



## WHAT CAN DISAB VACLOADER DO FOR A STEEL PLANT

### ***DISAB case study: IMS Tube City and the steel industry***

*"We need the best possible suction power available to handle heavy, dense materials such as iron ore, pig-iron, scale etc., and the DISAB is the best at handling these materials. With its 95% vacuum and over 8000 cubic meters per hour air volume, the DISAB sucks these materials with ease."*

Alan Railton is the Operations Manager at Hanson Support Services, owned by the US-based IMS Tube City Inc, and has a fleet of five DISAB Centurion LN200 8-1812 units or vac-loaders as they prefer to call them. Besides these giants of the industrial vacuum business, he can also call upon the services of a range of smaller machines: two DISAB-TELLA SDT-130/50 machines, two DISAB-TELLA SDBF-11 machines and various DISAB-TELLA Pre-Separators and VacSkips.

So this begs the first question, which machines does Alan send out when? *"It's a case of different horses for different courses, but we often use the DISAB LN200 machines in conjunction with ancilliary equipment from DISAB-TELLA such as Pre-Separators, Vacuum Skips and Filter Separators in order to give our clients more continuous suction operations. That in turn increases our own performance and gives the customer greater satisfaction."*

### ***What makes a DISAB special for steel customers?***

*"It's the sheer suction power of a DISAB that makes it the one we want for the steel-based customers. A DISAB can pull material as dense as iron ore along 200-300 feet of suction hose, and that's as difficult a material to shift as anything on a steel plant site."*

*"The beauty of a DISAB is its sheer versatility. Where a lot of vacuum machines work best with dry material, a DISAB has the vacuum and thus suction power to shift almost anything you'd find in a steel plant: iron ore, lime, dust, coke, slurries and liquids."*



- ***Improve housekeeping***
- ***Cut downtime***
- ***Save money***

*"In our business, we talk about 'offsetting charges', ie. the relatively low charges for the hire of an operator and a DISAB against the cost of for example using a facility on site like a clarifier, or recycling tonnes of scale at a time, or clearing up spillages of valuable chemicals. One DISAB can collect up to 12 tonnes of scale for recycling where the end value is now very significant. It's the same with coke; a DISAB can collect 10 cubic metres at a time, and four or five loads is a lot of money in material terms."*

*"By comparison, we can come along with a DISAB, suck up all the hazardous dust, waste material or spillage with a fully enclosed vacuum system, and then via the Hi Lift, gravity feed all that material back out into sealed bags or containers, safely and quickly."*

#### **A TYPICAL STEEL PLANT JOB: CLEANING OUT CLARIFIERS**

A typical job on site at a steel plant is cleaning out clarifiers, but Tube City also clears up around conveyors and spillages of scale or iron ore: *"We'll come and survey, and as we have all the required HSE paperwork, we can produce the risk assessment forms as well. We'll work out where to park up the DISAB safely, what length of flexible hoses to use where, and then how best to dispose of the collected material into eg. stock yards for recycling, or blow back into silos, etc."*

*"We are constantly dealing with the clarifiers, a key part of any steel plant. All the processed water has to go somewhere, and that means a clarifier or a settling pond where the solids can sink to the bottom. When they're full, we'll come along with one of our DISABs and suck it all out, then blow it back into another separate system or settling pond. Water is a major cost in the operation of a steel plant, so it pays to be able to re-use all the water that can be re-processed. Very little of the material we vacuum goes to landfill now. Recycling is a massive part of the modern steel industry, as it reduces the outlay for raw materials."*

#### **HOW DOES A DISAB COMPARE TO OTHER INDUSTRIAL VACUUM MACHINES?**

*"We've used all sorts of similar machines, and nothing touches the DISABs. There are so many virtues to them. They're easy and very safe to use, and the training and back up is excellent. Things like noise levels may not seem important until you stand next to a rival machine and realise you can't hear what the operator's saying! A DISAB operates at around 75dBA, so two operators can hear each other fairly easily, and the machine itself isn't breaking any on-site noise levels that may have to be complied with."*

*"A DISAB's vacuum pump runs off a donkey engine, which is a major advantage. That engine can run independently using red diesel which reduces the operational cost significantly compared to running the vacuum pump off the main engine."*

*"The DISAB's suction power is in a different league, and even compared to a dedicated vac-tanker, the DISAB can still do things a vac-tanker can't. For example, removing oil from the surfaces of clarifiers with a vac-tanker means the suction pipe has to be submerged and thus take up a huge amount of water with the oil. With a DISAB the operator can use the pipe semi-submerged and skim off all the surface oil, while minimising the amount of water intake. That's much more efficient."*

#### **BENTLEYS AND MINIS**

*"When it comes to essential things like capacity and air flow, comparing a DISAB with anything else is like comparing a Bentley to a Mini. Hiring the DISAB is usually a better bet, especially on a steel plant where there are iron ore pellets involved. A DISAB with 150 feet of flexible suction pipe can do a much better job of removing even this kind of material safely and efficiently."*

*"A DISAB can also shift dry, semi-liquid, slurries and liquid material. Most vacuum suction systems can cope with dry material, but are far less efficient when it comes to slurry or liquids. When you're on site it's not unusual to find that what you thought was solid can turn into slurry further down, so it's reassuring for a customer to know that we can cope with pretty well whatever we find."*



#### **TOP SERVICE AND SUPPORT MEANS MINIMAL DOWNTIME**

*"Besides all that, we like the service and support we get from DISAB itself. Since the opening of the new DISAB Service Centre in Manchester in 2008, we have used the facility a lot and we've found the Customer Support is always ready and willing to help whenever we need it. That means we can always be sure of getting parts when we need them, and minimise any downtime, on or offsite, and that in turn means we can spend more time solving all sorts of waste-related problems for our customers."*

*"That all adds up to a series of powerful reasons for using us, and why we run DISABs rather than anything else."*