

PERISTALTIC HOSE PUMPS

BUILT FOR MINING

Mining pumping systems must handle high solids content, severe abrasion and aggressive chemistry. These conditions increase wear, downtime and the cost of conventional pumping systems. Boyser peristaltic hose pumps isolate the product inside one replaceable hose, helping reduce operating costs and improve production reliability.

A SIMPLE PRINCIPLE FOR DIFFICULT MEDIA

Leaching, filtration, slurry transfer and accurate reagent dosing.

UP TO 80%

SOLIDS HANDLING

UP TO -9 m

SUCTION LIFT

+/- 5%

DOSING ACCURACY

02 / THE PUMP

RBT-100. BUILT FOR THE DUTY.



INDUSTRIAL PERISTALTIC PUMP

RBT-100

20 l/rev

CAPACITY

DN100

CONNECTIONS

15 bar

MAX. PRESSURE

SHOES

ROTOR SYSTEM

WHY IT WORKS

Only the hose touches the product

In a lime and metal-hydroxide application with up to 10% solids, the RBT-100 pumped through a 250 m pipeline and lifted the product approximately 60 m. Because only the hose contacts the medium, erosion, downtime and repair costs were reduced.

ABRASIVE SLURRIES

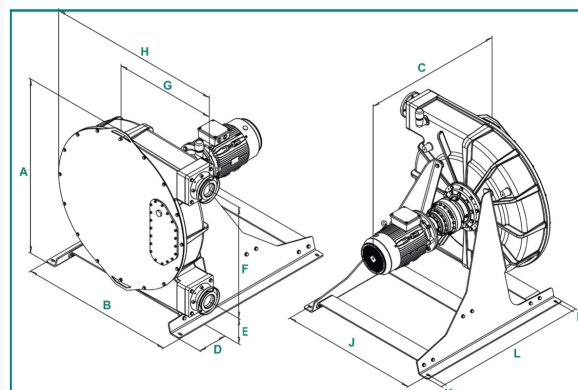
- Smooth transfer of pulps, pastes and sludge with high solids content.

CORROSIVE REAGENTS

- Chemical-resistant hoses for cyanides, acids and sulphate solutions.

ACCURATE DOSING

- Repeatable flow, largely unaffected by rising discharge pressure.



OFFICIAL DIMENSIONAL DRAWING

Two views. One real machine.

The factory drawing confirms the central drive arrangement, two DN100 process connections and the RBT-100 support frame.

RBT SERIES | SIZE 25 AND UP

25 / 32 / 40 / 60 / 70 / 80 / 100

The model number indicates the internal hose diameter in millimetres (e.g. RBT-25B = 25 mm).

MINERALS & APPLICATIONS



COPPER ORE

SLURRY TRANSFER

Copper sulphate (CuSO_4) solutions, pulps and slurries are often both abrasive and corrosive. Boyser pumps provide smooth, stable transfer while the medium contacts only the internal hose.



ZINC ORE

UP TO 70% SOLIDS

Dense zinc suspensions of up to 70% solids caused rapid impeller wear and unstable flow in centrifugal pumps. Boyser RBT-40 and RBT-60 pumps delivered the required flow while reducing maintenance and downtime.



KAOLIN

VISCOUS MINERALS

Natural kaolin, mainly kaolinite [$\text{Al}_2\text{Si}_2\text{O}_5(\text{OH})_4$], fine-grained silicates and lime slurry can be viscous and prone to clogging valves. Boyser's open hose path transfers these media gently and reliably.

WHERE BOYSER FITS

Transfer, dosing and process support

Mining applications often combine abrasion, corrosion, viscosity and entrained solids. The peristaltic principle brings the same robust solution to each stage.

SLURRIES: Pulps, pastes, sludge, hydroxides; **REAGENTS:** Sodium cyanide (NaCN), copper sulphate (CuSO_4), sulphuric acid (H_2SO_4); **CONDITIONING:** Flocculants and coagulants; **MINERALS:** Kaolin (kaolinite: $\text{Al}_2\text{Si}_2\text{O}_5(\text{OH})_4$), quicklime (CaO), hydrated lime [$\text{Ca}(\text{OH})_2$], silicates.

SELECTED REFERENCES

QUERETARO - MEXICO

Zinc sulphate (ZnSO_4), copper sulphate (CuSO_4)

FMP60A32

CAJAMARCA - PERU

Neutralisation slurry

RBT32BA31

PLANTA DEL TORO - MEXICO

Sodium sulphide (Na_2S)

RBT60A41

HILL GOLD MINE - AUSTRALIA

Lead nitrate [$\text{Pb}(\text{NO}_3)_2$]

RBT70A13

PERFORMANCE & EXPERT SUPPORT



REAL FIELD APPLICATION

Boyser pump in mining service

Digitally enhanced original application photograph from the earlier Boyser mining brochure, showing pump service and hose handling in a real plant environment.

MAIN ADVANTAGES

Less wear. Less downtime.

- No valves that can clog
- Excellent abrasion resistance
- Can run dry for extended periods
- Suction lift up to -9 m
- Reversible pumping direction
- Dosing accuracy of +/- 5%
- No mechanical or conventional shaft seals
- Energy savings of up to 90%

IN SHORT

Boyser hose pumps can handle virtually all abrasive and corrosive liquids that are difficult to pump with conventional technologies.

FREE TECHNICAL SUPPORT

FREE PUMP SELECTION & SIZING

Tell us about your application. We will select and size a suitable Boyser pump for your required flow, pressure and pumped medium - free of charge. Send us your operating conditions and we will prepare a tailored pump proposal.

REQUEST YOUR FREE PROPOSAL: info@boyser.eu

BOYSER DISTRIBUTOR

Boyser s.r.o. | Mlynska 8 | 082 21 Velky Saris | Slovak Republic

+421 948 210 705 | www.boyser.eu | info@boyser.eu

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