Frank Mohn Services AS

Service Bulletin

Keep You up to date with the latest news from Frank Mohn Services AS

Reconditioning of Mechanical Seals



Repair of Seals as an integrated part of the total pump overhaul gives:

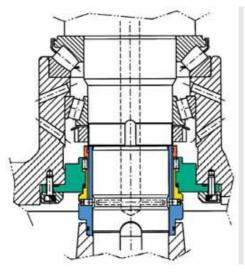


- Reduced
 Turn Around Time
- Reduced Life Cycle Cost
- Better feed back of operational experiences

Total Pump Service

The shaft seal is one of the most critical parts of a pump.

To ensure a long lifetime of the seal it is important to have a detailed knowledge of the pump design, the liquid handled and the seal system. The mechanical seal is also in many cases the part that limits the Mean Time Between Failures for the pump. By performing all the activities in our Maintenance Facilities, a complete failure analysis and a total pump repair can now be offered to our Coustomers at reduced Turn Around Time. This will also ensure the best Quality of the job. If the duty or other operational circumstances makes it necessary to upgrade the seal arrangement, our Engineering Service group will evaluate all consequences, and the best solution proposed to our Customers.







Seal design and upgrade

- A successful new, or upgraded seal design requires total knowledge of the system in which the seal is an integrated part.
- Our engineers have many years of experience from pump and seal design, including troubleshooting and testing of seal system for offshore- and marine applications.
- Experienced technical assistance in selection of seals and application studies is available.

Availability

- Pump downtime can be greatly reduced if spare seals are available when required.
- For most FRAMO pumps new seals, or reconditioned Exchange Units are available.
- The exchange program can be further developed in agreement with our customers.

Reconditioning

- In our dedicated Mechanical Seal Shop most types of seals can be repaired or totally reconditioned, regardless of material quality or seat configuration.
- Depending on condition, reconditioning is carried out at three levels:
 - A) Re-lapping of both sealing surfaces + renewal of elastomers, springs and fasteners.
 - B) As A + renewal of stationary seat.
 - C) A + B +shrink in new seat material.
- Lapping can be done to Plane, Concave or Convex configuration.
- The shop contains a full range of modern equipment and tools, operated by highly qualified personnel.
- All activities in the shop are subject to thorough Quality Control in accordance with relevant ISO standards.
- Tools and equipment are surveyed and calibrated in accordance with procedures and standards.
- Seal Condition Report issued on request.



Ultrasonic cleaning



Grinding



Lapping



Final Control under Monochromatic light

Save money - Improve your Seal lifetime

Do not throw away your worn Mechanical Seals.

Send them back to us, for evaluation.

It can save you maintenance costs, and it will provide us with valuable information about the life of your pumps, to our mutual benefit.



Frank Mohn Services AS

Head office: Frank Mohn AS, P.O. Box 98 Slåtthaug, 5851 Bergen, Norway, Phone: + 47 55 99 90 00, Telefax: + 47 55 99 93 80

Frank Mohn Flatøy AS, Flatøy, 5918 Frekhaug, Norway, Phone: + 47 55 99 94 00, Telefax: + 47 55 99 95 81

Frank Mohn Fusa AS, P.O. Box 10, 5641 Fusa, Norway, Phone: + 47 55 99 96 00, Telefax: + 47 55 99 97 80

Frank Mohn Services AS, P.O. Box 44 Slåtthaug, 5851 Bergen, Norway, Phone: + 47 55 99 92 00, Telefax: + 47 55 99 93 82

 $Framo\ Engineering\ AS,\ P.O.\ Box\ 174\ Sandsli,\ 5862\ Bergen\ Norway,\ Phone: +\ 47\ 55\ 92\ 88\ 00,\ Telefax: +\ 47\ 55\ 92\ 89\ 00$

Frank Mohn Nederland BV, Edisonweg 18, P.O. Box 305, 3200 AH Spijkenisse, The Netherlands, Phone: + 31 181 619311, Telefax: + 31 181 611193

Frank Mohn Houston Inc, 1802 West D Street, La Porte, Texas 77571-4601, USA, Phone: + 1 281 471 7920, Telefax: + 1 281 842 5450

Frank Mohn Singapore Pte Ltd, 17 Tuas View Circuit , Singapore 637575, Phone: + 65 6210 2400, Telefax: + 65 6210 2401

Frank Mohn AS Sweden Office, Askims Industriväg 1A, 43634 Askim, Sweden, Phone: + 46 31 682085, Telefax: + 46 31 681048

Frank Mohn Nippon K.K., City-haz Chojamachi Building 6 - 3, Chojamachi 2-chome, Naka-ku, Yokohama 231-0033, Japan, Phone: + 81 45 253 7155, Telefax: + 81 45 253 7188

Frank Mohn Korea Office, Rm. 309, Yachting Center Bldg., 1393, Woo-1 Dong, Haeundai-Ku, Pusan, Korea, Phone: + 82 51 743 6942, Telefax: + 82 51 743 6944

Frank Mohn China Ltd, Unit 1008 Pine City, 8 Dong An Road, Shanghai 200032, China, Phone: +86 21 6443 8845, Telefax: +86 21 6443 8846

Frank Mohn do Brasil Ltda. Av. Presidente Vargas, 463 - 19° andar, Edificio Banita 20071-003 – Rio de Janeiro - RJ Brazil Phone: + 55 21 2507 7898 Telefax: + 55 21 2507 7888