

# Dirghayu

## Wire Rope Grease for Marine Terminal Cranes WRD Super



Engineering The  
Lubricant Technology

World Class  
Grease Solutions

Sustainability Through **Green Future**



## Longevity to wire ropes on cranes of Marine Terminal – Dirghayu – WRD Super.

Wire Rope forms important part of crane used in ports. They consist of steel wire ropes having strands wound around the core in twisted form. In lifting, or dropping movement these strands get stressed due to friction between them. Hence, they need highest lubricity to reduce friction between individual strands & core while in operation. The grease or lubricant provides protection against rusting in salty & saline atmosphere. The grease gives highest protection under these atmospheric conditions. It simultaneously needs, penetration from outer layer to inner core.

The wire rope are carrying heavy load & hence need to have high load carrying capacity indicated by weld load. They work 24 x 7 per week & require long re-lubrication intervals, provided by high base oil viscosity & MOS 2 solid lubricant. During re-lubrication at high speeds, there should be having low flinging off due to tacky nature & high base oil viscosity.



### Biodegradable

**Tacky nature of Dirghayu Wire Rope Grease prevents Flaking & Dropping Off**

**Lower Scar Diameter resulting in Higher Lubricity**

**Penetrability gives Excellent wear & Corrosion resistance**

Four Ball Scar Diameter		
Petro	Synthetic	<b>Bio-Based</b>
0.5 to 0.8	0.4 to 0.7	<b>0.35 to 0.5</b>



## **Dirghayu's WRD Super Delivers –**

- Low wear due to very high lubricity (tested by four-ball scar)
- High wear and rusting protection (copper strip corrosion and salt spray test)
- Good penetration (due to vegetable base oil)
- Long re-lubrication intervals (due to high viscosity and solid lubricant MOS 2)
- High load-carrying capacity (test-weld Load)
- Low flinging off (tested on a special in-house test rig)

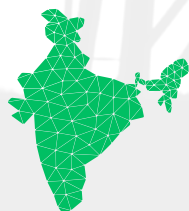
## **Eco Powered Lubricants:- Engineering a Green Future.**

Green Lubricants – Experience the future of lubrication technology, where performance and environmental responsibility go hand in hand –

- Bio-degradable lubricants deliver high-performance, eco-friendly solutions for a range of industries.
- Combining innovation with sustainability – These lubricants minimise environmental impact and meet stringent regulatory requirements.
- These lubricants counter the hazards of chemical lubricants contributing to a clean and green environment with the icing of energy conservation.



**A Patented  
Product**



**Pinoneer In  
India**



## Dirghayu Green Bio-based Wire Rope Dressing Grease for Marine Terminals / Ports WRD-Super

Test	Test Method	Unit	Std Value	WRD Super
Texture	Visual			Smooth & Tacky
Base Oil				Vegetable Oil
Thickener				Organic Modified Clay
Color				Black
Base Oil Viscosity @40°	ASTM D 445	cSt		460
Solid Lubricant				MoS2
NLGI Grade			00	00
Consistency Worked Penetration after 60 Strokes	ASTM D 217	mm	400-430	410
Four Ball Weld Load	ASTM D 2596	Kg		420
Four Ball Scar Diameter	ASTM D 2266	mm		0.42
Copper Strip Corrosion Test	ASTM D 4048			1 a
Salt Spray	ASTM D 117	HRS		>2500 hrs
Operating Temp. Range		°C		-20 to 180 °
Flinging	In- House			Tested

