



Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Introduction

Description

Lub-Scan is a lube oil monitoring device designed for monitoring oil conditioned for all oil-lubricated bearing and gearboxes. Lub-Scan incorporate the following functions:

- As a Lube Oil Monitoring Device
- As a Oil Level Indicator
- As a Sludge/Water discharge device
- To facilitate oil-change without interrupting machine operation





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Introduction

Advantages of Lub-Scan:

What Is your problem with Oil Lubrication Bearing & Gearbox?

- Water contamination?
- Condition Monitoring for bearing box lube oil?
- Oil Emulsification by water?
- Oil level checking?
- Oil replacement?

"Difficult to differentiate transparent colour oil contamination by water?"

With Lub-Scan Installation

- "Drain Contaminants" at any time without interrupting operation
- Easy Lube oil condition Monitoring through collecting cylinder at all time
- Prevent emulsification cause by water contamination
- Extend oil change Interval
- Easy level reading with an external Oil Level Indicator
- Easy to inspect and analyse oil condition using the refraction index mark line on the collection Reservoir
- Easy installation





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Introduction

Monitoring Pattern



Oil in good condition
(w/o contamination)

Continue operation



Fully contaminated by water
(narrow color mark)

Drain water immediately, check for
water ingress



Water collection at bottom
(slight water contamination)

Drain water and check for possible
water ingress





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Introduction

Monitoring Pattern



Water collection at bottom with darken oil

Drain water and monitor for oil condition, check possible water ingress



Sludge build up with clean oil or water

Drain water and replace oil, check possible water ingress



Fully darken oil or sludge

Drain oil/sludge, change oil immediately





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Introduction

Application

- Pump Bearing Boxes
- Gear Boxes
- Steam Turbine Bearing Boxes
- Oil Storage Tanks
- Oil Sump tanks

Precaution

Lub-Scan is not suitable for the following Installation:

- Pressurized lube oil system
- Operating temperature $> 120^{\circ}\text{C}$
- Environment subjected to aggressive chemicals & solvents





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Introduction

Overall Length: 345mm

Cylinder Dome Top Cover Diameter: 69mm

T-Joint Dimension: 29.4mm x 40mm



Tee Joint - joining top ball valve, oil leveler onto LubScan top cover

Top Cover - removable cover for easy maintenance & cleaning. Designed with anti-slipping locking mechanism.

Transparent Oil/Contaminants collection reservoir - Construct of oil resistance material, excellent clarity. "Fluorescent Red marking" line printed on this reservoir. User can easily determine contaminants from different density fluid which gives different reflective angle on this red line.

Oil Level Indicator - To indicate actual oil level in gear/bearing box.

Lube Oil-return hose & hose adapter - This hose allows clean/excess oil to flow back to gear/bearings box. This design also allows contaminant(s) to rapidly collect at the bottom of collection reservoir.
3/8" BSP Fitting

Top Control ball valve - always remain in "open" position during operation. "Close" position when discharging contaminants or cleaning oil reservoir. This valve can control the discharging rate/oil flow from gear/bearings box to facilitate oil-change without stopping the equipment. 1/2" BSP Fitting

Lower Ball Valve for discharging contaminants - Always remain at "close" position. 3/8" BSP Fitting

Elbow & Drain Pipe - Install only if require. 3/8" BSP Fitting





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Lub-Scan Field Installation

Kerteh East Coast, Malaysia

Sirachal, Thailand

TPCC, Mataput, Thailand

TUNTEX, Mataput, Thailand





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)
Lub-Scan Field Installation

Lub-Scan® Field Installation

at GPP5 and GPP6 LNG gasplant

Before installation :

- Difficult to monitor oil level
- Difficult to conduct oil sampling for oil conditional monitoring





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Lub-Scan Field Installation

Lub-Scan® Field Installation

at GPP5 and GPP6 LNG gasplant

Before installation :

- Constant oil leveler only shows oil sludge formation in the bearing box





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Lub-Scan Field Installation

Lub-Scan® Field Installation

at GPP5 and GPP6 LNG gasplant

Before installation :

- Difficult to discharge Oil sludge from bearing box.





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

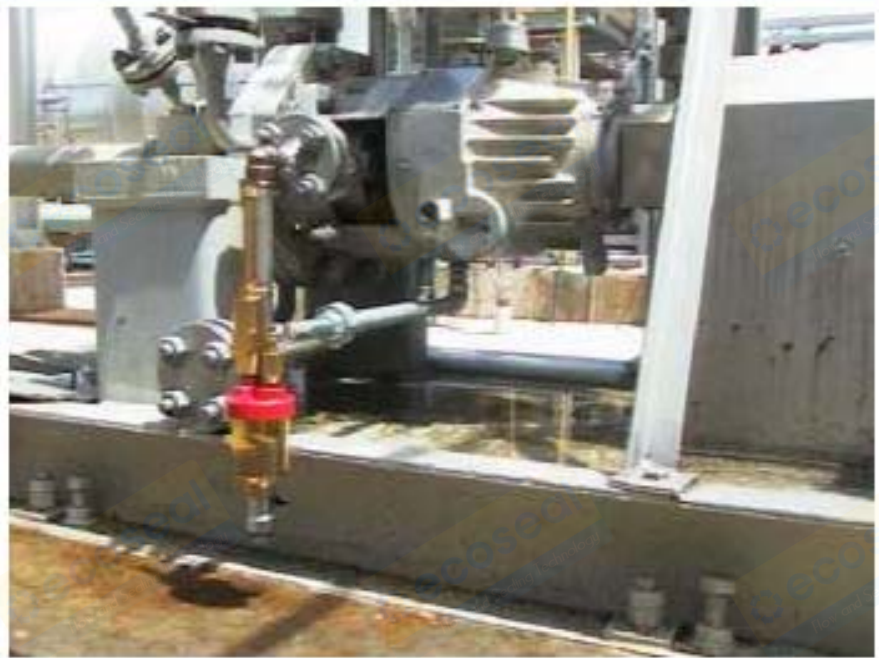
Lub-Scan Field Installation

Lub-Scan® Field Installation

at GPP5 and GPP6 LNG gasplant

After installation :

- Monitoring of Oil condition makes easy
- Easy level reading with an external oil level indicator





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Lub-Scan Field Installation

Lub-Scan® Field Installation

at GPP5 and GPP6 LNG gasplant

After installation :

- Water droplets start to accumulate and collect in the transparent Dome.





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)
Lub-Scan Field Installation

Lub-Scan® Field Installation

at GPP5 and GPP6 LNG gasplant

After installation :

- Water can be easily discharge from the bottom ball valve control without having to shutdown the pump





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Lub-Scan Field Installation

Lub-Scan® Field Installation

at GPP5 and GPP6 LNG gasplant

After installation :

- Lubricating oil remains clean and visible at all time
- No maintenance required
- Only periodical inspection to discharge any contaminants or sludge





Category: Lub-Scan Monitoring Device

**(For monitoring all oil lubricated bearings & gearboxes)
Lub-Scan Field Installation**

Lub-Scan® Device Model : LS-2

🔧 New Model Design :

- Better corrosion resistance
- Resistance to high temperature (+120°C)
- Leak-proof
- Resistance against ultra-violet
- Incorporated with flushing and cleaning line.





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Lub-Scan Field Installation

Lub-Scan® Device Model : LS-2

Parts Functions & Description:

Oil Level Indicator

T-Joint

Line Marker

Bottom control valve – always close

Top control valve – always open

Flushing Hole & Cap

– for flush-clean of transparent dome.

Transparent Collection Dome





Category: Lub-Scan Monitoring Device

**(For monitoring all oil lubricated bearings & gearboxes)
Lub-Scan Field Installation**

Lub-Scan® Field Installation

**Hydraulic Pump at
PTT Sirachal LNG Gas Plant in
Thailand.
Pictures taken on 08/03/03.**

**Conventional Oil
Leveler remain at one end of the
Pump while Lubscan is being
installed at the other end.**





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Lub-Scan Field Installation

Lub-Scan® Field Installation

**After Installation
of Lubscan**

**Without
Return Hose**

Lubscan Installed on January 28th 2003





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Lub-Scan Field Installation

Lub-Scan® Field Installation

**Lubrication
Collected in
Lubscan Cylinder**





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Lub-Scan Field Installation

Lub-Scan® Field Installation





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Lub-Scan Field Installation

Lub-Scan® Field Installation

**Oil level can be read at the
External Oil Level Indicator
attached to the Lubscan**





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Lub-Scan Field Installation

Lub-Scan® Field Installation

**Easy Installation
of Lubscan Lubrication
Device**





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Lub-Scan Field Installation

Lub-Scan® Field Installation





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Lub-Scan Field Installation

Lub-Scan® Field Installation





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Lub-Scan Field Installation

Lub-Scan® Field Installation





Category: Lub-Scan Monitoring Device

**(For monitoring all oil lubricated bearings & gearboxes)
Lub-Scan Field Installation**

Lub-Scan® Device Model : LS-2

New Model Design :

- Better corrosion resistance
- Resistance to high temperature (+120°C)
- Leak-proof
- Resistance against ultra-violet
- Incorporated with flushing and cleaning line.





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Lub-Scan Field Installation

Lub-Scan® Device Model : LS-2

Parts Functions & Description:

Oil Level Indicator

T-Joint

Line Marker

Bottom control valve – always close

Top control valve – always open

Flushing Hole & Cap

– for flush-clean of transparent dome.

Transparent Collection Dome





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Lub-Scan Field Installation

Lub-Scan® Field Installation

**Water Chiller
Pump at
TPCC Mataput
Petrochemical Plant In Thailand
Pictures taken on 19/03/03
Standby Pump.**

Before LUBSCAN installation





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Lub-Scan Field Installation

Lub-Scan® Field Installation

**After Installation
of Lubscan**

**With
Return Hose
to expedite the flow.**

Lubscan installed on February 18th 2003





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Lub-Scan Field Installation

Lub-Scan® Field Installation

**Lubrication
Collected In
Lubscan Cylinder**





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Lub-Scan Field Installation

Lub-Scan® Field Installation





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Lub-Scan Field Installation

Lub-Scan® Field Installation

**Oil level can be read at the
External Oil Level Indicator
attached to the Lubscan**





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Lub-Scan Field Installation

Lub-Scan® Field Installation

**Easy Installation
of Lubscan Lubrication Device**





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Lub-Scan Field Installation

Lub-Scan® Field Installation

After installation :

- **Water can be easily discharge from the bottom ball valve control without having to shutdown the pump**





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Lub-Scan Field Installation

Lub-Scan® Field Installation

After the water is being discharged,

The Oil usage can be further extended & the bearing is protected.





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Lub-Scan Field Installation

Lub-Scan® Field Installation





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Lub-Scan Field Installation

Lub-Scan® Field Installation

**Agitator Gear Box
at Tuntex Petrochemical Plant in
Mataput Thailand**

Pictures taken on 16/06/03

**Installation Date:
16/04/03**





Category: Lub-Scan Monitoring Device

**(For monitoring all oil lubricated bearings & gearboxes)
Lub-Scan Field Installation**

Lub-Scan® Field Installation

**Agitator Gear Box
at Tuntax Petrochemical Plant In
Metaput Thailand
Pictures taken on 16/04/03**

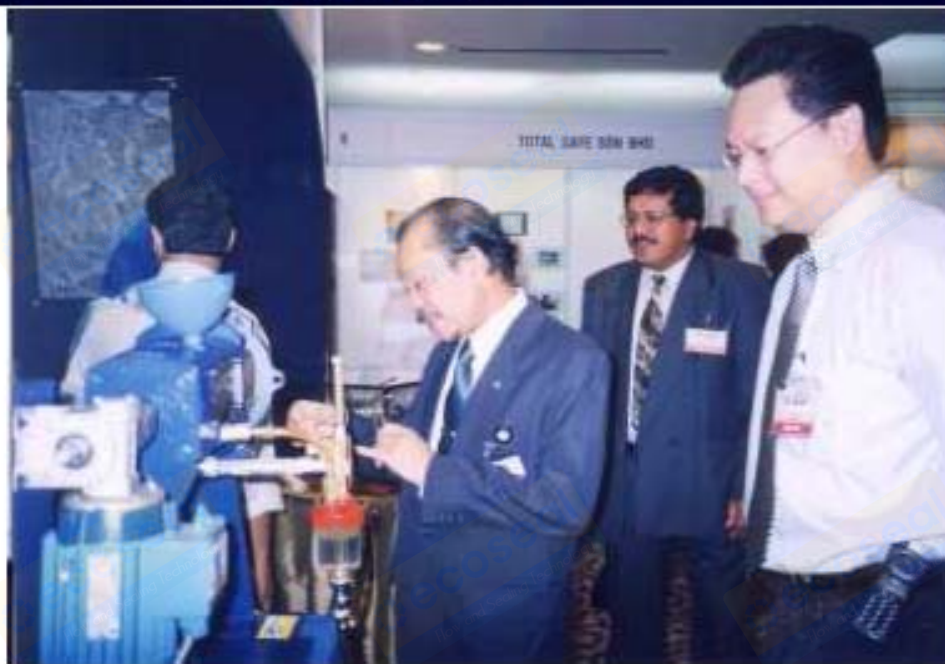
**Installation Date:
18/04/03**





Category: Lub-Scan Monitoring Device

Lub-Scan Trade Show display in Kuala Lumpur, Malaysia and Abu Dhabi, UAE.





Category: Lub-Scan Monitoring Device

Lub-Scan Trade Show display in Kuala Lumpur, Malaysia and Abu Dhabi, UAE.



HOME



PRINT



Category: Lub-Scan Monitoring Device

Lub-Scan Trade Show display in Kuala Lumpur, Malaysia and Abu Dhabi, UAE.





Category: Lub-Scan Monitoring Device

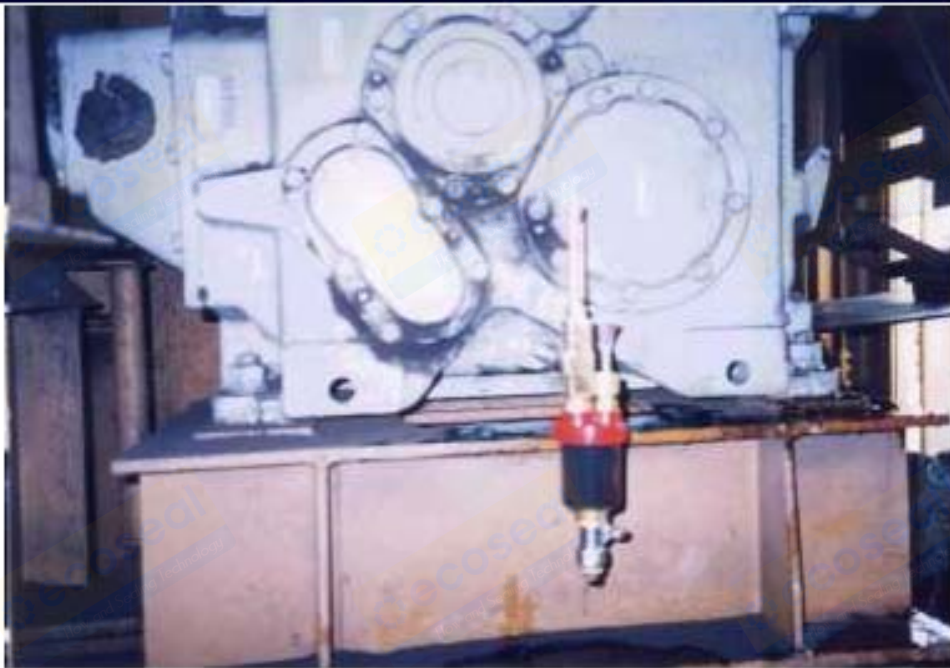
Lub-Scan Gear Box Installation at Klang Power Plant In Malaysia





Category: Lub-Scan Monitoring Device

Lub-Scan Gear Box Installation at Klang Power Plant In Malaysia





Category: Lub-Scan Monitoring Device

Lub-Scan Gear Box Installation at Klang Power Plant In Malaysia





Category: Lub-Scan Monitoring Device

Lub-Scan Gear Box Installation at Klang Power Plant In Malaysia





Category: Lub-Scan Monitoring Device

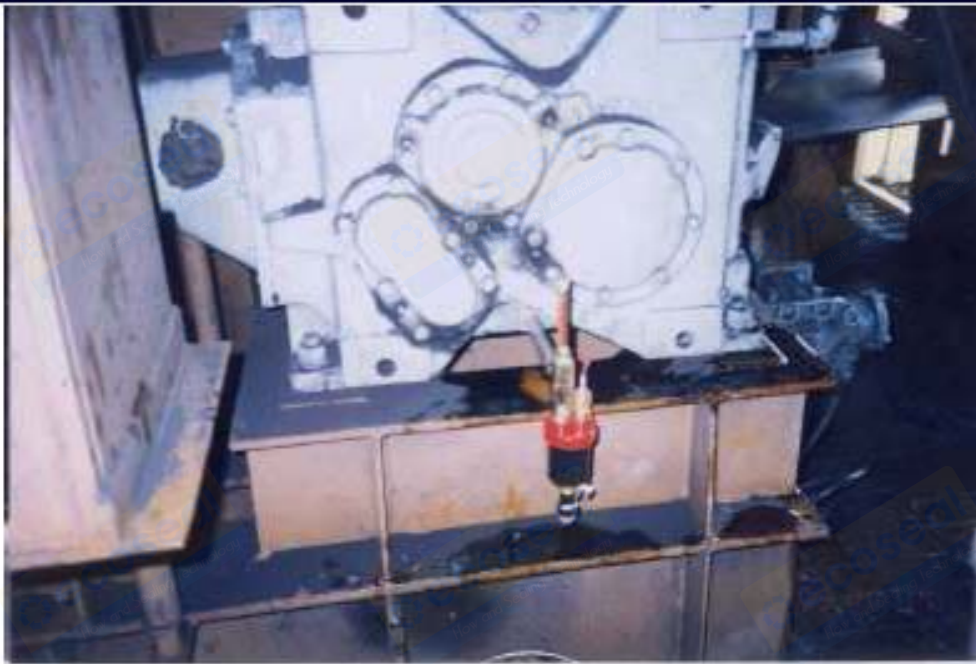
Lub-Scan Gear Box Installation at Klang Power Plant In Malaysia





Category: Lub-Scan Monitoring Device

Lub-Scan Gear Box Installation at Klang Power Plant In Malaysia





Category: Lub-Scan Monitoring Device Questionnaire Form

QUESTIONNAIRE

1. Does your equipment have any lube oil contamination problem? YES NO

2. What contaminants do you usually find in your equipment ?

. Steam/Water YES NO

. Gas YES NO

. Process chemicals YES NO

. Oil Sludge YES NO

. Others : _____ YES NO

3. How do you monitor your equipment's lube oil condition ?

. Sight Glass YES NO

. Dip-stick YES NO

. Other : _____ YES NO

4. Do you practice "Lube Oil Condition Monitoring" on your rotating equipment ? YES NO





Category: Lub-Scan Monitoring Device Questionnaire Form

5. Do you have difficulty collecting oil sample for conditional monitoring ? YES NO

6. Does all your equipment have oil level indicator ? YES NO

7. If no, how do you monitor the oil level ?

■ _____

8. Do you think Lub-Scan is a good solution for monitoring lube oil condition in your equipment ? YES NO

9. Are you satisfied with the functions of Lub-Scan ? If no, please indicate the additional functions that Lub-Scan should incorporate YES NO

■ _____

10. Will you recommend this product for your plant maintenance ? YES NO
Thank You

Contact Number : _____ Fax : _____





Category: Lub-Scan Monitoring Device

(For monitoring all oil lubricated bearings & gearboxes)

Lub-Scan Field Installation

Lub-Scan® Field Installation

at GPP5 and GPP6 LNG gasplant

Typical installation :

- Lub-Scan can be easily install on any oil-lubricated bearing or gearbox
- Additional length adaptor is used to adapt to higher oil level

