


IPS
Inclined plate settlers



Maximum
process recovery,
minimum plant
footprint



Beneficiation solutions from Metso

In a time when mother earth gives less, it's time to reach further. Metso beneficiation solutions for minerals processing aim for maximizing ore recovery while optimizing operations costs. Our proven solutions help to make the most challenging results possible.

Proven solutions to address any mineral processing challenge

Integrated beneficiation packages geared towards maximizing recovery

Every ore is different. With 100+ years of expertise, we at Metso, know your entire mineral processing needs and are dedicated to making it even more efficient and cost-effective. We are ahead of the curve in offering integrated beneficiation packages tailored to meet demanding needs. With principles built on continuous improvement and holistic customer service, Metso delivers proven solutions to maximize your process recovery.

Delivering a comprehensive value with our beneficiation solutions

Classification

Metso's advanced screening and classification solutions help in achieving optimum size control, improved product quality, enhanced comminution efficiency and increased throughput.

Separation

Metso's reliable beneficiation technology considerably improves the contained value of the ore by removing gangue minerals using flotation, gravity separation, magnetic separation, washing and leaching.

Dewatering

Metso's energy efficient dewatering solutions enable concentrate separation achieving maximum recovery of valuable materials using filtration, thermal drying and slurry handling.

Enabling economic and environmental sustainability

Avoiding wastage of water is the goal we share with you. Metso strongly believes in efficient and sustainable mining practices for plant operations. Our Inclined plate settler minimize the environmental impact on site, while maximizing profitability.

 50% smaller plant footprint	 Maximized recovery rate	 Robust design
 Increased uptime	 Maximized throughput	 Lower installation costs
 Lower environmental impact	 20% lower OPEX cost	

Saves up to 50% space compared to conventional technology

Inclined plate settlers (IPS)

Compact solutions for improved thickening performance

Metso's inclined plate settler (IPS) is a proven and a compact sedimentation and dewatering solution offering good clarity of the overflow liquid and maximum density of the underflow solids discharge with minimum space requirements. Easy to install, relocate and adapt to process changes, IPS offers maximum return on investment to customers.

Unique IPS Principle to optimize process efficiency

Metso's inclined plate principle uses parallel inclined plates to minimize floor area occupation. The size and cost of the gravity settler can be reduced by matching the thickening & clarifying requirements more closely.

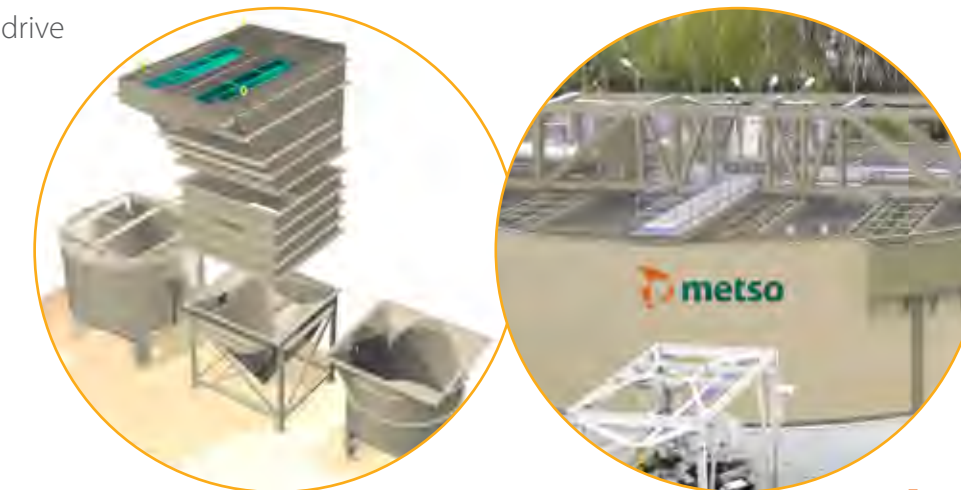
Two basic criteria for gravity settling equipment are good clarity of the overflow liquid and maximum density of the underflow solids discharge. The area needed to clarify a suspension is often greater than that needed for thickening. This means that in a cylindrical thickening tank, the lower section with rakes and drive mechanism can be oversized.

Wide product range for diverse demand

IPS product ranges from LTO, LTK, LTS, LTE, LTC and LTE/C models

Major applications:

- » Metallurgical industries
- » Metallic minerals
- » Chemical industry
- » Coal slurry
- » Power plants
- » Contaminated soils
- » Potash
- » Mine water treatment



Why choose Metso IPS solution?

Seamless solution to fit your process needs

Metso IPS is what you need when you are looking for flexible, compact, cost-efficient and environment friendly thickening and clarification solution

Building customer confidence through pilot tests and cost-efficient supply chain

Robust design

- Heavy duty construction of tank, sludge hopper and inclined plate pack
- Wide density of inclined plates
- Specifically designed feed ports for optimum ratio between clarification and thickening area
- No short circuiting

Lower costs

- Delivered as one-piece unit or in pre-fabricated sections
- Smaller foundations
- Less floor space
- Square outline for easier planning & construction

Simplified in-plant installation

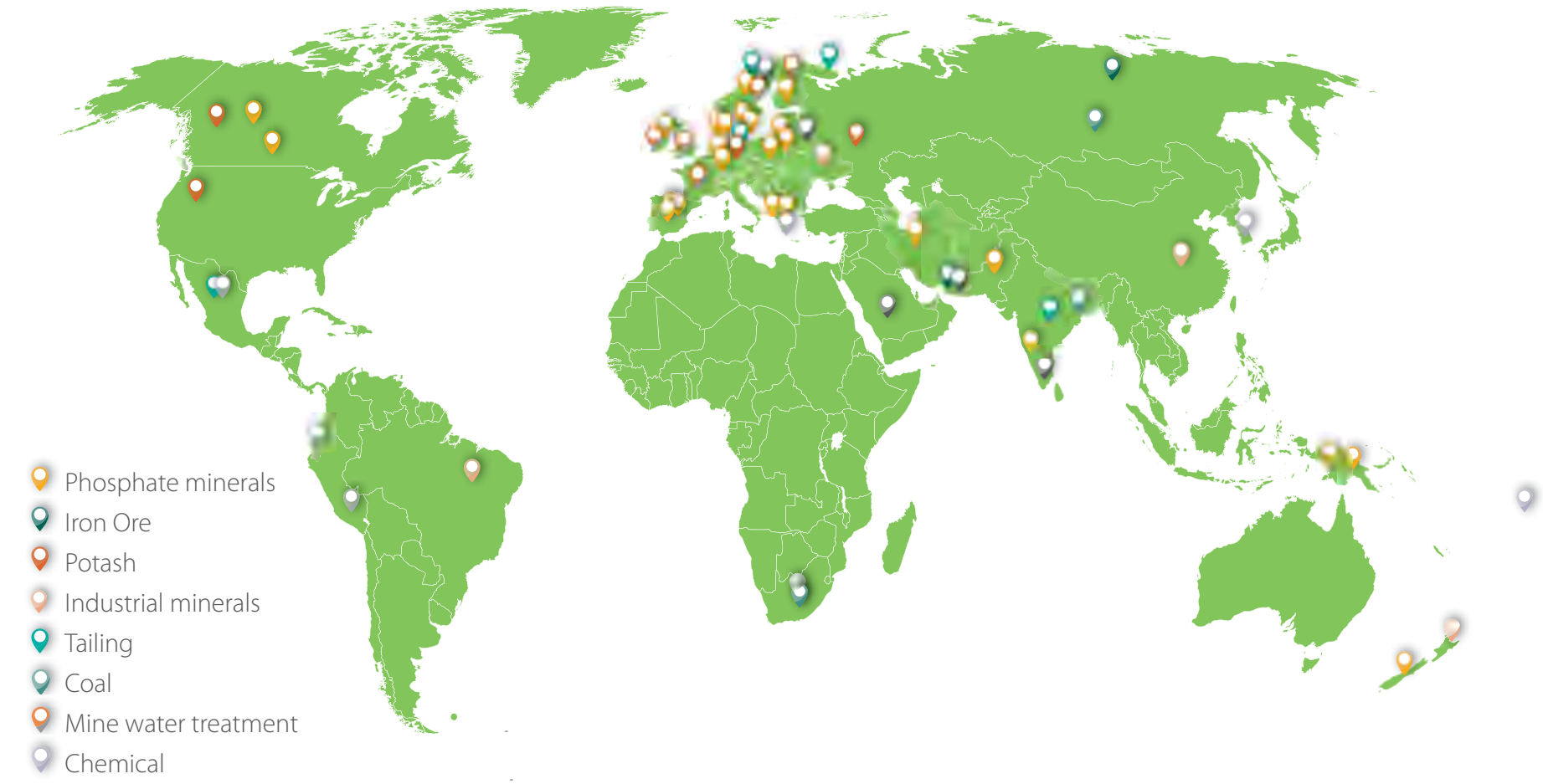
- Simple construction of sheet steel and standard profiles
- Shorter pipework runs
- Small internal volume and surface area
- High level installation for gravity feed to downstream processes

Flexible operations

- Easy to relocate
- Adaptability to process changes
- Easy to supervise and maintain

Extensive capabilities, matchless delivery

400+ installations world-wide delivering promising results





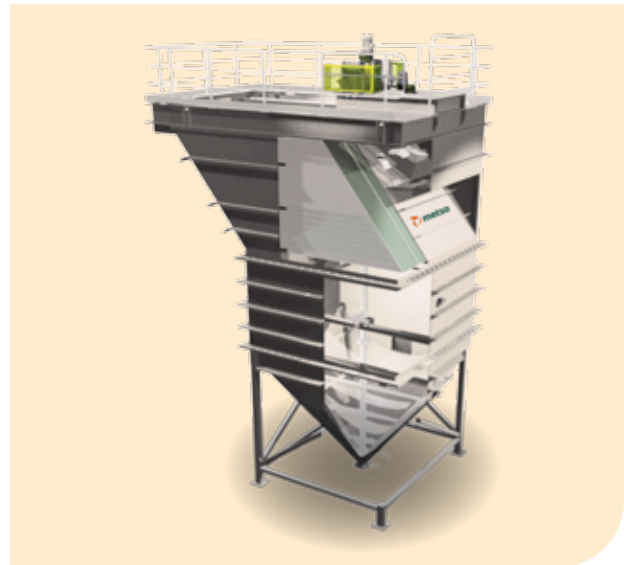
Easy to relocate and adapt to process changes, Metso Inclined Plate Settler offers flexibility to customer's operations.

Treatment of mine water underground at a large iron-ore mine

Challenge:
Pumping solid free processed water from underground mine with clean overflow and space issue

Solution:
Installing three units of IPS LTS/E 500 F-8 thickeners at the basement of the mine

Result:
Achieved production of a clean overflow with particles below 20 ppm against the set limit of 100 ppm with Metso's IPS units.



Clean overflow with particles below 20 ppm

Making the big difference to our customers

Everything we do is based on deep industry knowledge and expertise that makes the big difference to our customers. Decades of close customer collaboration and adaption to our customers' ever-changing needs have transformed us into a knowledge company.

Through our knowledge and experience, we work with our customers to create solutions that enable them to attain their objectives. We call this **The Metso Way**, which focuses on creating value to our customers.

The Metso Way

Knowledge -



We have deep knowledge about our customers' business environment, processes and challenges

People -



Our committed and highly competent people make the difference to our customers

Solutions -



We create the technology and services required to meet our customer needs



Metso Inc.,
www.metso.com/ips