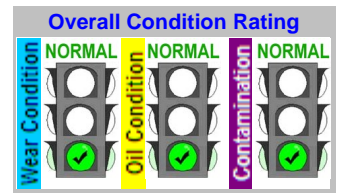


C Code : 16005190
 U Name : B005
 S
 T
 O
 M Address : c/o Technoplus Asia Co.,Ltd.
 E 634/3 Soi Ramkhamhaeng 39 (Thepleela 1)
 R Wangthonglang Bangkok 10310
 Site :
 Location :
 Test code : 89308

Unit ID : **Furnace Hyd**
 Unit Type : Hyd Syst Industrial
 Unit Make : DANIELI
 Unit Model : (not given)
 Oil type / Viscosity : 7 LUBRICANTS ISO 46
 Oil System Capacity : 2400 Liters



Notes (Finding, Evaluation, Interpretation, Suggestion and Recommendation)

All wear conditions and wear tests appear in normal working range.
 All oil conditions and oil tests appear in normal working range.
 All contaminant conditions and contaminant levels appear in normal ranges.
 Contamination levels are improving.
 No oil change recommended at this time, oil appears suitable for further use. Continue routine sampling interval.

Wasan C / Andy Sitton

			Current Sample			Previous Sample			Baseline and Alarm Limit				
Condition History			Wear	Oil	Cont.	Wear	Oil	Cont.	Alarm Limit				
Lab ID Bottle ID Date Sampled Oil Hours (Kms) Unit Hours (Kms) Oil Added (Liters) Filters Hours (Kms)	Test Method	Result	N	N	N	N	N	C	Alarm Limit Matrix -Set Name (Equipment type / oil type) Hydraulic System General ISO 46				
			154040	927732	11-Feb-11	150872	924854	28-Dec-10					
			2600	10 years	1800	10 years							
			800										
Wear Condition									RDE fine		RFS coarse		
Wear Element	Method	Unit	RDE fine	RFS coarse	RDE fine	RFS coarse							
Iron	D-6595	PPM	5.9		5.4		>10	>20	>10	>20			
Chromium	D-6595	PPM	1.2 C		1.0 C		>1	>2	>1	>2			
Lead	D-6595	PPM	1.6		0.4		>5	>9	>6	>10			
Copper	D-6595	PPM	2.3		3.0		>45	>75	>30	>55			
Tin	D-6595	PPM	0.0		0.1		>2	>3	>3	>6			
Aluminum	D-6595	PPM	0.0		0.1		>2	>3	>2	>4			
Nickel	D-6595	PPM	0.0		0.0		>1	>2	>2	>3			
Silver	D-6595	PPM	0.0		0.0								
Molybdenum	D-6595	PPM	0.2		0.0								
Titanium	D-6595	PPM	0.0		0.0								
Oil Condition									OS	L-Warning	L-Caution	U-Caution	U-Warning
Viscosity @ 40°C	D-445	cSt	44.6		44.8		46.0	<41.1	<43.7	>48.3	>50.6		
Viscosity @ 100°C	D-445	cSt											
Oxidation	FTIR	Abs	4.0		3.4								
Nitration	FTIR	Abs	4.6		3.9								
TAN	D-974	mg KOH/g.	0.63		0.64					>1	>1.5		
TBN	D-4739	mg KOH/g.											
Contamination									OS	U-Caution		U-Warning	
Water	T-H2O Check™	% (Wt.)	0.027		0.020					>0.03	>0.05		
Sodium	D-6595	PPM	2		2								
Silicon	D-6595	PPM	0.1		0.0								
Additive Element									OS				
Boron	D-6595	PPM	0		0								
Magnesium	D-6595	PPM	0		0								
Calcium	D-6595	PPM	10		12								
Barium	D-6595	PPM	0		0								
Phosphorus	D-6595	PPM	371		390								
Zinc	D-6595	PPM	570		542								
Additional Test									OS	U-Caution	U-Warning	U-Caution	U-Warning
Flash Point	D-3828	°C											
Viscosity Index	D-2270												

Note: Alarm Limits are variable and dependent upon dataset size and to be used as general guideline.
 No Sign or **N** : NORMAL , **C** or **C** : CAUTION (first level warning limit) , **W** or **W** : Warning (second level warning limit)
 U-Caution : Upper CAUTION Level L-Caution : Lower CAUTION Level First Level Alarm Alert Limit in Upper Level and/or Lower Level
 U-Warning : Upper WARNING Level L-Warning : Lower WARNING required Level Second Level Alarm Alert Limit in Upper Level and/or Lower Level
 Baseline will be data of either "The new oil" or "Reference oil" or "Oil specification". TNO = The new oil , RO = Reference oil , OS = Oil Specification
 Accuracy of interpretation and recommendation are based on representatives sample and information supplied. No warranty is expressed or implied for this report.

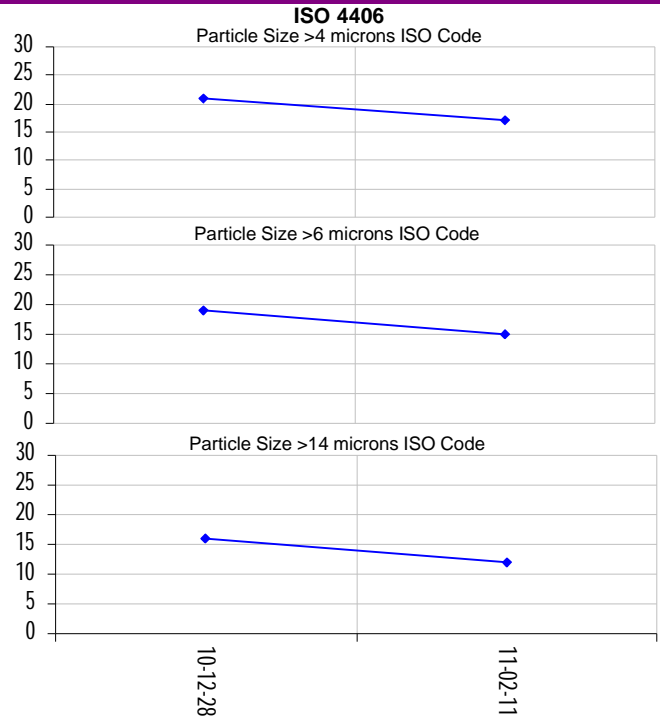
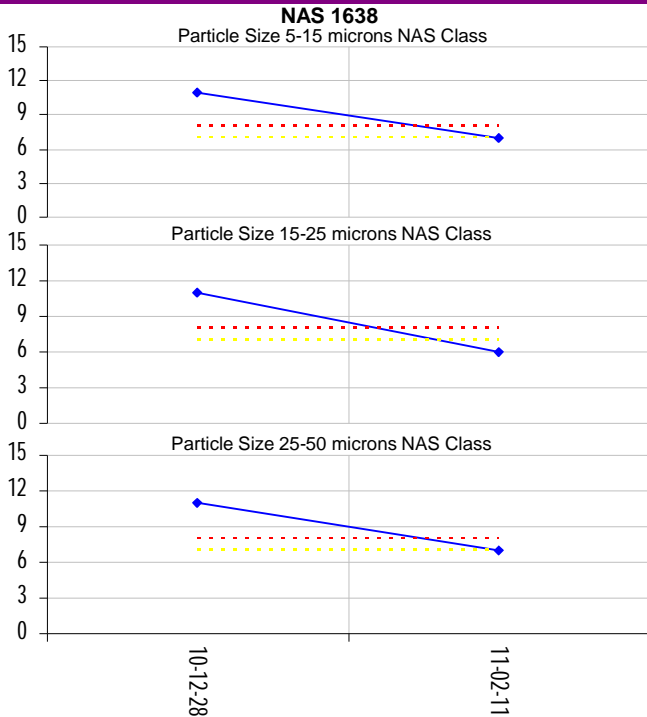
C Code : **16005190**
 U S Name : **B005**
 T O M E R Address : c/o Technoplus Asia Co.,Ltd.
 634/3 Soi Ramkhamhaeng 39 (Thepleela 1)
 Wangthonglang Bangkok 10310
 Site :
 Location :
 Test code : 89308

Unit ID : **Furnace Hyd**
 Unit Type : Hyd Syst Industrial
 Unit Make : DANIELI
 Unit Model : (not given)
 Oil type / Viscosity : 7 LUBRICANTS ISO 46
 Oil System Capacity : 2400 Liters

Notes (Finding, Evaluation, Interpretation, Suggestion and Recommendation)

Particle count indicates that oil cleanliness level is near to unacceptable range.
 Contamination levels are improving.

Lab ID	Current Sample		Previous Sample				Particle Count					
	Bottle ID	154040	150872			NAS 1638 ISO 4406		Alarm Limit				
Date Sampled	927732	924854			BASELINE		Hydraulic System General ISO 46					
Oil Hours (Kms)	11-Feb-11	28-Dec-10			U-Warning							
Unit Hours (Kms)	2600	1800			U-Caution							
Oil Added (Liters)	10 years	10 years										
Filters Hours (Kms)	800											
Contamination												
Particle Count NAS 1638 System Standard												
Particle Size Range	No. of Particles / 100ml.	Class	No. of Particles / 100ml.	Class	No. of Particles / 100ml.	Class	Class	No. of Particles / 100ml.	Class	No. of Particles / 100ml.	Class	
Particle Size 5-15 microns	23,400	7 C	506,600	11 W				>16000	7	>32000	8	
Particle Size 15-25 microns	2,200	6	46,100	11 W				>2850	7	>5700	8	
Particle Size 25-50 microns	600	7	13,100	11 W				>506	7	>1012	8	
Particle Size 50-100 microns	<100	6	1400	10								
Particle Size >100 microns	<100	4	<100	9								
Particle Count ISO 4406:1999 System Standard												
Particle Size Range	No. of Particles / ml.	Class	No. of Particles / ml.	Class	No. of Particles / ml.	Class	Class	No. of Particles / ml.	Class	No. of Particles / ml.	Class	
Particle Size > 4 microns	702	17	15,198	21								
Particle Size > 6 microns	197	15	4,254	19								
Particle Size > 14 microns	28	12	597	16								
ISO 4406 Class Rating	17/15/12		21/19/16									



C Code	: 16005190	Unit ID	: Furnace Hyd
U Name	: B005	Unit Type	: Hyd Syst Industrial
S Address	: c/o Technoplus Asia Co.,Ltd. 634/3 Soi Ramkhamhaeng 39 (Thepleela 1) Wangthonglang Bangkok 10310	Unit Make	: DANIELI
O Site	:	Unit Model	: (not given)
M Location	:	Oil type/ I Viscosity	: 7 LUBRICANTS ISO 46
E Test code	: 89308	Oil System Capacity	: 2400 Liters

Lab ID : 154040 Date sampled : 11-Feb-11 Hours on Oil : 2600 Hours on Unit : 10 years Bottle ID : 927732

ส่วนที่ 1 : หน้าหลัก[Section 1 : Main Page](#)

สภาพการสึกหรอและผลทดสอบการสึกหรอทั้งหมด พบว่าอยู่ในช่วงปกติ
คุณสมบัติของน้ำมันและผลทดสอบน้ำมันทั้งหมด พบว่าอยู่ในช่วงปกติ
สภาพการปนเปื้อนและระดับการปนเปื้อนสิ่งสกปรก พบว่าอยู่ในช่วงปกติ
ระดับความสกปรกกำลังได้รับการปรับปรุงให้ดีขึ้น
แนะนำว่าไม่จำเป็นต้องเปลี่ยนถ่ายน้ำมันในขณะนี้ น้ำมันยังมีสภาพเหมาะสมที่จะใช้งานต่อไป ยังคงเก็บตัวอย่างอย่างต่อเนื่อง

ส่วนที่ 2 : หน้าที่สอง[Section 2 : Second Page](#)

ผลการตรวจนับอนุภาคสิ่งสกปรกชี้ว่าระดับความสะอาดของน้ำมันใกล้เคียงยอมรับไม่ได้แล้ว
ระดับความสกปรกกำลังได้รับการปรับปรุงให้ดีขึ้น

ส่วนที่ 3 : หน้าของ Analytical Ferrography[Section 3 : Analytical Ferrography Page](#)**ส่วนที่ 4 : หน้าของ Gravimetric Page**[Section 4 : Gravimetric Page](#)

C Code : **16005190**
Name : **B005**

Address : c/o Technoplus Asia Co., Ltd.
634/3 Soi Ramkhamhaeng 39 (Thepleela 1)
Wangthonglang Bangkok 10310

Site :

Location :

Test code : 89308

Unit ID : **Furnace Hyd**

Unit Type : Hyd Syst Industrial

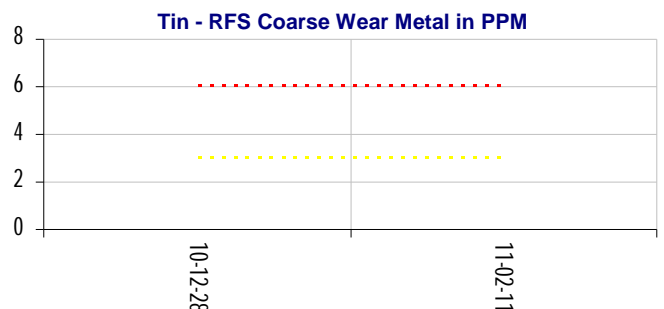
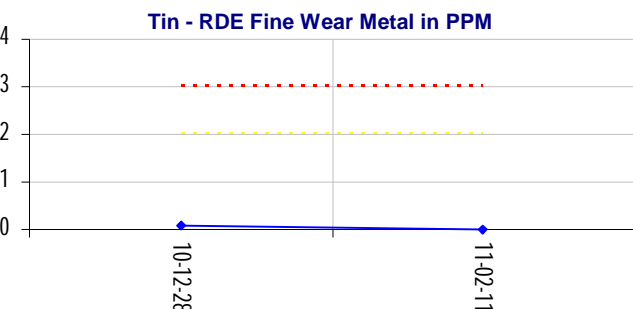
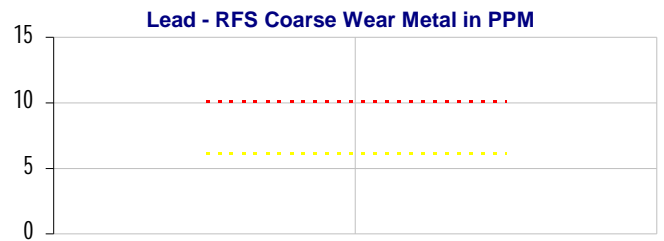
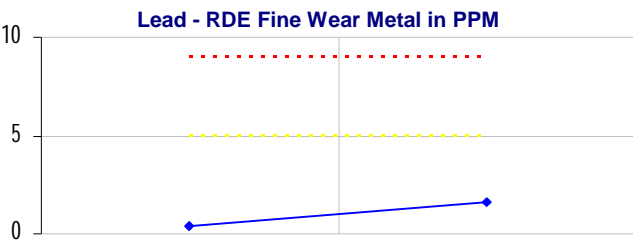
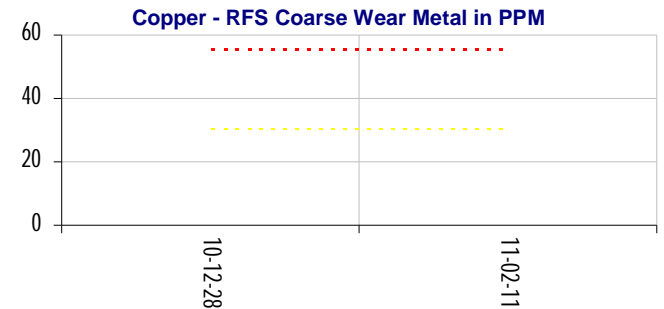
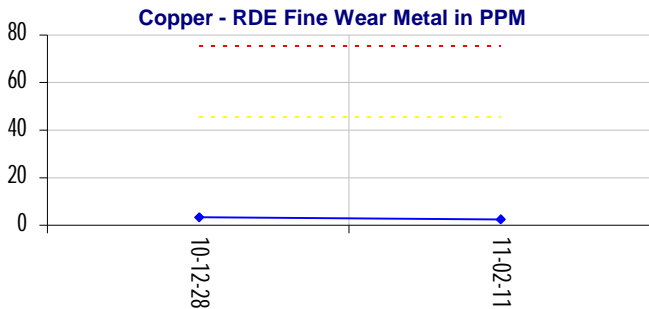
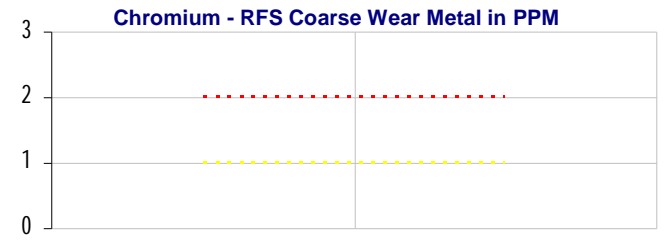
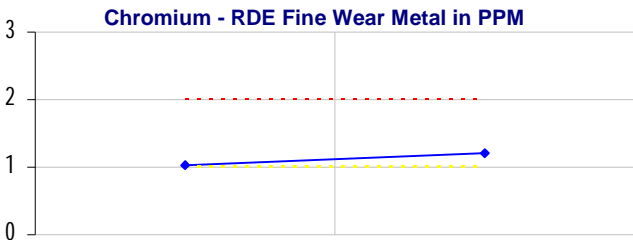
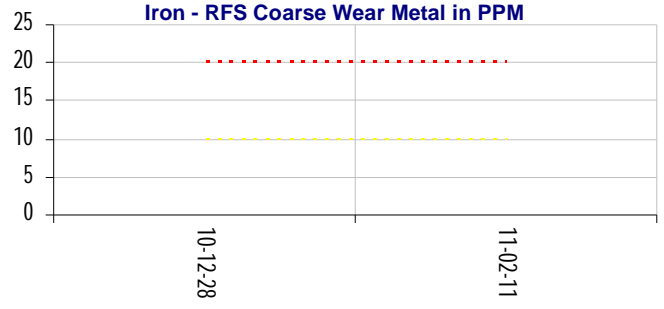
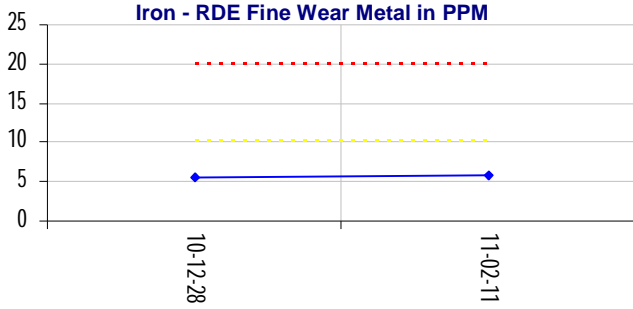
Unit Make : DANIELI

Unit Model : (not given)

Oil type / Viscosity : 7 LUBRICANTS ISO 46

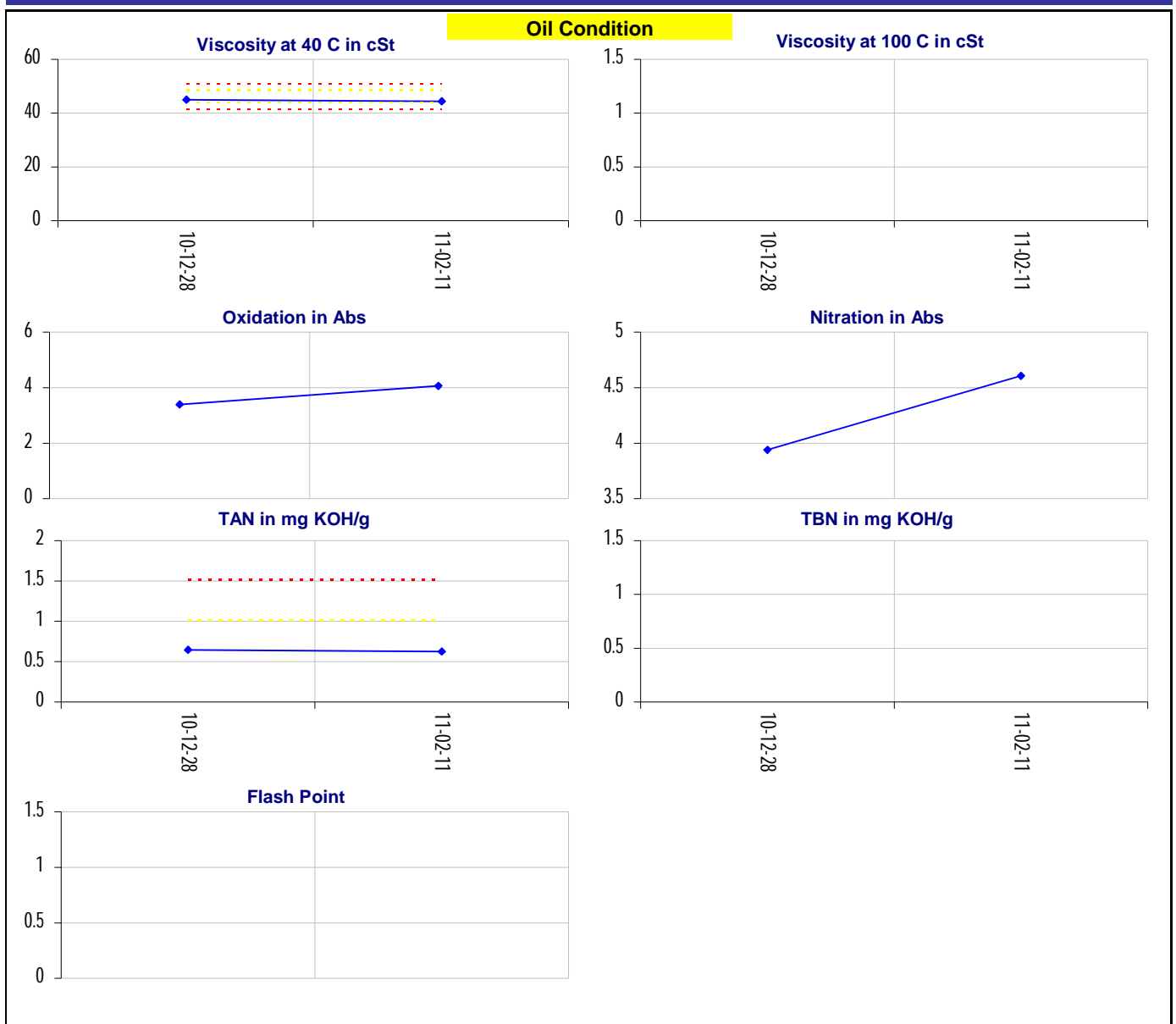
Oil System Capacity : 2400 Liters

Wear Condition



C Code : 16005190
 U Name : B005
 T
 O
 M Address : c/o Technoplus Asia Co., Ltd.
 E 634/3 Soi Ramkhamhaeng 39 (Thepleela 1)
 R Wangthonglang Bangkok 10310
 Site :
 Location :
 Test code : 89308

E Unit ID : **Furnace Hyd**
 O
 U
 I Unit Type : Hyd Syst Industrial
 P Unit Make : DANIELI
 M Unit Model : (not given)
 E
 N
 T
 O Oil type /
 I Viscosity : 7 LUBRICANTS ISO 46
 L
 Oil System Capacity : 2400 Liters



C Code : 16005190
 U Name : B005
 S Address : c/o Technoplus Asia Co., Ltd.
 T 634/3 Soi Ramkhamhaeng 39 (Thepleela 1)
 O Wangthonglang Bangkok 10310
 M Site :
 E Location :
 R Test code : 89308

E Unit ID : Furnace Hyd
 O Unit Type : Hyd Syst Industrial
 I Unit Make : DANIELI
 P Unit Model : (not given)
 M
 E
 N
 T
 O Oil type /
 I Viscosity : 7 LUBRICANTS ISO 46
 L
 Oil System Capacity : 2400 Liters

