



**PORT EQUIPMENT - SHIP LOADERS / UNLOADERS**

From initial project design to complete turnkey installations  
with mechanical and/or pneumatic most reliable and profitable solutions



**TOWER-TYPE**

**PNEUMATIC SHIP UNLOADERS**

*from 160 to 600 tons/hour* 5M





200 tons/hour

Antwerp - Belgium

## TYPE 160 - 200 - 300 UP TO 600

**Bulk handling** of any kind of cereals, seeds, nuts, animal feedstuff, some delicate cargoes (malt rice, cocoa beans), and certain chemicals (urea).

«**Tower**» type **VIGAN machines** are particularly well suited for the unloading of coastal vessels and/or barges with a width (beam) lower than about 15 – 20 meters.

A boom up to 17-18 meters is usually sufficient to reach most of the hold openings area and to ensure efficient unloading operations.

**Suction and gravity discharge** into trucks or industrial plant conveyors.

**Capacities:** up to 600 metric tons per hour.

### Many different models:

Special design according to customer's requirements;

- Rotating boom lengths up to 17-18 meters;
- Horizontal and vertical telescopic suction pipes;
- Full electric or autonomous diesel power unit.

### VIGAN high pressure 3 to 4 stage centrifugal turbo-blowers

### Self-cleaning filter up to 165 m<sup>2</sup>

### VIGAN cast iron heavy-duty airlock

from 75 up to 400 liters per rotation with replaceable and adjustable blade cutting tips and sealing rings.

### Simple and heavy-duty construction:

Special design according to customer's requirements;

- High wear resistant alloys for airlock, elbow, pipes, flexibles, ...
- Fully hot-dipped galvanized boom with rotation of more than 180°.

### Special features:

- Complete range of safety devices;
- Remote control of all movements of the boom and its telescopic pipes;
- Rotation of the boom : more than 180°.

**FOR MORE INFORMATION CONTACT  
WWW.VIGAN.COM**

A team of highly qualified specialists  
will immediately initiate for you  
a comprehensive study of your project



200 tons/hour

Douala - Cameroon



175 tons/hour

Willebroek - Belgium



150 tons/hour

Patras - Greece



## FULLY CUSTOMIZED EQUIPMENT

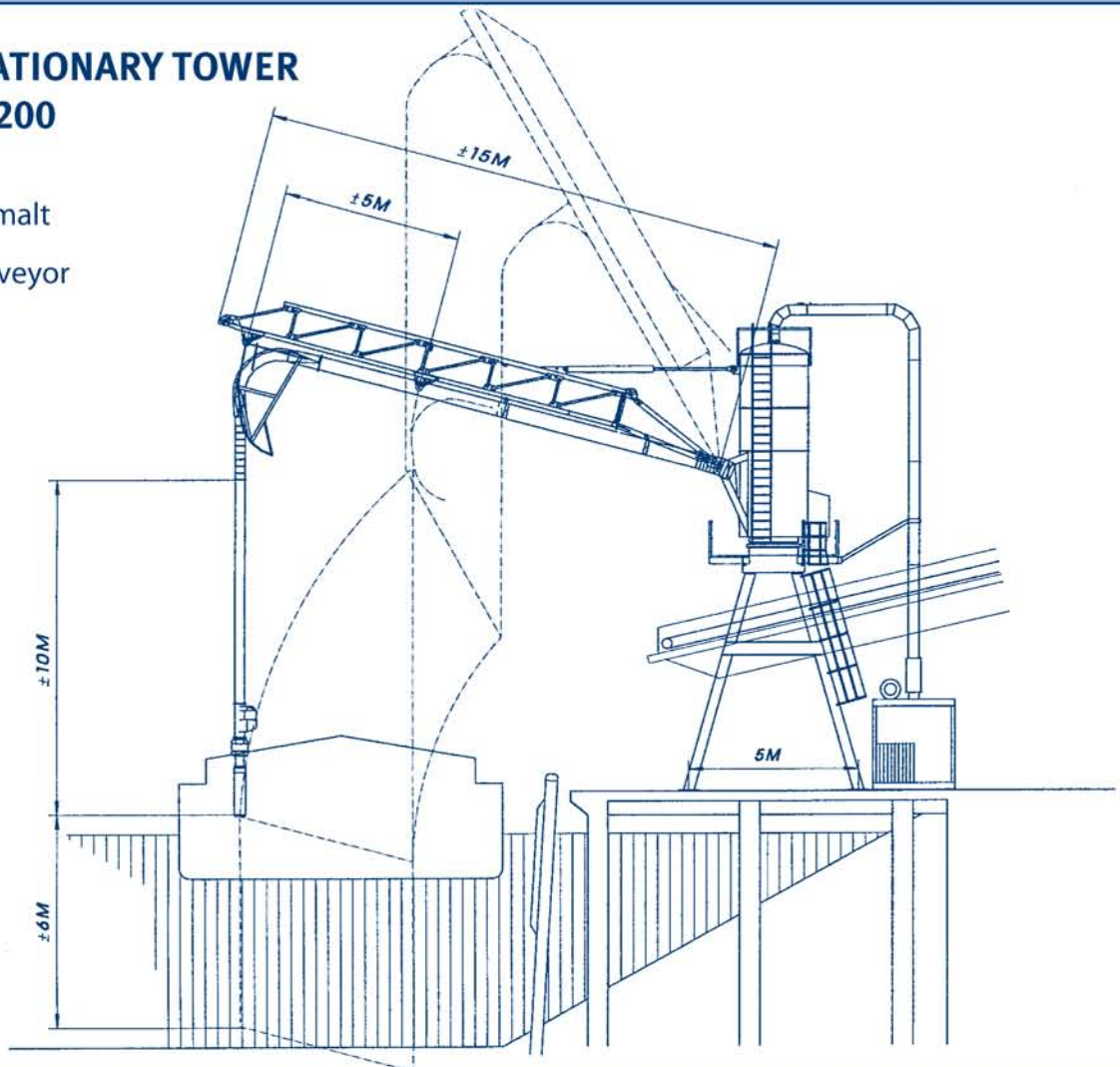


150 tons/hour (malt)

S'Hergtogenbosch - Netherlands

### VIGAN STATIONARY TOWER TYPE NIV 200

Discharging malt  
on a belt conveyor



WORLDWIDE REFERENCES  
AMONG LARGEST AGRI-BUSINESS COMPANIES

# VIGAN TOWER-TYPE PRINCIPLE

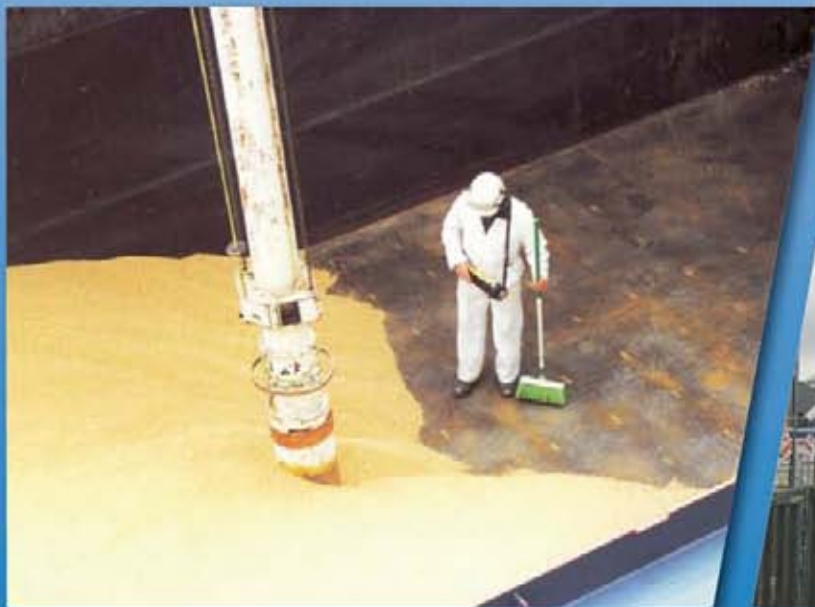
## VERY SIMILAR TO NIV



Vigan airlocks

Vigan multi-stage turbo-blowers

## SOME ADVANTAGES OF CONTINUOUS UNLOADING



- One single operator also during all cleaning
- Safe working conditions
- Environment-friendly : no dust

- Complete hold coverage
- High average efficiency
- Low energy consumption (0.6—0.8 KW/t)



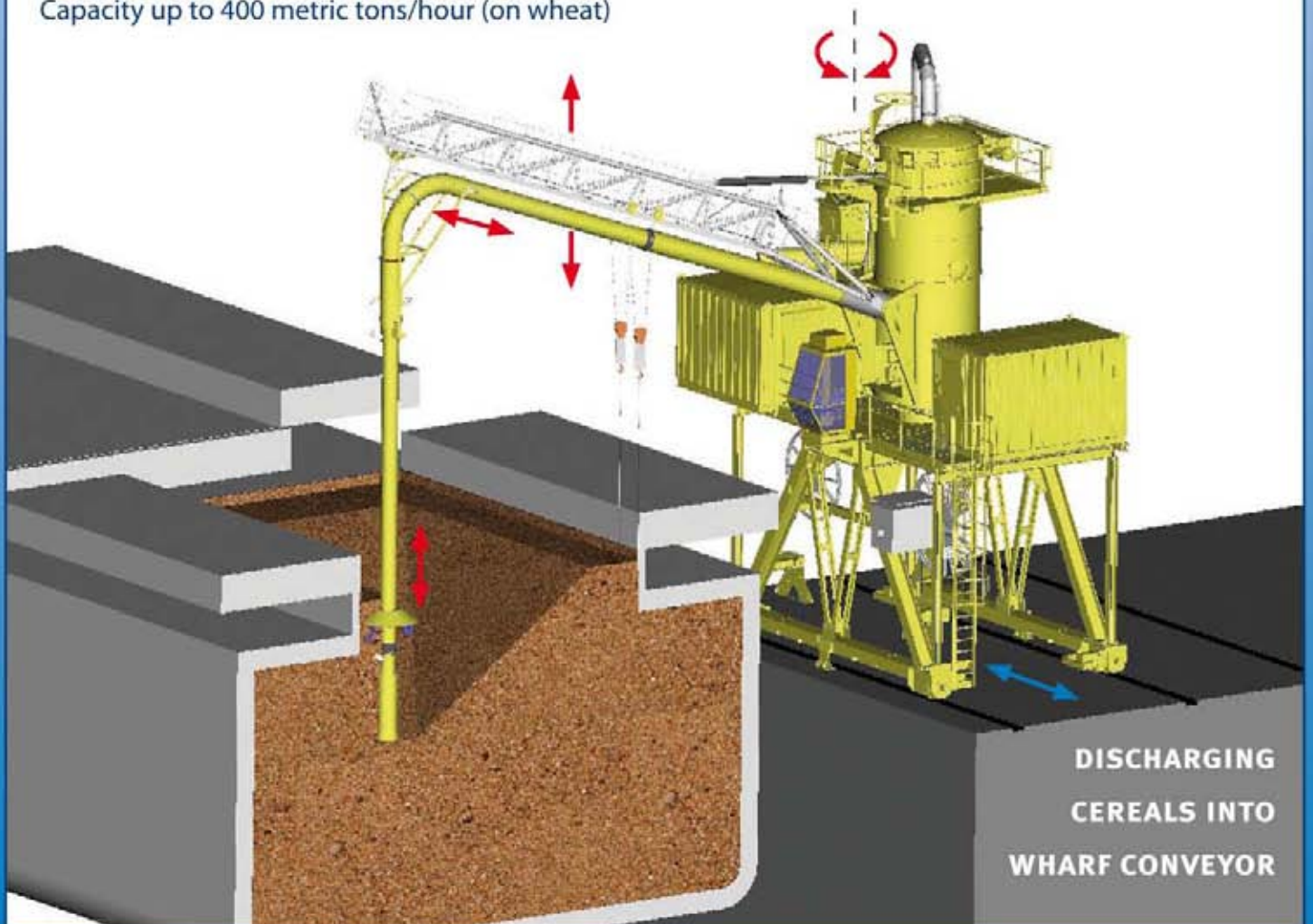


400 tons/hour

Sète - France

### VIGAN TOWER TYPE NIV 400 ON RAILS

Capacity up to 400 metric tons/hour (on wheat)



DISCHARGING  
CEREALS INTO  
WHARF CONVEYOR





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**MANUFACTURES BULK MATERIALS HANDLING SOLUTIONS MAINLY:**

- ◆ Mobile pneumatic conveyors or vacuators or grain pumps
- ◆ Pneumatic continuous barge unloaders and mechanical barge loaders
- ◆ Mechanical and pneumatic continuous ship unloaders for vessels up to post-Panamax
- ◆ Mechanical loaders for any size of ships

Vigan capabilities include also complete turnkey projects for port terminal including ship unloading & loading, storage facilities and bagging operations.

