the plug needs another mould.
- Wheels can be applied beneath the substructure for easy handling.