



Building Relationships in Process Engineering

## **TURNKEY ENGINEERING SOLUTIONS IN LIQUID SOLID SEPARATION**

- **GRAVITY THICKENING**
- **VACUUM BELT FILTRATION**
- **PRESSURE FILTRATION**
- **TAILINGS MANAGEMENT**
- **MATERIALS HANDLING**
- **AFTERMARKET SUPPORT**



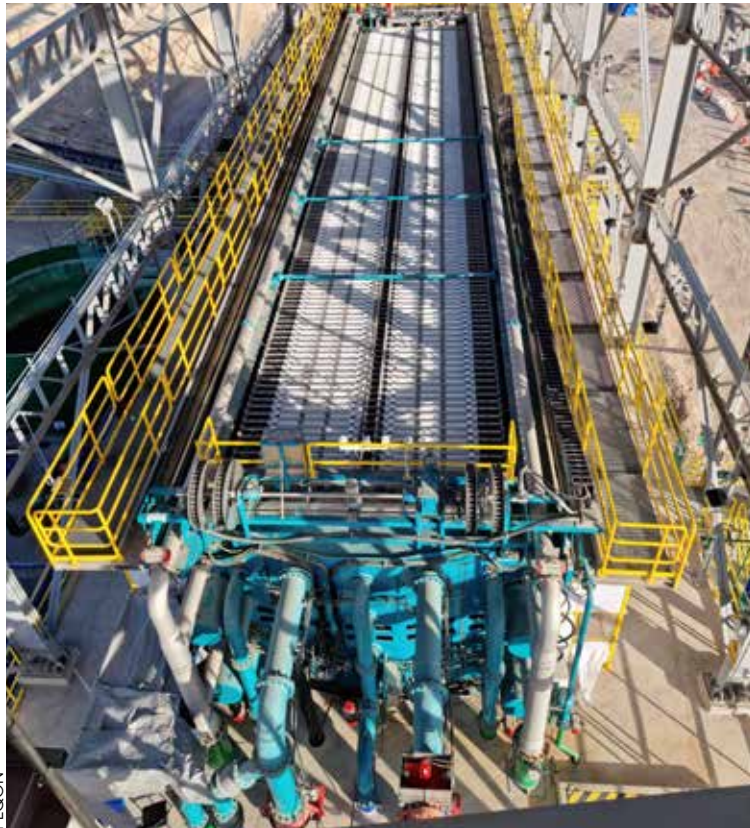
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# SMART DEWATERING. CLEANER OPERATIONS. SUSTAINABLE RESULTS

*PEQON Drives Dewatering Solutions for the Future of African Mining*



The GHT5000F DOMINO Filter Press Installation in Peru – plate size 5 000 x 5 000mm

**A**s water scarcity, carbon targets and tailings dam risks dominate mining agendas, PEQON is leading the shift to smart, sustainable dewatering by offering a combination of world-class equipment, digital intelligence and end-to-end engineering expertise.

Head-quartered in South Africa, PEQON specialises in smart dewatering and liquid-solid separation for the mining and minerals processing industries.

By aligning with the global environmental, social and

governance (ESG) trends, whereby water stewardship and climate adaptations are top ESG priorities in 2025 and beyond, PEQON has become a leader in providing smart engineering services and addressing ESG challenges in midstream processes in mineral processing operations.

Filtered tailings are fast becoming the compliance standard, reducing dam risks and insurance costs, and where carbon targets now include dewatering circuits to lower pump energy and smarter reuse of process water.

PEQON's smart systems enable clients to achieve Scope

## Smart Dewatering for Sustainable Mining

How PEQON is powering ESG wins in African mineral processing



### Industry Challenge

African mining faces growing pressure to:

- Cut water use
- Lower carbon intensity
- Eliminate tailings dam risks
- Maintain project bankability



### PEQON's Response

Africa's specialist in liquid-solid separation

Combining:

- World-class equipment
- Digital intelligence
- End-to-end engineering expertise



### Smart Solutions in Action

+8 000 t/d filter-press installations  
Rapid-deployment mud-press skids



### Measured ESG Results

- +70% Water Recovery
- ≤15% Tailings Moisture
- 40% Reduction in Long-Term Environmental Liability



### Why It Matters

With ESG scrutiny increasing, sustainable tailings management is no longer optional.

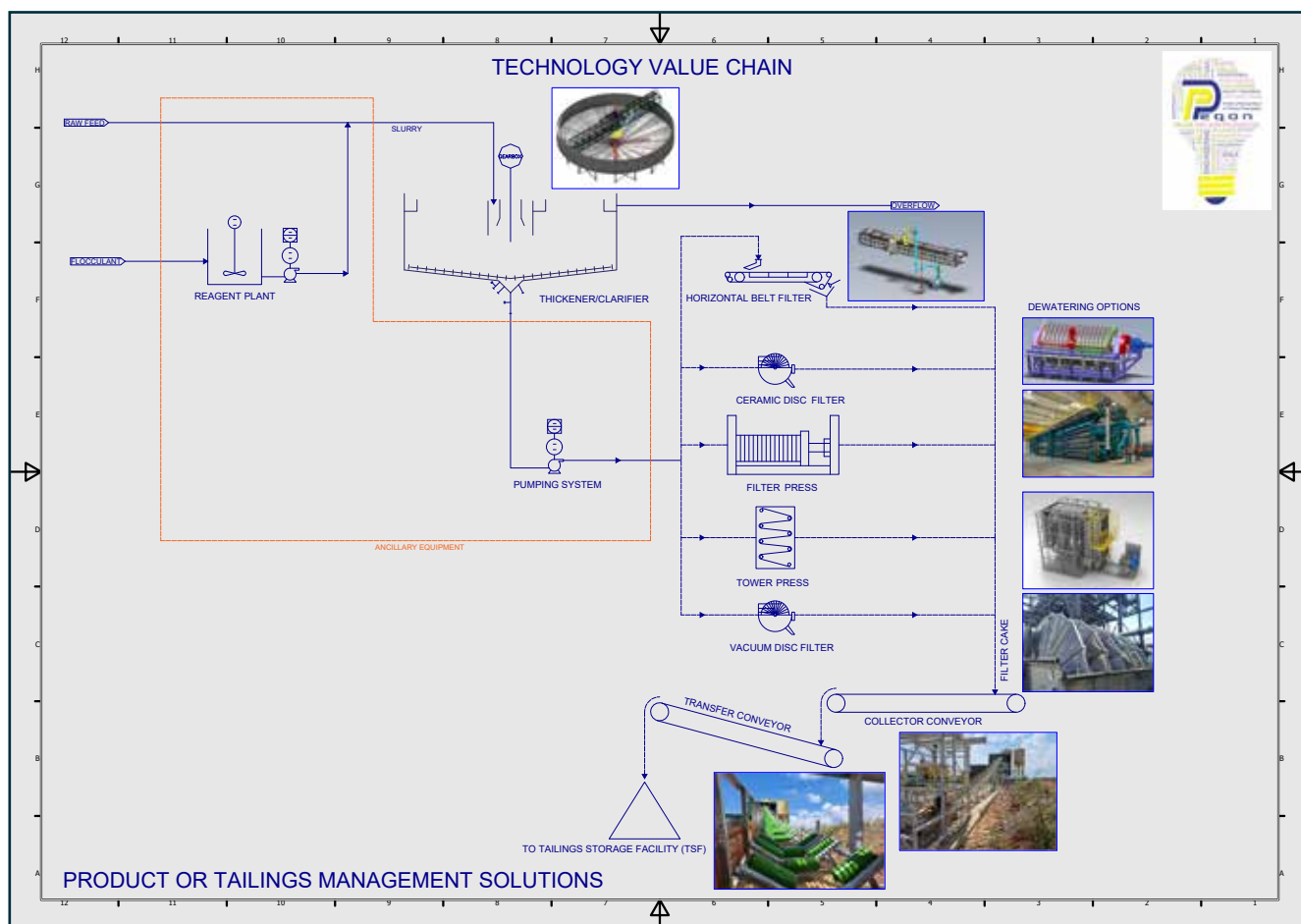
PEQON delivers:

- Sustainable dewatering practices
- Improved reliability & operational efficiency
- Proven midstream mineral processing expertise



### Join the Shift

Explore filtered tailings trends, review PEQON's success stories, and partner with a team turning separation challenges into sustainable value.



Images by PEQON

PEQON's dewatering value chain with technology options.

1 (direct) and Scope 2 (indirect) emission cuts and minimise long-term environmental liabilities.

From 8 000 tons per day filter press systems, to underground mud-press skids, PEQON helps clients to recover more than 70% water, achieve less than 15% moisture in tailings and cut long-term environmental liabilities by up to 40%.

New projects feature real-time monitoring and process optimisation through IIoT sensor and cloud dashboards.

### PEQON's Smart Dewatering Approach

By integrating high-capacity filter press technologies with smart IIoT analytics for real-time cycle optimisation, these filter presses can process more than 5 000 tons per day of solids with a cake moisture of less than 15% and more than 70%

water recovery.

Complimenting tailings filtration, PEQON's new EvoFlow Core® Feedwell System delivers 25% to 40% higher solids loading in high-rate thickeners whilst maintaining overflow clarity less than 250ppm suspended solids. Smart Sensors guide dosing and rake torque resulting in up to 15% savings in flocculant consumption.

### PEQON's Product Dewatering Innovations

- Skid-mounted mud-presses which can easily be deployed underground for backfill or feed-blending applications.
- Thickener Retrofits with high rate feedwell mechanisms that will offer up to 20% more water recovery.
- Supplementary Dewatering equipment to enhance standalone gravity circuits.

### PEQON's Filtered Tailings, Dry Stacking and Paste Plants

PEQON can couple high-rate thickening and high-capacity filter presses with Paste Plant technology as proven at Barrick's North Mara Gold Mine in Tanzania. This network includes PEQON's materials conveying solution which handles 6 000 dry tons per day of filtered cake from press to paste plant which then feeds the Underground Distribution (backfill) system.

For large concentrators, one large-format filter press, (4m x 2m or 5m x 5m filter plates), can replace multiple smaller units, cutting both capex and footprint by providing a more optimal CAPEX:OPEX ratio per dry ton treated.

### PEQON's Recent Project Highlights

- **South Africa:** Multi-year After Market Service Level Agreement



A Turnkey Dry Stacking Tailings Facility (thickening, pressure filtration, conveying, stacking)

- Project scoping and data gathering.
- Package and equipment design.
- Installation and commissioning.
- Performance monitoring and aftermarket optimisation.
- This approach reduces client risk and simplifies procurement and execution based on:
  - **African Expertise:** Local Engineering, Global Standards.
  - **Smart Integration:** Sensors and dashboards built in.
  - **Turnkey Execution:** EPC / EPCM for complete systems.
- Operator training across the continent.

### Ready to tackle Dewatering Challenges?

PEQON's customer base spans mining majors, mid-tiers and EPCMs across Africa.

Strategic partnerships with international OEMs enhances the Company's ability to deliver technically sound and cost-efficient solutions.

If you're planning, upgrading or troubleshooting your dewatering requirements, engage PEQON for insight, innovation and results.

PEQON's team of mechanical, metallurgical and digital experts are ready to solve your toughest dewatering challenges with smart solutions that will drive sustainability and profit. ■

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**PEQON - BUILDING  
RELATIONSHIPS IN PROCESS  
ENGINEERING**



The Dewater HP 6 x 6 Next Generation Filter Press – plate size 4 100 x 2 000mm

for servicing tailings dewatering equipment, as well as performance and condition monitoring.

- **Tanzania:** Materials handling system for tailings backfill.
- **Canada:** Multiple High-Rate Thickeners and Horizontal Vacuum Belt Filters for copper and pyrite concentrates, and copper tailings.
- **Europe & Africa:** Spare parts programs for dewatering and materials handling systems.

### What Makes PEQON Different?

Whilst priding itself in solving complex solid-liquid separation challenges across tailings and product dewatering applications, PEQON's Integrated Delivery

Model supplies a robust portfolio of dewatering technologies tailored for African conditions, including:

- High-Rate Thickeners (custom sizes with Evoflow Core® Feedwell).
- Vacuum Belt and Vacuum Disc Filters.
- Filter Presses, including the high capacity 4m x 2m or 5m x 5m units.
- Modular polymer dosing plants and materials handling solutions.
- Full integrated dry-stacked tailings systems.

The Integrated Delivery Model operates across the full project life cycle with: