

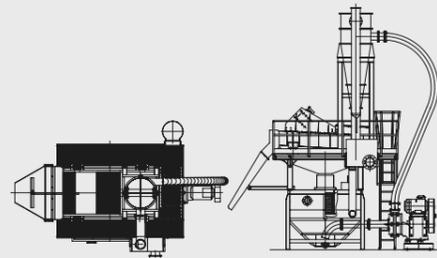


WASHING PLANT

**WP-GH**

418 / 524 / 630 / 836 / 1030

Hydrocyclone compact plant



**WASHING PLANT**  
**WP-GH**

**WP**

	WP-GH 418E	WP-GH 524E	WP-GH 630E	WP-GH 836E	WP-GH 1030E
<b>General specifications:</b>					
Reception tank (m³)	3.6	3.6	3.6	7	10
Capacity (t/h)	40	60	80	100	140
Minimum quantity of water (m³)	65	100	140	185	260
Approximate weight (kg)	5000	5900	6800	7900	8900
<b>Pumping group:</b>					
Pump model	C-100	C-150	C-150	C-200	C-250
Interior lined with special anti-abrasive rubber	Yes	Yes	Yes	Yes	Yes
Motor IP55 1500 rpm (kW)	15	30	37	45	90
<b>Hydrocyclone:</b>					
Cyclone model	SE 100/450	SE 125/600	SE 150/750	SE 200/900	SE 200/900
Inlet diameter (mm)	100	125	150	200	200
Upper body diameter (mm)	450	600	750	900	900
Cyclone and valve's interior lined with special anti-abrasive rubber	Yes	Yes	Yes	Yes	Yes
<b>Dewatering screen:</b>					
Model	TE-200	TE-300	TE-400	TE-400	TE-500
Useful dimensions (mm)	2500x800	2800x1000	2800x1200	2800x1200	2800x1400
Vibrators power (kW)	2 x 1.4	2 x 2.5	2 x 3	2 x 4	2 x 4
Polyurethane mesh	Yes	Yes	Yes	Yes	Yes
Pumping group and cyclone connected by a flexible pipe made of anti-abrasive rubber and aluminum flanges. Frame with stairs and footbridge for inspection and maintenance.					

**MAXIMUM PROFITABILITY**  
Increase your revenue by eliminating loss of quality fines  
Available hydrocyclones, washing wheels and trommels.



Carretera Alamús, s/n, E-25221  
Els Alamús, Lleida, Spain.

Apartado de correos 352,  
E-25080, Lleida, Spain.

Tel. +34 973 199 163  
Fax. +34 973 199 190

[www.arja.com](http://www.arja.com)  
[arja@arja.com](mailto:arja@arja.com)



[www.arja.com](http://www.arja.com)

# HYDROCYCLONE COMPACT PLANT

## SOLUTIONS FOR THE TREATMENT OF AGGREGATES

### WP-GH 836E

Sand washing plant in Lebanon

The ARJA washing plants are custom-developed to cover our customers needs on a basis of quality.

The objective is to optimize the sand production for the manufacture of concrete by decreasing the amount of cement needed in the manufacturing process and increasing its quality.

The elements that are composing ARJA's washing plants have been rigorously designed and selected for their efficiency, high resistance and easy maintenance.



ARJA also has bucket decanters, the perfect accessory for the most abrasive and thick materials.

Accessory assembled before the process of cycloning and whose function is to wash the coarser aggregates, allowing the entrance to the hydrocyclone of the finest aggregates only and reducing the wear of the installation to a minimum.

The pumping group consists of a hopper with a pyramidal trunk shape and a centrifugal pump, in which the water-sand mixture to be treated comes from the installation. The pump drives the mixture to the hydrocyclone with the proper pressure and concentration. The purpose of the receiver hopper is to maintain a stable level of power to the pump, with a mechanical device.

The hydrocyclone receives the mixture of sand and water, entering tangentially at its upper part and creating a whirlwind that rotates longitudinally around its axis, in such a way that the thicker solid particles stick to the side walls thereof due to the effect of the Centrifugal force descending to the bottom along with some water. The finer solid particles, along with most of the water rise, being channeled to the outside by the top of the cyclone.

The dewatering screen receives a final product with the least amount of water possible, it receives the material coming from the discharge of the hydrocyclone, filtering it and recirculating the filtered water back to the tank.



1

#### PUMPING GROUP

Water and sand mixture drive system.

2

#### HYDROCYCLONE

Hydrocyclone of disintegration of the material.

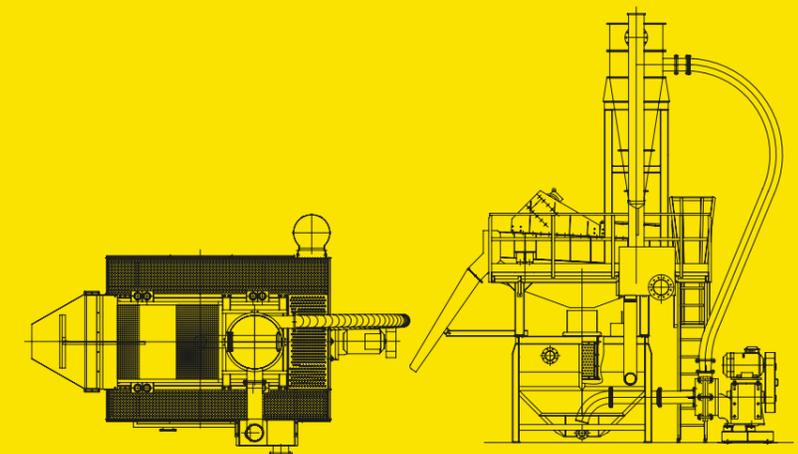
3

#### DEWATERING SCREEN

Zone of separation of water and washed sand.

## ADVANTAGES

- ★ **Better quality of the sand**  
Eliminating clays and impurities.
- ★ **Prevents the loss of fines**  
Optimal sand recovery. Up to 80 microns.
- ★ **Improves the fine curve**  
Granulometric curve of the finest aggregates 0 - 6 more regular.



Model	TPH	KW	Kg
WP-GH 418E	40	15	5000
WP-GH 524E	60	30	5900
WP-GH 630E	80	37	6800
WP-GH 836E	100	45	7900
WP-GH 1030E	140	90	8900

⚙️ Production
⚡ Power
⚖️ Weight