

CABLE REEL

TCR - MC TYPE



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1.

2. CABLE REEL

- 2.1 REDUCER
- 2.2 REEL DRUM
- 2.3 GUIDE ROLLER
- 2.4 MOTOR
- 2.5 REELING CABLE
- 2.6 SLIP RING
- 2.7 LIMIT SWITCH CAM

3.

- 3.1 GUIDE ROLLER TENSION
- 3.2 CABLE OVER-TENSION SLACK

4.

- 4.1 MAGNETIC COUPLING UNIT
- 4.2 REDUCER
- 4.3 SLIP RING BOX

5.

- 5.1 GUIDE ROLLER TENSION
- 5.2 LIMIT SWITCH CAM
- 5.3 ONE WAY CLUTCH
- 5.4 MAGNETIC COUPLING TORQUE

6.

7. REDUCER

8. SEQUENCE DIAGRAM

1.

1.1

PERMANENT MAGNET COUPLING Cable Reel Coupling Unit
 Cable
 , Slip Ring Box Reducer
 가 , Compact Basic Machine
 Cable Reeling .

1.2

1) Magnetic coupling Type Cable Reel Compact
 , Multi-Coupling Unit Cable
 (Hoisting) Cable
 Smooth Operation .

2) Coupling Coupler 가
 Torque 가 .

3) Motor 3 가 ,

4) Coupling Torque PLANETA Reducer
 Torque가 .

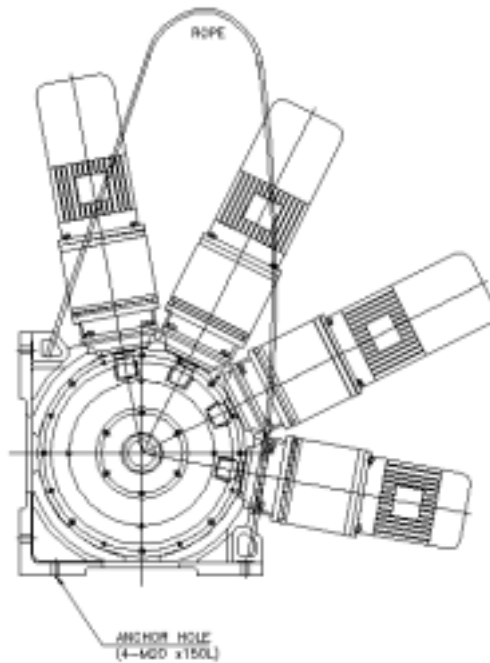
『 』 Magnetic Coupling One Way Clutch가 (Brake Motor가
) Motor Motor .

2. CABLE REEL

Magnetic Coupling Type Cable Reel Reel Drum, Slip Ring Box가
Reducer가

2.1 REDUCER(SLIP RING BOX)

- 1) Rope Reducer
- 2) Base Plate Reducer Anchor Bolt Hole Bolt, Nut
Spring Washer Reducer
- 3) Reducer Shaft Bolt(Lock Nut) Reel
Drum Shaft



1. Reducer

2. 4 MOTOR

2. 4. 1 BRAKE가 MOTOR

- 1) Motor , , 가 Motor
- 2) Terminal Box Cover
- 3) Tube Terminal Box Hole
Terminal Box Hole(20)
Cable Gland(Connector)
- 4) Hook가 Reel Drum
3 2
- 5) Sequence Reel
- 6) Reel Drum Spoke Block

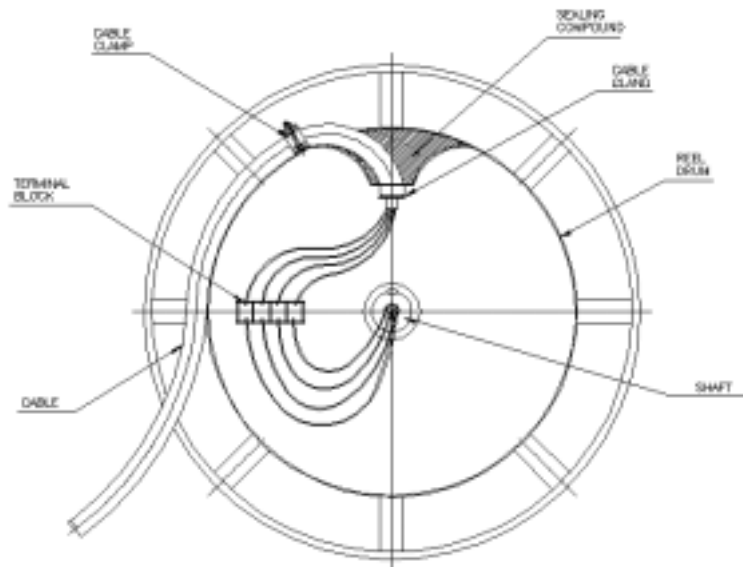
2. 4. 2 BRAKE가 MOTOR

- Brake가 Motor Slack
- Motor One Way Clutch(Back Stop Clutch)가
- 1) Reel Drum Motor가
- 2) Motor가 One way Clutch Motor
가
- a. Motor Bolt Motor Flange
- b. Motor Terminal Box Motor Motor
Motor Shaft
- c. Motor
- d. Motor One Way Clutch
- One Way Clutch 『One Way Clutch』

2. 5 REELING CABLE

Cable 2. 7 Limit Switch Cam 』
 Reeling Cable Reel Drum Cable (Square x Core, ,
) Drum , Reel Drum Dead Turn,
 , , Center Position Device Junction Box
 Cable

- 1) Cable Guide Roller , Reel Drum Cable Gland
- 2) Reel Drum Cable
- 3) Guide Roller Roller Cable Cable Gland Male
 Gland Reel Drum Female Gland
 Cable Sealing Compound Sealing
- 4) Drum Cable Clamp Bar , Cable Clamp
 (2-3mm) Cable 2-3 , Cable Clamp
 Bar
- 5) Drum Terminal Block Cable
- 6) Drum Cover



3. Reeling Cable

2. 7 LIMIT SWITCH CAM

Over Travel Cable Limit Switch 가 Slip Ring Shaft

1) Limit Switch Reel Drum Shaft 가 Chain Sprocket Wheel
Worm & Worm Wheel Cam 가

2) Limit Switch Cover Cam Cable
가

3) Cam 가 Limit Switch Shaft Sprocket Wheel
, Shaft Cam

4) Limit Switch Cover , Slip Ring Box
Slip Ring Box Box

3.

- 1) Switch
- 2) (Hoisting) Reel Drum
Jog Operation
- 3) Reel Drum Cable 가
- 4) Cable Cable
- 5) Cable Reducer Torque 가 가 Cable
Motor 가



3.1 GUIDE ROLLER TENSION

- 1) Guide Roller Limit Switch가

NO	SIGNAL	REMARKS
1	HR	Cable Over-Tension Detector (Right)
2	HL	Cable Over-Tension Detector (Left)
3	LS1	Cable Direction Detector (Right)
4	LS2	Cable Direction Detector (Left)

- 2) Cable Over-Tension Spring Force
Limit switch Switch Dog
- 3)
- 4) Spring Tension 『 5.1 Guide Roller 』

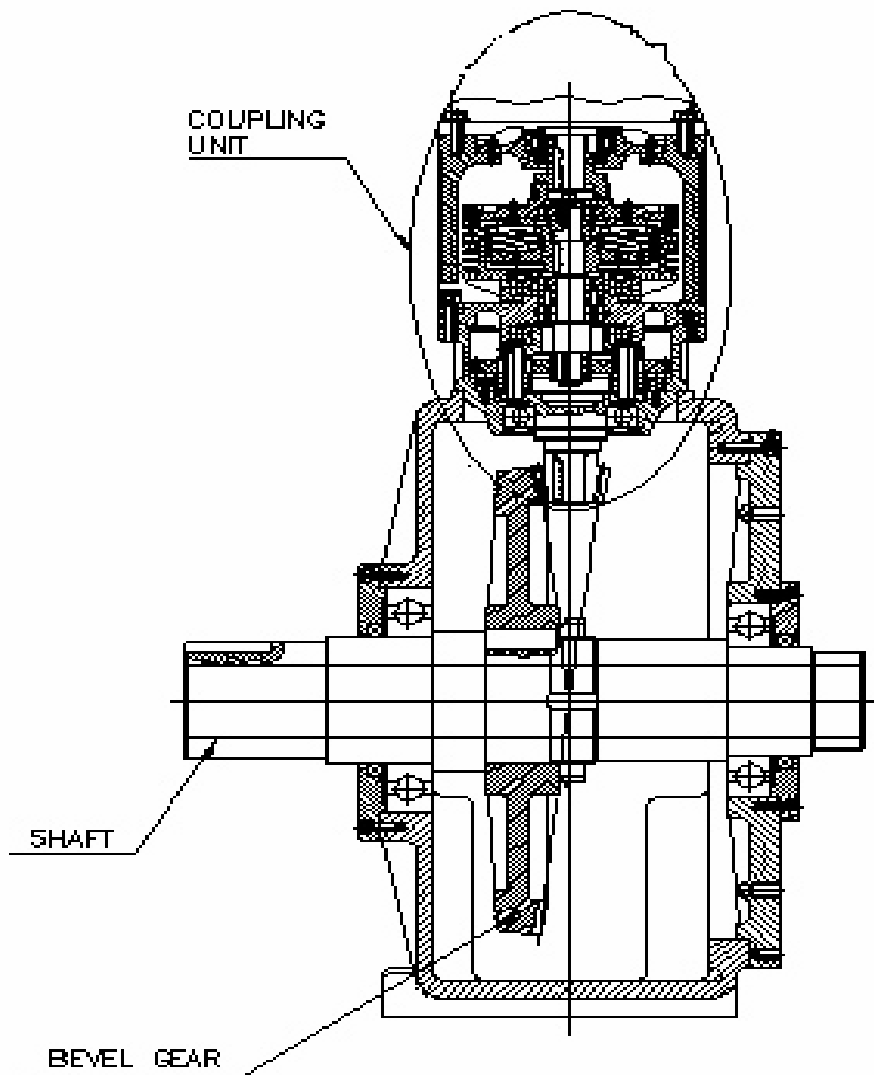
3. 2 GUIDE ROLLER OVER-TENSION SLACK

- 1) Cable Over Tension Slack Slip Ring
Box Limit Switch Cam 가 가 .
- 2) 가 , 『 5. 3 Limit Switch Cam 』 Cam
Test Run
- 3) Cam Magnet Coupling Gap Torque
- 4) Coupling Test Sheet Coupling Unit
『 5.4 Magnetic Coupling Torque 』 Torque

4.

4. 1 MAGNETIC COUPLING UNIT

- 1) Motor Magnetic Disc Disc가
Magnet Segment가 Motor Torque .
- 2) Coupling Torque Magnetic Disc segment (Gap)
, 『 Coupling Torque 』 .
- 3) Coupling Fin
- 4) Shaft Torque
Torque , 3 Gear Torque
- 5) Gear Bevel Gear가 Cable Reel
Drum Shaft .



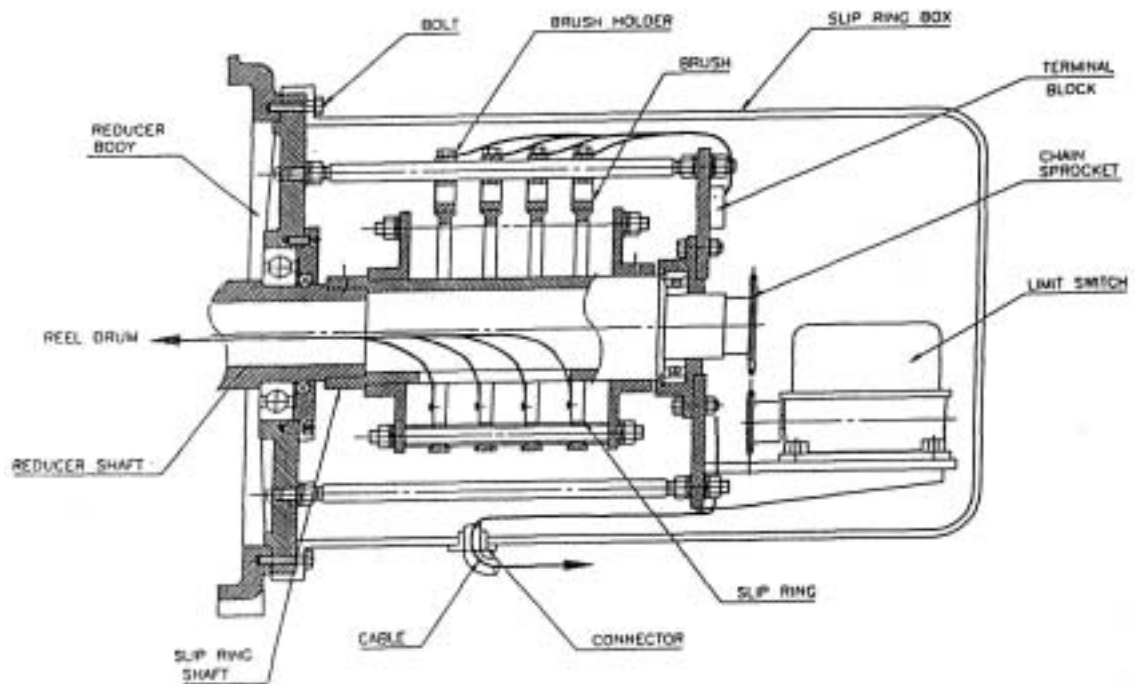
5. Magnetic Coupling Unit

4. 2 REDUCER

- 1) Reducer cable Torque Magnetic Coupling
Unit 3 Sets .
- 2) Shaft Bevel Gear가 , Shaft Reel Drum
Cable , Cable Motor , Brake가
Brake Motor Magnetic Coupler
Slip Cable .
- 3) Brake Motor Motor One Way Clutch Bearing
Motor .
- 4) 가 Brake One Way Clutch Cable
- 5) Magnetic Coupling Unit 2 Cable
Torque unit Unit가
- 6) Cable Brake Motor , Cable
Cable 가 .

4. 3 SLIP RING BOX

- | | | |
|--------------|--|----------------|
| 1) Reducer | Slip Ring, Brush Holder, Terminal Box, | Limit |
| Switch가 | | |
| 2) Reel Drum | Terminal Block | Reducer |
| | Shaft(Hollow Shaft) | Slip Ring |
| 2) Slip Ring | Brush가 | Brush Holder |
| | | Terminal Block |
| 4) | Reel Drum | Terminal Block |
| | Brush | Reel Drum |
| | | Slip Ring |

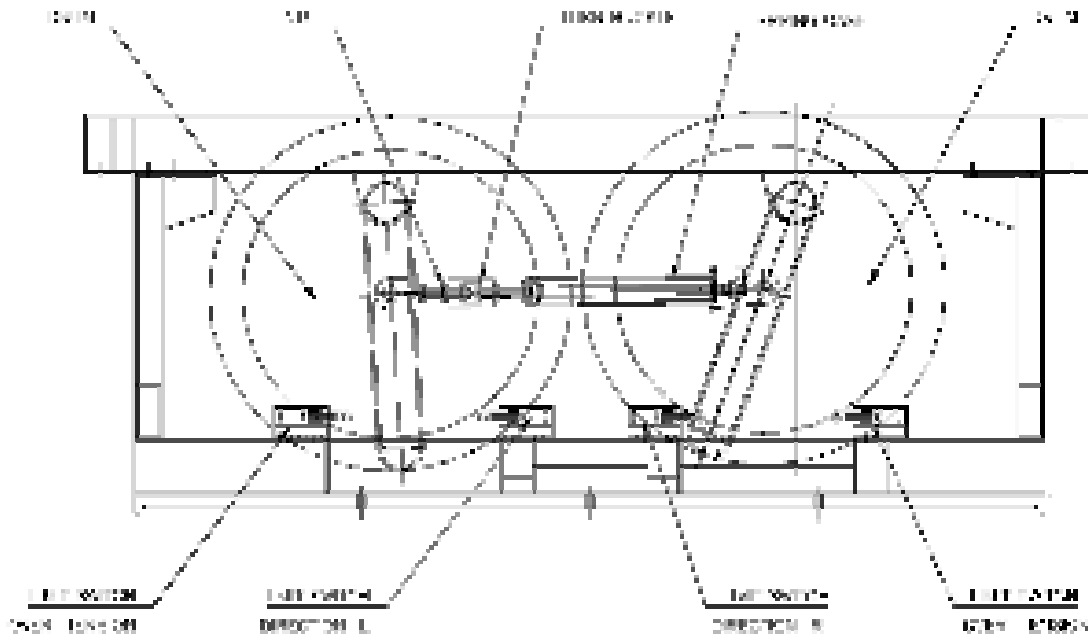


6. Slip Ring Box

5.

5.1 GUIDE ROLLER TENSION

- 1) Guide Roller Switch 가 Drum Spring , Limit

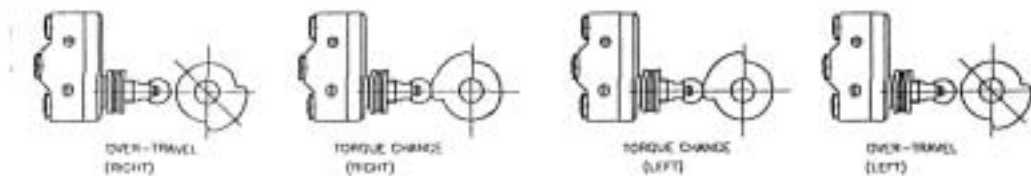
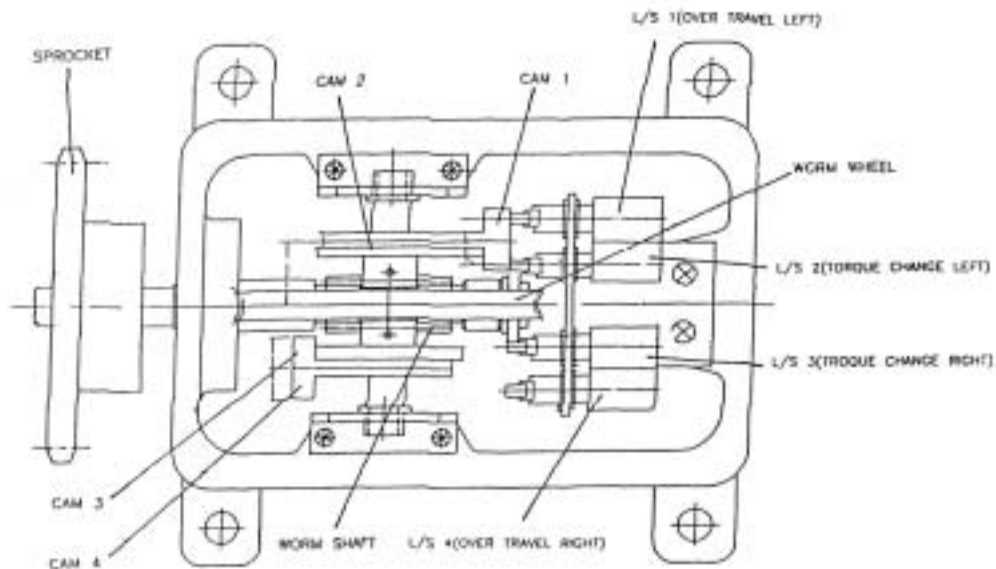


7. Guide Roller Tension

- 2) Reeling Unreeling Cable Slack Over Tension
 Spring Case Turn Buckle Nut Turn Buckle
 Spring Force Guide Roller
- 3) Slack Spring Force (Drum Center 가)
 Over Tension Spring Force 가 (Drum Center
 가 가) Turn Buckle
- 4) Spring Force Turn Buckle Nut
- 5) Cable 가 Slack Over Tension 가
 Limit Switch, Dog

5. 2 LIMIT SWITCH CAM

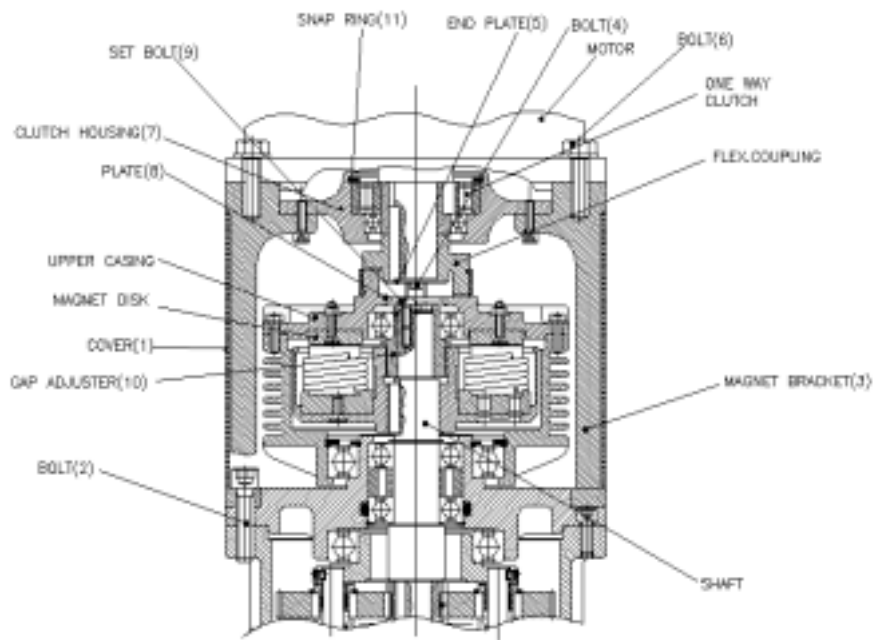
- 1) Slip Ring Limit Switch가 Cam
- 2) Torque (Cable 1/3, 2/3)
 Cable Slack Over-Tension Torque Limit Switch
 Cam Setting
- 3) Cam Setting Cover , Cam Bolt
 Cam Bolt
- 4) Cam Limit Switch (Worm & Worm Wheel)



8. Limit Switch Cam

5.3 ONE WAY CLUTCH

- 1) Coupling Cover(1)
- 2) Bolt(2) Motor Motor Bracket(3)
- 3) Motor Shaft Bolt(4) End Plate(5) Motor Bolt(6)
- Motor
- 4) Clutch Housing Snap Ring One Way Clutch
- 5)



9. One Way Clutch

5. 4 MAGNETIC COUPLING TORQUE

- 1) Coupling Cover(1)
- 2) Bolt(2) Motor Motor Bracket(3)
- 3) Plate(8) Set Bolt(9)
- 4) Torque Adjuster(10) 4 Hole 2 Hole
1/4 Gap
- 5) Torque Adjuster(10) Torque 가 가 ,
Torque 가
- 6) Torque Set Bolt(9)
- 7) Plate(8) Gasket Bond ,
- 8) Motor Braket(3), Cover(1)

6.

6. 1

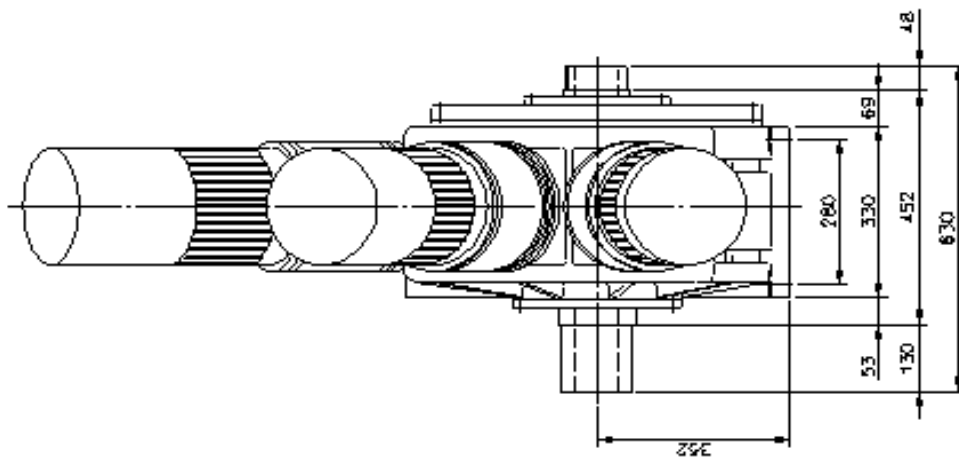
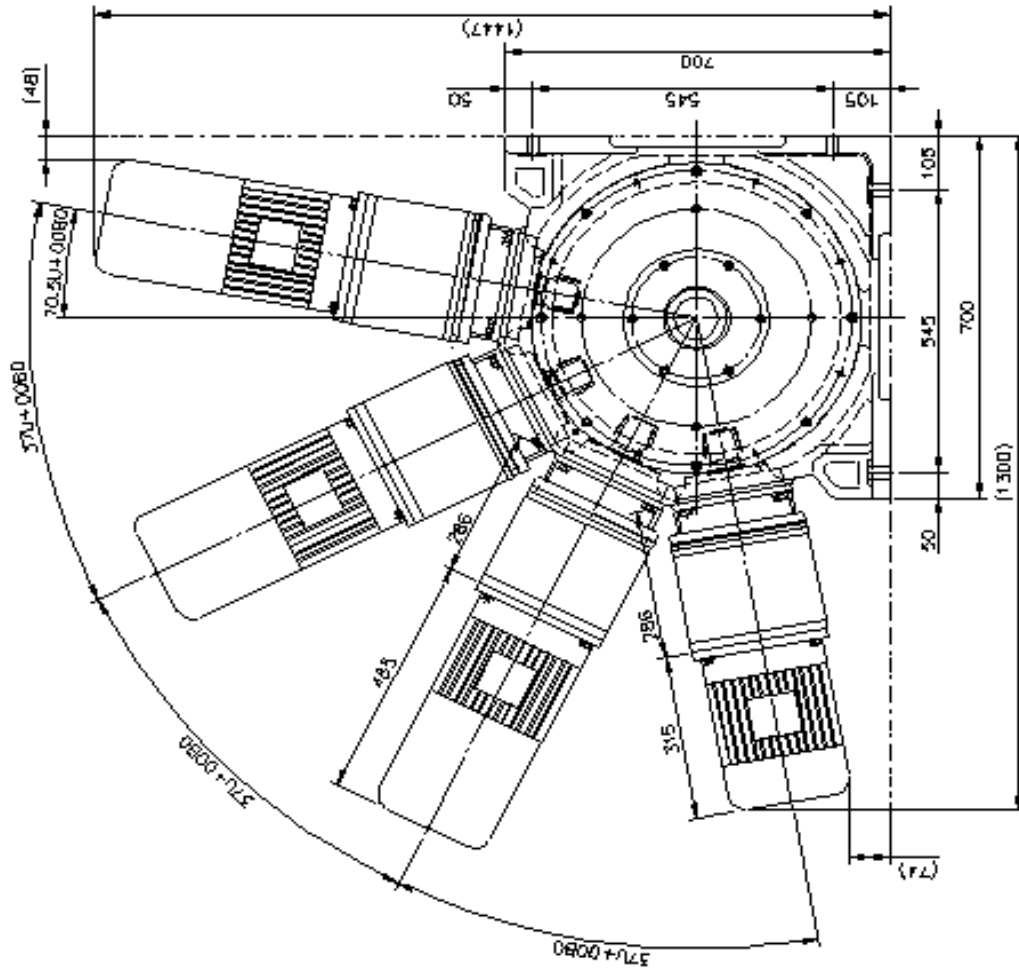
- 1) Magnetic Coupling Unit Ball Bearing Shield Type Bearing
- 2) Planetary Gear Box Grease
- 3) Reducer Box Grease Box Plug Grease
Gun 6

No	Grease	Maker		
1	Spirax G	Shell	6	0.5 l

6.2

No			
1	Slip Ring		Sand Paper
2	Brush		
3	Brush holder Spring Tension		Tension
4	Brush		
5	Slip Ring Box		Cover Packing Bolt
	Reel Drum		Cable Connector

7. REDUCER



10. Reducer

8. SEQUENCE DIAGRAM & CONTOL PANEL

