



V

TECH

- V-Tech Mining Cleaning Solutions (Pty) Ltd is a dynamic company that specializes in mining operations in conventional mining, pillar mining and cycle mining methods and we also do panel equipping of workplaces and includes equipment moves and opening up and secondary support work and the rails and track equipping and maintenance. In our cleaning solutions we do sweepings and vamping operations too.
- On the underground cleaning solutions, we do dam cleaning, cross-cut cleaning and drains and sump cleaning. On the spillages on conveyor belts we do the cleaning by means of hand cleaning and make use of vacuum units to clean the spillages.
- In plants operations - industrial cleaning where our focus on cleaning solutions - clear water dams, Ericson dams, sill traps, sumps, drains, CIP tanks, spillage in plants, cleaning of spillages on conveyor belts and cleaning of the conveyor belt structure; by means of technology - Vacuum units and Slurry pumps amphibious excavating and dredge pumping.
- We also do supply of Ventilation equipment, ventilation brattices different widths and lengths, supply of ventilation VB20 vent wrap, we supply new 500kw(10mpa) expanded fin type coil and car, we also do the refurbishment of the 500kw(10mpa) expanded fin type coil and car.
- We as V TECH Cleaning Solutions For Mining want to make a positive contribution and add value.





V TECH - VENTILATION PRODUCTS.

Underground mine ventilation provides a flow of air to the underground workings of a mine of sufficient volume to regulate temperature.

Our products is there to direct the ventilation flow to the correct working areas and our cooling systems,

to assist to cool the temperature of the ventilation.



VENTILATION PRODUCTS BACKGROUND.

In 1988 we developed a new type of ventilation door made of rubber with a self-closing hinge construction. The idea worked perfect for underground conditions. Due to the increased price of raw materials and availability of rubber products the appliance of the above became less and less. Therefore, we started with new concepts to be used on the mines namely:

1. Centre Gulley Brattices were made of the belting which is still in use in the mining industries.
2. In the early nineties we started testing various products to be used as a dust suppressant underground and for compaction roads on surface at various locations. The product is called Zenatex HE 2000, up to date various mines are still using the product.
3. In 1993 we developed a product called VB20 Vent Wrap Sealer, to be applied to ventilation pipes to seal leaks on the flange side of each pipe. All the CSIR tests on this product have been done to ensure that it conforms to the mine ventilation standards. (self-extinguishing, low toxicity, memory and self-adhesive) This product is currently used on various Gold and Platinum mines.
4. In 1995 we went to the USA to look at a product which could be beneficial for underground cooling in the stopes and haulages. We had a unit made up in the USA which was flown out to South Africa for CSIR test underground at Anglo Gold mine.

Since the rand-dollar fluctuation became too big, we found a suitable manufacturer in Boksburg South Africa. We then re-designed the Cooling unit to such an extent that we are now able to manufacture a better-quality product as in the USA, as well as a product that can withstand pressures of 17MPa and more.



VENTILATION PRODUCTS BACKGROUND.

All the different size coils were manufactured (100Kw - 200Kw - 300Kw - 500Kw) and tested at the CSIR for quality and performance.

5. We have recently designed and developed a product to be used on refrigeration cooling pipes for insulation on surface and underground. The product is called ISO - Thermal Lagging. This product took 2 years to develop and was also tested at the CSIR and SABS and conforms to the mine standards. We used the same manufacturers that manufactured the VB20 Vent Wrap Sealer for us because they have the modernized and efficient equipment to manufacture the above products.
6. We are currently busy developing two new products for the mining industry namely an insulating Paint and a See-through Ventilation Door.
7. During the past 15 years we designed and implemented quite a few products for the mining industry, which are still being used.
8. We do not manufacture the above products, due to the enormous cost of rigging up plants to manufacture these products. That is why we came to an agreement with manufactures to manufacture exclusively for V Tech .
(outsource)

V Tech also render combined assistance to all construction & engineering services in South-Africa, and Africa, Tremendous success in the mining sector has shown that V Tech , has the ability, knowledge and experience to render the best customer service to their client. Furthermore we provide tailor made quotation that suite the clients needs



SCOPE OF SUPPLY.

VENTILATION BRATTICES	VB 20 VENT WRAP
BULK COOLERS (200KW, 300KW, 500KW)	INLINE SPOT COOLERS(60KW, 100KW)
COOLING CARS HEAT EXCHANGERS	RE-FURBISHMENT OF EQUIPMENT



VENTILATION BRATTICES WITH LOOP.

Ventilation Brattices to be installed to act as a curtain to secure and direct ventilation to the work places.



ITEM	LENGHT	WIDTH	THICKNESS
BRATTICE	1.52M	460MM	4.0MM
BRATTICE	1.85M	460MM	4.0MM
BRATTICE	2.45M	460MM	4.0MM
BRATTICE	2.45M	765MM	4.0MM
BRATTICE	3.5M	915MM	4.0MM
BRATTICE	2.8M	460MM	4.0MM
BRATTICE	2.5M	400MM	4.0MM

VB 20 VENT WRAP.



ITEM	LENGHT	WIDTH
VB 20 VENT WRAP	33M	305MM



Primary Purpose: To seal Ventilation, Pipe & Flanges underground as well as Air column leaks under ground.

VB 20 is a durable and strong product and only need to wrap two to tree times around pipe to provide a proper seal. Cost effective.



500KW,1000KW,1500KW &2000KW BULK COOLER (HEAT EXCHANGERS)

Bulk air heat exchangers in underground operations are used either to cool air when maximum legal return temperatures from the working areas (reject temperatures) are reached, or to cool water from underground refrigeration plants (heat rejection).



INLINE COOLER(cooling coil).

ITEM	HEIGHT	LENGHT	WIDTH	KW
INLINE COIL	750MM	750MM	150MM	100KW
INLINE COIL	750MM	750MM	150MM	80KW
INLINE COIL	750MM	750MM	150MM	60KW

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This inline cooler get installed in - stope at working places to cool down the hot ventilation.



200kw, 300KW and 500kw EXPANDED FIN TYPE COOLING CAR HEAT EXCHANGERS.

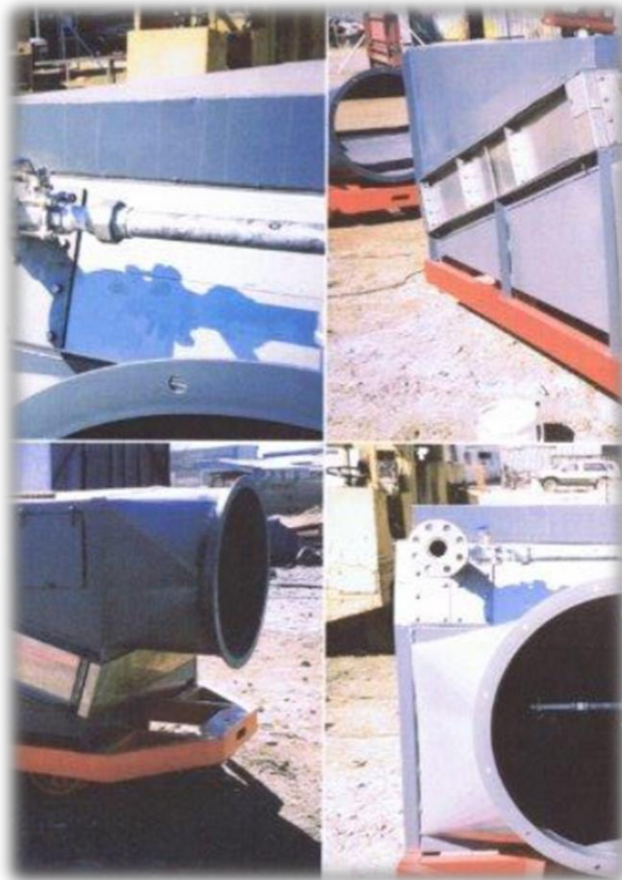
The cooling car is installed in cross cuts and haulages for the cooling of the ventilation for underground working places.

The cooling cars can be supplied in Low pressures & High Pressures.

The cooling car heat exchangers is CSIR tested.

We supply new fin type cooling car heat exchangers.

We also do refurbish old fin type cooling car heat exchangers where we refurbish the unit and supply a new coil to the unit.

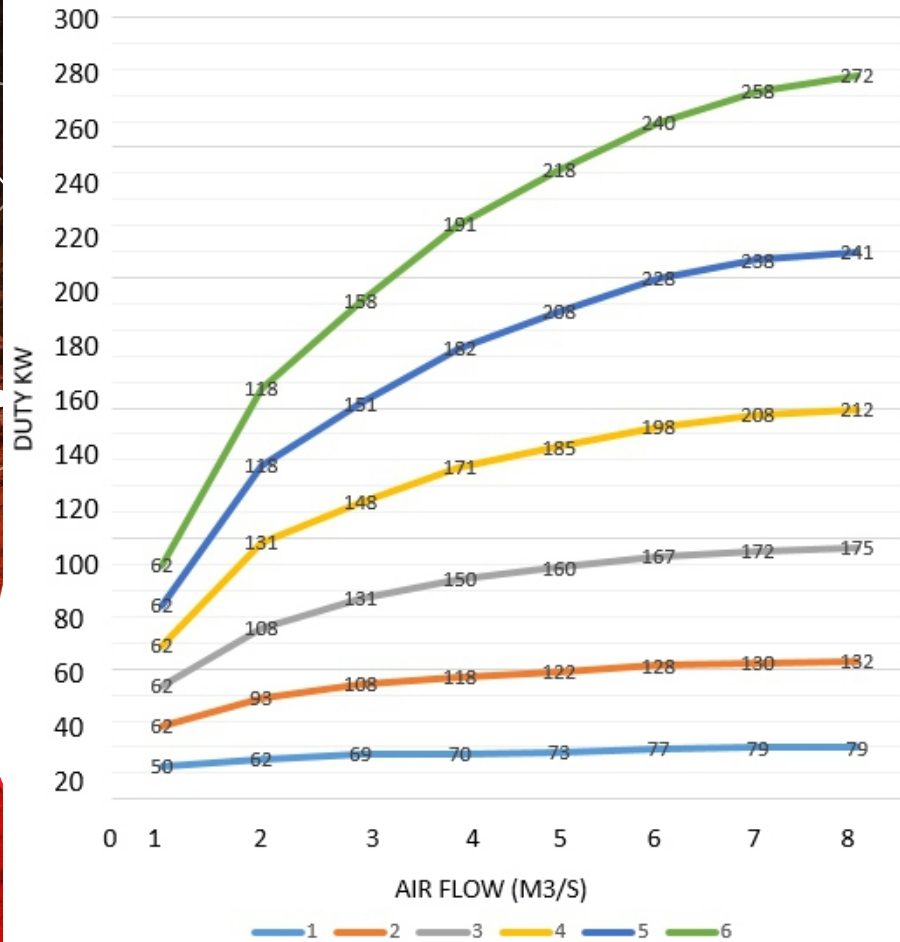




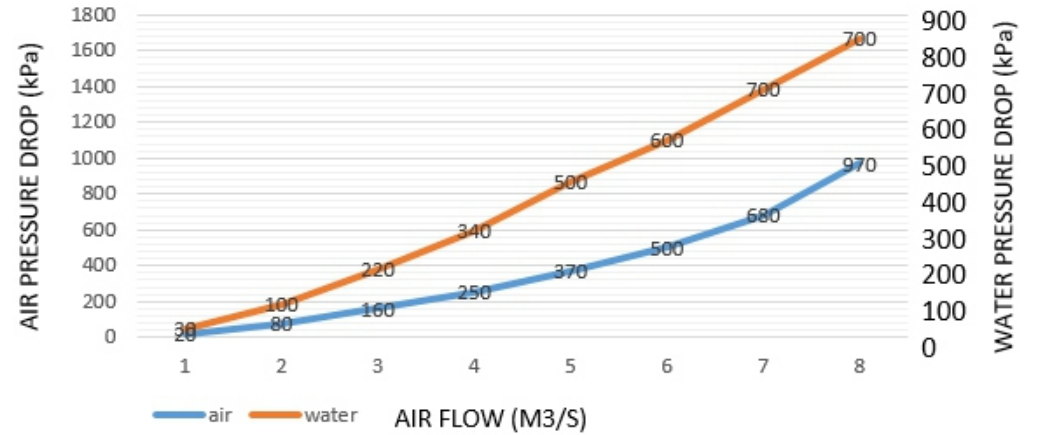
PERFORMANCE 100KW

100 KW VIPER HEAT EXCHANGER PERFORMANCE GRAPHS

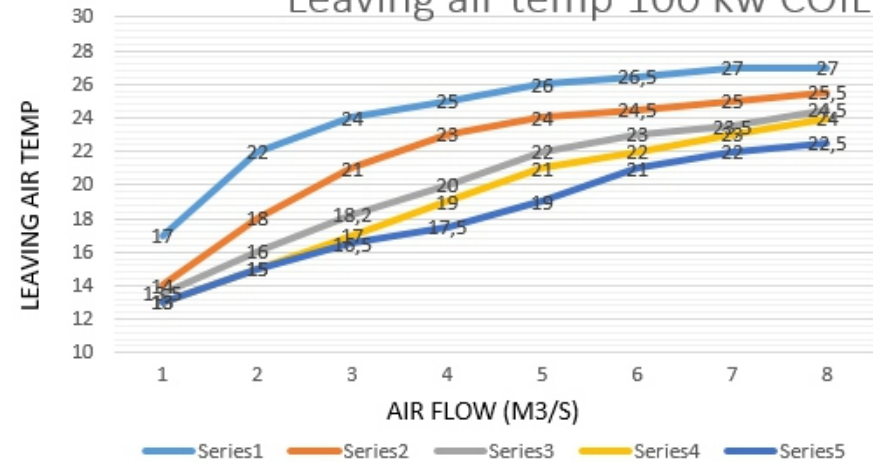
DUTY 100 KW COIL



PRESSURE DROP 100 KW COIL



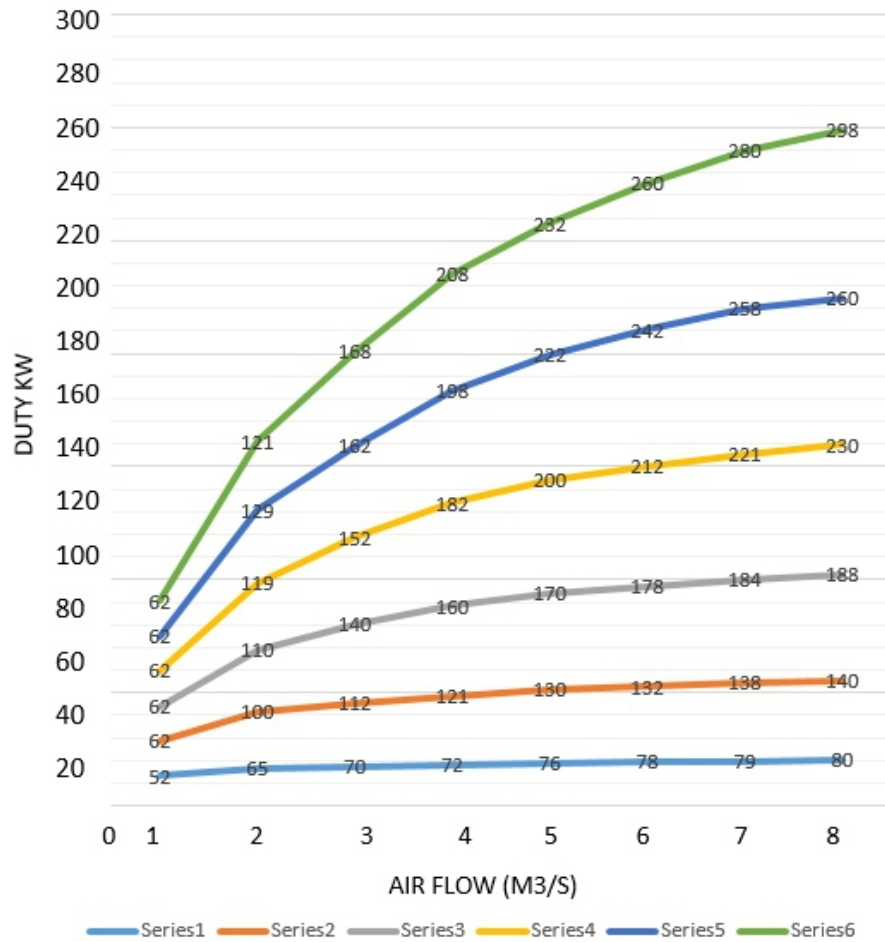
Leaving air temp 100 kw COIL



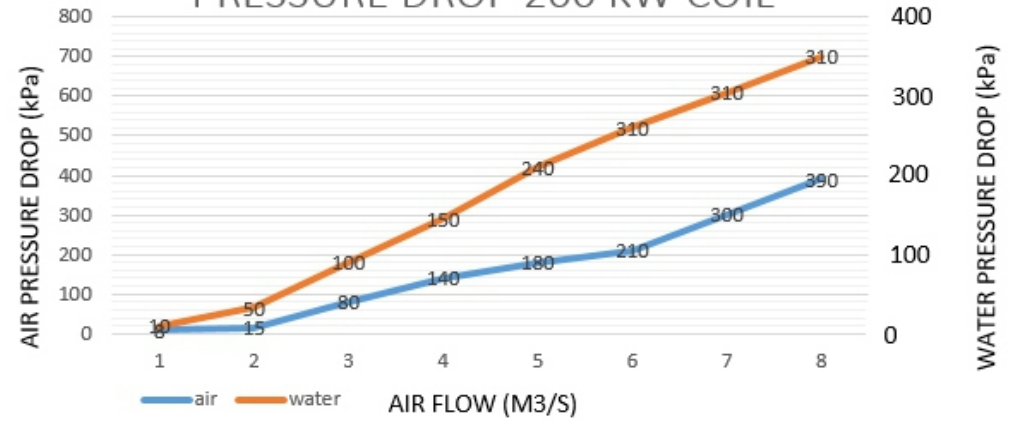
PERFORMANCE 200KW

200 KW VIPER HEAT EXCHANGER PERFORMANCE GRAPHS

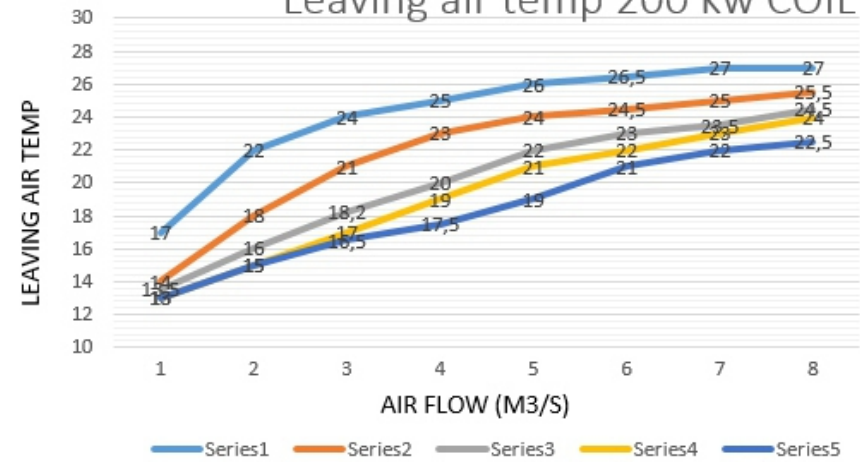
DUTY 200 KW COIL



PRESSURE DROP 200 KW COIL



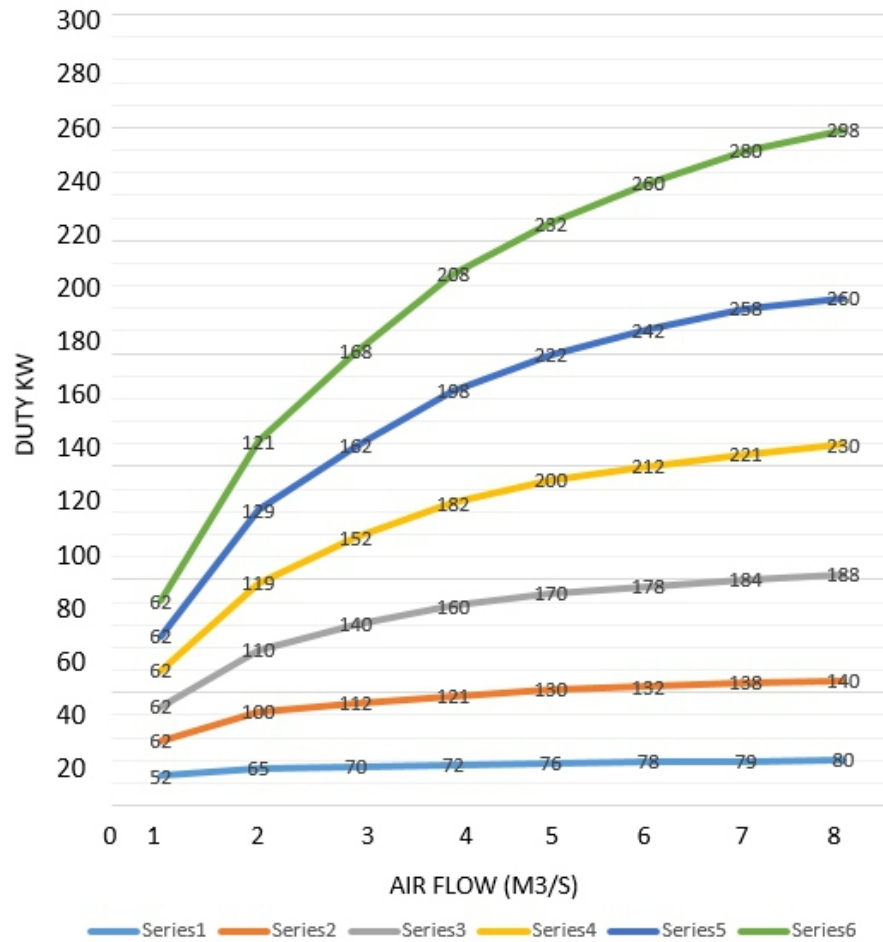
Leaving air temp 200 kw COIL



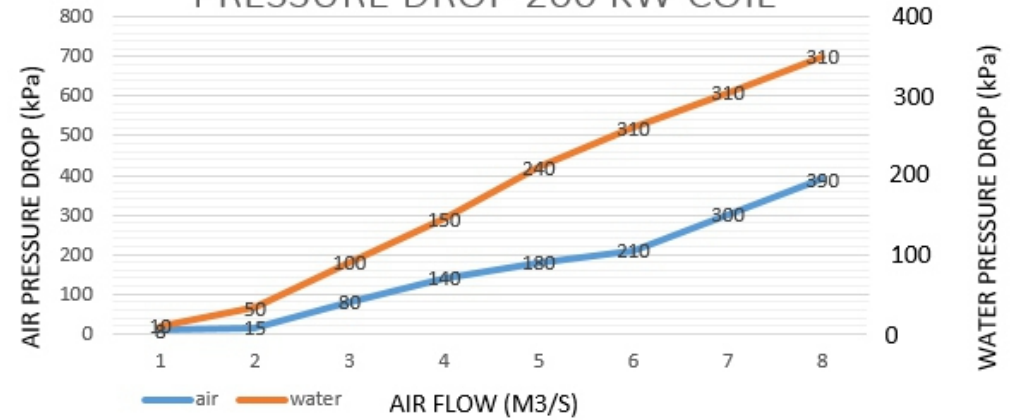
PERFORMANCE 300KW

200 KW VIPER HEAT EXCHANGER PERFORMANCE GRAPHS

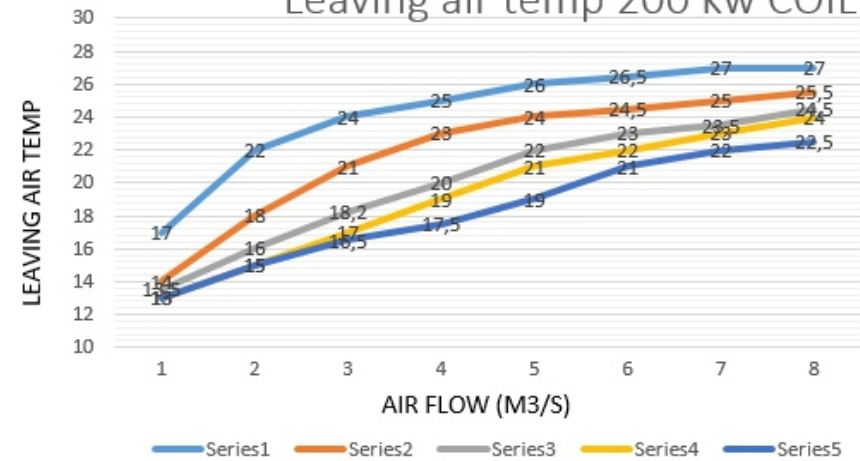
DUTY 200 KW COIL



PRESSURE DROP 200 KW COIL



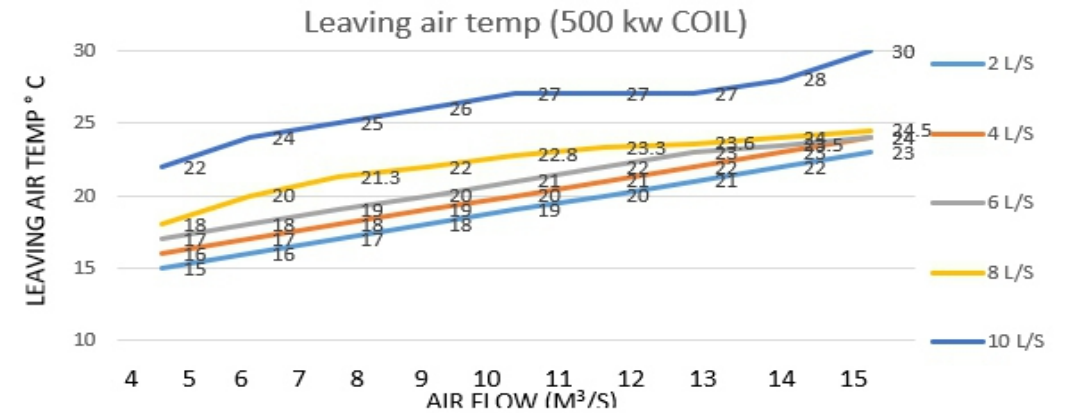
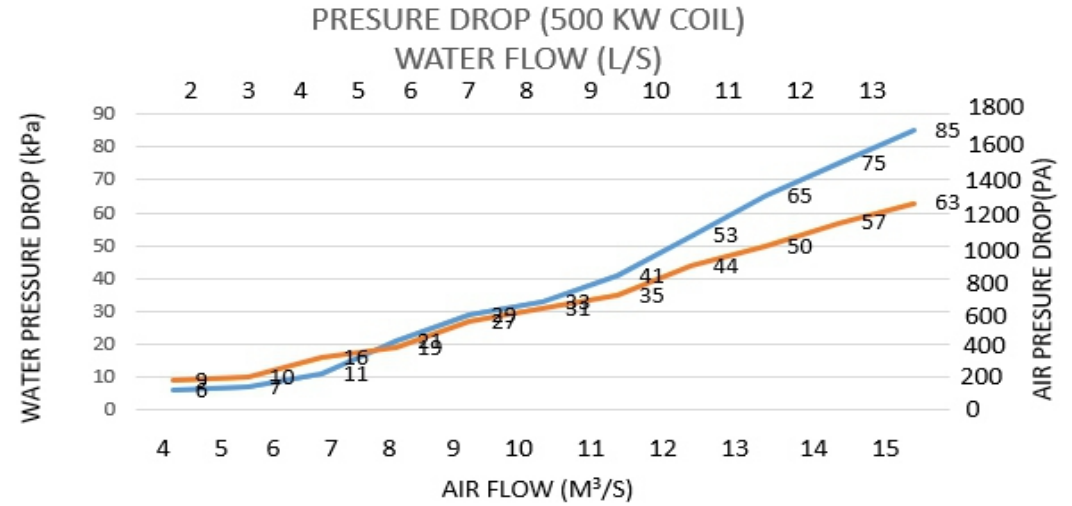
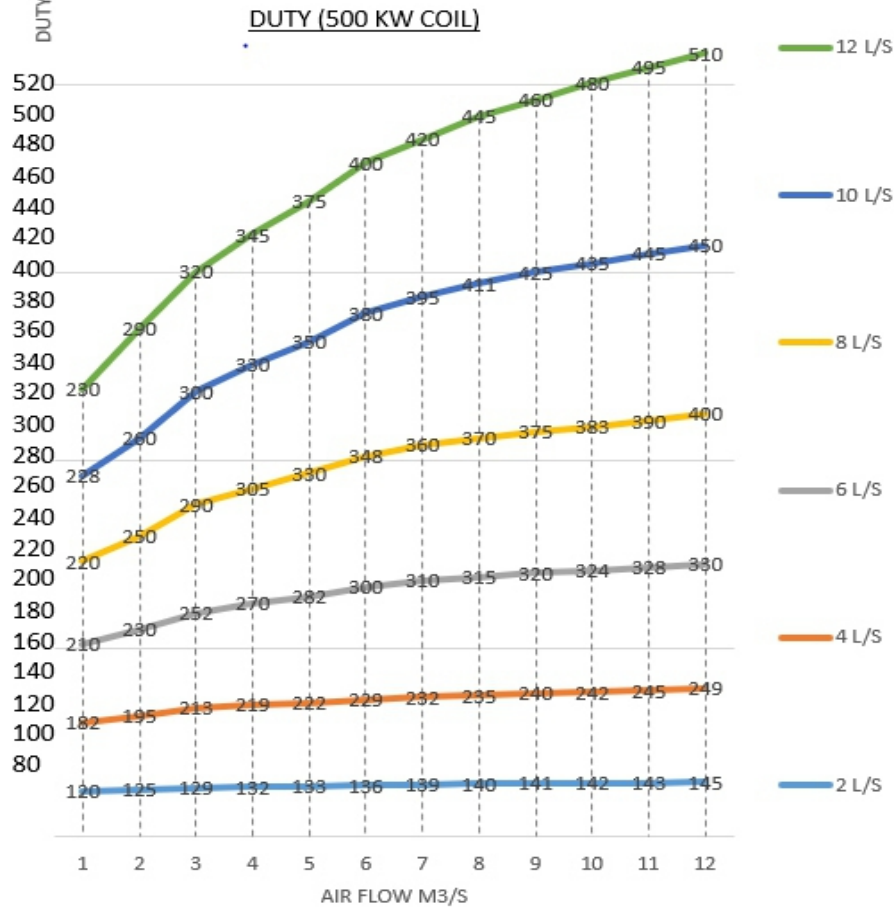
Leaving air temp 200 kw COIL



PERFORMANCE 500KW

500 KW VIPER HEAT EXCHANGER PERFORMANCE GRAPHS

500 KW COIL - 32 MM FIN SPACING
 ENTERING AIR FLOW 32°C DB / 28,5°C WB (SEA LEVEL)
 ENTERING WATER 12,0°C



CONCLUSION

VENTILATION.

With the knowledge and experience of the V Tech team and being a proudly South African company we are renowned for delivering quality service to all our clients in the Mining sector in South Africa and Africa.

As our drive to make a positive difference our products are part of this drive where we influence challenging ventilation conditions into favourable conditions to work with in.





CONTACT DETAILS

Please look at our web page.

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