

PROBLEM SUMMARY

Thermoforming Line 15 Extruder (S/N 18271)

Bevel Helical Gearbox

SUMMIT SYNGEAR FG-220 (13 GAL)

COMPONENT CONDITION SUMMARY





No relevant graphs to display

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

PROBLEMATIC TEST RESULTS							
Sample Status				ATTENTION	ATTENTION	ATTENTION	
Appearance	scalar	*Visual	NORML	▲ SOLID	SOLID	▲ SOLID	
Free Water	scalar	*Visual		△ >10%	>10%	<u>1.0</u>	

Customer Id: DARDALTX Sample No.: TO50001166 Lab Number: 05767414 Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data: Sean Felton +1 919-379-4092 sfelton@wearcheckusa.com

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Information Required	MISSED	Mar 03 2023	2	Please specify the brand, type, and viscosity of the oil on your next sample

HISTORICAL DIAGNOSIS

06 Jan 2023 Diag: Jonathan Hester

WATER



Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. There is no indication of any contamination in the oil. Sample is layered with a different type/density oil. The condition of the oil is acceptable for the time in service.



15 Nov 2022 Diag: Jonathan Hester

WATER



Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. There is no indication of any contamination in the oil. Sample is layered with a different type/density oil. The condition of the oil is acceptable for the time in service.

view report

20 Oct 2022 Diag: Doug Bogart

NORMAL



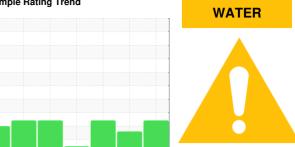
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.





OIL ANALYSIS REPORT

Sample Rating Trend



Thermoforming Line 15 Extruder (S/N 18271)

Bevel Helical Gearbox

SUMMIT SYNGEAR FG-220 (13 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil. Sample is layered with a different type/density

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION method limit/base current history1 history2			Aug2022	Aug2022 Oct2022	Oct2022 Nov2022 Jan 2023	Feb2023	
Sample Date Client Info 09 Feb 2023 06 Jan 2023 15 Nov 2022 Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A Sample Status Image: Client Info N/A N/A N/A WEAR METALS method limil/base current history1 history2 PQ ASTM D5185m >150 3 2 3 Chromium ppm ASTM D5185m >10 0 0 0 Nickel ppm ASTM D5185m >10 0 0 0 Silver ppm ASTM D5185m >10 0 0 0 Aluminum ppm ASTM D5185m >25 <1	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A Sample Status Image: Client Info N/A N/A N/A WEAR METALS method limil/base current history1 history2 PQ ASTM D8184 16 10 10 10 Iron ppm ASTM D5185m >150 3 2 3 Chromium ppm ASTM D5185m >10 0 0 0 Nickel ppm ASTM D5185m >10 0 0 0 Nickel ppm ASTM D5185m >25 <1	Sample Number		Client Info		TO50001166	TO50001463	TO50001212
Oil Age hrs Client Info N/A N/A N/A N/A Oil Changed Client Info N/A N/A N/A N/A N/A Sample Status Client Info N/A N/A N/A N/A N/A WEAR METALS method limit/base current history1 history2 PQ ASTM D5185m 16 10 10 Iron ppm ASTM D5185m >150 3 2 3 Chromium ppm ASTM D5185m >10 0 0 0 Nickel ppm ASTM D5185m >10 0 0 0 Silver ppm ASTM D5185m >0 0 0 0 Aluminum ppm ASTM D5185m >0 0 0 0 Copper ppm ASTM D5185m >10 0 0 0 Copper ppm ASTM D5185m 0 0 0 0 <td>Sample Date</td> <td></td> <td>Client Info</td> <td></td> <th>09 Feb 2023</th> <td>06 Jan 2023</td> <td>15 Nov 2022</td>	Sample Date		Client Info		09 Feb 2023	06 Jan 2023	15 Nov 2022
Oil Changed Satus Client Info N/A N/A N/A N/A WEAR METALS method limil/base current history1 history2 PQ ASTM D8184 16 10 10 Iron ppm ASTM D8185m >10 0 0 0 Chromium ppm ASTM D8185m >10 0 0 0 Chromium ppm ASTM D8185m >10 0 0 0 Nickel ppm ASTM D8185m >10 0 0 0 Silver ppm ASTM D5185m >10 0 0 0 Aluminum ppm ASTM D5185m >25 <1 0 0 Lead ppm ASTM D5185m >50 <1 <1 1 1 Lead ppm ASTM D5185m >10 0 0 0 0 Copper ppm ASTM D5185m >50 <1 <1 1	Machine Age	hrs	Client Info		0	0	0
Sample Status method limit/base current history1 ATTENTION WEAR METALS method limit/base current history1 history2 PQ ASTM D8188m −150 3 2 3 Chromium ppm ASTM D8188m −10 0 0 0 Nickel ppm ASTM D8188m −10 0 0 0 Titanium ppm ASTM D8188m −10 0 0 0 Silver ppm ASTM D8188m −10 0 0 0 Aluminum ppm ASTM D8188m −10 0 0 0 Lead ppm ASTM D8188m −10 0 0 0 Copper ppm ASTM D8188m −10 <1	Oil Age	hrs	Client Info		0	0	0
WEAR METALS method limil/base current history1 history2 PQ ASTM D8184 16 10 10 Iron ppm ASTM D8185m >150 3 2 3 Chromium ppm ASTM D8185m >10 0 0 0 Nickel ppm ASTM D8185m >10 0 0 0 Silver ppm ASTM D8185m >10 0 0 0 Silver ppm ASTM D8185m >10 0 0 0 Aluminum ppm ASTM D8185m >25 <1	Oil Changed		Client Info		N/A	N/A	N/A
PQ ASTM D8184 16 10 10 Iron ppm ASTM D8185m >150 3 2 3 Chromium ppm ASTM D8185m >10 0 0 0 Nickel ppm ASTM D8185m >10 0 0 0 Sliver ppm ASTM D8185m 0 0 0 0 Sliver ppm ASTM D8185m 0 0 0 0 Aluminum ppm ASTM D8185m 0 0 0 0 Aluminum ppm ASTM D8185m 100 0 0 0 Copper ppm ASTM D8185m >10 0 0 0 Vanadium ppm ASTM D8185m 10 0 0 0 Vanadium ppm ASTM D8185m 0 0 0 0 Cadmium ppm ASTM D8185m 0 0 0 0 Barium ppm <td>Sample Status</td> <td></td> <td></td> <td></td> <th>ATTENTION</th> <td>ATTENTION</td> <td>ATTENTION</td>	Sample Status				ATTENTION	ATTENTION	ATTENTION
Iron	WEAR METALS		method	limit/base	current	history1	history2
Chromium	PQ		ASTM D8184		16	10	10
Nickel	Iron	ppm	ASTM D5185m	>150	3	2	3
Titanium ppm ASTM D5185m 0 0 0 Silver ppm ASTM D5185m 0 0 0 Aluminum ppm ASTM D5185m >25 <1 0 <1 Lead ppm ASTM D5185m >100 0 0 0 Copper ppm ASTM D5185m >50 <1 <1 1 Tin ppm ASTM D5185m >10 <1 0 0 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 Boron ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m 0 0 0 0 Manganese ppm ASTM D5185m 1 <1 <1 1 Calcium ppm ASTM D5185m 2 0 <1 0 Calcium <td>Chromium</td> <td>ppm</td> <td>ASTM D5185m</td> <td>>10</td> <th>0</th> <td>0</td> <td>0</td>	Chromium	ppm	ASTM D5185m	>10	0	0	0
Silver	Nickel	ppm	ASTM D5185m	>10	0	0	0
Aluminum ppm ASTM D5185m >25 <1 0 <1 Lead ppm ASTM D5185m >100 0 0 0 Copper ppm ASTM D5185m >50 <1	Titanium	ppm	ASTM D5185m		0	0	0
Lead ppm ASTM D5185m >100 0 0 0 Copper ppm ASTM D5185m >50 <1	Silver	ppm	ASTM D5185m		0	0	0
Copper ppm ASTM D5185m >50 <1 <1 1 Tin ppm ASTM D5185m >10 <1	Aluminum	ppm	ASTM D5185m	>25	<1	0	<1
Tin ppm ASTM D5185m >10 <1 0 0 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 1 <1 1	Lead	ppm	ASTM D5185m	>100	0	0	0
Vanadium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 Boron ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 1 <1 1	Copper	ppm	ASTM D5185m	>50	<1	<1	1
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 1 <1	Tin	ppm	ASTM D5185m	>10	<1	0	0
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 1 <1	Vanadium	ppm	ASTM D5185m		0	0	0
Boron	Cadmium	ppm	ASTM D5185m		0	0	0
Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 1 <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 1 <1 1 Manganese ppm ASTM D5185m <1 0 0 Magnesium ppm ASTM D5185m 2 0 <1 Calcium ppm ASTM D5185m 4 0 12 Phosphorus ppm ASTM D5185m 7 4 0 Sulfur ppm ASTM D5185m >50 10 16 9 Sodium ppm ASTM D5185m >50 10 16 9 Sodium ppm ASTM D5185m >0 0 0 0 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE	Boron	ppm	ASTM D5185m		0	0	0
Manganese ppm ASTM D5185m <1 0 0 Magnesium ppm ASTM D5185m 2 0 <1 Calcium ppm ASTM D5185m 4 0 12 Phosphorus ppm ASTM D5185m 334 306 333 Zinc ppm ASTM D5185m 7 4 0 Sulfur ppm ASTM D5185m 126 150 131 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 10 16 9 Sodium ppm ASTM D5185m >50 10 16 9 Sodium ppm ASTM D5185m >20 <1	Barium	ppm	ASTM D5185m		0	0	0
Magnesium ppm ASTM D5185m 2 0 <1 Calcium ppm ASTM D5185m 4 0 12 Phosphorus ppm ASTM D5185m 7 4 0 Zinc ppm ASTM D5185m 7 4 0 Sulfur ppm ASTM D5185m 126 150 131 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 10 16 9 Sodium ppm ASTM D5185m >50 10 16 9 Sodium ppm ASTM D5185m >20 <1	Molybdenum	ppm	ASTM D5185m		1	<1	1
Calcium ppm ASTM D5185m 4 0 12 Phosphorus ppm ASTM D5185m 334 306 333 Zinc ppm ASTM D5185m 7 4 0 Sulfur ppm ASTM D5185m 126 150 131 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 10 16 9 Sodium ppm ASTM D5185m >50 10 16 9 Sodium ppm ASTM D5185m >20 <1	Manganese	ppm	ASTM D5185m		<1	0	0
Phosphorus ppm ASTM D5185m 334 306 333 Zinc ppm ASTM D5185m 7 4 0 Sulfur ppm ASTM D5185m 126 150 131 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 10 16 9 Sodium ppm ASTM D5185m >50 1 <1	Magnesium	ppm	ASTM D5185m		2	0	<1
Zinc ppm ASTM D5185m 7 4 0 Sulfur ppm ASTM D5185m 126 150 131 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 10 16 9 Sodium ppm ASTM D5185m 0 0 0 0 Potassium ppm ASTM D5185m >20 <1	Calcium	ppm	ASTM D5185m		4	0	12
SulfurppmASTM D5185m126150131CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>5010169SodiumppmASTM D5185m000PotassiumppmASTM D5185m>20<1	Phosphorus	ppm	ASTM D5185m		334	306	333
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 10 16 9 Sodium ppm ASTM D5185m >20 0 0 0 Potassium ppm ASTM D5185m >20 <1 <1 0 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML	Zinc	ppm	ASTM D5185m		7	4	0
Silicon ppm ASTM D5185m >50 10 16 9 Sodium ppm ASTM D5185m 0 0 0 0 Potassium ppm ASTM D5185m >20 <1 <1 0 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NORML NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML NORML NORML NORML <td>Sulfur</td> <td>ppm</td> <td>ASTM D5185m</td> <td></td> <th>126</th> <td>150</td> <td>131</td>	Sulfur	ppm	ASTM D5185m		126	150	131
SodiumppmASTM D5185m000PotassiumppmASTM D5185m>20<1<10VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONEYellow Metalscalar*VisualNONENONENONEPrecipitatescalar*VisualNONENONENONESiltscalar*VisualNONENONENONESiltscalar*VisualNONENONENONEDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLDodorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*VisualNORMLNORML	CONTAMINANTS		method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 <1 <1 0 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE MODER NONE Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML SOLID SOLID SOLID Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.1 NEG NEG NEG	Silicon	ppm		>50	10	16	9
VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NORML NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML NORML NORML NORML Emulsified Water scalar *Visual >0.1 NEG NEG NEG	Sodium	ppm	ASTM D5185m		0	0	0
White Metal scalar *Visual NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE MODER NONE Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML SOLID SOLID SOLID Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.1 NEG NEG NEG	Potassium	ppm	ASTM D5185m	>20	<1	<1	0
Yellow Metal scalar *Visual NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE MODER NONE Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML → SOLID SOLID → SOLID Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.1 NEG NEG NEG	VISUAL		method	limit/base	current	history1	history2
Precipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONEMODERNONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLSOLIDSOLIDSOLIDOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEG							
Silt scalar *Visual NONE NONE MODER NONE Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML SOLID SOLID SOLID Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.1 NEG NEG NEG							
Debrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLSOLIDSOLIDSOLIDOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEG							
Sand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORML▲ SOLIDSOLID▲ SOLIDOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEG					NONE	MODER	NONE
Appearancescalar*VisualNORML▲ SOLIDSOLID▲ SOLIDOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEG						NONE	
Odor scalar *Visual NORML NORML NORML NORML NORML NORML Emulsified Water scalar *Visual >0.1 NEG NEG NEG	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Emulsified Water scalar *Visual >0.1 NEG NEG NEG	Appearance	scalar	*Visual	NORML	▲ SOLID	SOLID	▲ SOLID
		scalar	*Visual	NORML	NORML	NORML	NORML
Free Water scalar *Visual \$\triangle >10\% \$\triangle 1.0\$	Emulsified Water	scalar	*Visual	>0.1		NEG	
	Free Water	scalar	*Visual		<u> </u>	<u></u> >10%	<u> </u>



OIL ANALYSIS REPORT







Laboratory Unique Number

Sample No. Lab Number

: 05767414 : 10337022

: TO50001166

Diagnosed : 16 Feb 2023 Diagnostician : Sean Felton

Received

: 14 Feb 2023

Test Package : IND 2 (Additional Tests: KF, KV100, PQ, VI) To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

4444 W LEADBETTER DR

DALLAS, TX US 75236

Contact: YON PALOMINO yon.palomino@dart.biz

T: (214)775-5673

F: