



# VAN VOORDEN *foundry*

an **ANDUS** group company



## Abrasion resistant liners

### Facts

- Material : Mohard®
- Length : 80 mm – 2,700 mm
- Type : single or double walled
- Parts : liners, expansion pipes, bends and branches

The pipeline system of a dredging system on board of dredging vessels is subject to heavy abrasion. Therefore the inside of the pipelines consists of an abrasion resistant inner layer, the liner.

In the past few years Van Voorden Foundry manufactured a large amount of liners. One of the largest projects was the delivery of the liners for the cutter suction dredgers “Athena” and “Artemis”, both owned and operated by Van Oord. The dimensions and shapes were according to the clients’ specification. Some liners were delivered as separate parts (unassembled), others assembled. The assembled liners consist of an outer pipe made of construction steel. Inside lies the abrasion resistant “inner” liner with a layer of shrink free mortar in between for fixation.

Over the years Van Voorden Foundry developed a special abrasion resistant material called Mohard®. This alloy is the result of our expertise in the field of abrasion resistant materials. The alloy was developed by our own metallurgy experts. Mohard® contains an optimum percentage of complex chromium carbides with a special composition. By adding molybdenum and applying a sophisticated heat treatment, the optimum structure for this cast iron has been achieved.

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Van Voorden Foundry is an operating company of Andus Group within the Manufacturing division.  
The other divisions include Contracting and Services & Maintenance.