

Lithium Mining

KSB Slurry & Non-Slurry Pumps



The Three Processes of Lithium Mining

KSB offers a range of products that are well-equipped for the three processes of lithium mining.

- 1 Extraction ponds
- 2 Transfer stations
- 3 Process plants

Extraction Ponds

UPA



Flow rates	310 m ³ /h
Total head	480 m
Max. pressure	60 bar
Max. temperature	60 °C

Single-stage or multistage single-entry centrifugal pump in ring-section design for vertical or horizontal installation; optionally available with lift check valve or connection branch; for well diameters of 8 inches to 40 inches

Transfer Stations & Process Plants

OMEGA



Single-stage, axially split volute casing pump for horizontal or vertical installation with double-entry radial impeller, mating flanges to DIN, ISO, BS or ANSI

Flow rates	up to 800 m ³ /h
Total head	up to 170 m
Max. pressure	25 bar
Max. temperature	80 °C

RDLO



Single-stage, axially split volute casing pump for horizontal or vertical installation with double-entry radial impeller, mating flanges to DIN, EN or ASME

Flow rates	up to 18000 m ³ /h
Total head	up to 300 m
Max. pressure	30 bar
Max. temperature	140 °C

KWP



Horizontal radially split volute casing pump in back pull-out design, single-stage, single-entry, available with various impeller types

Flow rates	up to 15000 m ³ /h
Total head	up to 140 m
Max. pressure	10 bar
Max. temperature	140 °C

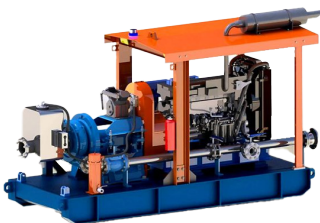
SEWATEC



Volute casing pump for horizontal or vertical installation, with various next-generation impeller types, discharge flange to DIN and ANSI standards

Flow rates	up to 10000 m ³ /h
Total head	up to 115 m
Max. pressure	16 bar
Max. temperature	70 °C

DND



The DnD is a modular pumping unit outfitted with the GIW® LSA/LCC pump with either diesel drive or electric with generator set that can be used to transfer the crystals from the harvest ponds to either trucks or to the mine processing plant.

Process Plants

MegaCPK



Horizontal radially split volute casing pump in back pull-out design, with radial impeller, single-entry, single-stage, to DIN EN ISO 2858 / ISO 5199, in a large range of material and seal variants

Flow rates up to 4000 m³/h

Total head up to 162 m

Max. pressure 25 bar

Max. temperature 400 °C

MAGNOCHEM



Horizontal seal-less volute casing pump in back pull-out design, with magnetic drive, to DIN EN ISO 2858 / ISO 5199, with radial impeller, single-entry, single-stage

Flow rates up to 1400 m³/h

Total head up to 236 m

Max. pressure 40 bar

Max. temperature 300 °C

MOVITEC



Multistage vertical high-pressure centrifugal pump in ring-section design with suction and discharge nozzles of identical nominal diameters arranged opposite to each other (in-line design), close-coupled

Flow rates up to 192 m³/h

Total head up to 415 m

Max. pressure 40 bar

Max. temperature 140 °C

MULTITEC



Multistage horizontal or vertical centrifugal pump in ring-section design, long-coupled or close-coupled, with axial or radial suction nozzle, cast radial impellers and motor-mounted variable speed system

Flow rates up to 1500 m³/h

Total head up to 1000 m

Max. pressure 100 bar

Max. temperature 200 °C

CPKN



Horizontal radially split volute casing pump in back pull-out design, with radial impeller, single-entry, single-stage, to ISO 2858 / ISO 5199

Flow rates up to 4800 m³/h

Total head up to 275 m

Max. pressure 25 bar

Max. temperature 400 °C

RPH



Horizontal radially split volute casing pump in back pull-out design, to API 610, ISO 13709 (heavy duty), type OH2, single-stage, with single-suction radial impeller and centreline pump feet; with inducer if required

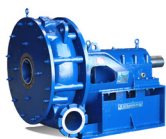
Flow rates up to 4800 m³/h

Total head up to 270 m

Max. pressure 110 bar

Max. temperature 450 °C

GIW® LSA



Rugged design features, combined with shell, impeller and liner in proprietary GIW Gasite® material, are recognized worldwide for superior abrasion resistance

Flow rates up to 18000 m³/h

Total head up to 150 m

Max. pressure 17 bar

Max. temperature 120 °C

GIW® LCC



High efficiency slurry pump with excellent wear characteristics over a broad operating range; the wetted pump end is made of high chrome white iron; designed to permit easy dismantling and reassembly for maintenance and inspection

Flow rates up to 3675 m³/h

Total head up to 105 m

Max. pressure 16 bar

Max. temperature 120 °C

Process Plants (Continued)

GIW® MDX



Operates at the heart of the mill circuit and tackles the most extreme duty conditions; maximizes productivity and minimizes the costs by matching operating cycle times with scheduled mill outages

Flow rates up to 14000 m³/h

Total head up to 90 m

Max. pressure 16 bar

Max. temperature 120 °C

GIW® HVF



High-efficiency pump specially developed for handling air entrained slurries; features patented impeller and venting chamber that removes air contained in the fluid handled from the impeller eye, preventing blockage and reducing downtime

Flow rates up to 5725 m³/h

Total head up to 50 m

Max. pressure 11.5 bar

Max. temperature 120 °C

GIW® TBC



Horizontal high-pressure end-suction centrifugal pump offering maximum resistance to wear and ease of maintenance; conventional single-wall design transfer stress loads from wear parts to the casing covers in high pressure applications

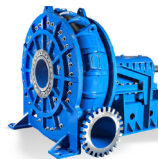
Flow rates up to 18200 m³/h

Total head up to 90 m

Max. pressure 37 bar

Max. temperature 120 °C

GIW® WBC



Patented design with state-of-the-art hydraulic system and highly wear resistant materials for high-pressure applications; pump casing is designed to withstand maximum stresses, e.g. during pressure surges

Flow rates up to 16200 m³/h

Total head up to 150 m

Max. pressure 32 bar

Max. temperature 120 °C

GIW® LCV



Robust vertical shaft submersible pump in cantilever design with suction from the bottom and bearings arranged outside of the fluid handled; design with open and closed impeller for best efficiency and maximum free passage

Flow rates up to 2045 m³/h

Total head up to 40 m

Max. pressure 69 bar

Max. temperature 60 °C

GIW® ZWF



Vertical cantilever, rugged hard metal sump pump with top and bottom suction; open impeller and heavy duty bearing assembly with no submerged bearings

Flow rates up to 400 m³/h

Total head up to 35 m

Max. pressure 10 bar

Max. temperature +65 °C



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