

Pumping Highly Abrasive Mill Scale Slurry Using 30 HP Slurry Pump

This case study is about the private steel plant in Central India, that tells us the challenges faced by them in removing Mill Scale Slurry & how their life changed for better by using heavy duty slurry pump provided by Darling Pumps.

Problem faced by Customer :

The problem faced by this steel plant was quite common in nature, the actual purpose was to pump out hot water slurry laden with iron scales. This slurry was a result of quenching process carried out on Hot rolled TMT Bars. It was a continuous & unavoidable process.

User was using traditional horizontal surface mounted hot water pumps – 2 nos 90HP to remove the slurry from collection pit. However these pumps were unable to remove high density mill scale slurry. Pumps were able to remove only the surface water leaving back the actual slurry as it is. Eventually user had to take periodic shut down to remove the accumulated slurry manually or through JCB. On face of it though this method was serving their purpose but at the same time it was resulting in huge amount of production loss due periodic shut downs.

User was desperately looking for a solution whereby this problem could be taken care once for and all. For this they approached Darling Pumps. Initially they were skeptical about the solution offered by Darling Pumps. But once they got the idea that we have effectively given solutions for similar or tougher applications else where, they decided to give it a try.



**OVER YEARS DARLING PUMPS HAVE GIVEN MANY
SOLUTIONS FOR MILL SALE SLURRY PUMPING...**

Solution Offered by Darling Pumps:

- Darling Pumps engineers carried out site visits to understand the exact nature of slurry & desired working parameters.
- We not only proposed them a readymade solution from our product range (30 HP pump) but also gave them some important suggestions on how & where to install the pumps for optimal output.
- A special arrangement for agitation & jetting was provided as a built feature with our slurry pumps.
- We also deputed our service technician when the pumps were been installed, this ensured that pumps were installed correctly & were ready to give desired output.
- All the operating parameters were monitored & recorded for future reference & use.

Benefits to the customer:

- Continuous cleaning of slurry through out the year.
- No more shut down hence no loss in productivity.
- Less energy consumed as compared to earlier method.
- Lesser running cost & lesser maintenance.
- No safety concern as there is no manual intervention

Benefits of 4DRR Series Pumps:

- Highly efficient slow speed motors with built-in protection against temp. rise
- Pumps can be offered for slurries with specific gravity up to 2.8
- Shaft not exposed to pumpage liquid
- Built-in agitator arrangement
- Dual mechanical seals are independent of discharge pressure, neither are they exposed to pumpage liquid
- Optional cooling jacket arrangement
- Special series for pumping hot temperature liquids up to 90°C.



Darling 4DRR Series Pump

END RESULT – WE ARE HAPPY TO ADD ONE MORE NAME TO OUR EVER GROWING LIST OF SATISFIED CUSTOMERS, PERFORMANCE CERTIFICATE ISSUED BY THIS CLIENT IS A STRONG TESTIMONY FOR THE EFFORTS WE HAVE PUT IN WITH THEM.

Note: For more details about this case study, you can contact: +91-9981992833