

NitroTrapp® Project References

NitroTrapp® project references for nitrate treatment in food-industry applications in Mexico. The installations below present system configurations ranging from a single-vessel arrangement to a parallel multi-filter system, together with the corresponding hydraulic, water-quality, and regeneration parameters.



2

SELECTED
INSTALLATIONS

90–301 gpm

SERVICE FLOW RANGE

20–30 mg/L

NITRATE INLET RANGE

0 mg/L

PROJECT NITRATE
OUTLET

CONFIDENTIALITY NOTICE

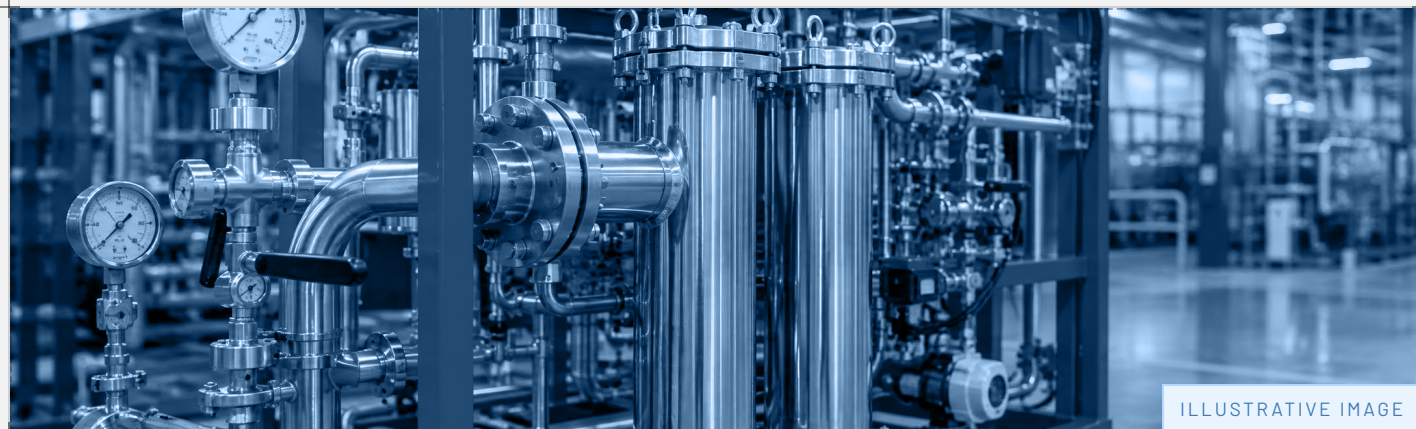
Client/company names are withheld in accordance with Non-Disclosure Agreement (NDA) obligations. Project references are therefore identified by installation location, industry application, and technical parameters only. Images in this document are illustrative and are not photographs of the referenced installations.

SECTION 01

Reference Portfolio

Side-by-side comparison of the two documented installations. Values are as recorded in the project data.

PARAMETER	PROJECT 01 • HIDALGO	PROJECT 02 • GUANAJUATO
Installation site	Hidalgo, Mexico	Guanajuato, Mexico
Filter arrangement	1 filter • Single	3+1 filters • Parallel
Filter size	36" × 72"	42" × 72"
NitroTrapp volume	660 L	3,600 L
Service flow	90 gpm	301 gpm total
EBCT	1.94 min	2.37 min
Nitrate inlet → outlet	20 → 0 mg/L	30 → 0 mg/L
Regeneration frequency	24 hours	22.7 hours
Volumetric capacity	129,600 gal	409,960 gal
Regenerant	NaCl	NaCl



Hidalgo, Mexico

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90 gpm
SERVICE FLOW

Single-vessel NitroTrapp installation • 36" × 72" filter • 660 L total media volume

PROJECT OVERVIEW

This food-industry installation in Hidalgo, Mexico uses a single NitroTrapp® filter with a 36" × 72" vessel and 660 L total NitroTrapp volume. At a service flow of 90 gpm, the system operates with an EBCT of 1.94 minutes and a backwash flow of 20 gpm. The project operating data shows nitrate at 20 mg/L at the inlet and 0 mg/L at the outlet. Regeneration uses NaCl on a 24-hour frequency, with a regeneration criterion above 3 ppm and a stated volumetric capacity of 129,600 gallons.



PROJECT NITRATE PERFORMANCE

20 mg/L
INLET NITRATE



0 mg/L
OUTLET NITRATE

SYSTEM CONFIGURATION

Filter quantity	1
Hydraulic arrangement	Single
Filter size	36" × 72"
Total NitroTrapp volume	660 L

HYDRAULIC PERFORMANCE

Service flow rate	90 gpm
EBCT	1.94 min
Backwash flow rate	20 gpm

WATER QUALITY & REGENERATION

Nitrate inlet	20 mg/L
Nitrate outlet	0 mg/L
Regeneration criteria	>3 ppm
Regeneration frequency	24 hours
Volumetric capacity	129,600 gal
Regenerant	NaCl
Regenerant consumption	105.6 kg

Guanajuato, Mexico

Client: Confidential • Name withheld under NDA

301 gpm

TOTAL SERVICE FLOW

Parallel NitroTrapp installation • 3+1 filters • 42" × 72" vessels • 3,600 L total media volume

PROJECT OVERVIEW

This food-industry installation in Guanajuato, Mexico uses a 3+1 parallel NitroTrapp® configuration with 42" × 72" vessels and 3,600 L total NitroTrapp volume. Total service flow is 301 gpm, with an EBCT of 2.37 minutes and a backwash flow of 30 gpm. The project operating data shows nitrate at 30 mg/L at the inlet and 0 mg/L at the outlet. Regeneration uses NaCl on a 22.7-hour frequency, with a regeneration criterion above 8 ppm, a stated volumetric capacity of 409,960 gallons, and regenerant consumption of 144 kg per filter.



ILLUSTRATIVE IMAGE

PROJECT
NITRATE
PERFORMANCE

30 mg/L
INLET NITRATE



0 mg/L
OUTLET NITRATE

SYSTEM CONFIGURATION

Filter quantity	3+1
Hydraulic arrangement	Parallel
Filter size	42" × 72"
Total NitroTrapp volume	3,600 L

HYDRAULIC PERFORMANCE

Total service flow rate	301 gpm
EBCT	2.37 min
Backwash flow rate	30 gpm

WATER QUALITY & REGENERATION

Nitrate inlet	30 mg/L
Nitrate outlet	0 mg/L
Regeneration criteria	>8 ppm
Regeneration frequency	22.7 hours
Volumetric capacity	409,960 gal
Regenerant	NaCl
Regenerant consumption	144 kg per filter