



The HyPump

Technical Specifications





The HyPump

The HyPump is an innovative hydro-powered water pump specifically designed for irrigation canals, to deliver pressurized water to drip or sprinkler systems, thus saving water, without increasing energy consumption or energy costs.





Technical Specifications

Can pump up to:

200 meters vertical height
16 kms distance
800,000 liters of water per day

Can irrigate up to:

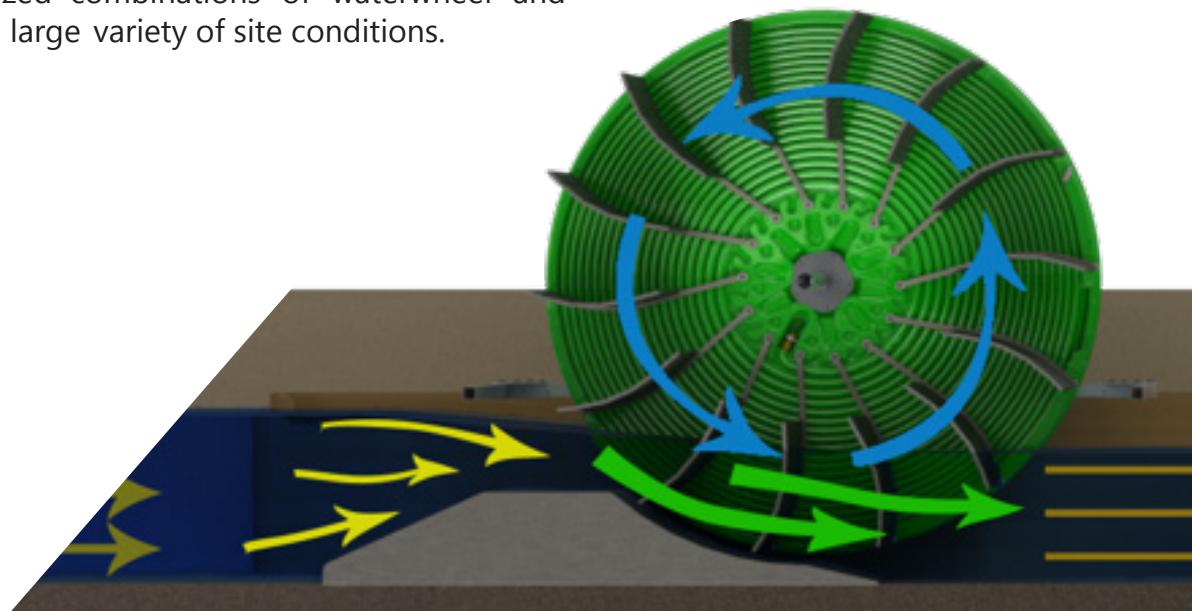
10 to 20 hectares of land
depending on the local site
conditions and crops being
irrigated

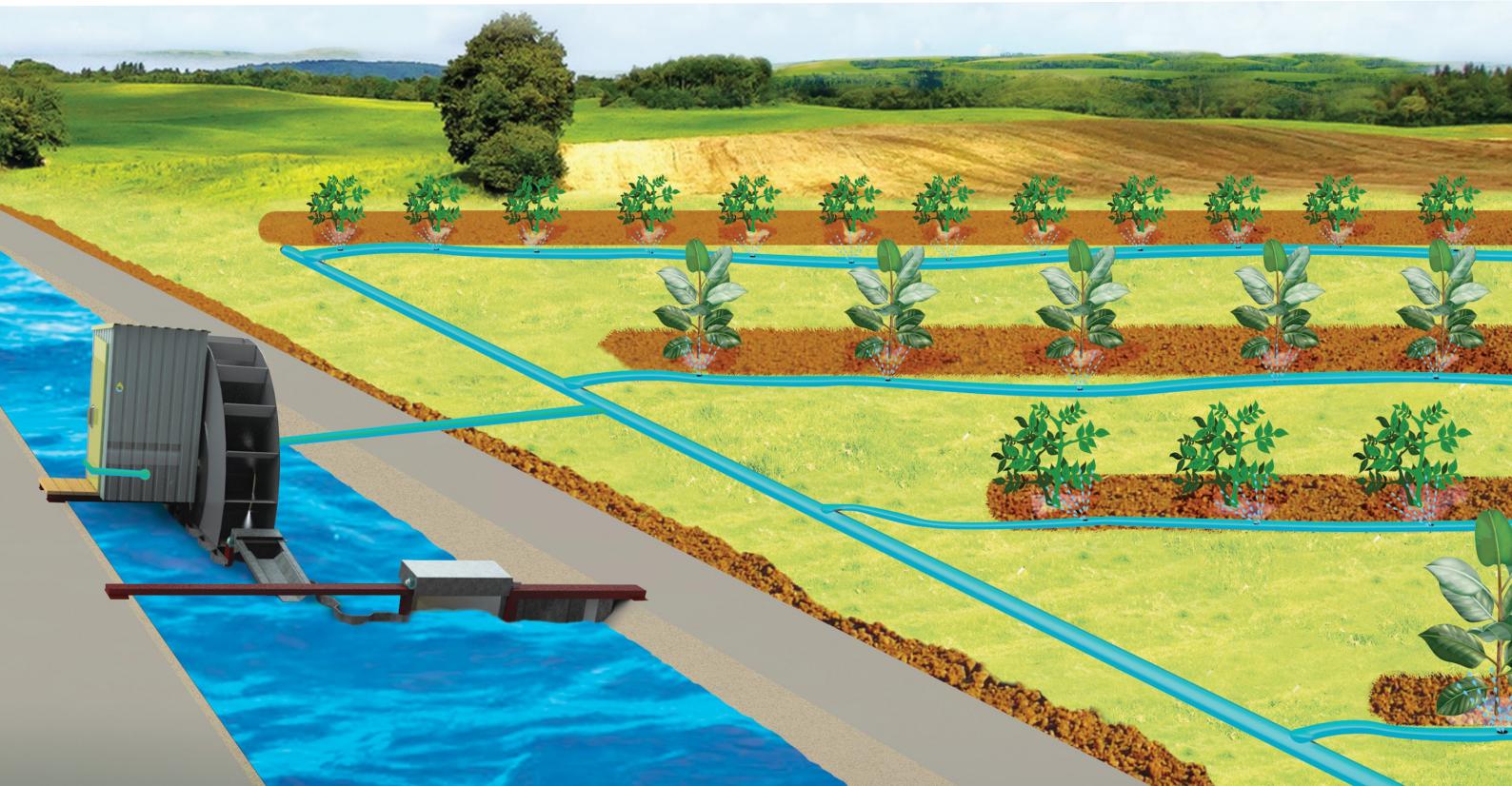
Can irrigate using:

Drip irrigation
Sprinkler irrigation
Spray irrigation

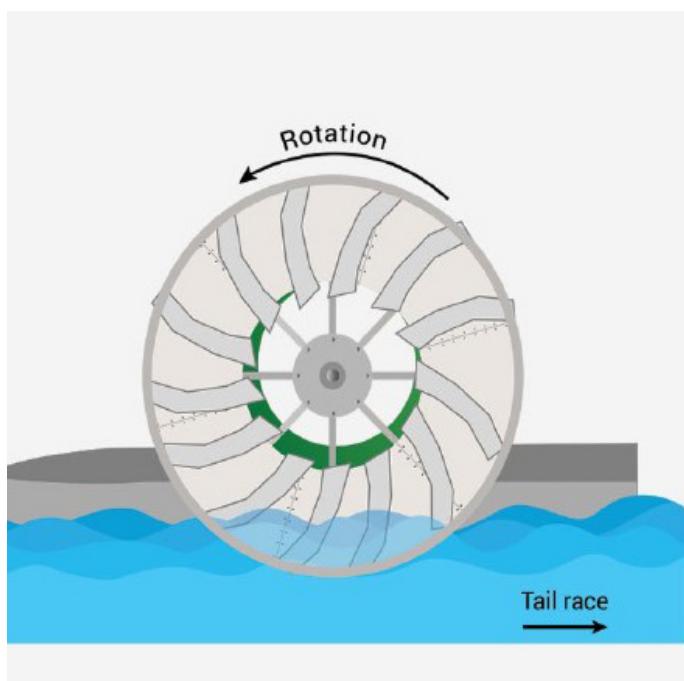
How Does it Work?

The HyPump is able to use two different waterwheels for propulsion - undershot and overshot. The modular HyPump design and the patented manufacturing method allow for customized combinations of waterwheel and pump to match a large variety of site conditions.

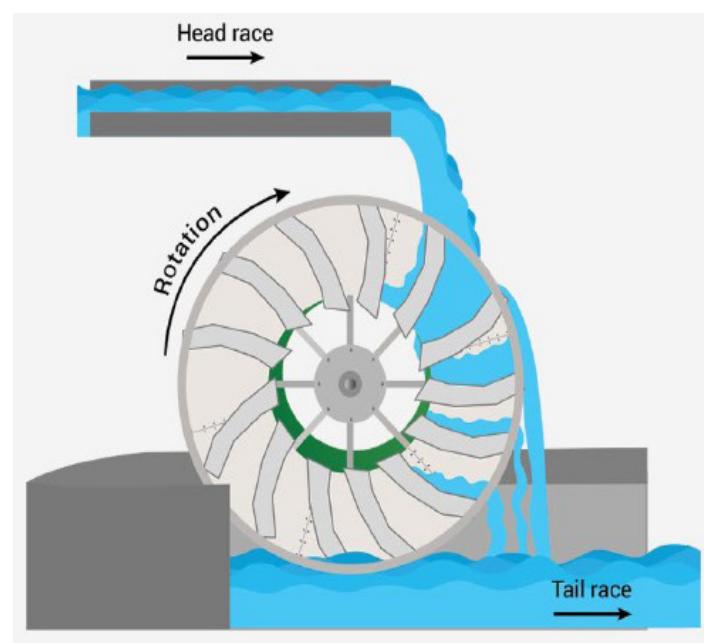




Major Variants



Undershot waterwheel for implementation in flowing canals



Overshot waterwheel for canal drops

Use Scenarios



Input conditions of canal:

Nominal flow rate: 1000 l/s
Minimum flow rate: 400 l/s
No drop in canal
Nominal static head created by shroud: 0.5 m
Min. static head created by shroud: 0.3 m
Max. static head created by shroud: 0.8 m

Output of the pump:

Hectares irrigated: 18
Flow rate: 750 m³/day at 36 m
Maximum height: 200 m
Irrigation type: Pumping to a reservoir, which is connected to drip system

Crops being irrigated:

Peach trees, Olive trees, Almond trees

HyPump in Canal Flow - Hijar, Spain



Input conditions of canal:

Flow rate: 150 l/s
Canal drop: 3 m

Output of the pump:

Hectares irrigated: 12
Flow rate: 500 m³/day at 25 m
Maximum height: 25 m
Irrigation type: Direct coupling to drip and sprinkler irrigation.

Crops being irrigated:

Grapes, Kiwis

HyPump in Canal Drop - Lliria, Spain





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