



**IAS OIL FLUSHING AND CONTAMINATION REMOVAL TECHNOLOGY  
DESIGNED TO INSURE A RELIABLE START UP AFTER MAINTENANCE OR COMMISSIONING PROJECTS**

- Multi-stage Mechanical filtration to purify the system and the fluid
- Then IAS applies Tri-Blend De-Oxidizing Agent (D.O.A.) which increases the fluid solubility of the system fluid, by removing soluble and insoluble contamination and by-products of fluid oxidation which are present in not only the fluid but also have precipitated out within the system internals, causing sludge varnish and other agglomerations that foul and negatively affect the operation and reliability of the fluid and the fluid system itself.
- The IAS D.O.A is a blended product which is similar in composition to ion-exchange resins used in water systems; however, in this process, the D.O.A. acts as a Molecular Sieve through an Electro-Mechanical (not chemical) Process whereby the Free Radicals of differing polarity, otherwise known as precipitated oxidation by-products and other contamination which is designated for removal for fluid and system rejuvenation and reliability, are stripped from the fluid, thereby increasing its solubility factor.
- After the initial multistage Mechanical filtration and the D.O.A. process are begun, fractional vacuum distillation is employed to remove the small amounts of water (pure H<sub>2</sub>O) which is naturally present in the D.O.A. and through the IAS process is precisely and slowly released into the fluid slip stream and nearly simultaneously removed through the IAS process.
- Near the end of the process, IAS employs, Electro-magnetic particle agglomeration whereby the molecular binders attaching the remaining contamination to the system internals are broken and the contamination is allowed to dissolve back into the fluid (while maintaining a contamination factor in the fluid system well below the saturation point so all contamination remains inert to normal system operations) and then those last contaminants are removed slowly, precisely and reliably in the slip stream IAS process.
- The IAS process results in a process which is 100% effective in not only addressing the contamination build-up in the fluid but also the contamination build-up in the system...for it is the contamination precipitate build-up in the system that causes negative reliability issues such as erratic valve operation, catalyzed oxidation at a abnormally increased rate, sludge and blockage of orifices and filtration media, etc. All of this, through the IAS Process, is competed on-line and without downtime...making this process valuable as it avoids unnecessary downtime, unnecessary fluid replacement and disposal and simultaneously decontaminates all of the built-up system contamination which would otherwise adversely affect system operation. The IAS process is also the only viable solutions, short of an off-line, time-consuming, high in cost flush as normal oil change outs will only serve to ruin the new fluid as the system contamination will only dissolve into the new fluid past its saturation point and serve to continue a viscous circle or reliability shortcomings.

**The IAS process is the most reliable, economical and safe way to remove unwanted contamination from fluids which are degraded or degrading and simultaneously eradicates system contamination which has fouled the fluid system and can and /or will cause mechanical shortcomings.**