



**ABKO TEC**

# IWAKO

## HYDROCYCLONE SAND SEPARATOR CATALOG

---



082 547 9989



[saleslabkotec@gmail.com](mailto:saleslabkotec@gmail.com)



[www.strainer-filter.com](http://www.strainer-filter.com)



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



@abkotec



082 547 9989

## ABOUT ABKO TEC

**ABKO TEC** IS A PROFESSIONAL SUPPLIER AND MANUFACTURER OF INDUSTRIAL VALVE EQUIPMENT, SPECIALIZING IN HIGH-QUALITY STRAINER FILTERS AND PIPELINE FILTRATION SYSTEMS DESIGNED FOR A WIDE RANGE OF INDUSTRIAL APPLICATIONS. OUR PRODUCTS ARE ENGINEERED TO REMOVE UNWANTED SOLID PARTICLES FROM PIPELINES, HELPING TO PROTECT CRITICAL EQUIPMENT SUCH AS PUMPS, VALVES, FLOW METERS, AND CONTROL SYSTEMS. WITH A STRONG COMMITMENT TO ENGINEERING EXCELLENCE, PRODUCT RELIABILITY, AND COMPLIANCE WITH INTERNATIONAL STANDARDS, **ABKO TEC** PROVIDES DEPENDABLE FILTRATION SOLUTIONS FOR DEMANDING INDUSTRIAL ENVIRONMENTS.

OUR STRAINER FILTERS ARE WIDELY USED IN INDUSTRIES INCLUDING OIL & GAS, PETROCHEMICAL, CHEMICAL PROCESSING, POWER GENERATION, WATER TREATMENT, MARINE, AND GENERAL INDUSTRIAL PLANTS. DESIGNED FOR DURABILITY AND EFFICIENT PERFORMANCE, OUR PRODUCTS HELP IMPROVE SYSTEM RELIABILITY, REDUCE MAINTENANCE COSTS, AND ENSURE SMOOTH OPERATION OF INDUSTRIAL PIPING SYSTEMS.

ABKO TEC OFFERS A COMPREHENSIVE RANGE OF BASKET STRAINER SOLUTIONS TO MEET VARIOUS OPERATIONAL REQUIREMENTS. OUR PRODUCT RANGE INCLUDES SEVERAL TYPES OF BASKET STRAINERS DESIGNED FOR DIFFERENT FLOW CONDITIONS AND MAINTENANCE PREFERENCES.

THROUGH CONTINUOUS PRODUCT DEVELOPMENT, STRICT QUALITY CONTROL, AND CUSTOMER-FOCUSED SERVICE, ABKO TEC IS COMMITTED TO DELIVERING RELIABLE INDUSTRIAL FILTRATION SOLUTIONS AND BUILDING LONG-TERM PARTNERSHIPS WITH CUSTOMERS WORLDWIDE.

## ABKO TEC LIMITED PARTNERSHIP (HEAD OFFICE)



082 547 9989



[saleslabkotec@gmail.com](mailto:saleslabkotec@gmail.com)



[www.strainer-filter.com](http://www.strainer-filter.com)



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



@abkotec



082 547 9989



## PRODUCTS “IWAKO” INDUSTRIAL STRAINER FILTERS

- STANDARD BASKET STRAINER
- MANUAL BRUSH CLEANING BASKET STRAINER
- AUTOMATIC BASKET STRAINER
- AUTOMATIC BACKWASH STRAINER
- DUPLEX BASKET STRAINER
- HYDROCYCLONE SAND SEPARATOR
- SCREEN FILTER ELEMENT
- CUSTOM FABRICATED STRAINER FILTER FOR SPECIALIZED APPLICATIONS

### KEY FEATURES

- HIGH FILTRATION EFFICIENCY FOR PIPELINE PROTECTION
- ROBUST CONSTRUCTION FOR INDUSTRIAL APPLICATIONS
- LARGE DIRT HOLDING CAPACITY
- LOW PRESSURE DROP DESIGN
- EASY MAINTENANCE AND CLEANING
- FLEXIBLE INSTALLATION AND MATERIAL OPTIONS
- CONTINUOUS OPERATION AVAILABLE (DUPLEX / AUTOMATIC MODELS)
- CUSTOM FABRICATION AVAILABLE FOR SPECIAL PROJECTS

### TYPICAL APPLICATIONS

THE STANDARD BASKET STRAINER IS WIDELY USED ACROSS VARIOUS INDUSTRIAL SECTORS WHERE PIPELINE PROTECTION IS REQUIRED:

- WATER TREATMENT SYSTEMS
- COOLING WATER CIRCULATION SYSTEMS
- CHEMICAL PROCESSING PLANTS
- OIL & GAS FACILITIES
- FOOD & BEVERAGE PROCESSING
- POWER GENERATION PLANTS
- CHILLER



# “IWAKO” HYDROCYCLONE SAND SEPARATOR



## “IWAKO” HYDROCYCLONE SAND SEPARATOR SPECIFICATIONS

Body : Carbon Steel / Stainless Steel SUS304 ,304L,316,316L  
 Drain Valve : Brass / Stainless Steel  
 End Connection : Flanged , Threaded , Welded

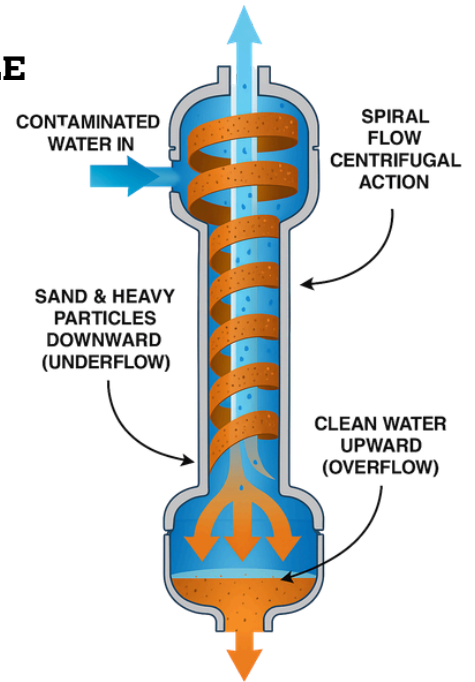
## ADVANTAGES OF HYDROCYCLONE SAND SEPARATOR “IWAKO”

- NO FILTER ELEMENT REQUIRED (MAINTENANCE-FREE OPERATION)
- CONTINUOUS SEPARATION WITHOUT SYSTEM SHUTDOWN
- HIGH EFFICIENCY FOR SAND AND HEAVY PARTICLE REMOVAL
- LOW MAINTENANCE AND LONG SERVICE LIFE
- NO MOVING PARTS (RELIABLE OPERATION)
- COMPACT DESIGN WITH LOW PRESSURE LOSS
- LOW COST

## HYDROCYCLONE SAND SEPARATOR WORKING PRINCIPLE

CONTAMINATED FLUID ENTERS THE SEPARATOR THROUGH THE TANGENTIAL INLET, CREATING A HIGH-VELOCITY SWIRLING (VORTEX) FLOW INSIDE THE CYLINDRICAL BODY. DUE TO CENTRIFUGAL FORCE, HEAVIER PARTICLES SUCH AS SAND AND SOLIDS ARE FORCED OUTWARD TO THE WALL AND MOVE DOWNWARD ALONG THE SPIRAL PATH.

THE SEPARATED SOLIDS ARE COLLECTED AT THE BOTTOM CHAMBER AND DISCHARGED THROUGH THE UNDERFLOW OUTLET, WHILE THE CLEANED FLUID FORMS AN INNER UPWARD VORTEX AND EXITS THROUGH THE TOP OUTLET. THIS PROCESS ENABLES CONTINUOUS SEPARATION WITHOUT THE NEED FOR FILTER ELEMENTS.



## HYDROCYCLONE SAND SEPARATOR CATALOG “IWAKO”



# “IWAKO” HYDROCYCLONE SAND SEPARATOR PVC



## “IWAKO” HYDROCYCLONE SAND SEPARATOR SPECIFICATIONS

- Body : PVC
- Drain Plug Valve : Brass
- Vortex Finder (Outlet Tube) : PVC Center Tube for Clean Water Outlet
- Cone Section : PVC Reinforced Conical Body, Smooth Internal Surface
- Inlet / Outlet : Flanged
- Drain Valve : Ball Valve Brass

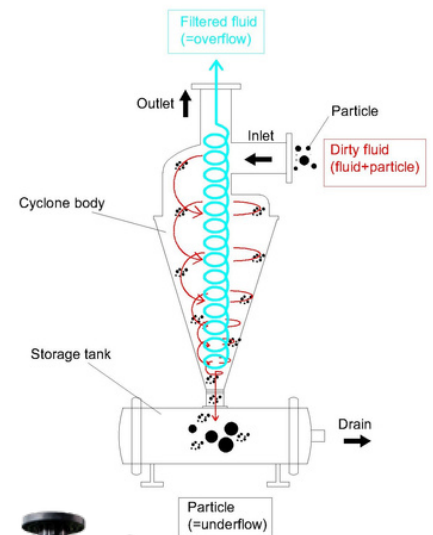
## ADVANTAGES OF HYDROCYCLONE SAND SEPARATOR PVC “IWAKO”

- Corrosion-resistant PVC construction
- No filter element - no clogging or replacement required
- Continuous operation without system shutdown
- High efficiency for sand and heavy particle separation
- Low maintenance and no moving parts
- Lightweight and easy installation
- Cost-effective solution for water treatment applications
- Low Cost

## HYDROCYCLONE SAND SEPARATOR “PVC” WORKING PRINCIPLE

Contaminated fluid enters the hydrocyclone through the tangential inlet, generating a high-speed vortex inside the cyclone body. Centrifugal force drives heavier particles such as sand toward the outer wall, where they spiral downward along the cone section.

The separated solids are collected in the bottom storage tank and discharged through the underflow (drain) outlet. Meanwhile, the lighter and cleaner fluid forms an inner upward vortex and exits through the top outlet (overflow). This continuous process enables effective solid-liquid separation without the use of filter elements.



## HYDROCYCLONE SAND SEPARATOR PVC CATALOG “IWAKO”

