

# Mining & Mineral Processing

Fluid Handling Solutions from ITT



ITT

*Engineered for life*



## Improving Plant Profitability

**Increased UPTIME**  
Of your process

**Decreased MAINTENANCE**  
Activities

**Decreased ENERGY**  
Costs

## Monitoring & Control

### PumpSmart

Advanced pump Control, Protection and Optimization logic designed to improve overall reliability efficiency of your process systems.



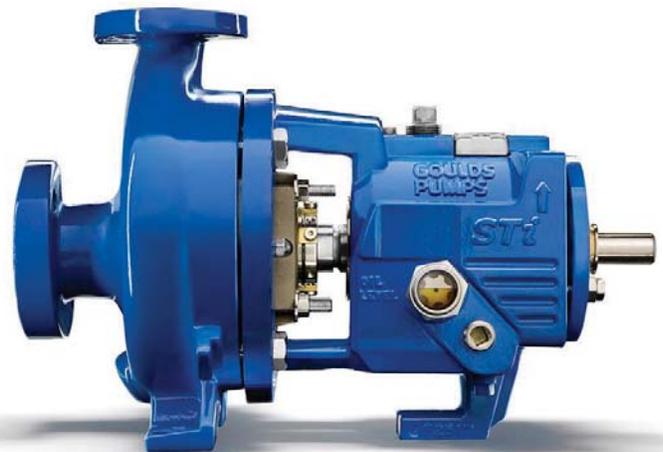
### ProSmart

Predictive Condition Monitoring that provides a cost-effective solution to maintaining uptime on all of your rotating equipment.



### 3196 i-FRAME

Integrated Condition Monitor constantly measures vibration and temperature at the thrust bearing. Colored LED's indicate general pump health. Provides early warning of improper operation before catastrophic failure occurs.



## Plant Performance Services

### Product Repair

PRO Services® repairs ALL brands of pumps and rotating equipment. No need to source different product specialists depending on the equipment.

- Service Center Repair
- Turnkey Repair/Installation
- Emergency Service

### Reliability Services

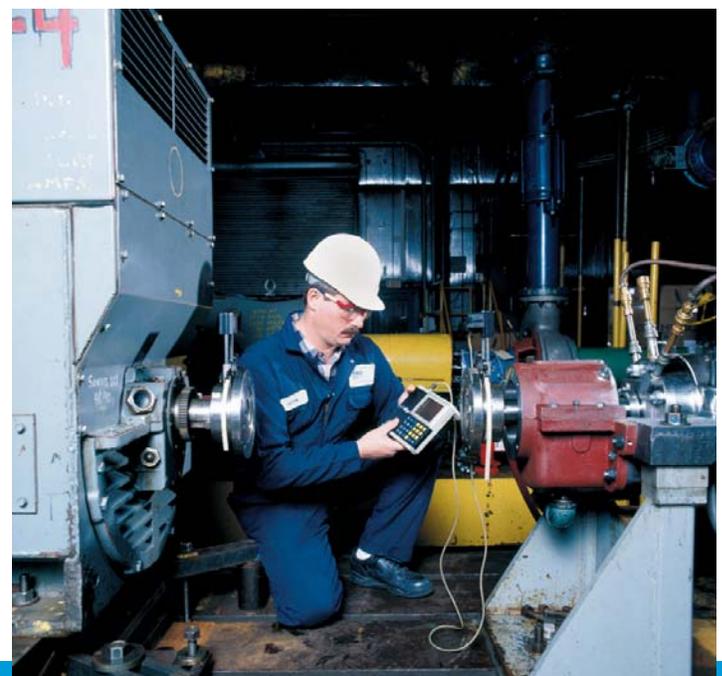
ITT provides reliability improvement programs to extend equipment life and lower maintenance costs.

- Predictive Condition Monitoring
- Root Cause Failure Analysis
- Engineered Upgrades
- Training

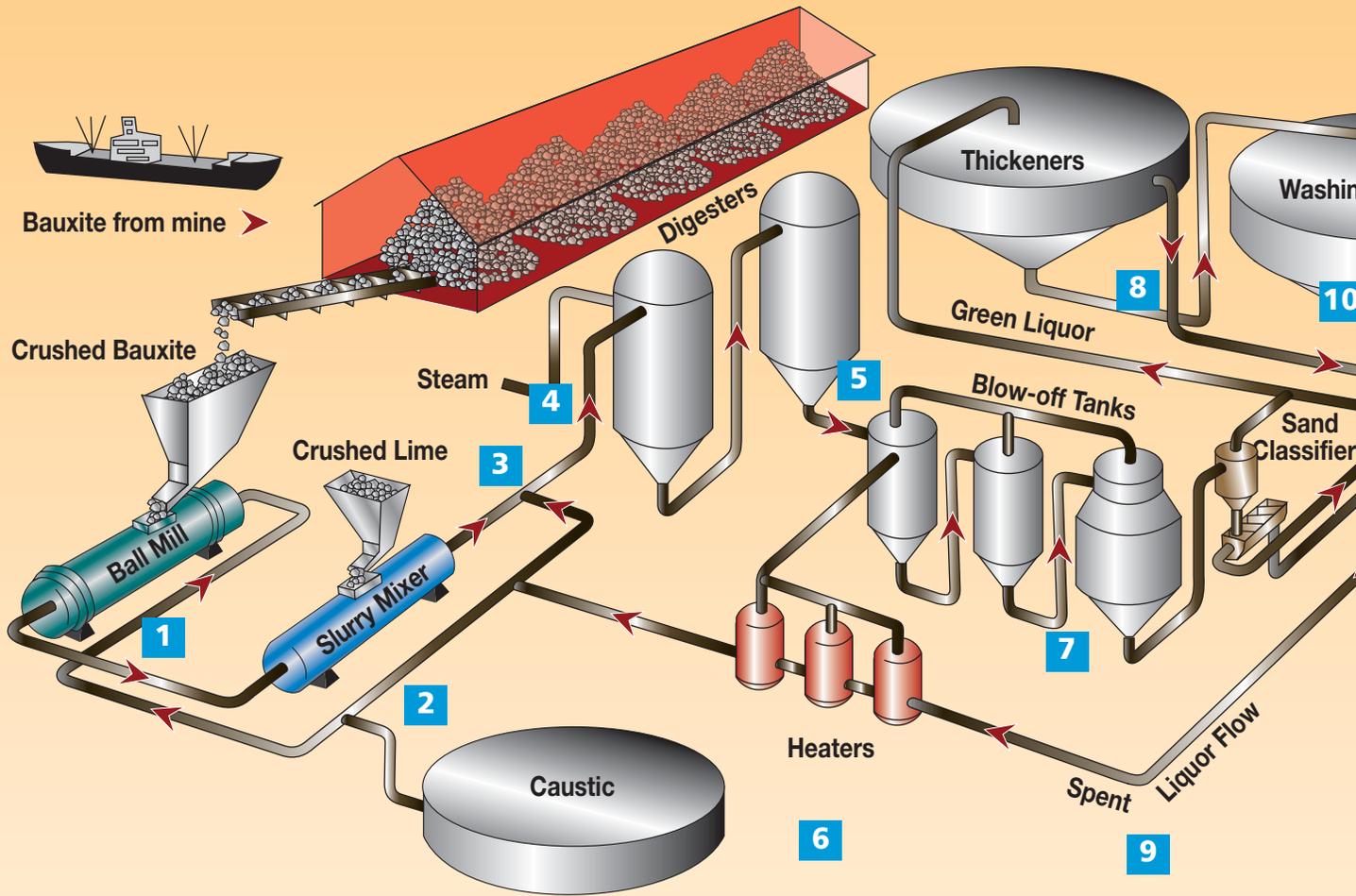
### Optimization of Assets

ITT conducts equipment health and inventory management programs to optimize equipment performance, reliability and life cycle costs.

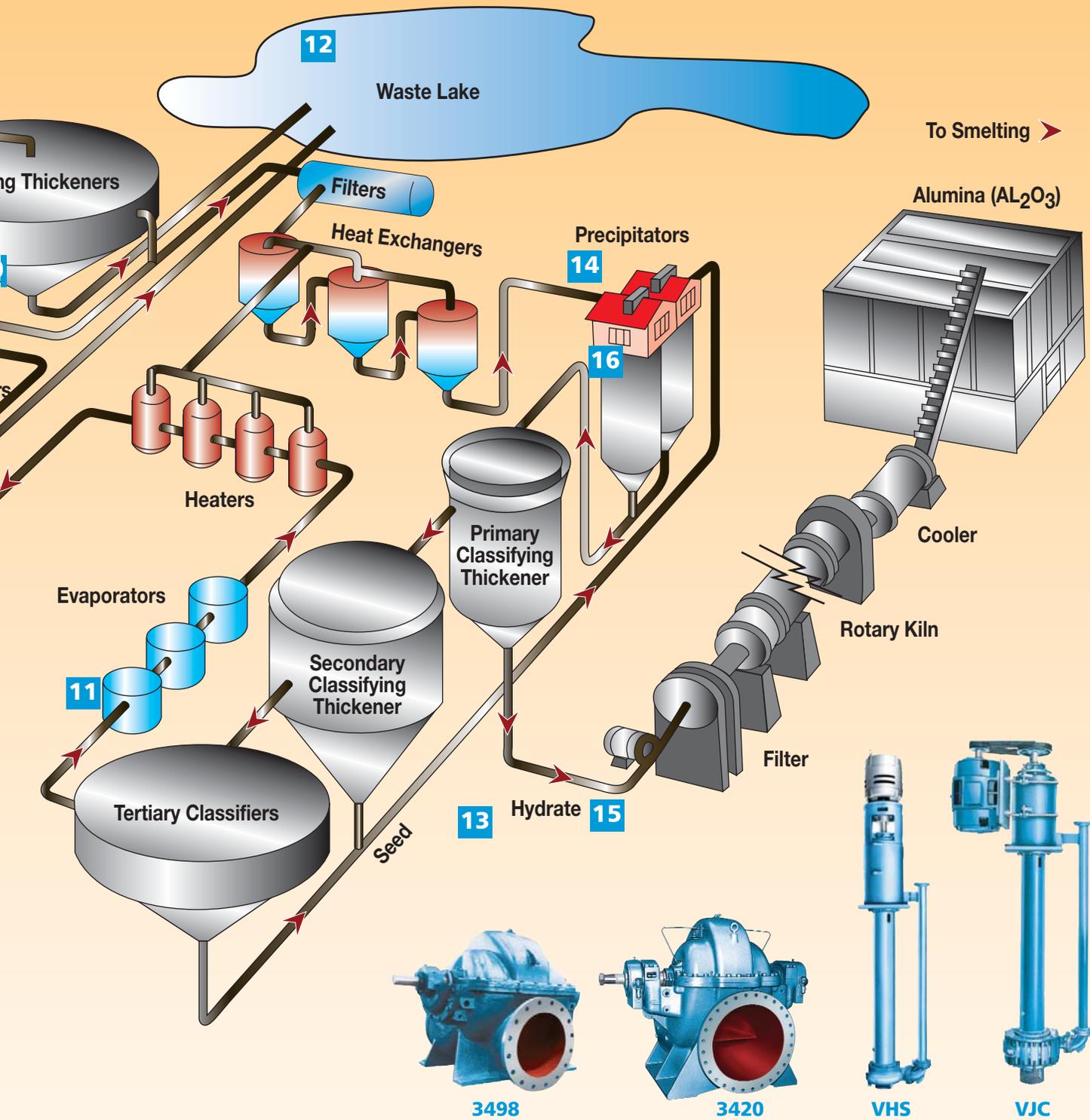
- Inventory Management
- Replacement /Exchange
- Maintenance Management
- Contract Maintenance



# Alumina Refinery Solutions

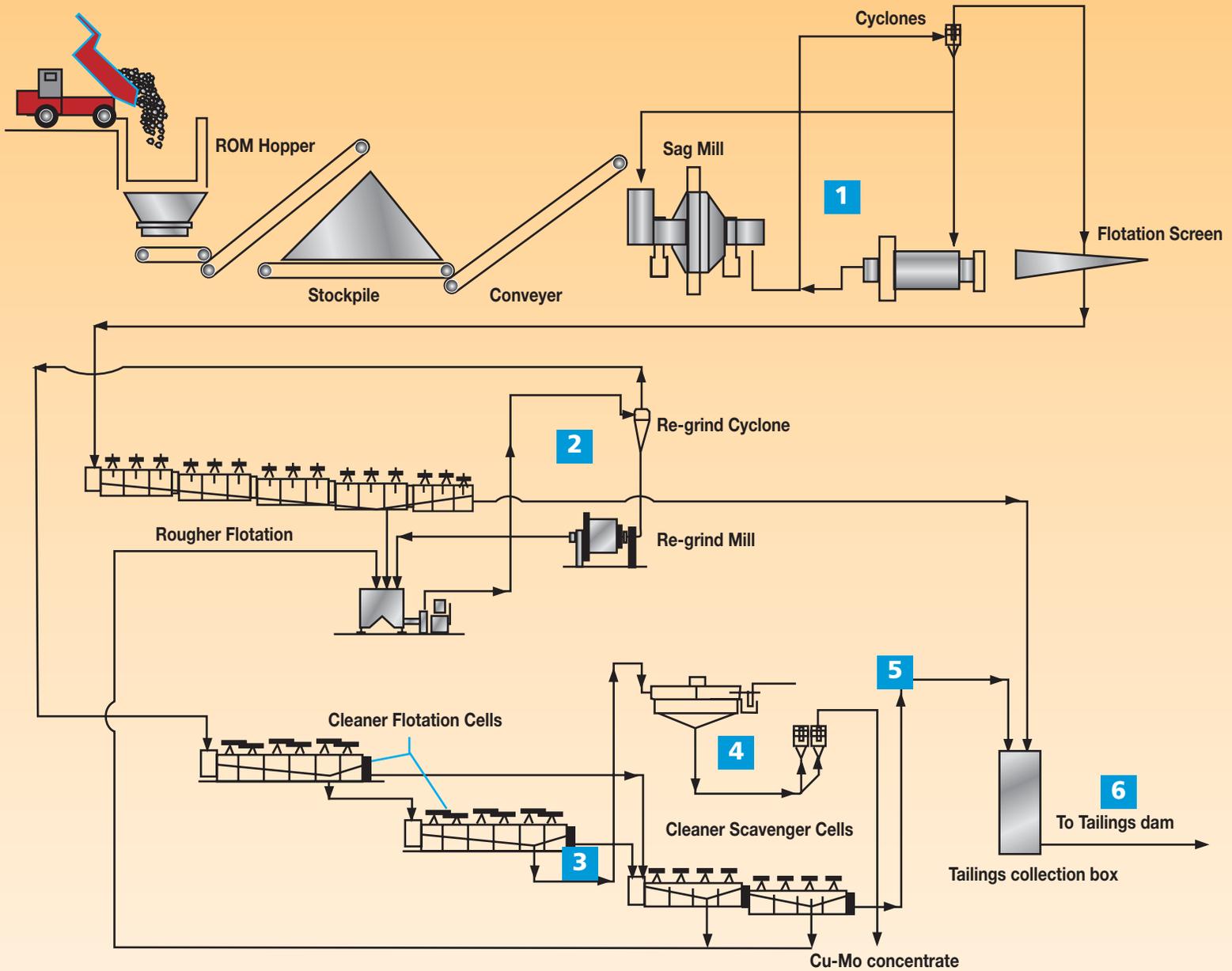


1	2	3	4	5	6	7	8
<b>Mill Discharge</b> - 5500	<b>Caustic Supply</b> - 3196 - 3180 - 3410 - 3409	<b>Slurry to Digestion</b> - 5500	<b>Condensate Digestion</b> - 3700 - HT3196	<b>Digestion</b> - 5500	<b>Water Supply</b> - VIT	<b>Spent Liquor</b> - 3196 - 3180 - 3410 - 3409 Dependent upon Flow Range	<b>Green Liquor</b> - 3196 - 3180 - 3410 - 3409 Dependent upon Flow Range
	   		 			   	   



9	10	11	12	13	14	15	16
<b>Sump Pumps</b> - VHS - VJC	<b>Filter Feed</b> - 3196 - 3180 - 3410 - 3409 - 3498 - 3420 Dependent upon Flow Range	<b>Evaporation</b> - 3196 - 3180 - 3410 - 3409	<b>Mud Disposal</b> - 5500	<b>Sweetener Service</b> - 5500	<b>Precipitation</b> - 5500	<b>Hydrate</b> - 5500	<b>Thickener Applications</b> - 5500

# Copper Concentration Solutions



## 1 Mill Discharge Cyclone Feed

- SRL-XT
- 5500
- SV1



## 2 Re-grind Cyclone Feed

- SRL-XT
- 5500
- SV1



## 3 Flotation Concentrates

- SRL-S
- VRS
- VJC
- CW/CWX
- SV1



## 4 Thickener/Clarifier Under Flow

- SRL
- SRL-XT
- 5500
- SV1



## 5 Flotation Tailings

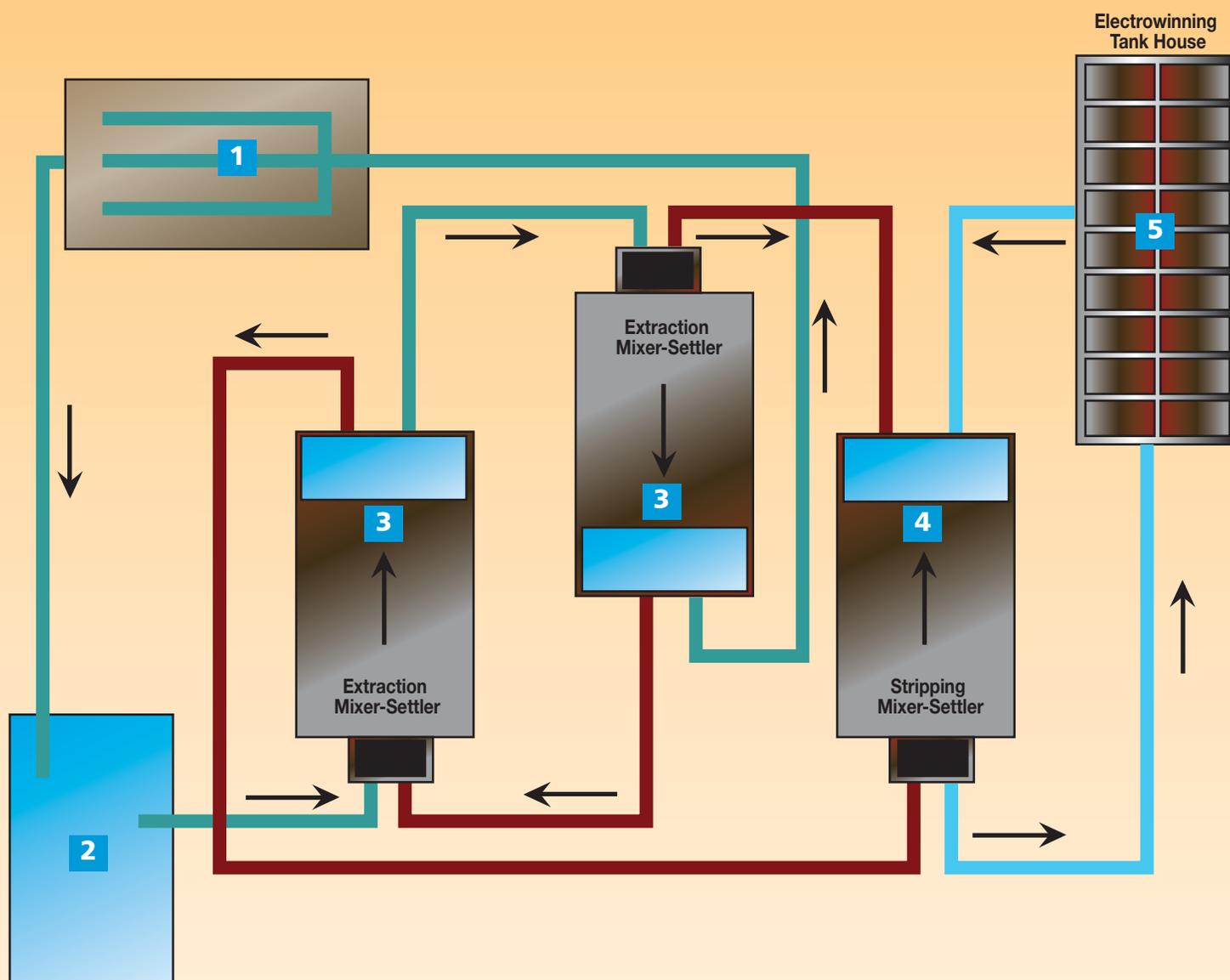
- VRS
- VJC
- SRL
- SV1



## 6 Thickened Tailings

- 5500
- SRL
- SRL-XT
- SV1





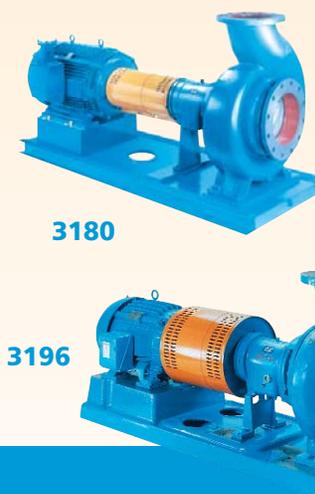
- 1**
- VIT
  - 3700
  - 3400
  - CNX



- 2**
- VIT
  - 3700
  - 3400
  - CNX



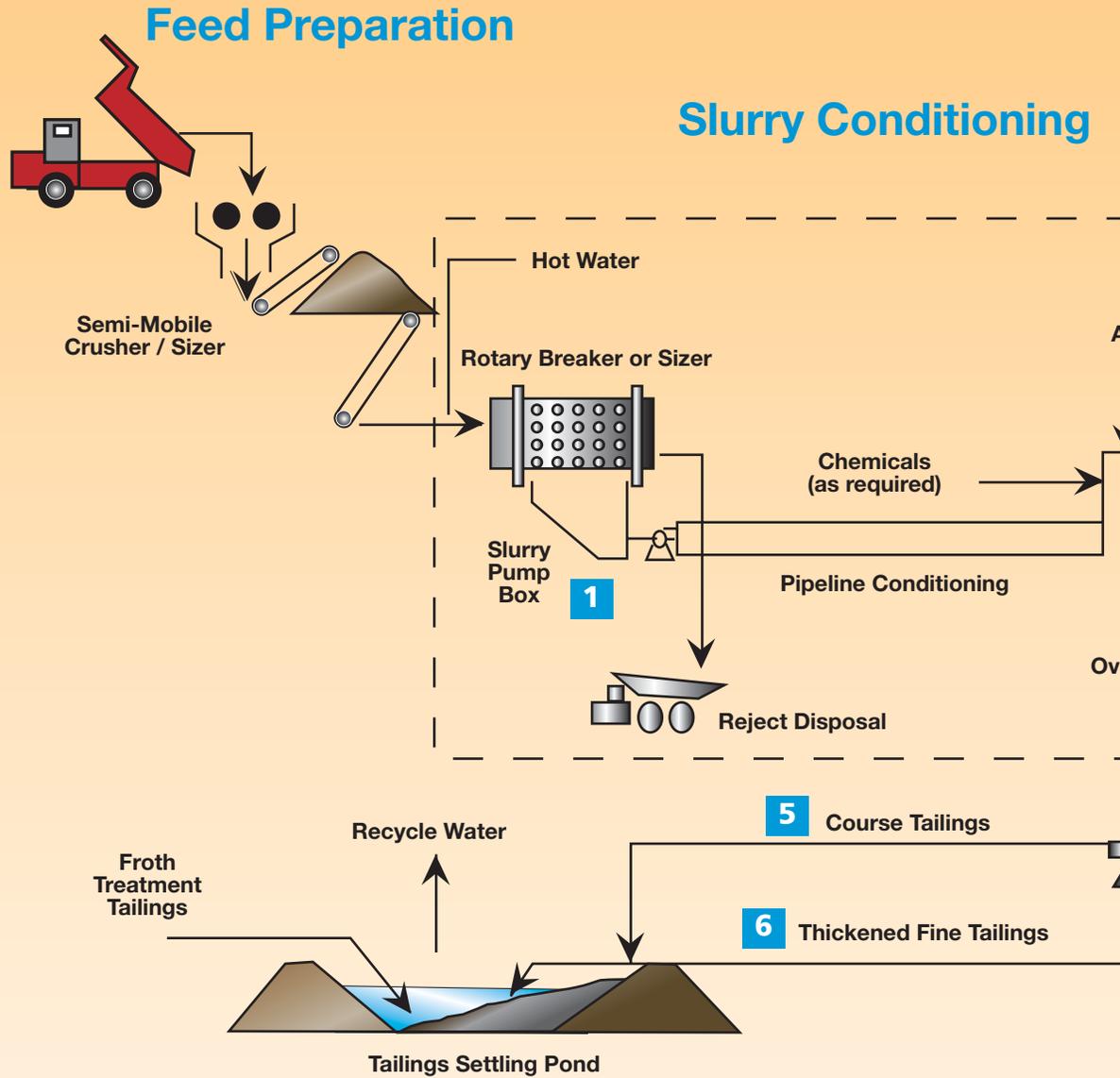
- 3**
- 3180
  - 3196
  - 3171



- 5**
- 3196
  - 3171



# Oil Sands



**1**  
**Slurry Conditioning**  
**Hydro-Transport**  
 - 5500

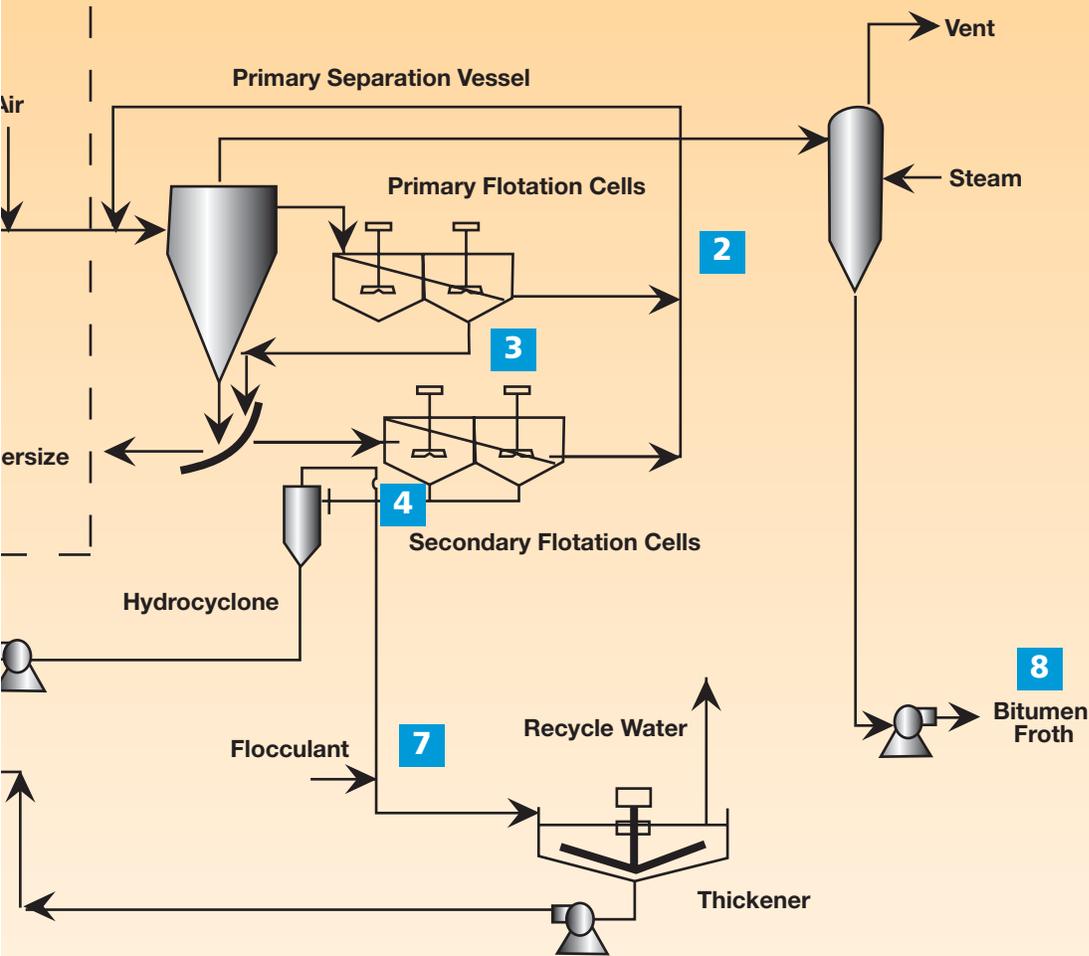
**2**  
**Flotation Concentrate**  
**Bitumen Froth**  
 - CWX with Shearpeller  
 - 5500 with Shearpeller

**3**  
**Flotation Tailings**  
 - Axial Flow Pump

**4**  
**Cyclone Feed**  
 - SRL with urethane lining  
 - 5500



## Extraction



5

**Coarse Tails**  
 - 5500  
 - SRL with urethane lining

6

**Thickened Fine Tails**  
 - 5500 with urethane suction liners  
 - SRL with urethane lining

7

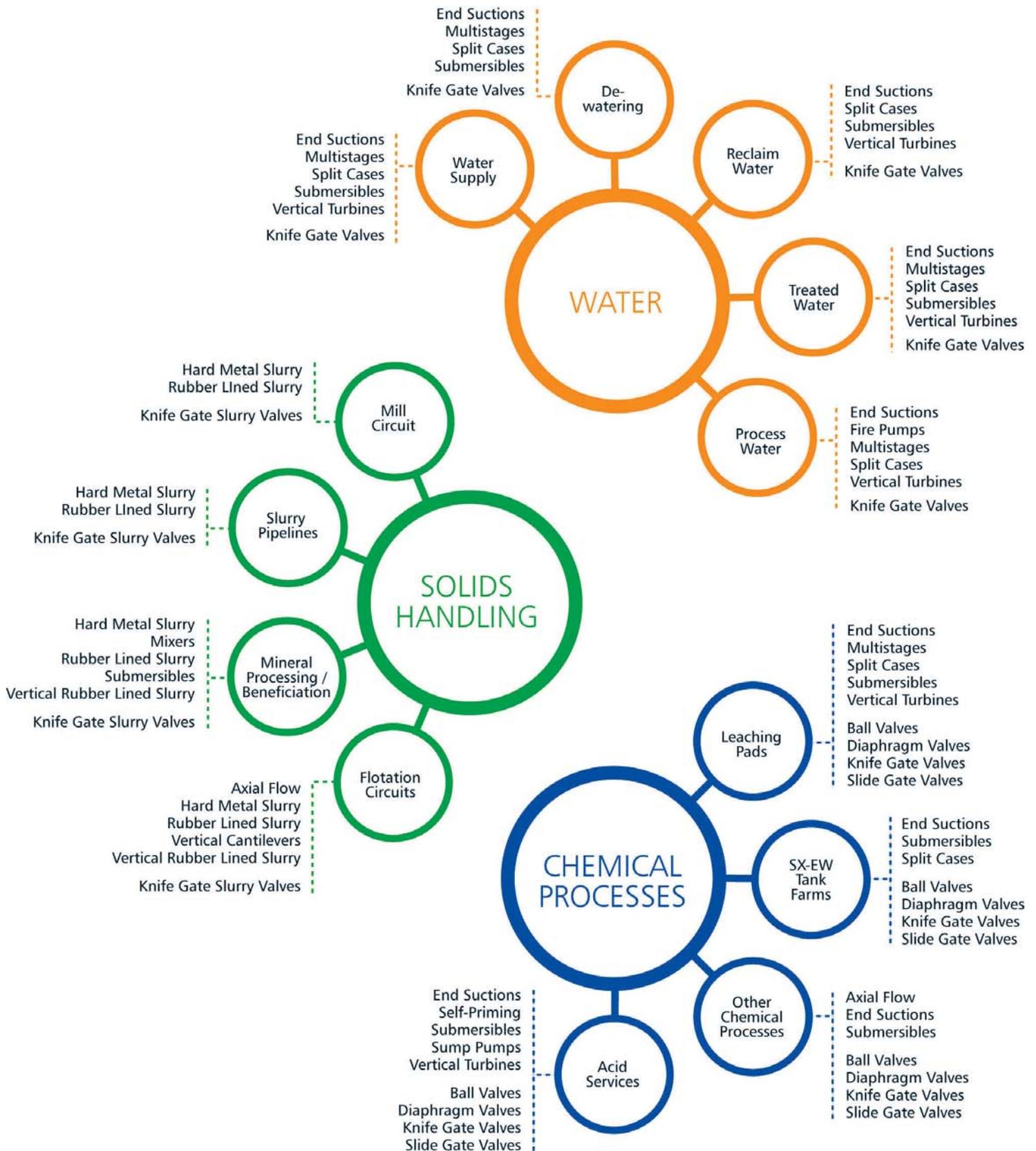
**Cyclone Overflo**  
 - SRL with urethane lining  
 - Axial Flow

8

**Bitumen Froth**  
 - CWX with Shearpeller  
 - 5500 with Shearpeller



# ITT Products for Mining Services



## ITT Fluid Technology – Profile

Major ITT Fluid Technology production and assembly facilities are located in Argentina, Australia, Austria, Brazil, Canada, China, England, Germany, Italy, Malaysia, Mexico, the Philippines, Saudi Arabia, South Korea, Sweden, Poland and the United States.

Principal customers are in North America, Europe, the Middle East, Africa, Latin and South America, and the Asia/Pacific region. Sales are made directly to customers or through independent distributors and representatives.

As one of the world's leading producers of fluid handling equipment and related products for treating and recycling wastewater, ITT actively promotes more efficient use and re-use of water and endeavors to raise the level of awareness of the need to preserve and protect the earth's water resources

### Business Units

ITT Fluid Technology brings its product and services portfolio to market through three market-oriented business units:

#### Water and Wastewater

ITT's Water & Wastewater value center provides a complete offering to municipal and industrial wastewater transport and treatment customers including a full range of wastewater and dewatering pumps, secondary biologic treatment, filtration and disinfection products.

ITT's brands serving water and wastewater markets include Flygt, Sanitaire, ABJ, Leopold and WEDECO.

#### Industrial Process

ITT's Industrial Process value center brings to market the most complete portfolio of pumps, valves and control systems for industrial markets including mining, oil & gas, chemical, water and wastewater, pulp & paper, hydrocarbon processing, power generation and niche industrial applications.

ITT's brands serving industrial markets include Goulds Pumps, Fabri-Valve, Dia-Flo, Cam-Tite Cam-Line, C'treat and Pure-Flo.

#### Residential and Commercial Water

ITT's Residential & Commercial Water value center manufactures and markets pumps, systems and accessories for residential, municipal and commercial applications including water, wells, HVAC systems, pressure boosters, boiler controls and fire protection.

ITT's brands serving Residential and Commercial Water markets include Goulds Pumps, Lowara, Bell & Gossett, McDonnell & Miller, Vogel, A-C Fire Pump, Flowtronex and Standard.



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Visit our Web site at [www.gouldspumps.com](http://www.gouldspumps.com)



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