



MMP NICKEL SMELTER PROJECT

Filtersafe Case Study



BACKGROUND

PT Mitra Murni Perkasa (MMP) operates in the nickel smelting industry in Indonesia, where reliable process water is essential for stable and continuous operations. For this project, PT Gapura Ligua Solutions acted as the water treatment solution provider, selecting Filtersafe technology to support the downstream UF system.

CHALLENGES

The primary requirement of the project was to ensure consistent production of clean water for the nickel smelting process. Effective pre-filtration ahead of the UF membranes is critical to prevent damage or premature fouling caused by larger suspended particles.

INDUSTRY

Nickel Smelting

APPLICATION

UF Protection

FILTERSAFE

- 30 years filtration experience
- 3,000+ installations
- 10µm upwards & 50-6,840 m³/hr.
- Modular filter technology

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|--------------------------|---------------------------------------|--------------------------|---------------------------|
| Filtersafe Model | 4 x Titan 7K | Client | PT Gapura Ligua Solutions |
| Filtration Degree | 100 micron | End Client | PT Mitra Murni Perkasa |
| Location | Balikpapan, Indonesia | Installation Date | September 2025 |
| Flow Rate | 762 m ³ /h (3 + 1 filters) | Water Source | Seawater |
| System Role | UF Protection | | |

FILTERSAFE SOLUTION

Filtersafe was selected based on the customer's confidence in the technology for UF protection. The system treats seawater following the sedimentation basin, where polymers are dosed prior to the automatic screen filters, providing reliable and consistent pre-filtration.



RESULTS & BENEFITS

The Titan 7K filter features a simple horizontal design with a hinged back lid, allowing maintenance and servicing to be carried out easily by a single operator. This simplicity improves operational reliability and, if required, can eliminate the need for CIP procedures, reducing maintenance effort and downtime.

