There are many reasons for rotary joint leakage. This chapter only deals with leakage caused by uncleaned internal fluids. In this case, the rotary joint can be inspected and the cause determined by examining the seal rings.

旋轉接頭洩漏的原因很多，本篇僅針對內部流體不潔而造成異常洩漏現象做說明；此情況可檢視接頭內部的重要零件－封環，視其運轉磨耗情形做簡易的研判。

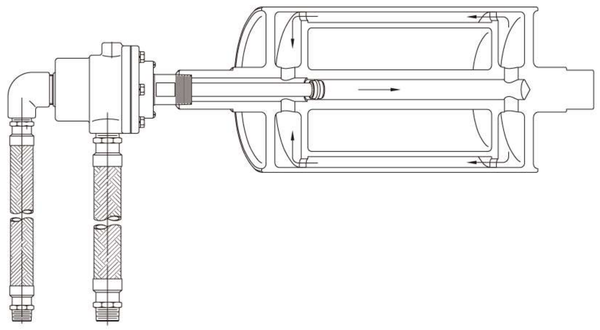


Fig.1

## COOLING SERIES

水用冷卻類

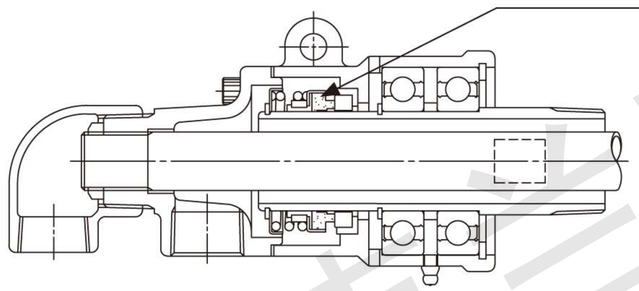
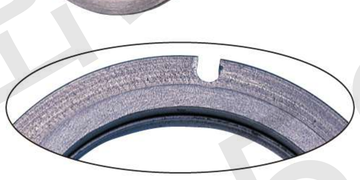


Fig.2

Fig.3



## HEATING SERIES

熱油及蒸汽，熱水類

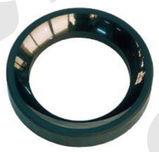


Fig.4

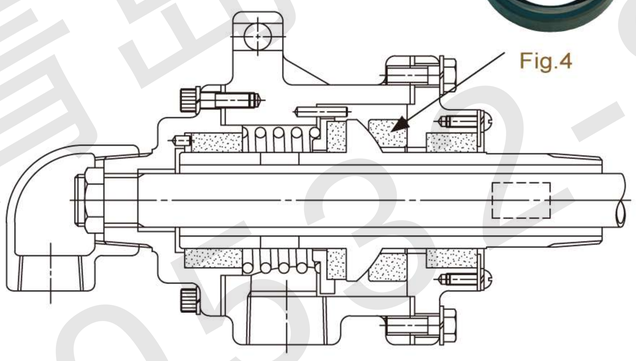


Fig.5

Fig.6

Fig.7

## NOMAL CONDITION

正常現象

Fig.2,4

If there are no impurities in the seal face, it will be smooth and bright. Any leakage would therefore most likely not have been caused by unclean fluids.

封環摺動面無雜質入侵，平滑又光亮。如因旋轉接頭洩漏經檢視為此現象時，應不是流體不潔所造成的。

## ABNORMAL CONDITION

異常現象

Fig.3, 5, 6

If impurities get in the seal face, they will cause it to become rough and dull. In this case, unclean fluids would be mainly responsible for any leakage.

封環摺動面雜質入侵造成粗糙，不平滑無亮度，不能止漏。如因旋轉接頭洩漏經檢視為此現象時，即為流體不潔造成的主要原因。

## SERIOUS ABNORMAL WEAR

嚴重異常現象

Fig.7

The severe wear shown was caused by coarse impurities. This will result in a lot of fluid being lost.

所示為很粗的不潔物造成嚴重的磨損，此狀況流體會大量洩漏。

## SERIOUS ABNORMAL WEAR

嚴重異常現象

Fig.8

This rotary joint is used with mixing rolls. Leakage after 3 months of normal use was because there were many impurities and the quality of the oil was bad.

此只旋轉接頭使用於軋輪機；開機時運轉正常，使用約 3 個月後，開始洩漏。經檢視發現內部夾雜有很多雜質，油質亦不良。

Fig.8