



MAIN ADVANTAGES OF A MECHANI MAG MAGNET

Self-Cleaning Elctromagnet:

- ✓ **5 YEAR WARRANTY** ON INNER COILS and MAGNETISM!
- ✓ **2 YEAR WARRANTY** on external moving components – excluding the belt.
- ✓ Our coils are completely wet wound (soaked in varnish) using solid drawn aluminium wire wrapped in double layer fibreglass dipped in high quality Class H (**180°C**) varnish.
- ✓ **Rectangular** cross-sectional, **solid-rod type** aluminium wire is used - as the coils are wound, each layer of wire lies flush on the previous layer – **no air gaps AND coils take up less volume** and less chance of cracking/tearing/breaking with time compared with “strip coil” aluminium.
- ✓ With **no air gaps heat does not get trapped** and is **transferred more effectively through the aluminium coil** itself and dissipated out the corrugated/finned sides of casing.
- ✓ By taking up less overall volume, we allow for the use of thicker wire and **therefore lower current densities** through coil windings – i.e. **less heat and better magnetic field!**
- ✓ More turns due to larger space available for coil wire therefore **stronger magnetic field** produced.
- ✓ Our unique **tight “packing” of each turn** on the next prevents inner winding turns from moving and rubbing on one another from vibration/impact etc thereby **reducing the chances of wear of wire insulation between winding turns – longer lifespan.**
- ✓ Each coil is **tightly packed** and insulated with high quality **insulation spacers.**
- ✓ All insulation spacers are fastened tightly to the magnet body ensuring **no possibility of the coils coming into contact with the magnet steel body** or any fastening screws.
- ✓ All coils are compactly **“compressed” and “baked”** to ensure minimal spacing for no possible movement of coils.
- ✓ Additional unique “spinnerkop” **fastening device** is fitted to the bottom of coils to **protect and fasten the coils** in place to further prevent possible movement of coils. No possibility of coil “jumping” which can lead to insulation failure!
- ✓ Our terminal boxes are made completely of heavy duty, thick steel.
- ✓ Suspension lugs are fully integrated **into the magnet casing** and are fully welded right-round – not bolt-on or weld-on-top type.
- ✓ Each suspension lug has 2 X lifting holes – 1 for rigging and 1 for permanent suspension.
- ✓ We use **IEC dimension Motors** with **SEW gearboxes** – interchangeable with any other brand IEC motor unit.
- ✓ Gearboxes all have **oil level sight-glasses** to enable oil level monitoring.

- ✓ We have the capability to modify designs to suit **site specific restrictions** – ie max heights, max width etc.
- ✓ Our pulleys are all made from high quality seamless pipe with wall thickness minimum: 12mm.
- ✓ **Belt Tear/Jam sensors** are fitted to non-drive pulleys to monitor for belt failure.
- ✓ Our magnets are designed for long-lifespan and minimal maintenance requirements.
- ✓ We have been designing, testing and manufacturing magnets successfully for **50 years** now with many loyal happy customers.

Control Panel/Rectifier:

- ✓ Full control cubicle with switchgear components.
- ✓ Control cubicle is offset away from the Transformer tank thereby avoiding possible heat from interfering with switchgear components.
- ✓ Control cubicle enclosure allows for easy access for installation and maintenance.
- ✓ Control Cubicle is detachable from Transformer tank if required.
- ✓ We only use top quality electrical components – eg. Schneider, CBI etc.
- ✓ Our control cubicles are fully weatherproof with a glazed outer door and internal access door complete with lockable isolator handle.
- ✓ Transformer tank has an easy to remove (light weight) lid and easy/spacious access to all internal components for easy maintenance and/or replacement should the need arise.

