

Lubrication

LUBRICATION

Proper lubrication of roller chains is a very important factor in getting their best possible performance and longer lifetime. No matter how well a transmission system is designed, if it is not properly lubricated, its service life will be shortened. Abrasion between the pin and bushing causes roller chains to stretch. Therefore, these parts should be well lubricated.

The gap between the pin-link plate and roller-link plate on the slack side of the chain should be filled with lubricant. The oil forms a film which minimizes wear of the pin and bushing thus increasing the chain service life. It also reduces noises and cools down the chain running at high speed.

POINTS OF LUBRICATION

- 1) Fill and change oil periodically.
- 2) Generally, heavy oil and grease are not suitable as a lubricant.
- 3) Avoid mix of oil with another kind or other maker's.
- 4) Adequate lubrication quantity is also essential for a chain's longer service life.

Type	Method	Amount	Type	Method	Amount
A	Manual lubrication 	Periodically to keep chain joints from drying	B	Oil bath lubrication 	Effective at medium and low speeds. To be dipped 6-12 mm.
	Dripping lubrication 	Usually 4-20 drops of oil per minute. Excess oil should be reserved in a simple case.		Lubrication by slinger disc For small speed ratio 	Effective at rather high speeds. To be dipped 12-25mm at about 200m/min. circumferential speed of slinger disc.
C	Forced lubrication 	Effective for heavy load, high power and high speed. Ab 4 ltr/min. should be filled without oil shortage or heating up. Closed circulating lubrication system needs a clean tank or case.		Lubrication by slinger disc For small speed ratio 	Case should be cleaned to remove impurities.

SY Chain No.	Temperature[°C]							
	-10	0	40	50	-10	0	40	50
	0	40	50	60	0	40	50	60
Lubrication Type	TYPE A-B				TYPE C			
~ SY50	SAE10	SAE20	SAE30	SAE50	SAE10	SAE20	SAE30	SAE40
SY60 ~ SY80	20	30	40	50	10	20	30	40
SY100	20	30	40	50	20	30	40	50
SY120 ~	30	40	50	50	20	30	40	50