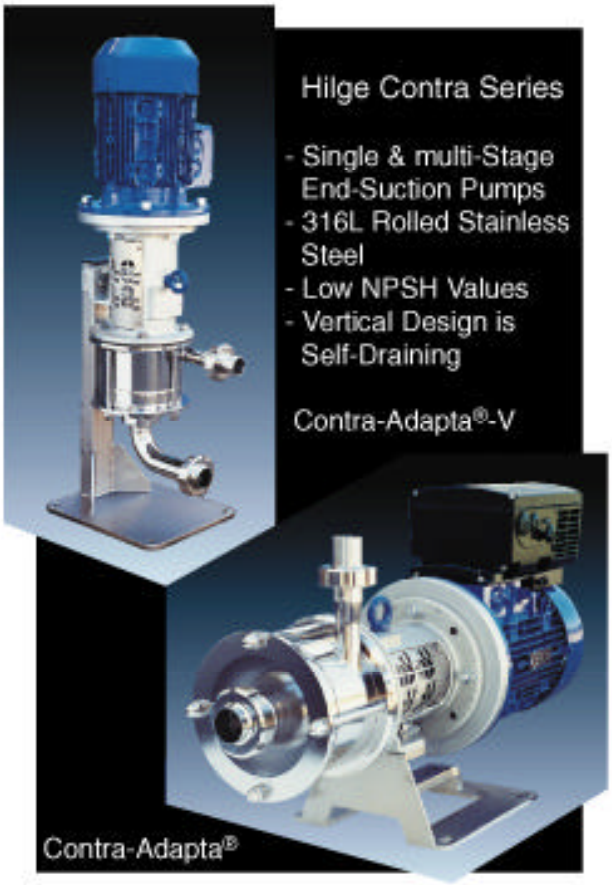
Rouging And Ferrite Eroding All Of Your Processing Profits?

Then Switch to the Hilge Sanitary Centrifugal Pumps

Hilge Sanitary Centrifugal Pumps have a surface material that reduces roughness, creating a "pore-free" finish. Unparalled in the indusrty, making them ideal for all sterile and CIP applications.



Here are The Pure Facts And Solutions

Nowadays, the acquisition of ultrapure liquid transfer pumps for your pharmaceutical, biotechnology or sterile environments requires many important decisions. Evaluation of the primary specifications and performance information is essential, but not enough. If your goal is to achieve a smooth, nearly particle-free surface finish, it is paramount for you to review both the pump's material composition quality and its' manufacturing process. The final finishing treatment used is also a critical point in determination of the stainless steel surface roughness.

While many claim to have the *"BEST "*, the majority of CIP/SIP pumps in service today are manufactured from CAST Stainless Steel. But due to the increased ferrite (iron) and low Nickel content in the 316L SS, as expressed by many leading experts, this type of material produces rouging and corrosion. And for elimination of rouging in sanitary system components, the ferrite content must be at <4%. Only ***Hilge Sanitary Centrifugal Pumps,*** made of cold-rolled, deep-drawn and forged (NON-CAST) 316L stainless steel are NON-ROUGING!

Through careful control of the manufacturing process and only using reliable low carbon rolled nickel chrome-molybedenum steel (Cr-Ni-Mo), every ***Hilge Sanitary Centrifugal Pump*** produced provides a low ferrite content between <1% to a maximum of <3% for all your special pharmaceutical applications. As a standard procedure, every ***Hilge Sanitary Centrifugal Pump*** is electro-polished to a non-porous seal that reduces the surface area by 90%. This treatment creates an ultra-smooth, extremely fine finish, with low shear and gentle handling characteristics. The total carefully controlled process produces an open "pore-free"surface, that ensures the elimination of any form of microorganism's survival possibility.

So, are you tired of constantly dealing with rouge in your WFI, RO and USP systems, along with the added expense of continual repassivation? Then why not make the switch to ***Hilge Sanitary Centrifugal Pumps*** today! Just contact one of our factory-trained engineers to discuss your specific pump application or entire operation.

To get the details, ask for our FREE pamphlet "The Facts About Ferrite & Rouging"

Shanley Pump & Equipment, Inc.

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Hilge Stainless Steel Pumps Will Save You Money $$$ On Your Repassivation!

Here are all of the Outstanding Features

- NON-ROUGING – Using only Cold-Rolled, Deep-Drawn & Forged (NON-CAST) 316L Stainless Steel
- Careful Manufacturing Process Controls Ensures a Ferrite Content between <1% to a maximum of 3%
- Quiet Operation, Low Maintenance, Cost-Savings
- Available in Four Configurations with Surface Finishes from 0.4µm Ra (15Ra) to 3.2µm Ra (35Ra)
- Hilge Pumps Comform to ASME BPE Standards
- All Hilge Pumps are Electropolished as Standard – Reducing the Surface Area Roughness by 90%

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Do You Have ROUGING PROBLEMS WITH PUMPS? Look Inside For The Solution!

Hilge Contra-Adapta® Sanitary Centrifugal Pumps Eliminate Particle Residue and Build-up

Neither grinding or the "IIIc" machining method are able to produce the necessary type of nonporous, smooth surface required in reducing biological formation and contamination in metallic materials. Only ***Hilge Sanitary Centrifugal Pumps*** carefully controlled electro-polishing process have demonstrated the ability to provide the most desirable safety margins and high resistance to biocorrsion.

Surface Roughness Techniques of Various Materials

Surface ground, using a 180-grit grinding wheel

Surface machined, using the n (IIIc) method

Surface electropolished, using the POLIGRAT method

Progressively finer surface finishes from 50 micron to 0.8 micron