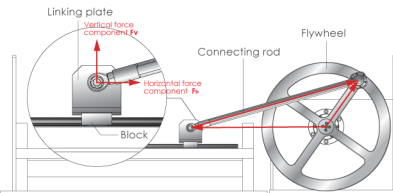


Acceleration testing machine

The Acceleration testing machine is a slide-crank mechanism and it uses flywheel as the crank. Working under a limited stroke, it helps block to reach higher acceleration and velocity. Moreover with rotation velocity of the motor, it can be tested the service life under different acceleration and velocity.

The introduction of High-Speed Testing Machine



Rail
AR-Rail

Block

1. Stainless steel reinforcement plate
2. S-Type Standard Seal
3. Environmental Lubrication Pad

Condition



Block Model : ARC25MN
Dynamic load capacities : 24.8 KN
(Rated life of load capacity is based on 100 km)
Stat load capacities : 42.5 KN
Preload : V2 (0.08C)
Max velocity : 10.47 m/s
Max acceleration : 438.2 m/s²
Stroke : 0.5 m
Equivalent Load : 10928 N (0.44C)
Service life : 708.6 km

Inspected Item

1. The accessories are detected or not
2. Whether the Rail profile surface is damaged
3. Whether the Block Body profile surface is worn or is in material fatigue situation

Testing Result

Block



The raceway surface and chamfered edges were in good condition without material fatigue.

Reinforcing Plates



The reinforcing plates were in good condition without distorted.

Seal



There's no damage in the surface and sealing function still work well.

End Caps



The rotary channels of the end caps were in good condition but less shiny.

Upper and the bottom lubrication storages



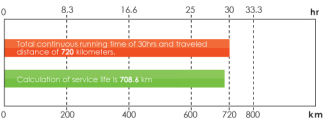
Supplied well.

Steel ball



There're no fatigue in the surface and still glossy.

Testing record



Testing summary

According to ARC25MN V2 its basic load capacities, preload and equivalent dynamic load, the calculation of the service life can be 708.6 km.

This test after running 30 hrs = 720 km, the appearance of the block and the plastic parts without damage, the upper and the bottom lubrication storage pads were in good condition and supplied well, the raceway surfaces were also in good condition which means it can continue running with high velocity.