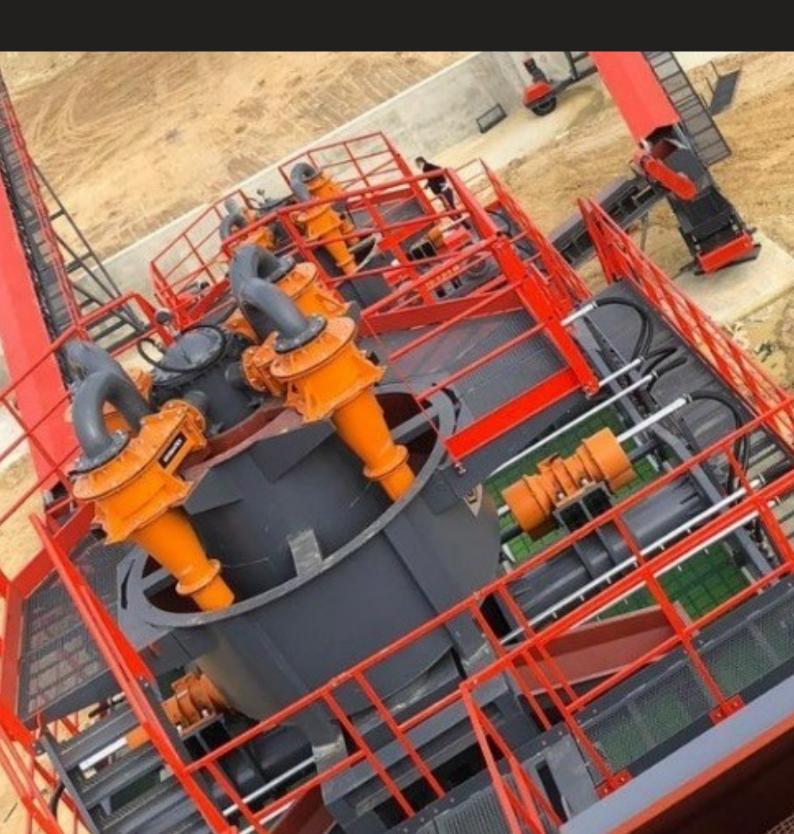
# GROMATEX

# **HYDROCYCLONES**

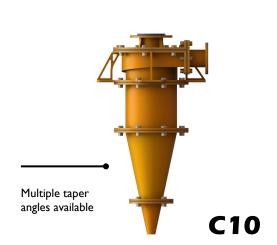


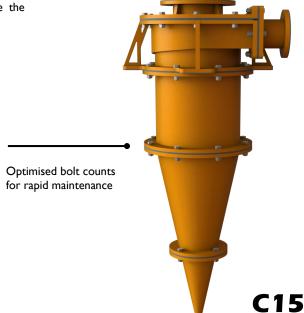
### **GROMATEX**

# GROMATEX HYDROCYCLONES HAVE BEEN DESIGNED AND MANUFACTURED IN THE UK SPECIFICALLY FOR THE DEMANDS OF THE AGGREGATE AND RECYCLING INDUSTRIES

They are lined with the highest quality abrasive resistive rubber which is designed to work in the toughest applications. The rubber is hot vulcanised to the steel body at pressure to ensure a top quality seamless liner. They incorporate many new features to improve wear life and make maintenance easier.

Additionally, we have aligned with industry norms to ensure the cyclones can be retrofitted into existing wash plants.



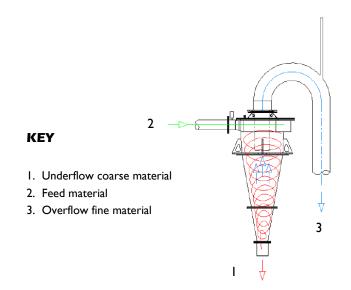


# WHAT IS A HYDROCYCLONE?

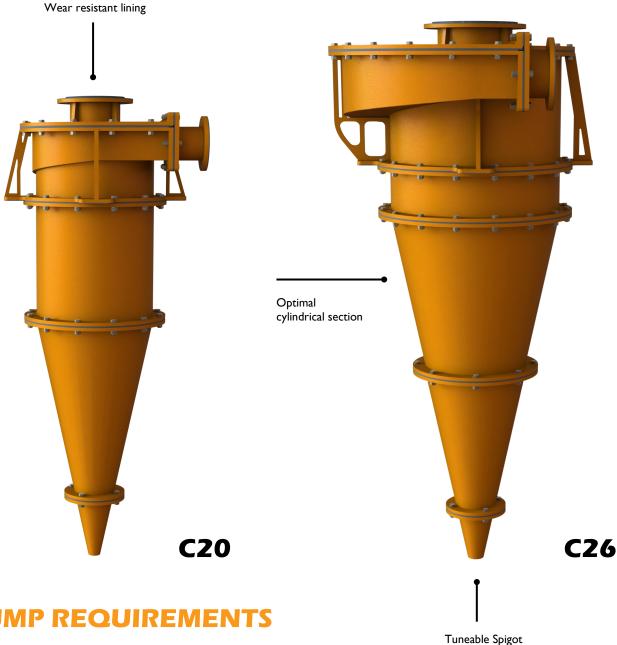
A hydrocyclone is a device used for the classification of sub sieve materials typically below 200 microns.

The material (in slurry form) is fed into the feed chamber at pressure, using a centrifugal pump. The cyclone is carefully paired with a suitable centrifugal pump to ensure optimal feed rate for the cyclone to perform efficiently. The shape of the cyclone creates a vortex which separates lighter particles from heavier particles.

Due to the rapid motion of the fluid and the abrasive particles it contains, it is of prime important the best abrasive-resistant materials are used in the construction of the hydrocyclone.



# **HYDROCYCLONES**



#### **PUMP REQUIREMENTS**

Gromatex cyclones can be paired with any brand of centrifugal slurry pump, however care must be taken to ensure that the pump feed rates and operation pressures are optimal with the cyclones requirements to ensure optimal operating conditions and maximum efficiency. Gromatex recommend using SlurryPro's centrifugal pump range. We can specify and supply pumps according to your specific requirements. As a rule the tables indicate typical pairings.

#### SINGLE PUMP / SINGLE CYCLONE SETUP

Cyclone Type	Cyclone Size	Pump Size	Max Output
C15	380	4-3	Up to 100 TPH
C20	500	6-4	Up to 150 TPH
C26	660	8-6	Up to 200 TPH

#### SINGLE PUMP / DOUBLE CYCLONE SETUP

When dealing with cyclo-pacs, i.e. more than two cyclones arranged in a cluster it is advisable to contact Gromatex and our engineers will take on board each specific application and can advise on the set up required.

Cyclone Type	Cyclone Size	Cyclone Qty	Pump Size	Max Output
C15	380	2	6-4	Up to 200 TPH
C20	500	2	8-6	Up to 300 TPH
C26	660	2	10-8	Up to 400 TPH

## **HYDROCYCLONES**



#### **OPERATING VARIABLES**

& TUNING

During the operation of the cyclone there are certain variables that will change and can affect the performance of the cyclone. The two main variables to be concerned about are feed solids concentration and feed pressure.

#### **CYCLONE VARIABLES**

Certain parts within the assembly of the cyclone can be altered to change or tune the properties of the cyclone. Cut points can be managed by changing the inlet diameter, the vortex finder and most easily the spigot assembly. Gromatex carry a full range of spigots and vortex finders which are available upon request.

Cyclone Type	Cyclone Size (mm)	Typical Cut Point
CI5	380	63 microns
C20	500	63 microns
C26	660	75 microns





