



The Installation Case Portfolio of Centralized Lubrication System

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The Installation Case of Vehicle CLS



CLS for Yutong Bus

Manufacturer:Yutong
 Type of Distributor:single-row single-line
 Number :2
 Installation Date: 2017.10.13

Vehicle:Yutong bus
 Type of Lubrication pump :AR60H
 Lube points :8

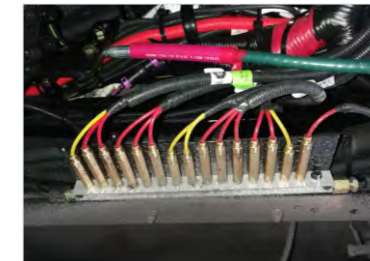


- ① The location of pump
 - ② The location of monitor
 - ③ The location of distributor
 - ④ The location of tube and wire harness
- (Note: the order is from left to right, top to bottom)

CLS for Zhongtong Bus

Manufacturer:Zhongtong
 Type of Distributor:single-row single-line
 Number :2
 Installation Date: 2018.8

Vehicle: Zhongtong LCK6109052
 Type of Lubrication pump :AR60
 Lube points : 15

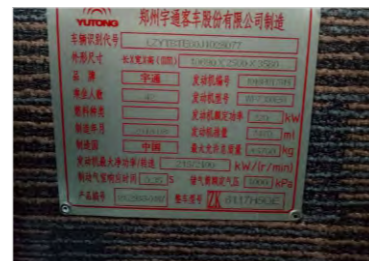


- ① The location of pump
- ② The location of monitor
- ③ The location of distributor
- ④ The location of lube points

CLS for Yutong Bus

Manufacturer:Yutong
 Type of Distributor:single-row single-line
 Number :2
 Installation Date: 2018.6

Vehicle:Yutong bus
 Type of Lubrication pump :AR60H
 Lube points :8



- ① The location of pump
- ② The location of monitor
- ③ The location of distributor
- ④ Vehicle Information

CLS for Zhongtong Bus

Manufacturer:Zhongtong
 Type of Distributor:single-row single-line
 Number :1
 Installation Date: 2017.10.13

Vehicle: Zhongtong LCK6109052
 Type of Lubrication pump :AR60H
 Lube points : 8

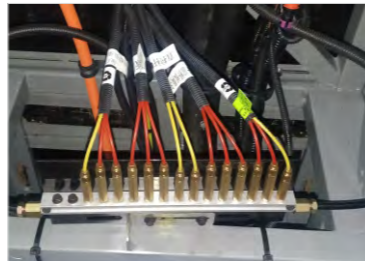


- ① The location of pump
- ② The location of monitor
- ③ The location of distributor
- ④ The location of tube and wire harness

CLS for Gold Dragon Bus

Manufacturer:Gold Dragon
 Type of Distributor:single-row single-line
 Number:2
 Installation Date: 2017.8

Vehicle:King Long 6106
 Type of Lubrication pump:AR60H
 Lube points:20

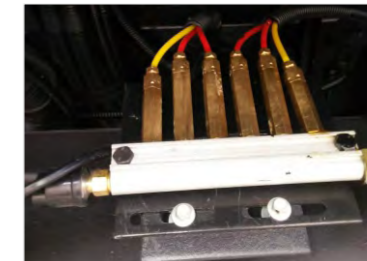


- ① The location of pump
- ② The location of monitor
- ③ The location of distributor
- ④ The location of tube and wire harness

CLS for BYD Bus

Manufacturer:BYD
 Type of Distributor:single-row single-line
 Number:2
 Installation Date:2018.8

Vehicle:BYD GZ6100LGEV5
 Type of Lubrication pump:ALP50
 Lube points:12



- ① The location of pump
- ② The location of monitor
- ③ The location of distributor
- ④ The location of lube points

CLS for CRRC

Manufacturer:CRRC
 Type of Distributor:single-row single-line
 Number :2
 Installation Date: 2018.9

Vehicle:Zhongche Bus
 Type of Lubrication pump :AR60H
 Lube points :12

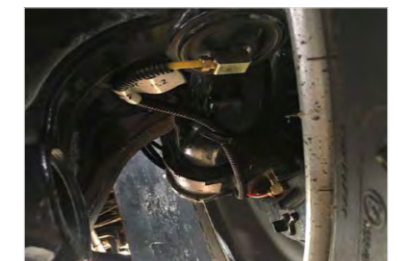


- ① The location of pump
- ② The location of monitor
- ③ The location of distributor
- ④ The location of tube and wire harness


CLS of Malaysia Kuala Lumpur Bus

Type of Distributor:single-row single-line
 Number:2
 Installation Date:2018.6

Vehicle: Bus
 Type of Lubrication pump: AR60
 Lube points: 21



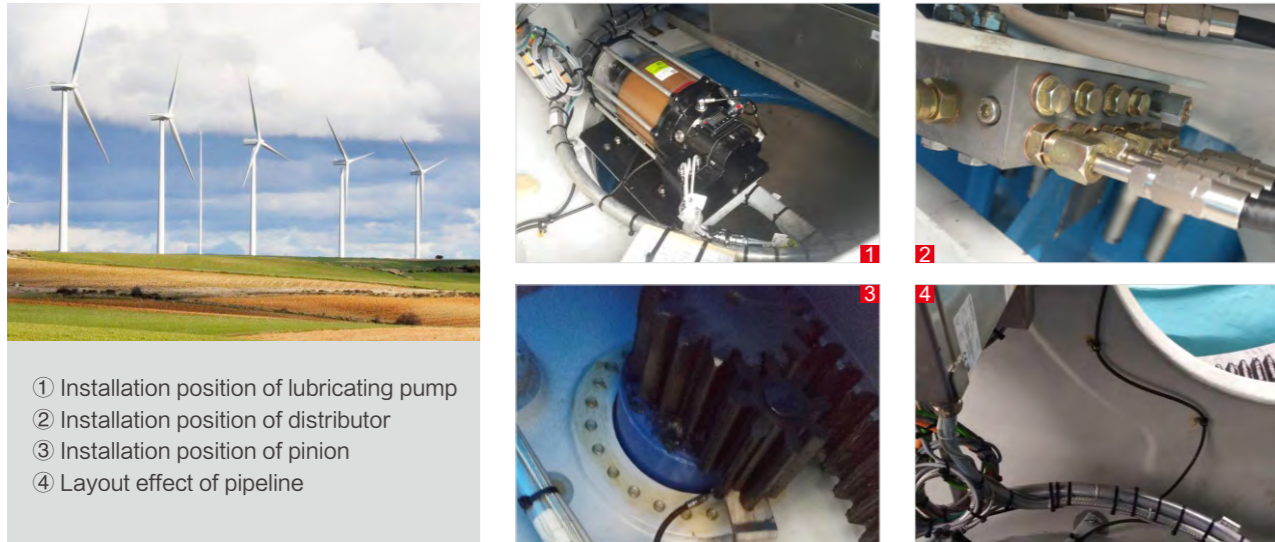
- ① The location of pump
- ② The location of monitor
- ③ The location of tube and wire harness
- ④ The location of lube points



The Installation Case
of CLS and WGCS
in Wind Turbines

Envision Energy

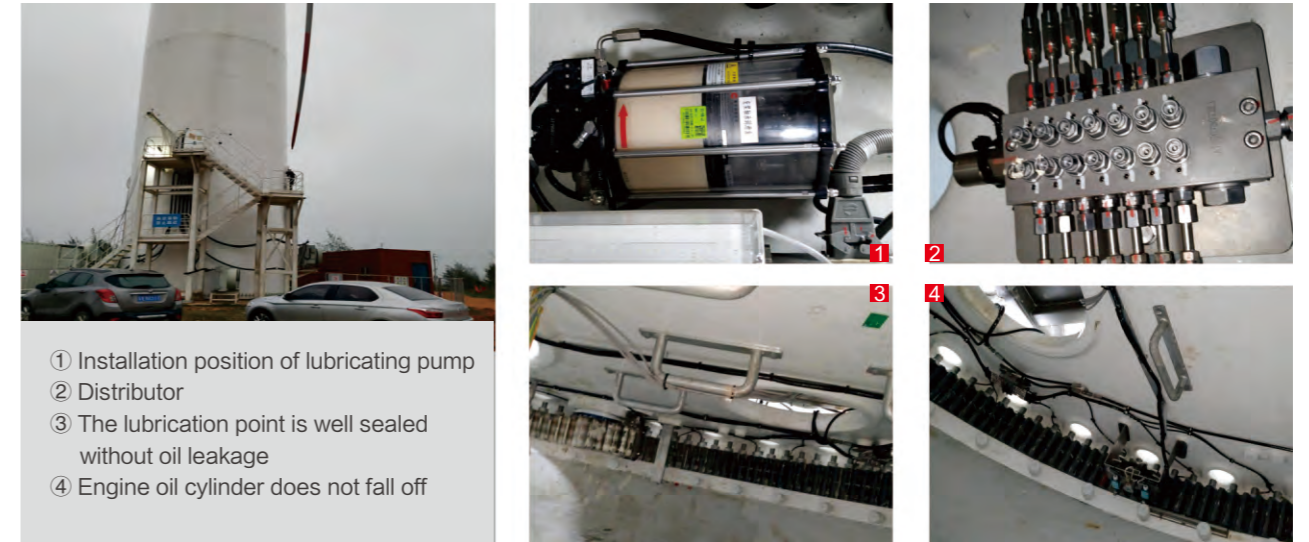
Fan Model: 2.XMW
 Installation Position: Yaw, Principal Axis, Variable Pitch
 System Type: Progressive Centralized Lubrication System



- ① Installation position of lubricating pump
- ② Installation position of distributor
- ③ Installation position of pinion
- ④ Layout effect of pipeline

Mingyang Smart Energy

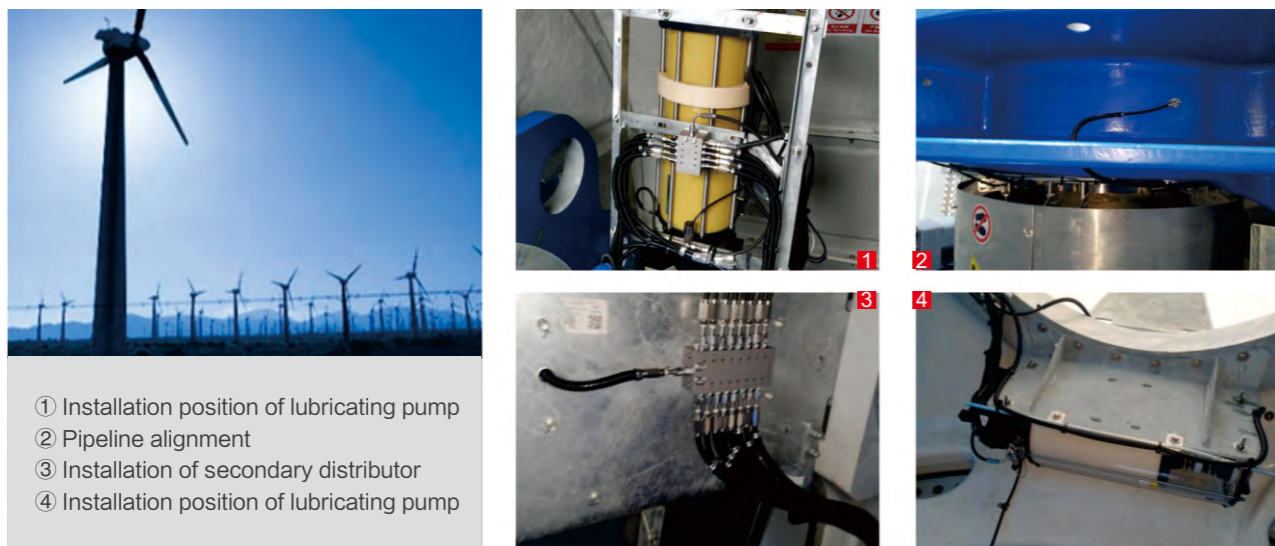
Fan Model: 5MW/6MW/8MW
 Installation Position: Yaw, Variable Pitch
 System Type: Single-Line Centralized Lubrication System



- ① Installation position of lubricating pump
- ② Distributor
- ③ The lubrication point is well sealed without oil leakage
- ④ Engine oil cylinder does not fall off

Envision Energy

Fan Model: 4MW/5MW
 Installation Position: Yaw, Principal Axis, Variable Pitch
 System Type: Progressive Centralized Lubrication System



- ① Installation position of lubricating pump
- ② Pipeline alignment
- ③ Installation of secondary distributor
- ④ Installation position of lubricating pump

Mingyang Smart Energy

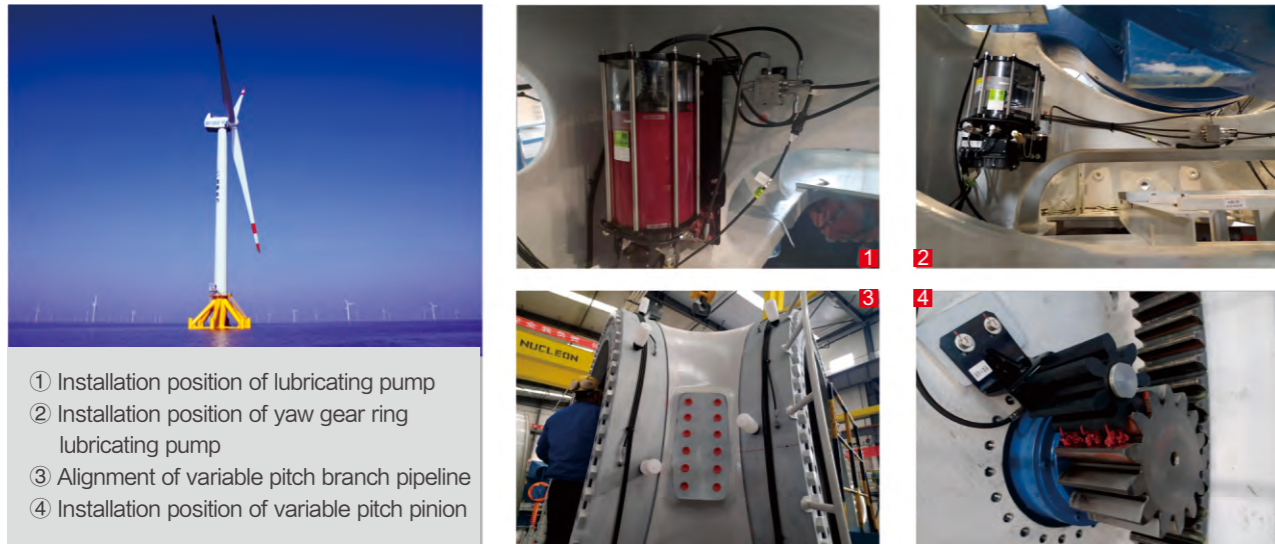
Fan Model: 3MW
 Installation Position: Yaw, Variable Pitch
 System Type: Progressive Centralized Lubrication System



- ① Installation position of lubricating pump
- ② Installation picture of distributor
- ③ Pipeline protection picture
- ④ Installation picture of branch pipeline

Haizhuang Wind Power

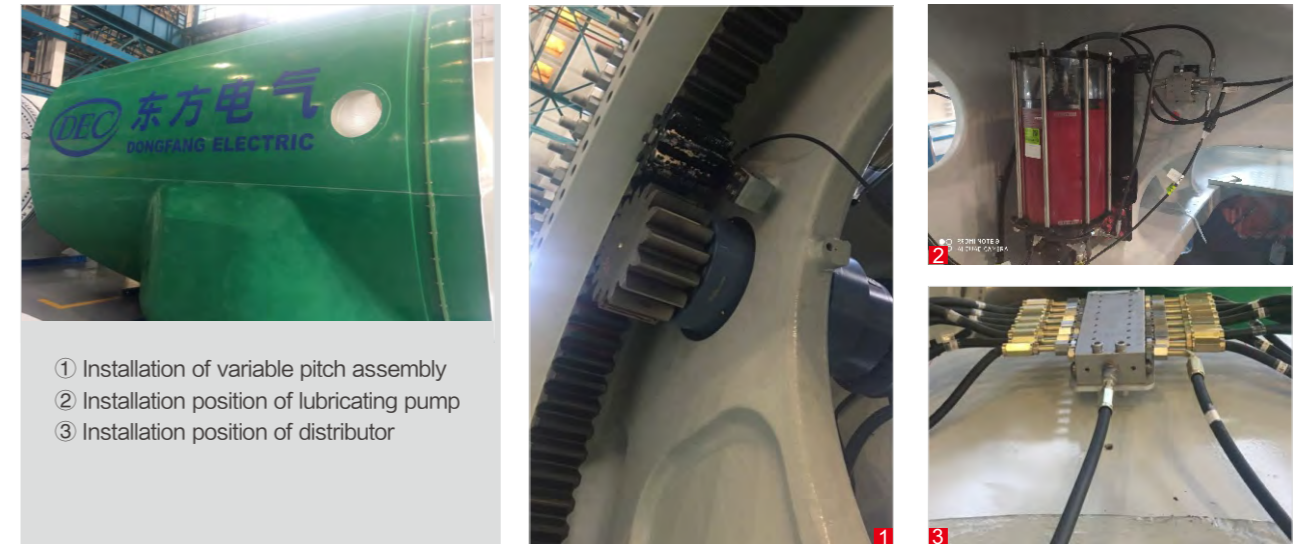
Fan Model: 2.XMW/3MW
 Installation Position: Yaw, Principal Axis, Variable Pitch
 System Type: Progressive/Single-Line Centralized Lubrication System



- ① Installation position of lubricating pump
- ② Installation position of yaw gear ring lubricating pump
- ③ Alignment of variable pitch branch pipeline
- ④ Installation position of variable pitch pinion

Dongfang Electric Wind Power

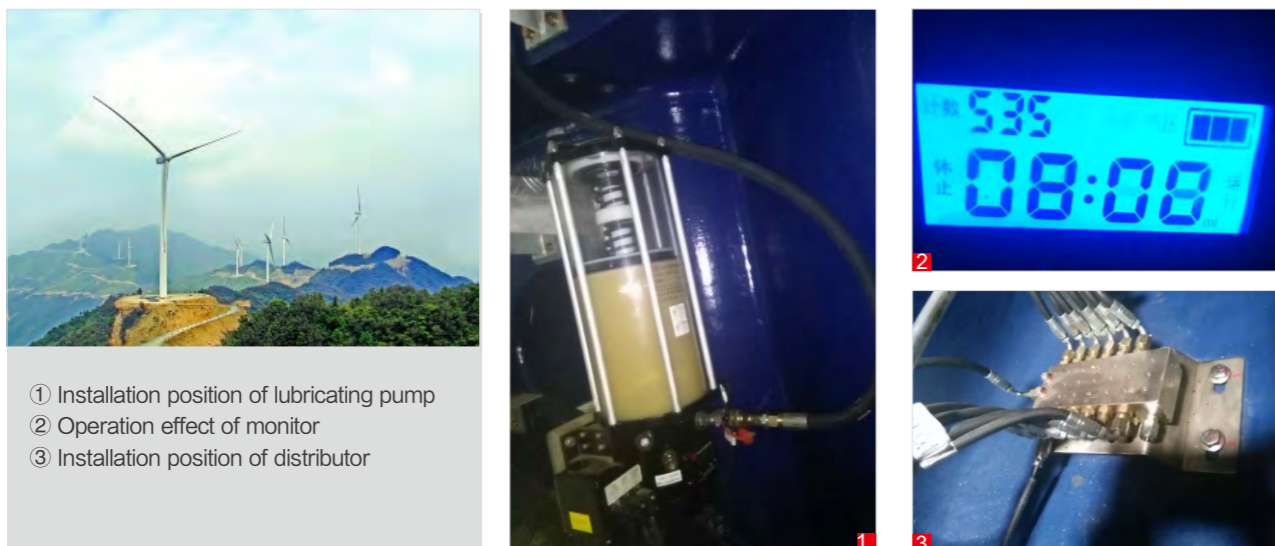
Fan Model: 3MW
 Installation Position: Yaw, Principal Axis, Variable Pitch
 System Type: Progressive Centralized Lubrication System



- ① Installation of variable pitch assembly
- ② Installation position of lubricating pump
- ③ Installation position of distributor

CRRC Wind Power

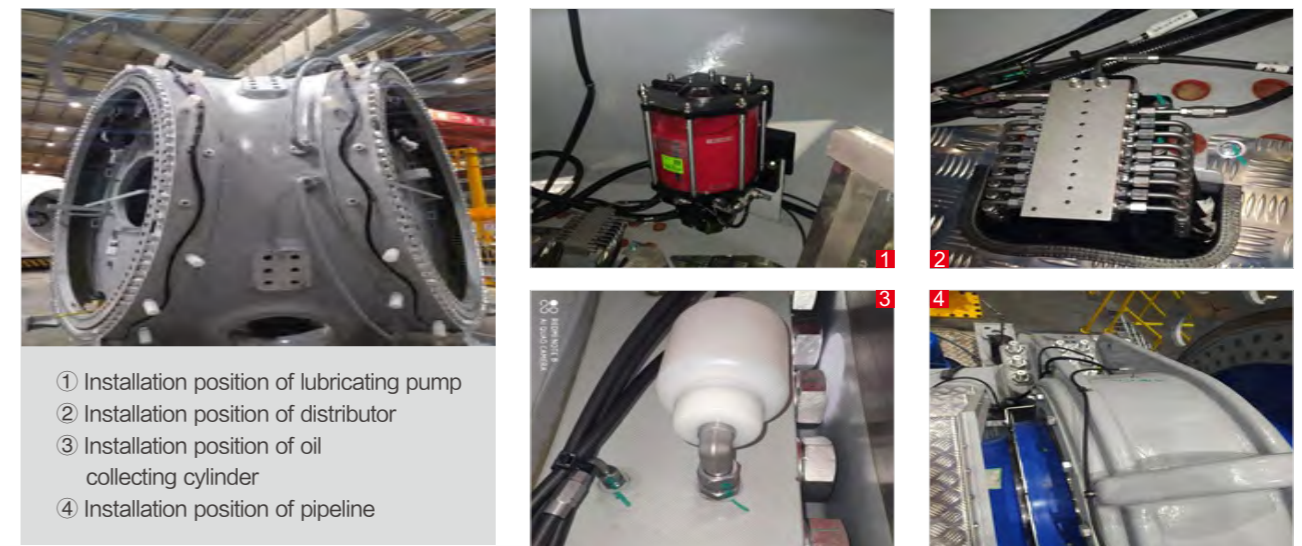
Fan Model: 1.5MW/2.XMW/3.XMW/4.XMW
 Installation Position: Yaw, Principal Axis, Variable Pitch
 System Type: Progressive/Single-Line Centralized Lubrication System



- ① Installation position of lubricating pump
- ② Operation effect of monitor
- ③ Installation position of distributor

Sany Renewable Energy

Fan Model: 909
 Installation Position: Yaw, Principal Axis, Variable Pitch
 System Type: Progressive Centralized Lubrication System



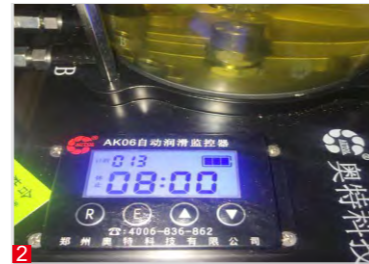
- ① Installation position of lubricating pump
- ② Installation position of distributor
- ③ Installation position of oil collecting cylinder
- ④ Installation position of pipeline

Guizhou Longyuan

Main Engine Manufacturer: GOLDWIND
 Fan Model: 1.5MW
 Modified Part: variable pitch
 System Type: single-line centralized lubrication system + used grease collection system



- ① Installation position of lubricating pump
- ② Operation effect of monitor
- ③ Installation position of distributor
- ④ Lipid evacuator and absorber



Jingneng Saihan

Main Engine Manufacturer: GOLDWIND
 Fan Model: 1.5MW
 Modified Part: variable pitch
 System Type: single-line centralized lubrication system + used grease collection system



- ① Installation position of lubricating pump
- ② Installation position of distributor
- ③ Operation effect of monitor
- ④ Effect of oil discharge



Liaoning Longyuan

Main Engine Manufacturer: United Power
 Fan Model: 1.5MW
 Modified Part: variable pitch bearing
 System Type: single-line centralized lubrication system + used grease collection system



- ① Installation position of lubricating pump
- ② Installation position of distributor
- ③ Installation effect of pipeline
- ④ Effect of lubrication point



Datang Guizhou

Main Engine Manufacturer: United Power
 Fan Model: 2MW
 Modified Part: variable pitch
 System Type: used grease collection system

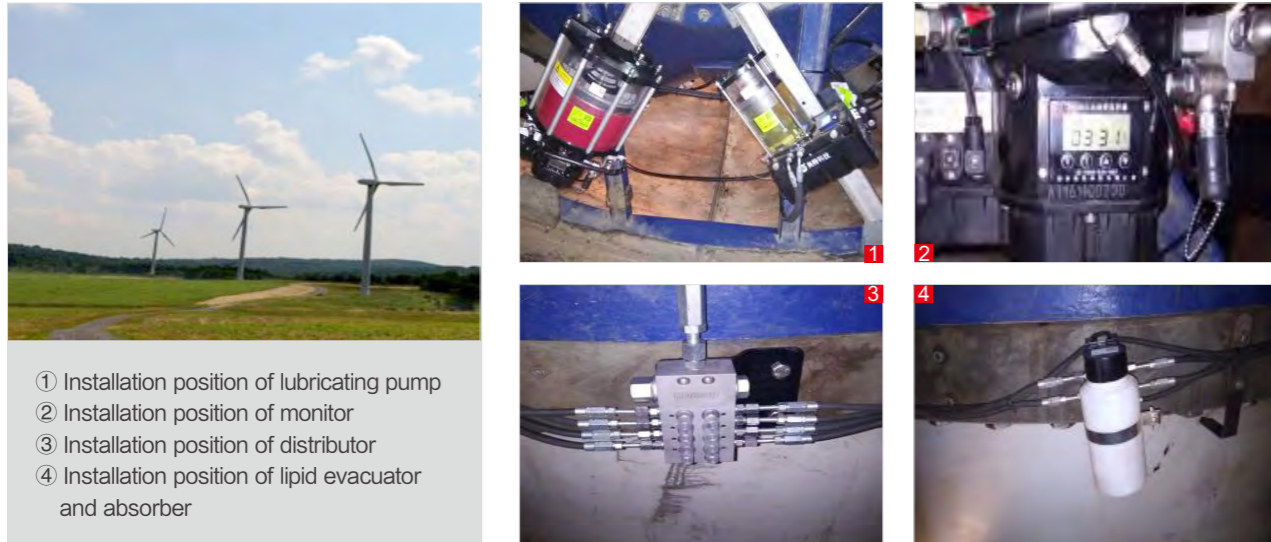


- ① Installation position of power pump
- ② Installation position of four-way
- ③ Parameter setting
- ④ Lipid evacuator and absorber



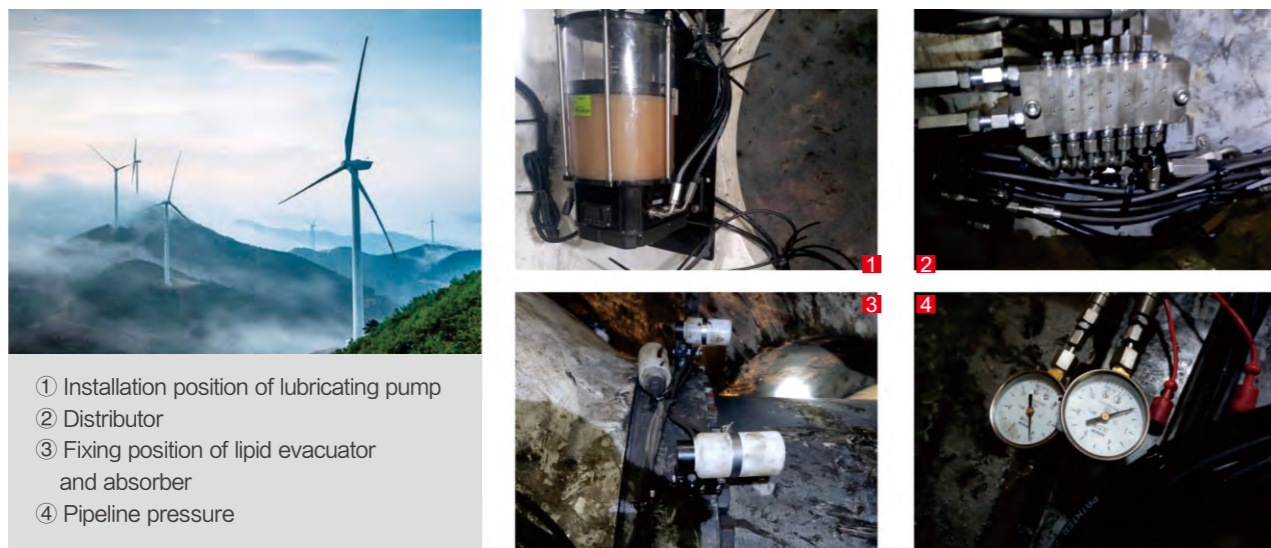
State Power Investment Corporation Limited

Main Engine Manufacturer: Mingyang Smart Energy
 Fan Model: 1.5MW
 Modified Part: variable pitch
 System Type: single-line centralized lubrication + used grease collection system



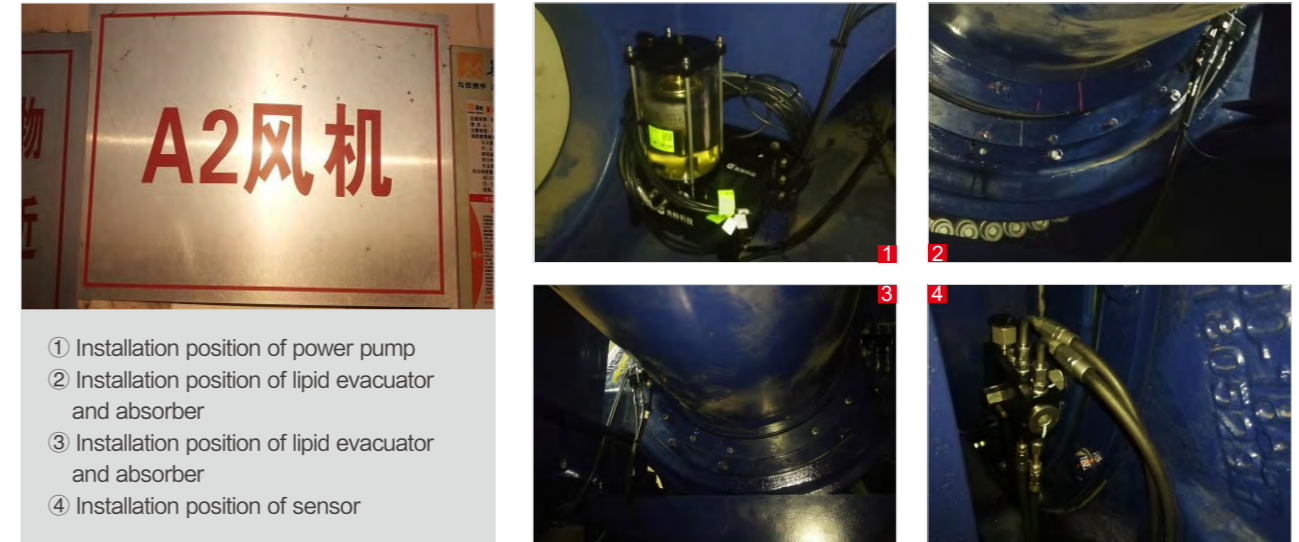
Datang Sanmenxia

Main Engine Manufacturer: China Creative Wind Energy
 Fan Model: 3MW
 Modified Part: variable pitch
 System Type: double-line centralized lubrication system + used grease collection system



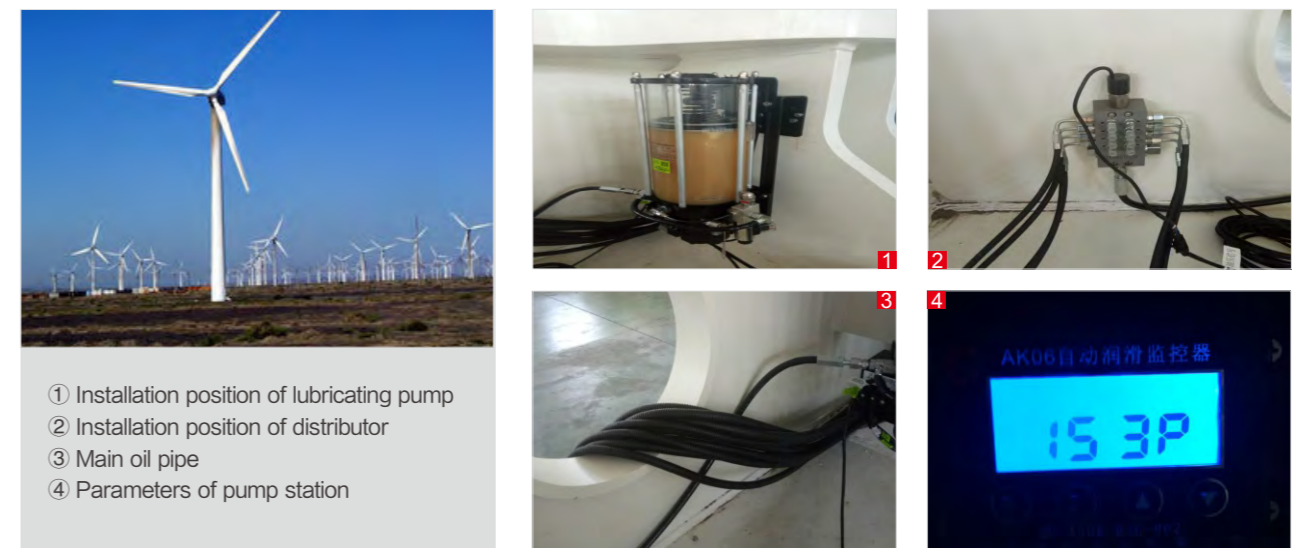
Shandong Jiaozhou

Main Engine Manufacturer: Mingyang Smart Energy
 Fan Model: 2MW
 Modified Part: principal axis
 System Type: single-line centralized lubrication + used grease collection system



Datang Zhongwei

Main Engine Manufacturer: China Creative Wind Energy
 Fan Model: 2MW
 Modified Part: variable pitch + yaw
 System Type: single-line centralized lubrication + used grease collection system





The Installation Case of earthmoving equipment

SANY SY215 Excavator Centralized Lubrication System

Equipment Type: SY215E
 Lubricating Pump Model: ALPA1016
 Distributor Type: Progressive Distributor

Total Number of Equipment Lubrication Points:13
 Installed on: May 2020



- ① Installation position of lubricating pump
- ② Installation position of distributor



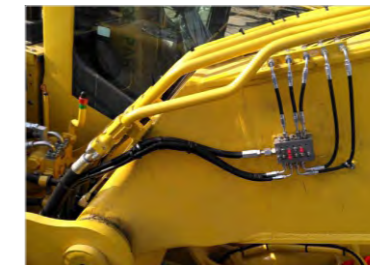
CLS of Komatsu 240 Excavator

Manufacturer:Komatsu
 Type of Distributor:Progressive Distributor
 Number of Distributor:3
 Installation Date:2018.3.28

Equipment type:Komatsu 240 excavator
 Type of Lubrication:ALP1026
 Lube points:9



- ① The location of pump
- ② The location of tube and wire harness
- ③ The location of distributor



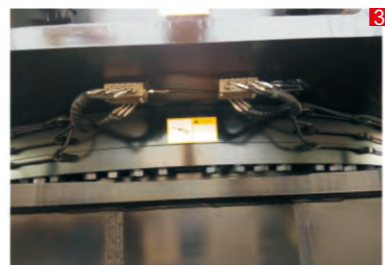
SANY SY1250 Excavator Centralized Lubrication System

Equipment Type: SY1250H
 Lubricating Pump Model: ADP1221
 Installed on: May 2020

Total Number of Equipment Lubrication Points:9
 Distributor Type: Progressive Distributor



- ① Installation position of lubricating pump
- ② Installation position of distributor
- ③ Installation position of distributor
- ④ Line alignment



CLS of XCMG XE900D Excavator

Manufacturer: XCMG
 Type of Distributor: Single-line Distributor
 Number of Distributor: 2
 Installation Date: 2017.3.18

Equipment type: XE900D excavator
 Type of Lubrication: ALP1026
 Lube points: 12



- ① The location of pump
- ② The location of monitor
- ③ The location of distributor
- ④ The location of tube and wire harness



CLS of Catepillar Excavator

Manufacturer: Catepillar
 Type of Distributor: Progressive Distributor
 Number of Distributor: 2
 Installation Date: 2017.11.15
 Equipment type: Catepillar 390 excavator
 Type of Lubrication: ALP1026
 Lube points: 11



- ① The location of pump
- ② The location of monitor
- ③ The location of distributor
- ④ The location of tube and wire harness



CAT 966M XE



CLS of Sunward Excavator

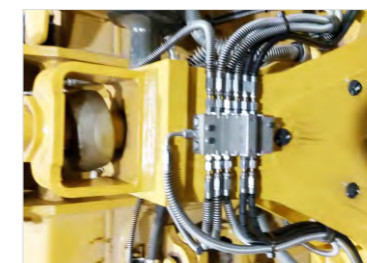
Manufacturer: Sunward
 Type of Distributor: Progressive Distributor
 Number of Distributor: 3
 Installation Date: 2017.7
 Equipment type: SWE70B excavator
 Type of Lubrication: ALP822
 Lube points: 17



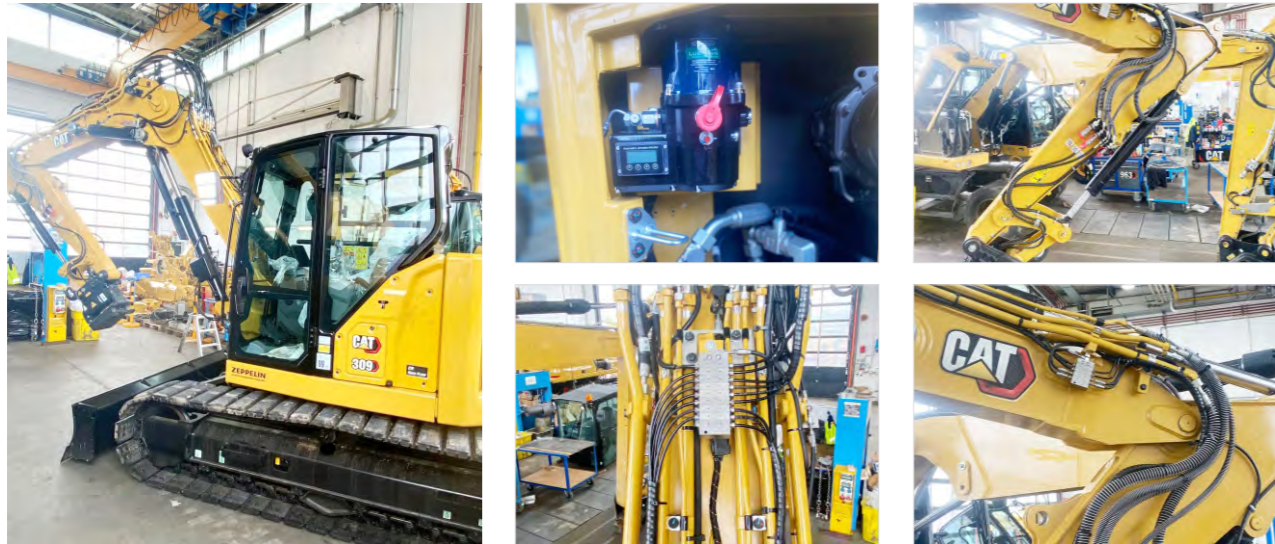
- ① The location of pump
- ② The location of distributor



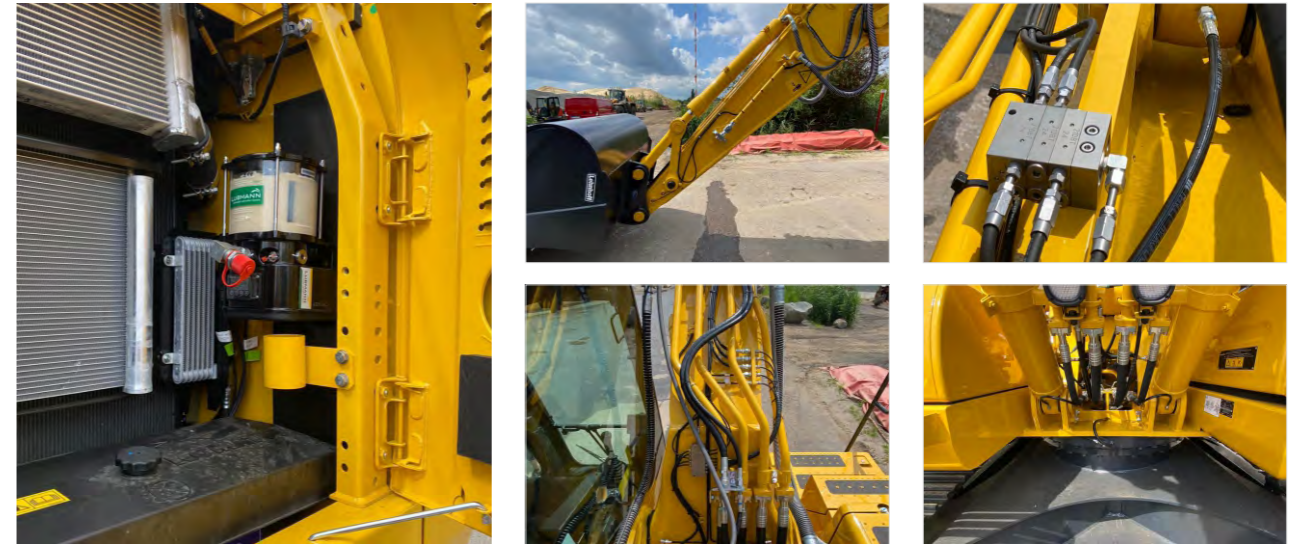
CAT D5 DOZER



CAT309



Komatsu PC 240 NLC



Caterpillar 315



Kubota U56-5





The Installation Case of Truck

Tonly 875D Dump Truck Centralized Lubrication System

Equipment Type: 875D dump truck
 Lubricating Pump Model: ALPA1014
 Total Number of Equipment Lubrication Points:9

Distributor Type: Single-Line
 Progressive Distributor
 Installed on: May 2020



- ① Installation position of lubricating pump
- ② Installation position of distributor
- ③ Installation position of monitor



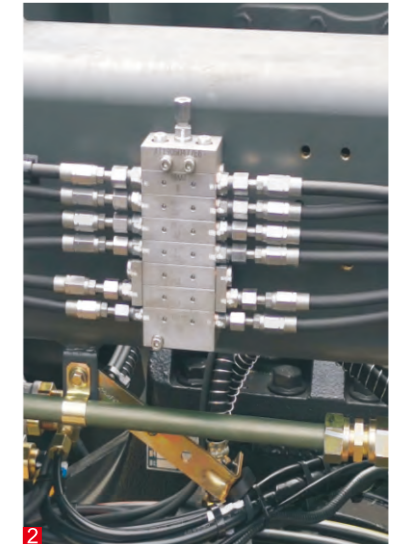
XCMG 90T Heavy Truck Centralized Lubrication System

Equipment Type: XCMG 90T heavy truck
 Lubricating Pump Model: ALPA1014
 Total Number of Equipment Lubrication Points:9

Distributor Type: Three-Line Progressive Distributor
 Installed on: May 2020



- ① Installation position of lubricating pump
- ② Installation position of distributor



Shaanxi Tonly Heavy Industries Mining Truck Centralized Lubrication System

Equipment Type: Mining Truck
 Lubricating Pump Model: AR60H
 Installed on: August 2019

Total Number of Equipment Lubrication Points:32
 Distributor Type: Pressurized Distributor



- ① Installation position of lubricating pump
- ② Installation position of monitor
- ③ Installation position of distributor
- ④ Position of lubrication points



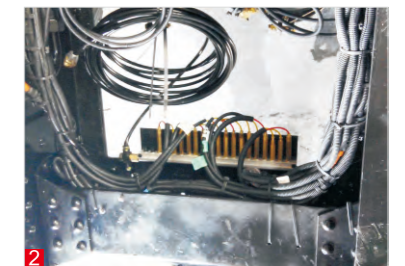
Ginaf Heavy Truck Centralized Lubrication System

Equipment Type: HD5395 TS Mining Truck
 Lubricating Pump Model: ALP502, AR60H
 Total Number of Equipment Lubrication Points: 23/22

Distributor Type: Pressurized Distributor
 Installed on: April 2014



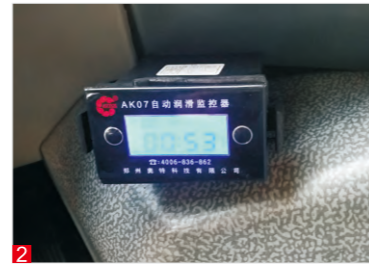
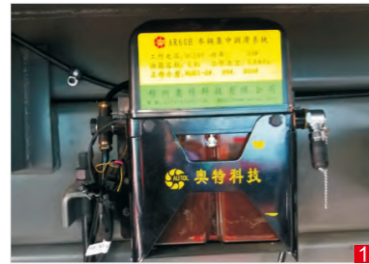
- ① Installation position of 50 lubricating pump
- ② Installation position of distributor
- ③ Installation position of 60 lubricating pump
- ④ Installation position of distributor



Sinotruk Qingdao Heavy Industry 90 T Heavy Truck Centralized Lubrication System

Equipment Type: Heavy Truck
 Lubricating Pump Model: AR60
 Total Number of Equipment Lubrication Points: 28

Distributor Type: Pressurized Distributor
 Installed on: December 2018

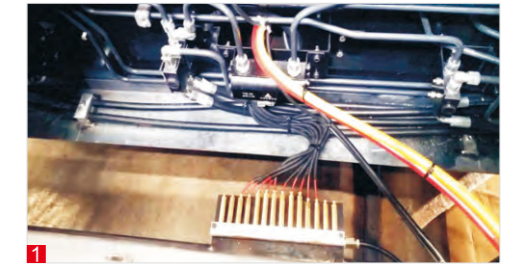


- ① Installation position of lubricating pump
- ② Installation position of monitor
- ③ Installation position of distributor
- ④ Effect of lubrication point

Centralized Lubrication System for Jiefang Car Carrier and Auman Car Carrier

Equipment Type: Car Carrier
 Lubricating Pump Model: AR60H
 Total Number of Equipment Lubrication Points: 52

Distributor Type: Pressurized Distributor
 Installed on: June 2018

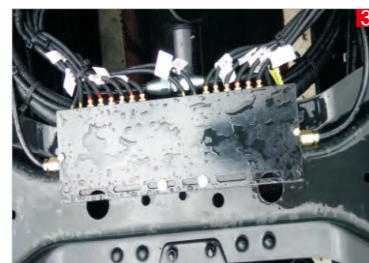


- ① Installation position of distributor
- ② Installation position of pipeline


HINO MOTOR Centralized Lubrication System

Equipment Type: truck
 Lubricating Pump Model: AR60
 Total Number of Equipment Lubrication Points: 28

Distributor Type: Single-Line In-line Distributor
 Installed on: July 2017



- ① Installation position of lubricating pump
- ② Installation position of distributor
- ③ Position of lubrication points
- ④ Arrangement of wire harness



The Installation Case of Rotary Drill

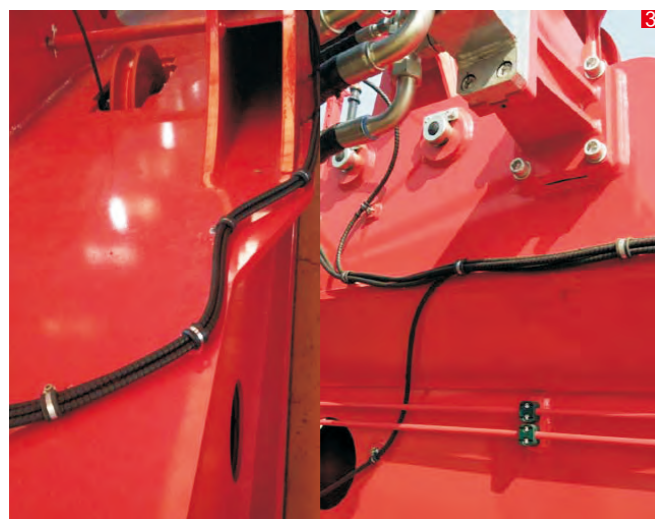
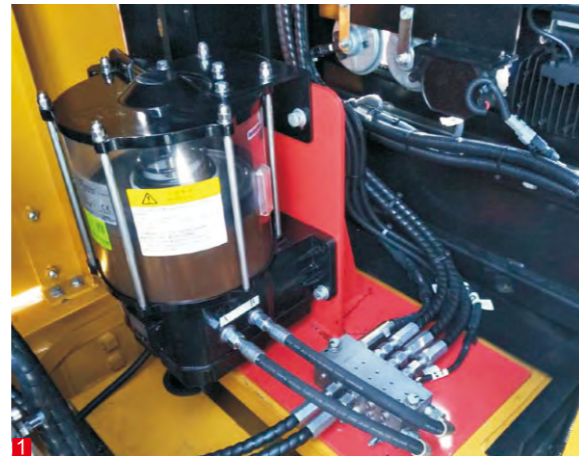
SANY 365 Rotary Drill Centralized Lubrication System

Equipment Type: 365 rotary drill
 Lubricating Pump Model: ALPA1026
 Total Number of Equipment Lubrication Points: 46

Distributor Type: Double-Line Progressive Distributor
 Installed on: April 2018



- ① Installation position of lubricating pump
- ② Installation position of distributor
- ③ Arrangement of wire harness
- ④ Position of lubrication points



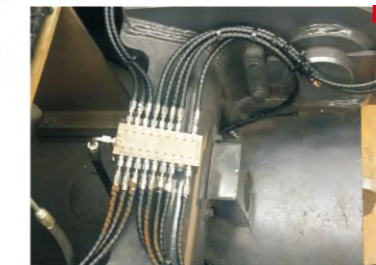
Zoomlion 280C-3 Rotary Drill Centralized Lubrication System

Equipment Type: 280c-3 rotary drill
 Lubricating Pump Model: ADPA1026
 Total Number of Equipment Lubrication Points:13

Distributor Type: Double-Line Progressive Distributor
 Installed on: October 2020



- ① Installation position of lubricating pump
- ② Double-line distributor
- ③ Chassis distributor and pipeline
- ④ Chassis distributor and pipeline



Yutong YTR300D Rotary Drill Centralized Lubrication System


Equipment Type: YTR300D rotary drill
 Lubricating Pump Model: ADP1224
 Total Number of Equipment Lubrication Points: 23

Distributor Type: Double-Line Progressive Distributor
 Installed on: August 2020



- ① Installation position of lubricating pump
- ② Distributor
- ③ Pipeline
- ④ Oil discharge test





The Installation Case of Loader

Jiyuan XCMG Loader Centralized Lubrication System

Equipment Type: Z150 loader
 Lubricating Pump Model: ALP812
 Total Number of Equipment Lubrication Points: 12

Distributor Type: Progressive Distributor
 Installed on: May 2020



- ① Installation position of lubricating pump
- ② Installation position of distributor
- ③ Position of lubrication points
- ④ Oil discharge



Jiyuan Doosan Loader Centralized Lubrication System

Equipment Type: DL501-9C loader
 Lubricating Pump Model: ALPA1022
 Total Number of Equipment Lubrication Points: 14

Distributor Type: Progressive Distributor
 Installed on: November 2020



- ① Installation position of lubricating pump
- ② Installation position of distributor
- ③ Position of lubrication points
- ④ Line alignment



Doosan Loader Centralized Lubrication System

Equipment Type: DL501-9C loader
 Lubricating Pump Model: ALPA1022
 Total Number of Equipment Lubrication Points: 14

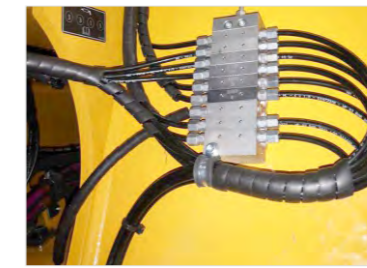
Distributor Type: Progressive Distributor
 Installed on: June 2017



- ① Installation position of lubricating pump
- ② Installation position of distributor
- ③ Position of lubrication points
- ④ Arrangement of wire harness



S&G



Doosan DL 220



JCB 435S





The Installation Case of Port

Shanghai Donggang Centralized Lubrication System

Equipment Name: Query-side Container Crane
 System Name: Multi-line Lubrication System
 System Model: ACL300

Number of Lubrication Points: 4
 Installed on: October 2017



Huaneng Caofeidian Terminal Centralized Lubrication System

Equipment Name: Belt Conveyor
 System Name: Multi-line Smart Lubrication System
 System Model: ACL300

Number of Lubrication Points: 1200
 Installed on: May 2016



SDIC Caofeidian Terminal Centralized Lubrication System

Equipment Name: Belt Conveyor / Ship Loader
 System Name: Multi-line Smart Lubrication System
 System Model: ACL300

Number of Lubrication Points: 1358
 Installed on: June 2020



Zhuhai Hongwan Container Terminals Centralized Lubrication System

Equipment Name: portal slewing crane/rail gantry crane
 System Name: Multi-line Smart Lubrication System
 System Model: AISL 1000

Number of Lubrication Points: 97
 Installed on: June 2018





The Installation Case of Mine

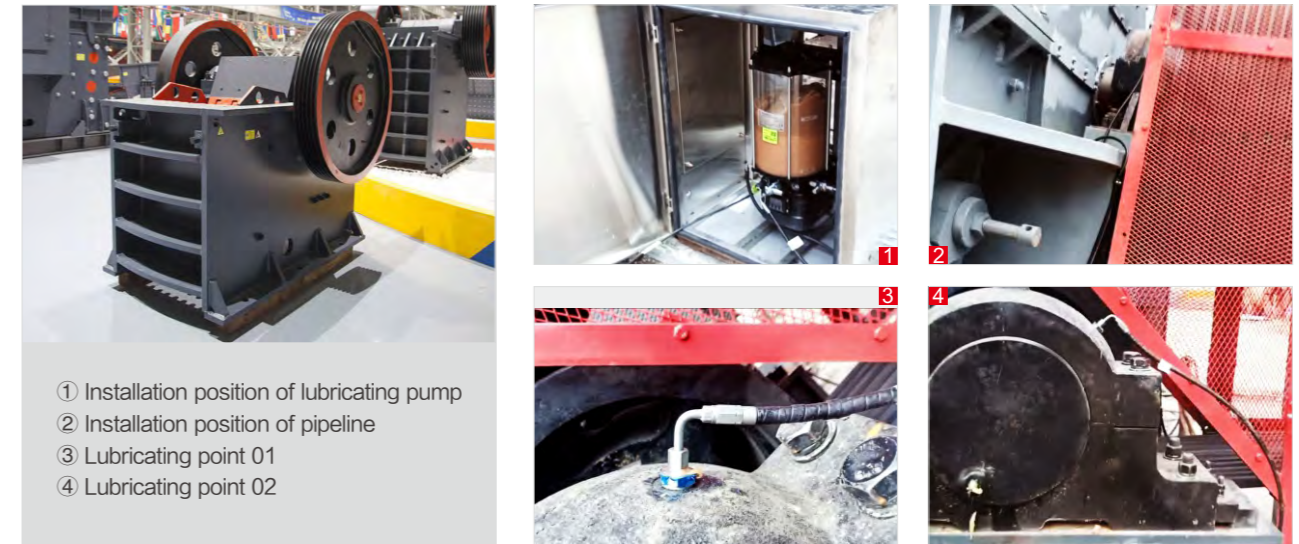
Centralized Lubrication System for Liming Heavy Industry 860 Crusher

Equipment Name: 860 crusher
 System Name: Smart Centralized Lubrication System
 System Model: ALP1024
 Number of Lubrication Points: 4
 Installed on: March 2018



SNK SAN

Main Engine Manufacturer: jaw crusher
 Number of Lubrication Points: 4
 System Name: ALPB1218j - "Lubrication System"



Zhongyudingli Centralized Lubrication System

Equipment Name: Vibrating feeder
 System Name: Smart Centralized Lubrication System
 System Model: automatic lubricant pump
 Number of Lubrication Points: 8
 Installed on: June 2018



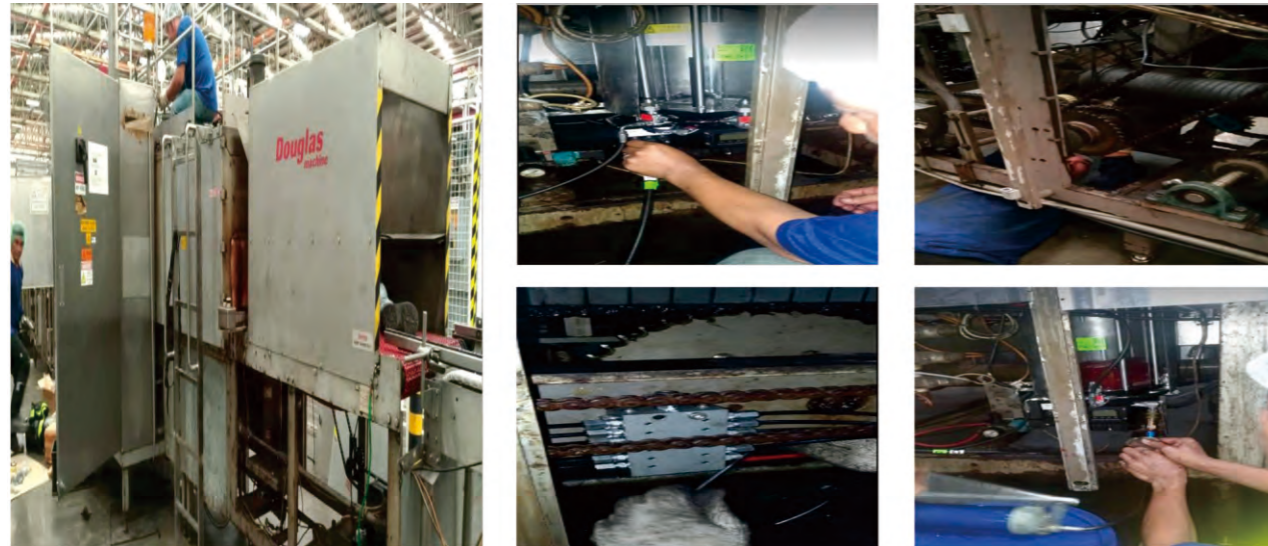


The Installation Case of Production Line

Centralized Lubrication System for Philippine Coca-Cola Production Line

Equipment Name: Coca-Cola Production Line
 System Name: Smart Lubrication System
 System Model: ALP1016

Number of Lubrication Points: 80
 Installed on: November 2020



Centralized Lubrication System for Philippine Injection Molding Machine

Equipment Name: Injection Molding Machine
 System Name: Smart Centralized Lubrication System
 System Model: ALP1014

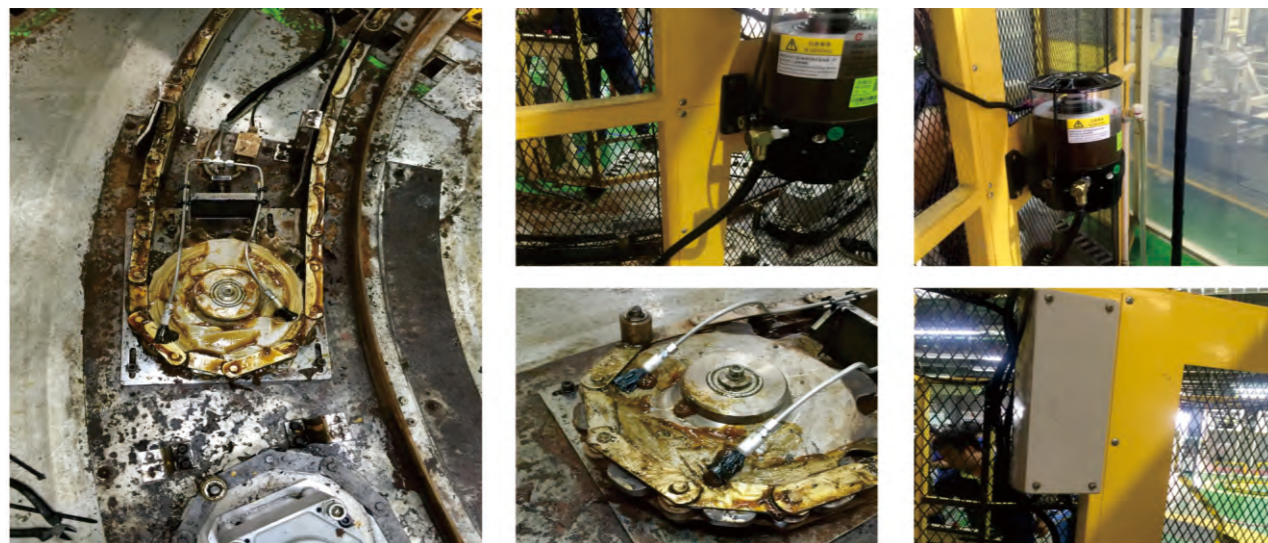
Number of Lubrication Points: 30
 Installed on: January 2018



Centralized Lubrication System for Hitachi Auto Parts Production Line Chain

Equipment Name: Chain of Production Line
 System Name: Smart Centralized Lubrication System
 System Model: ALP502

Number of Lubrication Points: Chain
 Installed on: August 2018



Centralized Lubrication System for Liu'an Beer Production Line

Equipment Name: Bearings of Beer Production Line
 System Name: Multi Line Lubrication System
 System Model: ALPB1226

Number of Lubrication Points: 4
 Installed on: November 2020



The Installation Case of Single Point Lubricator

South African Mine

Equipment Name: Belt
Installed Product Model: Single Point Lubricator
Number of Lubrication Points:30

