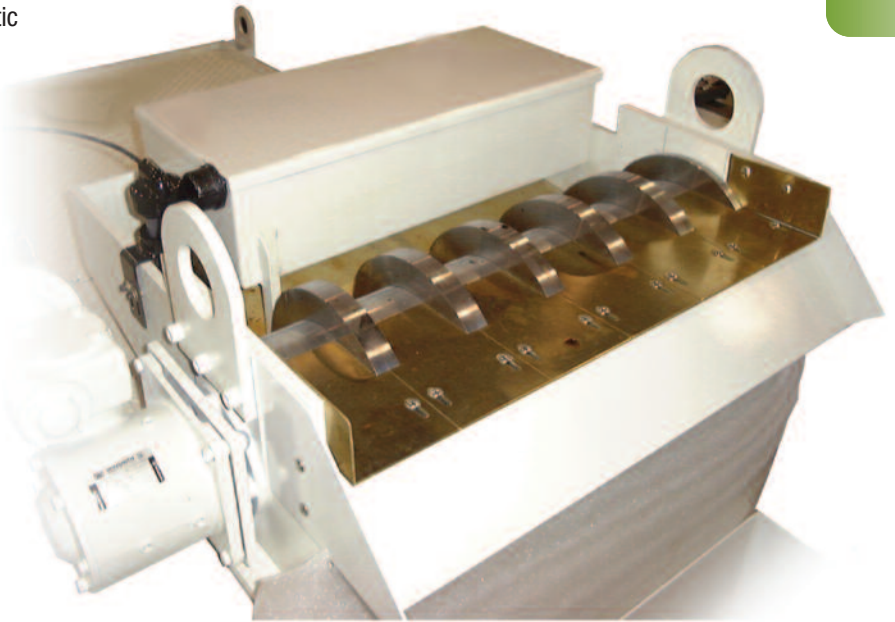
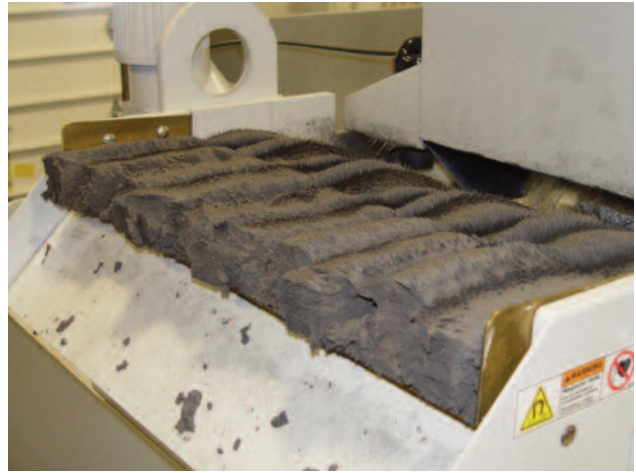


## Magnetic Filtration

### *HPS, HPA and HPN Series*

Our **Magnetic Indexing Drum Filters**, both standard ferrite ceramic drum as well as the rare earth Neodymium Iron Boron Magnetic drum, are the leaders in the industry in design and magnetic field strength. The Neo filter provides strengths of 10X that of standard ferrite ceramic!

What sets us apart is our raised pole drum construction and the logic employed to index the drum, automatically on demand. Compared to smooth cylindrical drums that rotate continuously, our raised pole design provides 40% more magnetic surface area per linear foot. And because the drum is not rotated continuously, the captured contaminants being discharged are drier which reduces coolant loss. Our automatic indexing control logic will only rotate the drum when the fluidic probe generates a signal, as the captured contaminants continue to build up in the intense magnetic field. The purpose behind this circuitry is to maintain the optimum porosity of the filter matrix and thus using the matrix to capture some non-magnetic particles as well as heavy oils and greases. The most-reliable, ultra-efficient filtration and removal of magnetic and non-magnetic contaminants, from metal-working fluids.



#### **APPLICATIONS:**

- MACHINING:
  - BROACHING
  - GUN DRILLING
  - HOBGING
  - MILLING
- GRINDING:
  - CENTERLESS ID & OD
  - THRUFEED
  - CYLINDRICAL ROLL
  - DOUBLE DISK
  - CREEP FEED & THREAD GRINDING
- HONING
- MICRO SIZING

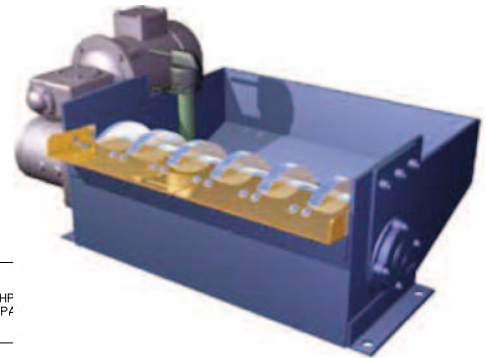
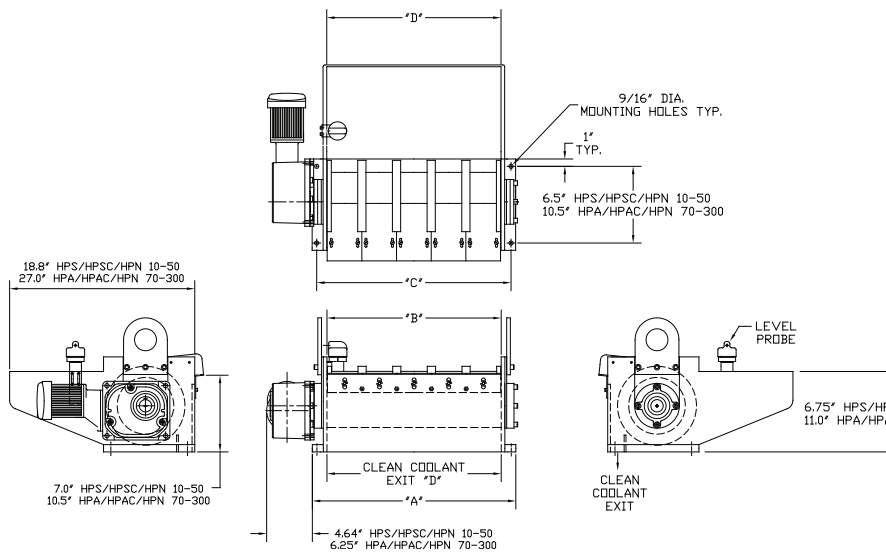
#### **ATTRIBUTES:**

- CUT YOUR COST OF DIRTY COOLANT DISPOSAL BY UP TO 90%
- CAPABLE OF MAINTAINING MACHINE TOOL COOLANTS TO 10 MICRON
- NOMINAL CLARITY WITHOUT THE USE OF CONSUMABLE MEDIA
- IMPROVE TOOL LIFE AND PRODUCT QUALITY
- SAFEGUARD WORKER HEALTH AND SAFETY

#### **BENEFITS:**

- DESIGNED FOR EASY INSTALLATION AND MINIMAL MAINTENANCE
- HIGHLY RELIABLE SYSTEMS WITH LITTLE TO NO DOWNTIME
- MINIMAL OPERATOR INVOLVEMENT AND TRAINING
- NO NEED TO BUDGET FOR EXPENSIVE CONSUMABLES
- OPERATES FOR PENNIES PER DAY IN ELECTRICAL COST
- SYSTEM PAYBACK TYPICALLY IN LESS THAN 9 TO 12 MONTHS
- SYSTEMS AVAILABLE FOR SMALL, MEDIUM AND LARGE OPERATIONS

# Magnetic Filtration



HPS-10&HPSC-10 THRU HPS-50&HPSC-50 IN DECIMALS OF AN INCH (MILLIMETERS)					
MODEL**	Flow Rate* (G.P.M.)	A	B	C	D
HPS-10/HPSC-10	10	10.750 (273)	7.000 (178)	9.500 (241)	7.000 (178)
HPS-15/HPSC-15	15	14.125 (359)	10.375 (264)	12.875 (327)	10.375 (264)
HPS-20/HPSC-20	20	17.438 (443)	13.688 (348)	16.188 (411)	13.688 (348)
HPS-30/HPSC-30	30	24.063 (611)	20.313 (516)	22.813 (579)	20.313 (516)
HPS-40/HPSC-40	40	30.750 (781)	27.000 (686)	29.500 (749)	27.000 (686)
HPS-50/HPSC-50	50	37.375 (949)	33.625 (854)	36.125 (918)	33.625 (854)
HPA-70&HPAC-70 THRU HPA-300&HPAC-300 IN DECIMALS OF AN INCH (MILLIMETERS)					
MODEL**	Flow Rate* (G.P.M.)	A	B	C	D
HPA-70/HPAC-70	70	27.813 (706)	23.813 (605)	26.563 (675)	23.813 (605)
HPA-90/HPAC-90	90	32.563 (827)	28.563 (725)	31.313 (795)	28.563 (725)
HPA-110/HPAC-110	110	37.313 (948)	33.313 (846)	36.063 (916)	33.313 (846)
HPA-130/HPAC-130	130	42.063 (1068)	38.063 (967)	40.813 (1037)	38.063 (967)
HPA-150/HPAC-150	150	46.813 (1189)	42.813 (1087)	45.563 (1157)	42.813 (1087)
HPA-160/HPAC-160	160	51.563 (1310)	47.563 (1208)	50.313 (1278)	47.563 (1208)
HPA-170/HPAC-170	170	56.313 (1430)	52.313 (1329)	55.063 (1399)	52.313 (1329)
HPA-200/HPAC-200	200	65.875 (1673)	61.875 (1572)	64.625 (1641)	61.875 (1572)
HPA-250/HPAC-250	250	80.125 (2035)	76.125 (1934)	78.875 (2003)	76.125 (1934)
HPA-300/HPAC-300	300	94.375 (2397)	90.375 (2296)	93.125 (2365)	90.375 (2296)

\*Flow rates are based on water based coolant applications. Flow rates on oil applications are reduced by 50%.

\*\*These dimensions are for general reference only and are not certified drawings.

\*\*\* Suffix "C" on any model number represents "Chip Style Housing" for machining chip applications.

\*\*\*\* Suffix "N" on any model number represents "Neodymium Iron Boron" rare earth magnetic drum.

## SmartSkin Products:

- Centralized & Portable Coolant Recycling Systems
- Oil Water Separators
- Floating Suction Skimmers
- In-Line High Powered Rare-Earth Magnets for Fluid Filtration
- Sumpcleaners & Coolant Dispensers

## Materials of Construction

All Magnetic Filters are manufactured to industrial grade standards. Drums are constructed of 304 S/S and A36 HRS combinations. Filter Housings are constructed of HRS, 304 S/S, and 6061 T6 Aluminum.

## Optional Equipment

- Extended swarf discharge chute designed to meet site discharge requirements.
- Inlet distribution diffuser box designed to eliminate splash and evenly distribute dirty fluid across width of magnetic drum.
- Inlet enclosure designed to completely seal the top of the filter assembly (includes extend swarf discharge chute).

## Site Requirements

### Electric:

120/1/60 VAC, 208-230/460/ 3/60 VAC

### Piping:

Only customer piping required is for the dirty fluid inlet connection or dirty fluid flume in the case of gravity feed installations.

### Consumables:

NO CONSUMABLES REQUIRED!

### Maintenance:

Only annual Periodic Maintenance Cycle required which consists of lubrication of 2 bearings and inspection for wear.