



# SHADECO VALVES & PUMPS CC

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**VALVES - DECO, AMCO, NINGBO AND ACTUATORS  
PUMPS - SHADECO AND EXCELLENT PUMPS  
INSTALLATIONS & REPAIRS**

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## DECO WT SLURRY KNIFE GATE VALVE

### *Body Material and Design*

- Deco WT is a wafer type slurry knife gate valve manufactured in South Africa by Shadeco Valves and Controls. It is made in two pieces bolted together. It is a world class standard knife gate valve available in cast iron, ductile iron and 316 stainless steel bodies. This valve is a bi-directional slurry knife gate valve, this simply means it can take flow from both directions. The valve is designed for a media with high consistency. It is also designed in such a way that it does not use gland packing, therefore there is no gland packing stuffing box, it seals around the sleeves. Therefore Deco WT type is a simple type of valve to assembly. The valve blade has a sharp edge at the bottom which helps the blade to penetrate easily between the sleeves when the valve closes.
- Deco WT type slurry knife gate valve is an ideal valve for abrasive, corrosive and vigorous application in severe applications like the mining industry.

### *Unique Seat Design and Blade*

- Deco WT type slurry knife gate valve has a unique seat design which is carried out by two EPDM sleeves on each side. The blade also plays an important part in the sealing arrangement of these valves. It's blade has a sharp edge at the bottom which enables the blade to penetrate easily between the sleeves during the closing process. When the valve is fully opened there is no flow restriction or cavities inside the valve.



## **Unique Seat Design and Blade Paint**

### **(CONTINUED)**

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- Deco WT type slurry knife gate valve seat is made out of two sleeves and these sleeves does not allow any media into the valve chest area either when the valve is fully opened or fully closed. This prolongs the valve life span due to the fact that the valve will not seize easily as other valves normally do. The seizing is normally caused by the media getting into the chest area of the valve. There are also four grease nipples mounted on the chest area of the valve, two on each side of the valve, the main aim is to grease the valve chest area to prevent rust and provide blade lubrication. In addition to that the valve has two blade scrubbers on each side made out of urethane to clean the blade every time the valve closes.

## **Sleeves and Gate Materials**

- Deco WT type slurry knife gate valves is available in two seat material, Natural Nitrile and EPD sleeves, the valve blade is made out of 316 stainless steel.

## **Gland-Follower**

- The valve has no gland-follower at all, therefore this make the assembly process much easier, This also reduces the leaking problem normally happened around the gland packing and stuffing box of ordinary valves.

## **Gland Packing**

- Deco WT type slurry knife gate valve does not use a gland packing therefore there is no gland packing stuffing box. The gland packing is replaced by two urethane scrubbers one on each side, their main function is to clean the by 316 S/S blades every time the valve closes.

- Deco WT type slurry knife gate valve as soon as is received from the foundry it get into the the machine for drilling and machining then the valve is deepen into a decreaser solutions to remove all oil and grease before it is painted. Firstly is painted with anti-rust primer paint and finished in a blue industrial paint which can handle rust tremendously.
- It can also be powder coated for sewage application.

## **Operations**

- Deco WT type has an interchangeable pedestal available in ductile iron or 316 S/S materials. Simply means that you can switch easily from the hand-wheel to air or hydraulic cylinder/actuator without any mounting brackets.
- The valve can be operated in handwheel, chain-wheel and bevel gearbox; it can also be automated with electric motorized actuator.

## **Maximum Operating Pressure, Temperature and Sizes**

- Deco WT type slurry knife gate valve can handle temperature ranging from -30°C up to 120°C. The valve provides a bubble tight shut off in both directions up to a maximum line pressure of 10 bars.
- Deco WT type slurry knife gate available sizes range from 2" (50mm) up to 24" (600mm).

## **Open Gap at the Bottom**

- Deco WT type slurry knife gate valve has an open gap at the bottom; this gape helps the valves to clean itself during the closing process. The valves blow the slurry outside through this gap during the closing process. In this matter there is no slurry build up any where inside the valves. This plays fundamental role in the life span of the valve because it prevent pressure surge at the valve sleeves eventually it prevent sleeve wearing.

## Drilling

- The flange holes are drilled and tapped, the valve design can accommodate different flange drilling standard, the valve can easily adapt to different flange drilling like “table 10, table D and ANSi 150.

## Applications

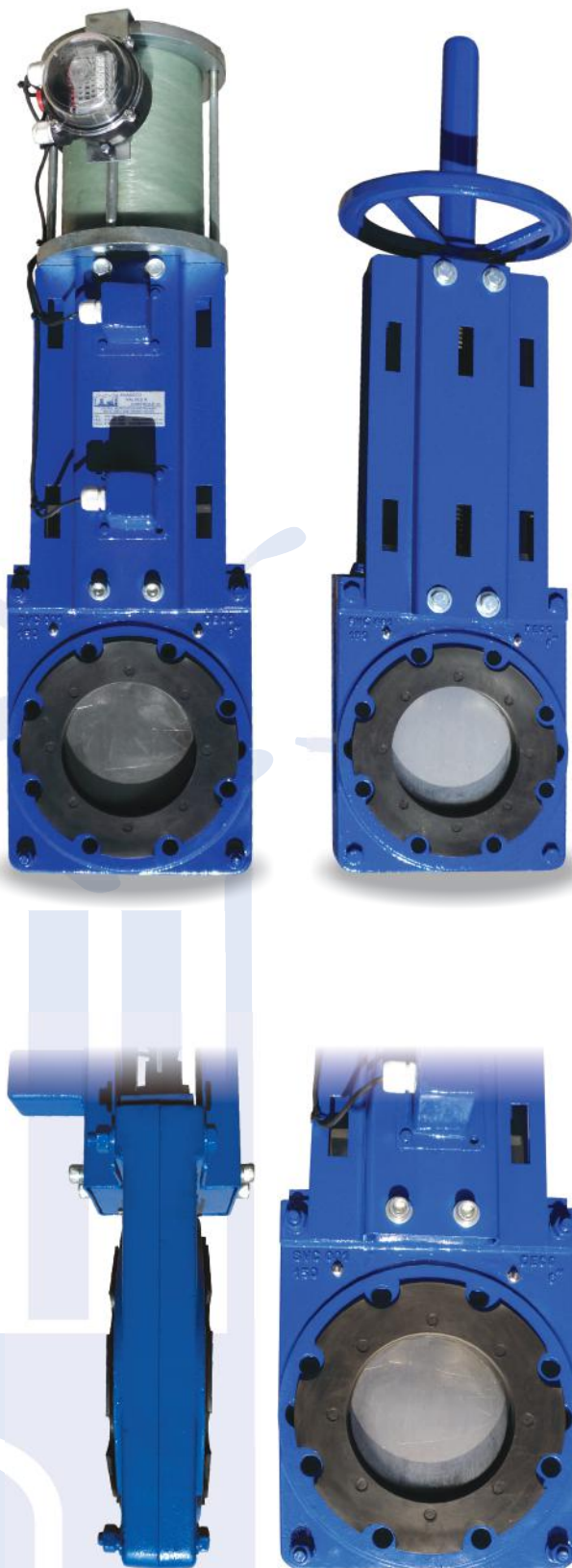
- Deco WT type slurry knife gate valves is design for an isolation application that is (on and off). It cannot be used for throttling/control application. It can withstand clean, dirt, viscous, corrosive, sludge, fibrous, slurry, clean, and corrosive and liquid.

## Installation

- Deco WT type slurry knife gate valve is a bi-directional Knife gate valve it can take the flow from both direction.
- It can be installed at any side of the pump and at any position either vertical or horizontal.

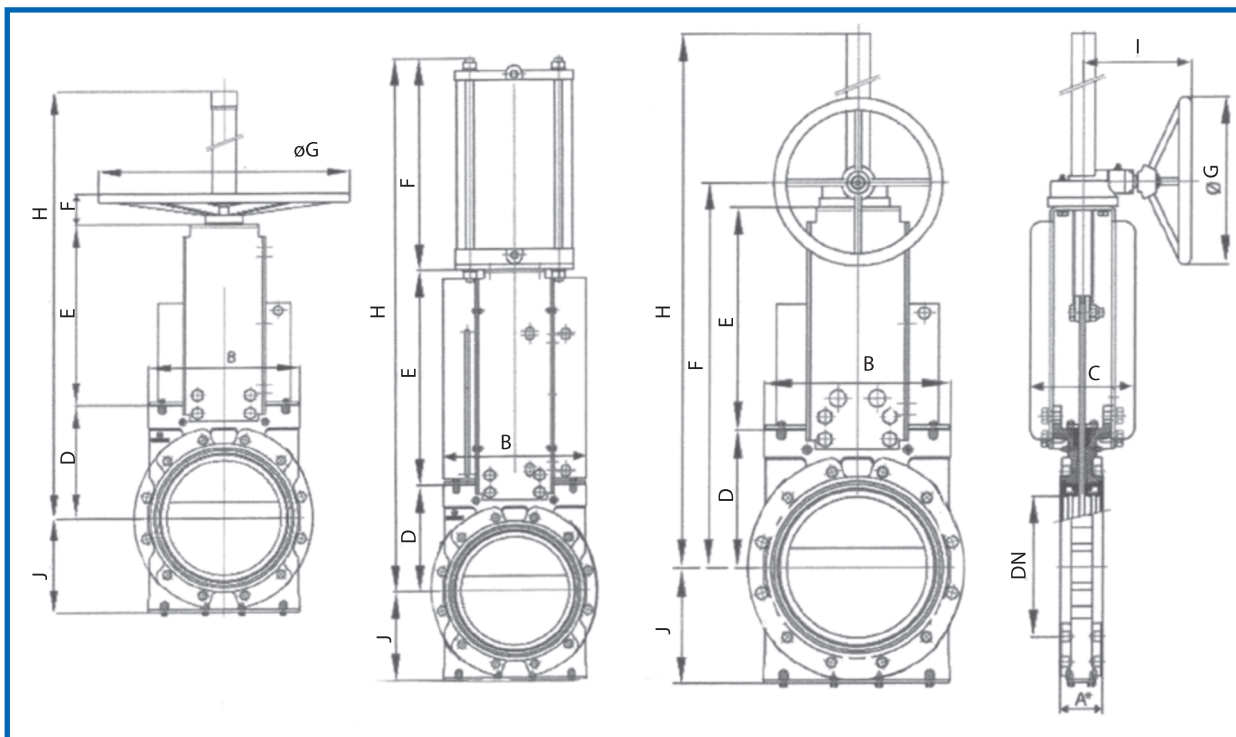
## Maintenance

- Deco WT type slurry knife gate valve can be repaired, therefore is a fully refurbish type of valves. This can be done in two ways at the plant where by you can purchase the worn out parts from the manufactures or by send the valve back to the manufactures.





## DECO WT SLURRY KNIFE GATE VALVES TECHNICAL DRAWINGS



DN	A1*	A2*	B	C	D	E	F	ØG	H	J	I
50	76	83	280	165	205	322	572	300	990	160	200
80	76	83	335	185	245	397	688	300	1510	200	263
100	82.5	90	300	250	280	441	767	450	1590	232	263
150	82.5	90	350	250	325	508	879	450	1700	258	263
200	95	102	400	270	350	567	963	450	1780	292	263
250	95.5	103	450	270	420	631	1155	450	2175	318	236
300	121	129	500	290	462	700	1265	650	2305	345	263
350	121	129	600	290	510	805	1420	650	2520	400	263
400	181	181	700	320	570	956	1628	650	2735	485	288
450	187	187	750	320	600	1021	1723	650	2780	510	288
500	206	206	800	320	650	1061	1833	650	2940	570	288
600	225.5	225.5	900	320	700	1192	1995	650	3200	620	288

NB: Due to continuous development program Shadeco Valves and Pumps  
deserved the right to make change without giving any notice