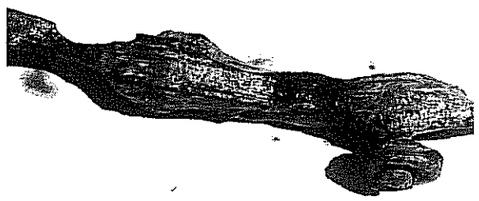
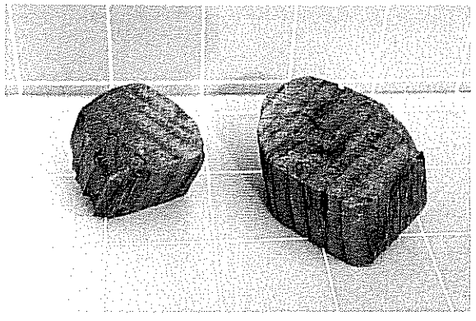
Basic problems

- *The waterlogged wood consistency is like a sponge*
- *The waterlogged wood exposed to the air dries up rapidly, shrivels, breaks up and shrinks*
- *Without an appropriate restoration the waterlogged wood cannot easily be displayed*
- *The existing restoration methods for waterlogged wood are not totally reversible, not long lasting and very expensive*



Re-surfaced wood

Our technology

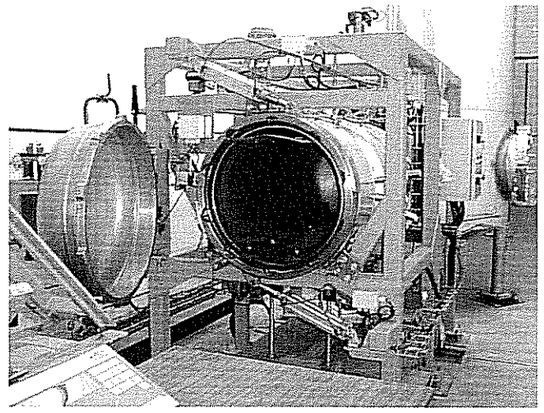


Treated wood

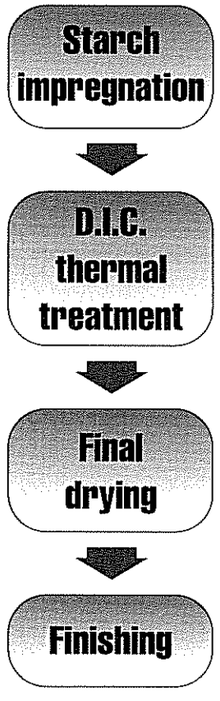
- ECONOMICAL: lower costs compared to existing methods
- REVERSIBLE: total reversibility
- ECOLOGICAL: more natural appearance of the wood; use of environmentally friendly products
- POSSIBILITY to treat large pieces of wood
- QUICK: treatment speed (ten times quicker than the PEG + freeze-drying method)

CRAFT WEST project

The project aims at the development (through the building of a pilot plant) of a recently patented process for the archaeological - wood sector (Arké method) that can also be applied to fresh wood. This process consists of consolidating the waterlogged wood and reinforcing the fresh wood using a treatment that comprises impregnation coupled with innovative desiccation in a D.I.C. chamber (Instantaneous Controlled Decompression)



D.I.C. Treatment chamber



The ARKÉ process

Arké method

CONSEQUENCES OF ARKÉ METHOD ON WATERLOGGED WOOD

- Compression and traction resistance at least equal to 75% of untreated seasoned wood
- Resistance to bacterial attacks similar to untreated seasoned wood
- External appearance similar to untreated seasoned wood
- Dimensional stability during hygrometric shifts similar to untreated seasoned wood

AIMS OF ARKÉ METHOD

- Restoring of large pieces of waterlogged archaeological wood (whole boats) currently not treatable even with the best available methods on the market (PEG + freeze-drying)
- Finding a totally ecological treatment method for wood restoration
- Innovation in the treated wood exposition.