

## Improving the cleaning of IBC containers

How to reduce the costs of washing IBC containers in a fertilizer company



### SCENARIO FOR THE SECTOR

The importance of deep cleaning in the agrochemical industry

PNR Italia has successfully faced a critical challenge in the agrochemical sector. A customer that produces fertilizers has turned to PNR Italia with **a problem of inefficient washing of containers IBC** (Intermediate Bulk Container). Before the involvement of PNR Italia the washing process was manual, requiring a lot of time and water.

### THE PROBLEM OF OUR CLIENT

The customer company, operating in the agrochemical industry, is a leading manufacturer of high-quality fertilizers. Their production involves using numerous IBC containers, which require a thorough washing process before being reused or disposed of.

The customer faced several challenges related to washing IBC containers:

**Time-consuming:** the manual washing process took a long time, slowing production and increasing operating costs.

**Water waste:** the manual washing method consumes a significant amount of water, representing both a high cost and a negative environmental impact.

**Inadequate cleaning:** despite the time spent washing, IBC containers were not thoroughly cleaned, causing potential contamination and product quality issues.

### PNR ITALIA SOLUTION

PNR Italia has worked with the client to address these challenges. The solution proposed was **the implementation of the UBR high-pressure washing head**. This innovative device has been designed to provide efficient and effective washing of IBC containers. The results are clear: the implementation of the UBR washing head has led to significant improvements in the IBC container washing process.

#### SECTOR

Agriculture and livestock | Chemical



#### APPLICATION

Tank cleaning



#### PROBLEM

Improving the cleaning of IBC containers



#### SOLUTION

Time and water savings with high pressure washing



**Time-Saving:** the washing cycle time has been reduced from 10 to just 3 minutes, allowing the customer to increase productivity and production capacity.

**Water saving:** thanks to the efficiency of high-pressure washing, water consumption has been significantly decreased, reducing operating costs by 40% and the environmental impact.

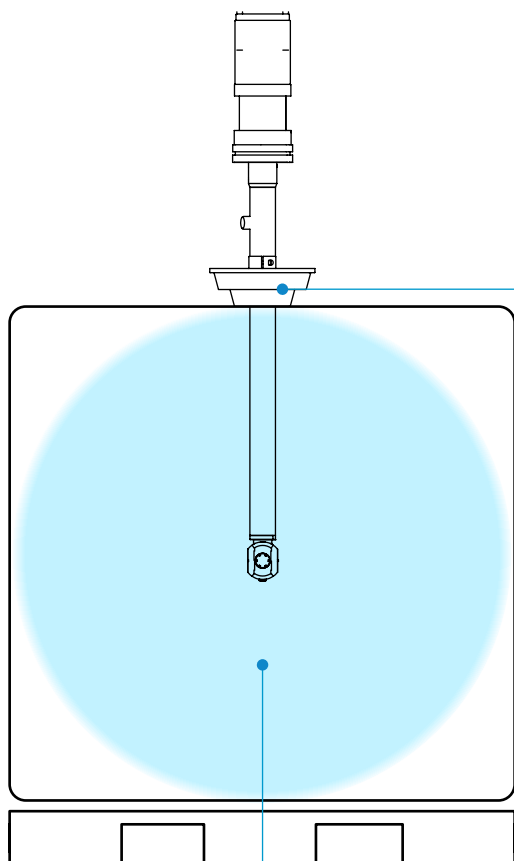
**Effective cleaning:** the UBR washing head ensures complete cleaning of IBC containers, eliminating any risk of contamination and ensuring the final product's quality.

#### ADVANTAGES FOR OUR CLIENT

Thanks to the collaboration with PNR Italia and the implementation of the UBR high-pressure washing head, the company operating in the agrochemical sector has achieved greater operational efficiency, **saving time, water, and costs.**

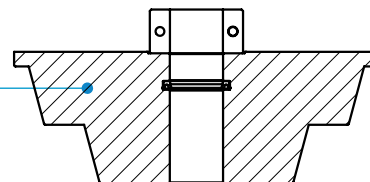
THIS CASE STUDY DEMONSTRATES HOW TECHNOLOGICAL INNOVATION AND ATTENTION TO EFFICIENCY CAN LEAD TO SIGNIFICANT RESULTS IN OPTIMIZING INDUSTRIAL PROCESSES.

**THE ESTIMATED WATER SAVING WAS -70 LITERS IN 5 MINUTES.**



360°  
COVERAGE

FLANGE  
CONNECTION



The Y2 adaptor has been designed with a dual integrated interface to accommodate the 150 mm and 220 mm upper loading opening IBCs.

**The adaptor can be considered a "universal" adaptor of UBR for all IBCs on the market.**

It also features a dual bezel system that adjusts the washing head's working height in the best position.

#### FOCUS ON THE PRODUCT



UBR  
HIGH-PRESSURE CLEANING HEAD

**The washing heads of the UBR series** have been designed to **wash containers of limited dimensions with an effective high-pressure jet.**

Their tiny size allows them to be easily moved when many tanks have to be treated.

The highest quality materials, high precision machining, and the choice of motors produced by selected suppliers make these devices ideal in many applications.

MOUNTING ON THE TANK	Flange connection for stationary mounting
MOTORIZATION	Electric motor
TUBE LENGTH   WEIGHT	700 mm > 8.9 Kg
WORKING PRESSURE	35 bar
FLOW RATE	8 liters/min