

# Application Data

## Steelworks



### Benefits of High Pressure Water

- The most effective cleaning/descaling method
- Reduced energy consumption, our pumps are 90% efficient
- No fire hazard when working in hot areas
- Improves surface quality in descaling operations
- The pump is versatile & can be used for other cleaning & cutting applications

Typical Pumps & Performances		
Pump	Performance	Application
HPS2200	<b>90lpm at 500bar</b> (20gpm at 7,250psi)	Coke oven door cleaning to reduce emissions
HPS2200	<b>59lpm at 1000bar</b> (16gpm at 14,500psi)	Water jetting for plant maintenance
HPS3000	<b>405lpm at 290bar</b> (107gpm at 4,200psi)	Hydromechanical Descaling during hot-rolling
HPS5000	<b>675lpm at 290bar</b> (179gpm at 4,200psi)	
HPS650	<b>96lpm at 250bar</b> (26gpm at 3,625psi)	Water hydraulics in place of oil hydraulics for fire resistance
HPS3000	<b>465lpm at 250bar</b> (123gpm at 3,625psi)	

### References

- TATA Steel (UK)
- SSI UK (UK)
- ArcelorMittal (France)
- Usiminas (Brazil)
- China Steel Corporation (Taiwan)
- China Ecotek (Taiwan)
- Dragon Steel (Taiwan)
- Metallurgica Siderforge (Italy)
- Posco (South Korea)
- Italiana Coke (Italy)
- BHP/Bluescope Steel (Australia)

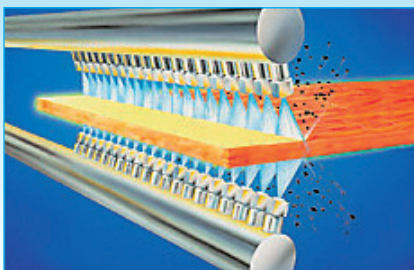
Steel plants are notoriously tough environments to work in with equipment exposed to extreme heat, dirt, poor water quality & weather. Hughes Pumps have been supplying the global steel industry since 1970 & still have pumps operating in critical applications that are more than 20 years old.

Water jetting eliminates emissions from coke oven door seals & will keep the plant & pipelines cleaner &

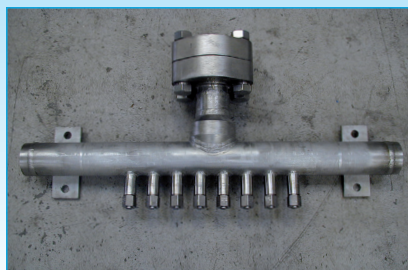
at maximum efficiency.

Hydromechanical Descaling of strip, slab, plate or blooms during hot rolling removes iron oxide scale layers thus improving surface quality.

Water based hydraulic systems are used in hot-metal areas of steel mills for fire resistance. Water-based hydraulic fluid is lower in cost than hydraulic oil, non-toxic & biodegradable.



The descaling process



Typical spray header fitted with descaling nozzles



Coke oven door cleaning, 500bar



Water jetting of granulator screen, 700bar

This information is intended to be a guide only. The required pump size & performance can vary depending on many factors including rate of work required, hardness of deposit or work piece, operator skill, site access etc.

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