

Lynx 40 Centrifuge Inspection Report -- NEW STYLE

18405067634

ALFA LAVAL LYNX 40 CENTRIFUGE INSPECTION REPORT

Job Information

Job Number J-3844

Inspected By Roberto

Date Inspected Jun 2, 2025

Serial Number xxx-xxx

Does unit have a gearbox Yes

→ Gearbox make/model → 6.0

Take a picture of entire unit before disassembly.



Inspection Summary

General Comments on Condition of Unit

Unit arrived with several issues on solid end of conveyor. There are stack up issues that must be repaired.

RA wasn't on the skid

Coupling

Technical Data

Measure Center of Main Motor Shaft to

center of Main Pulley, document.

Main Belt Size Xpb2120

Main Motor Frame Size Lynx 40 design

Main Motor Shaft Size2 3/8Main Pulley Diameter18inch

Main Pulley # of Ribs and Grooves 5

Measure Center of Back Drive Pulley to

Center of Back Drive Motor Shaft,

document. If applicable

Back Drive Motor HP 20

Back Drive Motor Frame Size Lynx 40 design

Back Drive Motor Shaft Size 1 7/8

Back Drive Belts, If applicable. Coupling

Back Drive Coupling Size, if applicable. Lynx 40 design

Gear Box Pinion Size 19mm

SKID

SKID

SKID Repair

Measurements or Notes

Paint

VIBRATION ISOLATORS

VIBRATION ISOLATORS OK

CASE

Case Condition → Measurements or Notes	Repair → Nordbak
CASE GASKET	
Case Gasket Condition → Measurements or Notes	Replace → Replace gasket
CASE CLAMPS	
Case Clamp Condition	OK
FEED TUBE	
Feed Tube Condition → Measurements or Notes	Replace Came in with no feed tube
FEED TUBE SUPPORT	
Feed Tube Support Condition	ОК
BELT GUARD	
Belt Guard Condition	ОК
GEAR GUARD	
Gear Guard Condition	ОК
MAIN MOTOR	
Main Motor Condition	ОК
MAIN MOTOR BASE	
Main Motor Base Condition	OK

MAIN PULLEY	
Main Pulley Condition	OK
MAIN MOTOR BUSHING FOR PULLEY	
Main Motor Bushing for Pulley Condition	ОК
MAIN DRIVE BELT	
Main Drive Belt Condition	ОК
BACK DRIVE MOTOR	
Back Drive Motor Condition	ОК
BACK DRIVE MOTOR BUSHING	
Back Drive Motor Bushing Condition	ОК
BACK DRIVE COUPLING	
Back Drive Pulley Condition	ОК
PINION SIDE BACK DRIVE BUSHING	
Back Drive Pulley Condition	ОК
MAIN MOTOR CABLE	
Main Motor Cable	ОК
BACK DRIVE MOTOR CABLE	
Back Drive Motor Cable	OK
FORK LIFT POCKETS	

Back Drive Motor Cable	OK
CABLE RACK	
Back Drive Motor Cable	OK
SOLID END HOPPER	
Back Drive Motor Cable	OK
LIQUID END HOPPER	
Back Drive Motor Cable	ОК
SENSORS	
Back Drive Motor Cable	OK
MOTOR GLANDS	
Back Drive Motor Cable	OK
PLUGS	
Back Drive Motor Cable	OK
BOWL (MARK FLANGES TO INSUF	RE CORRECT REASSEMBLY)
Solid End Fit	
Solid End Fit (7.4935 - 7.4925) → Measurements or Notes	Repair → Remove egg shape



Liquid Head Fit

Liquid End Fit Pictures

OK



Carbide Nozzles (8)

Carbide Nozzles (8)

OK

Carbide Plows (2)

Carbide Nozzles (8)

Bowl Strips

Bowl Strips Pictures OK



Bowl Condition

Section C to Conical

OK

Wear Ring

Section C to Conical Pictures

OK



CONVEYOR

Tiles

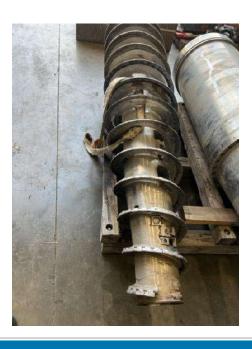
Tiles



Flights

Flights Pictures

OK



Liquid End Spline Hub Fit

Solid End Bearing Area



Spline Hub Condition

Spline Hub Condition Pictures

OK



Spline Hub Fit

Spline Hub Condition



Conveyor Housing Fit

Conveyor Housing Fit

OK

Liquid End Housing Fit

Liquid End Housing Fit

OK

Thrust Bearing Area

Thrust Bearing Area
Pictures



NU Bearing Area

NU Bearing Area Pictures OK



Spline Hub Pins

Spline Hub Pins

OK

Shim

Shim

OK

Liquid End Seal Holder

Liquid End Seal Holder

Replace

Pictures





N I I I	Bearing	A
	Rearing	ΔrΔa
	Dearing	$\Delta I \cup A$

NU Bearing Area

OK

NU Snap Ring

NU Snap Ring

OK

Liquid End Seal Holder

Liquid End Seal Holder

Replace

Seal Holder Snap Ring

Seal Holder Snap Ring

OK

Thrust Collar

Thrust Collar

Replace



Pins From Spline Hub

Pins From Spline Hub

OK

Solid End Protecting Tube Condition

Solid End Protecting Tube Condition Pictures

Replace



Solid End Protecting Tube Pin

Solid End Protecting Tube Pin

Replace

Puller Disc Solid End

Puller Disc Solid End Pictures

Replace



Spring Spacers- Solid End

Spring Spacers- Solid End Pictures

Replace



Flat Spacers Solid End

Flat Spacers Solid End OK

Thrust Bearing Housing Solid End

Thrust Bearing Housing Solid End Replace



Needle Bearing Area- Solid End

Needle Bearing Area- Solid End

OK

Protecting Tube Bushing Area

Protecting Tube Bushing Area

Replace

Lock Ring Condition

Protecting Tube Bushing Area Pictures

Replace



Lock Nut Condition

Lock Nut Condition

Replace

Seal Holder Solid End

Seal Holder Solid End Pictures





LIQUID HEAD

LE Head Fit

LE Head Fit

→ Measurements or Notes

Pictures



Throw Off Disc

Throw Off Disc



Ring Case Condition

Ring Case Condition
Pictures

OK



Grease	Rina

Grease Ring

OK

Pillow Block Cover

Pillow Block Cover

OK

Pillow Block Spacer

Pillow Block Spacer



Pillow Block V ring

Pillow Block V ring Pictures

OK



Main Bearing Area

Main Bearing Area



Gear Flange Inboard Fit

Gear Flange Inboard Fit

OK

Gear Flange Outboard Fit

Grease Ring (0.483 - 0.500)

OK

Dam Plates Condition

Dam Plates Condition
Pictures

OK



Dowel Pin Condition

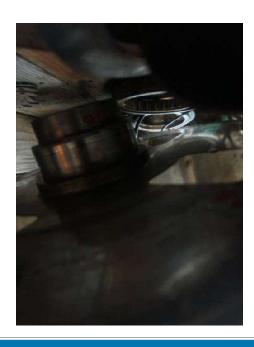
Dowel Pin Condition

OK

Inboard Seal Area

Inboard Seal Area Pictures





Outboard Seal Area

Outboard Seal Area

OK

Conveyor Bearing Area

Conveyor Bearing Area

OK

Spline Condition

Spline Condition



SOLID HEAD

Solid Head Fit

Solid Head Fit

→ Measurements or Notes

Pictures



Protecting Ring Condition

Protecting Ring Condition



Grease Ring

Grease Ring

OK

Pillow Block Cover Condition

Pillow Block Cover Condition
Pictures

OK



Pillow Block Spacer

Pillow Block Spacer

OK

Pillow Block V-Ring

Pillow Block V-Ring

OK

Main Bearing Area

Main Bearing Area Pictures OK



Inboard Pulley Sheave Fit

Inboard Pulley Sheave Fit

OK

Outboard Pulley Sheave Fit

Outboard Pulley Sheave Fit Pictures

OK



Key Way Condition

Key Way Condition

OK

Key Stock Condition

Key Stock Condition

OK

Lock Washer Condition

Lock Washer Condition

OK

Lock Nut Condition

Lock Nut Condition

OK

Brass Bushing

Brass Bushing Pictures Replace



Inboard Seal Area

Inboard Seal Area

Repair



Outboard Seal Area

Outboard Seal Area Pictures

Repair



Conveyor Bearing Area

Conveyor Bearing Area

Repair



Thrust Bearing Area

Thrust Bearing Area

OK

GEAR FLANGE

Gear Flange Inboard Fit

Gear Flange Inboard Fit Pictures

OK



Gear Flange Outboard Fit

Gear Flange Outboard Fit OK **Gearbox Depth Gearbox Depth** OK Fit to Gearbox **Press To Bearing** OK **Pictures** Gear Flange Splines Labyrinth OK **PULLEY SHEAVE Pulley Grooves Condition Pulley Condition** OK



Pulley Sleeve Condition

Pulley Sleeve Condition Pictures

OK



Pulley Sleeve Inboard Fit

Pulley Sleeve Inboard Fit OK

Pulley Sleeve Outboard Fit

Grooves Condition OK

Pulley Sleeve Labyrinth Condition

Pulley Sleeve Labyrinth Condition OK



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Gear	Fland	$\alpha \wedge I \wedge$	haar	·⊿ Fi±
(1ear	FIALIC		100041	
u cui	I IGII	$q \subset I \cap I$	DOGI	G 1 1 C

Pulley Sleeve Labyrinth Condition OK

Gear Flange Outboard Fit

Gear Flange Outboard Fit OK

Keyway Condition

Gear Flange Outboard Fit OK

SOLID END PILLOW BLOCK

Solid End Pillow Block Condition

Solid End Pillow Block Condition OK \hookrightarrow Measurements or Notes \hookrightarrow 7.874



Labyrinth Condition

Labyrinth Condition Pictures

OK



Bearing Area

Bearing Area

OK

Bearing Cover Condition

Bearing Cover Condition

Bearing Cover Press

Bearing Cover Press

OK

Dowel Pins Condition

Bearing Cover Press

OK

LIQUID END PILLOW BLOCK

Liquid End Pillow Block Condition

Liquid End Pillow Block Condition

→ Measurements or Notes

Pictures

OK → 7.086



Labyrinth Condition

Labyrinth Condition



Bearing Area

Bearing Area

OK

Bearing Cover Condition

Bearing Cover Condition

OK

Bearing Cover Press

Bearing Cover Press

OK

Dowel Pins Condition

Bearing Cover Press

OK

PROTECTING TUBE

Dowel Pin (5mm)

Dowel Pin

Pictures

Replace



Brass Ring Area	
Brass Ring Area	Replace
Concentric	
Concentric	Replace
PARTS TO QUALIFY	
Parts to Qualify	
PARTS TO QUALIFY	1 OF 4
Parts to Qualify	
Part	Bowl
Notes	Set in the lathe put all areas running zero skim cut both faces max .003 per side make a skim cut witness to confirm
PARTS TO QUALIFY	2 OF 4
Parts to Qualify	
Part	Liquid head
Notes	Set in the lathe put all areas running zero skim cut both faces max .003 per side make a skim cut witness to confirm
PARTS TO QUALIFY	3 OF 4
Parts to Qualify	
Part	Solid head

Notes	Set in the lathe put all areas running zero skim cut both faces max .003 per side make a skim cut witness to confirm
PARTS TO QUALIFY	4 OF 4
Parts to Qualify	
Part	Gear flange
Notes	Set in the lathe put all areas running zero skim cut both faces max .003 per side make a skim cut witness to confirm
HIT LIST	
Hit List	
HIT LIST	1 OF 18
Hit List	
Department	Machine
Description of Work	Repair seal area
	Repair bearing area
	Repair thrust bearing area
Part	Weld and machine fit Solid head
HIT LIST	2 OF 18
Hit List	

Department	Machine
Description of Work Part	Weld and machine fit Liquid head
HIT LIST	3 OF 18
Hit List	
Department	Assembly
Description of Work Part	Change solid end parts and check stack up Conveyor
HIT LIST	4 OF 18
Hit List	
Department	Assembly
Description of Work Part	Install trunnions Conveyor
HIT LIST	5 OF 18
Hit List	
Department	Assembly
Description of Work Part	Straighten the conveyor Conveyor
HIT LIST	6 OF 18
Hit List	

Department	Assembly	
Description of Work Part	Balance conveyor Conveyor	
HIT LIST		7 OF 18
Hit List		
Department	Assembly	
Description of Work Part	Assembly the conveyor Conveyor	
HIT LIST		8 OF 18
Hit List		
Department	Assembly	
Description of Work Part	Build solid head Solid head	
HIT LIST		9 OF 18
Hit List		
Department	Assembly	
Description of Work Part	Build liquid head Liquid head	
HIT LIST		10 OF 18
Hit List		

Department	Assembly	
Description of Work Part	Check stack up Assembly	
HIT LIST	1:	1 OF 18
Hit List		
Department	Assembly	
Description of Work Part	Install heads Assembly	
HIT LIST	1:	2 OF 18
Hit List		
Department	Assembly	
Description of Work Part	Install gear box and check run out Assembly	
HIT LIST	13	3 OF 18
Hit List		
Department	Assembly	
Description of Work Part	Balance RA Assembly	
HIT LIST	14	4 OF 18
Hit List		

Department	Assembly
Description of Work Part	Replace case gasket Skid
HIT LIST	15 OF 18
Hit List	
Department	Assembly
Description of Work Part	Nordbak to case top Skid
HIT LIST	16 OF 18
Hit List	
Department	Assembly
Description of Work Part	Perro the skid and make it ready to send it Skid
HIT LIST	17 OF 18
Hit List	
Department	Assembly
Description of Work	Indicate main bearings and alignment of the main motor
HIT LIST	18 OF 18
Hit List	
Department	Assembly

Description of Work

Test run

OUTSIDE SERVICE

Outside Service

OUTSIDE SERVICE 1 OF 1

Outside Service

Part Skid

Description of Outside Service Needed Paint

MASTER GEARBOX INSPECTION REPORT

Job Information

Job Number

Inspected By

Date Inspected

Take a picture of entire unit before disassembly.

J 3844. 6.0 KNM

MIGUEL

May 30, 2025



Inspection Summary

General Comments on Condition of Unit

internal components in good condition...bearings and seals replace only

FIRST STAGE

Pinion Bearing Area 1

Pinion Bearing Area 1

→ Measurements or Notes

Pictures

OK → 0.787



Pinion Bearing Area 2

Pinion Bearing Area 2

→ Measurements or Notes

OK → 0590



Pinion Seal Area

Pinion Seal Area

→ Measurements or Notes

Pictures

OK → 0.782



Ring Gear

Ring Gear

→ Measurements or Notes

OK → 11.807



Planet Gears

Planet Gears → Measurements or Notes

Pictures

OK → 4643



Journals

Journals

→ Measurements or Notes

OK **→** 4635

Pictures





Thrust Washers

Thrust Washers Not Applicable

Journal Bearings

Journal Bearings Not Applicable

Cover

Cover OK

→ Measurements or Notes → 11805



Notes on First Stage

Notes On First Stage

6.0KNM

SECOND STAGE

Pinion

Pinion

→ Measurements or Notes

Pictures

OK → 1180



Ring Gear

Ring Gear

→ Measurements or Notes

Pictures

OK → 11807



Planet Gears

Planet Gears

→ Measurements or Notes

Pictures

OK -> 4213



Journals

Journals

→ Measurements or Notes

OK → 4203



Thrust Washers Not Applicable

Journal Bearings

Journal Bearings Not Applicable

Cover

Thrust Washers Not Applicable

Cage

Cage OK



Cage Cover

Cage Cover

→ Measurements or Notes

Pictures

OK → 10.863

