AICPA & CIMA
Together as the Association of International Certified Professional Accountants

Operational Case Study Examination

May 2023 – August 2023

Pre-seen material

Context Statement

We are aware that there has been, and remains, a significant amount of change globally. To assist with clarity and fairness, we do not expect students to factor these changes in when responding to, or preparing for, case studies. This pre-seen, and its associated exams (while aiming to reflect real life), are set in a context where current and on-going global issues have not had an impact.

Remember, marks in the exam will be awarded for valid arguments that are relevant to the question asked. Answers that make relevant references to current affairs will, of course, be marked on their merits.

Contents

Your role 2
Company background 3
The tractor industry 4
Extracts from Tracs Europe website 5
The Directors of Tracs Europe 6
Key management teams in Tracs Europe 7
Overview of the manufacturing process 9
Other information about company operations 11
Financial statements for the year ended 31 December 2022 15
Budget information for the year ending 31 December 2023 18
Articles 23
Tax regime in Teeland 26

Your role

You are a Finance Officer working within the Finance Department of Tracs Europe. You are principally involved in the preparation of management accounting information and providing information to managers to assist with decision making. At times, you are also expected to assist with the preparation of the financial statements and answer queries regarding financial reporting and other financial matters.

Company background

Tracs Europe is a company that manufactures and sells tractors used for agricultural purposes. The company is based in Teeland, a country in Europe which has the T$ as its currency. Tractors are manufactured at the company's Production Facility in Teeland and sold throughout Europe.

Tracs Europe is a wholly-owned subsidiary of AgRi, a leading global manufacturer and seller of a range of agricultural equipment including tractors, combine harvesters, trailers and ploughs. AgRi is based in North America and was founded in 1860 by Charles Birdage. AgRi initially manufactured ploughs and other farm implements designed to be pulled by teams of horses or oxen. AgRi launched its first engine powered tractor in North America in 1920.

AgRi has numerous subsidiaries, some of which manufacture and sell finished products (tractors, combine harvesters, trailers and farming implements) and some of which make components and sub-assemblies such as tractor cabs. There are only two subsidiaries which manufacture and sell tractors: Tracs Europe, based in Teeland, serving the European sales market and Tracs America, based in North America, serving the sales markets in the Americas, Australia, New Zealand and parts of Asia. Tracs Europe was set up in 1960 as a result of the AgRi group expanding its operations into the European market.

Tracs Europe does not sell directly to the end-users of its tractors (who are mostly farmers). Sales are made to dealers throughout Europe, who then sell to the end-user. Tracs Europe has sales teams which develop and maintain relationships with a large network of dealers across Europe.

All of the tractors that Tracs Europe sells are large tractors for agricultural use. These are manufactured at the company's Production Facility, located in the west of Teeland. Manufacturing is largely an assembly process, starting with the engines which are built from scratch and ending with the final tractor assembly. Tracs Europe buys in raw materials, parts, components and sub-assemblies from a variety of suppliers (including other group companies).

For the year ended 31 December 2022, Tracs Europe:

- Manufactured and sold 31,150 tractors in Europe**.**
- Generated revenue of T$2,990 million.
- Made a gross margin of 25.9% and an operating margin of 8.7%.
- Had an average of 4,120 employees.

The tractor industry

The global market

The global tractor market was worth T$66 billion in 2022 and is expected to grow on average by 4.2% a year over the next 10 years. This market can be split into two types of tractor: agricultural tractors (which are typically large and designed for heavy duty agricultural work) and mini tractors used for landscaping and grass cutting purposes.

The growth in tractor sales is expected to be driven by increasing farm mechanisation and automation in some parts of the world (for example, South Asia). In other parts of the world (for example, Europe) there is increasing demand for smart tech and alternative power sources for tractors. In these markets there is also increasing demand for compact and mini tractors for landscaping and grass cutting.

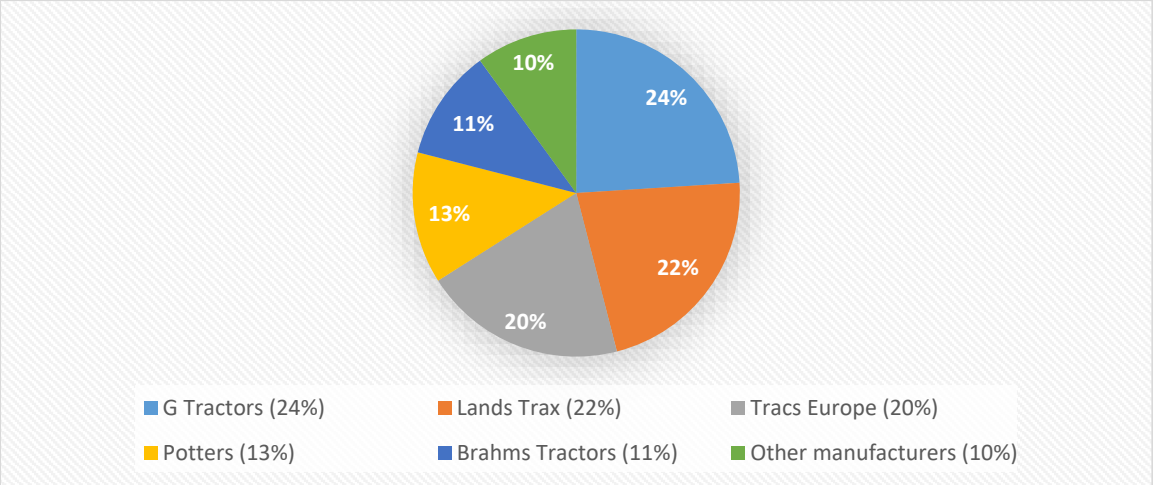
The global market for agricultural tractors is dominated by five large global specialist agricultural equipment companies which manufacture and sell the full range of agricultural equipment including tractors, combine harvesters, trailers and ploughs. Construction equipment global companies also manufacture and sell agricultural tractors, but for such businesses, this is often secondary to their main business of construction equipment.

Some, but not all, of the manufacturers of agricultural tractors also manufacture and sell compact and mini tractors. This market though is dominated by specialist small mechanical equipment manufacturers.

The power and specification of agricultural tractors sold varies considerably across the world, influenced by the nature of farming in each region. For example, the agricultural tractors sold in North America and Western Europe tend to be larger and have higher specifications than those sold in some parts of Asia.

The European market for agricultural tractors

In 2022, there were 155,000 agricultural tractors sold across Europe. Market share, based on sales volumes for 2022, was as follows:



Extracts from Tracs Europe website

Our tractor ranges

A++ Power

- Max power: between 360 to 420 hp (horsepower) depending on model
- Weight: between 12 to 13.5 tonnes depending on model

A+ Power

- Max power: between 240 to 300 hp (horsepower) depending on model
- Weight: between 9 to 11.5 tonnes depending on model

A Power

- Max power: between 120 to 180 hp (horsepower) depending on model
- Weight: between 5 and 6.5 tonnes depending on model

Our tractor models

We have three models in each of our ranges: Basic, Regular and Premium. As the names suggest:

- **Basic** is our starter model, with the lowest max power and the smallest size in each range. Practical, no frills but still comfortable and able to get the job done!
- **Regular** is our mid-range model in terms of max power and size. Cabs are air-conditioned with fully adjustable seating, easy to use driver controls and rear cameras.
- **Premium** is our top of the range model, with the highest power and largest size in each range. All models come with an air-conditioned cab, deluxe self-adjusting seating to give you the best ride even in the roughest terrain, ergonomically designed driver controls and cameras that cover all angles.

So, that's three different power ranges, each with models reflecting three different specifications, making a choice of nine different tractors. A model to suit every farming need!

The Directors of Tracs Europe

Managing Director: Tony Roberts

Tony has overall responsibility for Tracs Europe and is the key contact for group management. Tony has been Managing Director for 5 years, having previously been a Product Development Director for another AgRi subsidiary. Tony was instrumental in securing the move of AgRi's Tractor Product Development Centre to Europe.

Production Director: Jack Newman

Jack has responsibility for all aspects of the Production Facility and has been in post for 10 years, having worked his way up from junior production management. Jack is passionate about production quality and has instigated many initiatives to promote total quality management throughout the facility.

Product Development Director: Joe Steiner

Joe is a mechancial engineer with over 20 years of experience in the field of tractor design and development. He was appointed 6 months ago when the Tractor Product Development Department was moved to Tracs Europe. Joe is keen on embracing new technologies in engine design, including the use of non diesel fuels.

Sales & Distribution Director: Reena Blois

Reena has responsility for all aspects of sales & distribution, including developing and maintaining relationships with Tracs Europe's large network of dealers and the distribution of tractors to dealers. Reena has been in post for 8 years and in that time has increased the dealer network by over 20%.

Human Resources Director: Gina Patel

Gina has responsibility for all HR issues relating to Tracs Europe's employees and is an expert in employment law. Gina has over 20 years experience in the field of HR and has been with Tracs Europe for 4 years. She believes that a high level of employee welfare is key to a successful company.

Finance Director: Karl Lomas

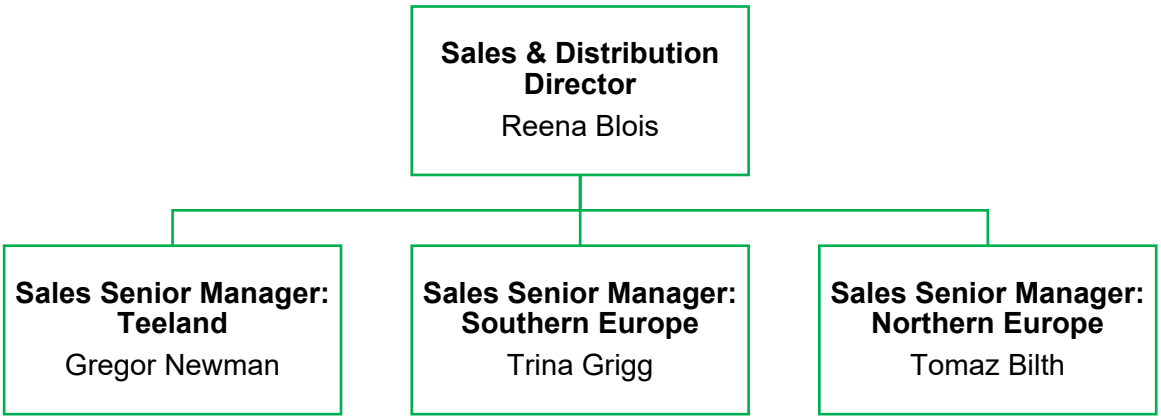
Karl has responsibility for all finance-related issues, including the provision of internal and external financial information and developing relationships with local finance providers. He has been a qualified accountant for 15 years and has been Finance Director for 2 years.

Information Technology Director: Priya Golt

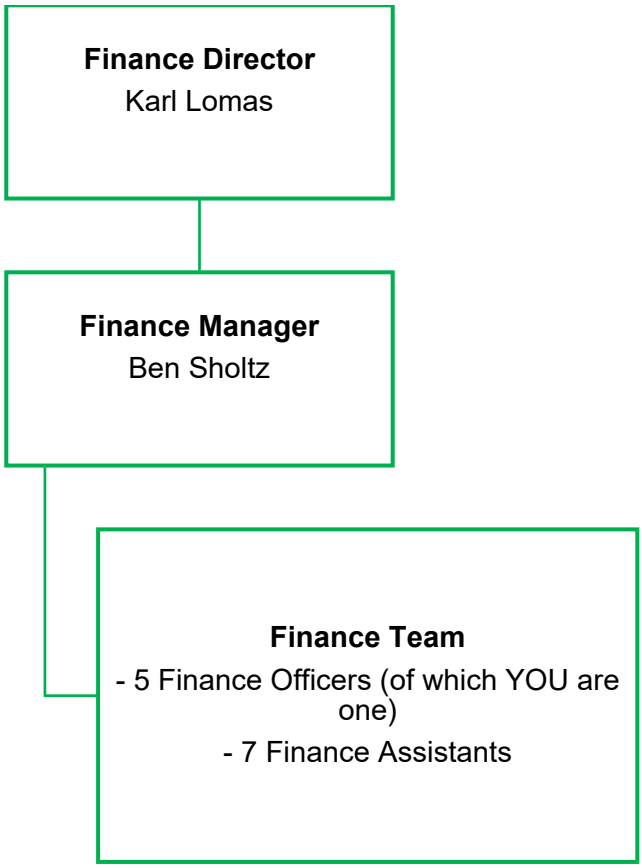
Priya has responsibility for the smooth operation of all of Tracs Europe's IT systems and for maintainting the company website. Priya has been in post for 6 months and has many ideas about how the IT systems used by the company could be improved. She is keen that the company embraces more smart technology.

Key management teams in Tracs Europe

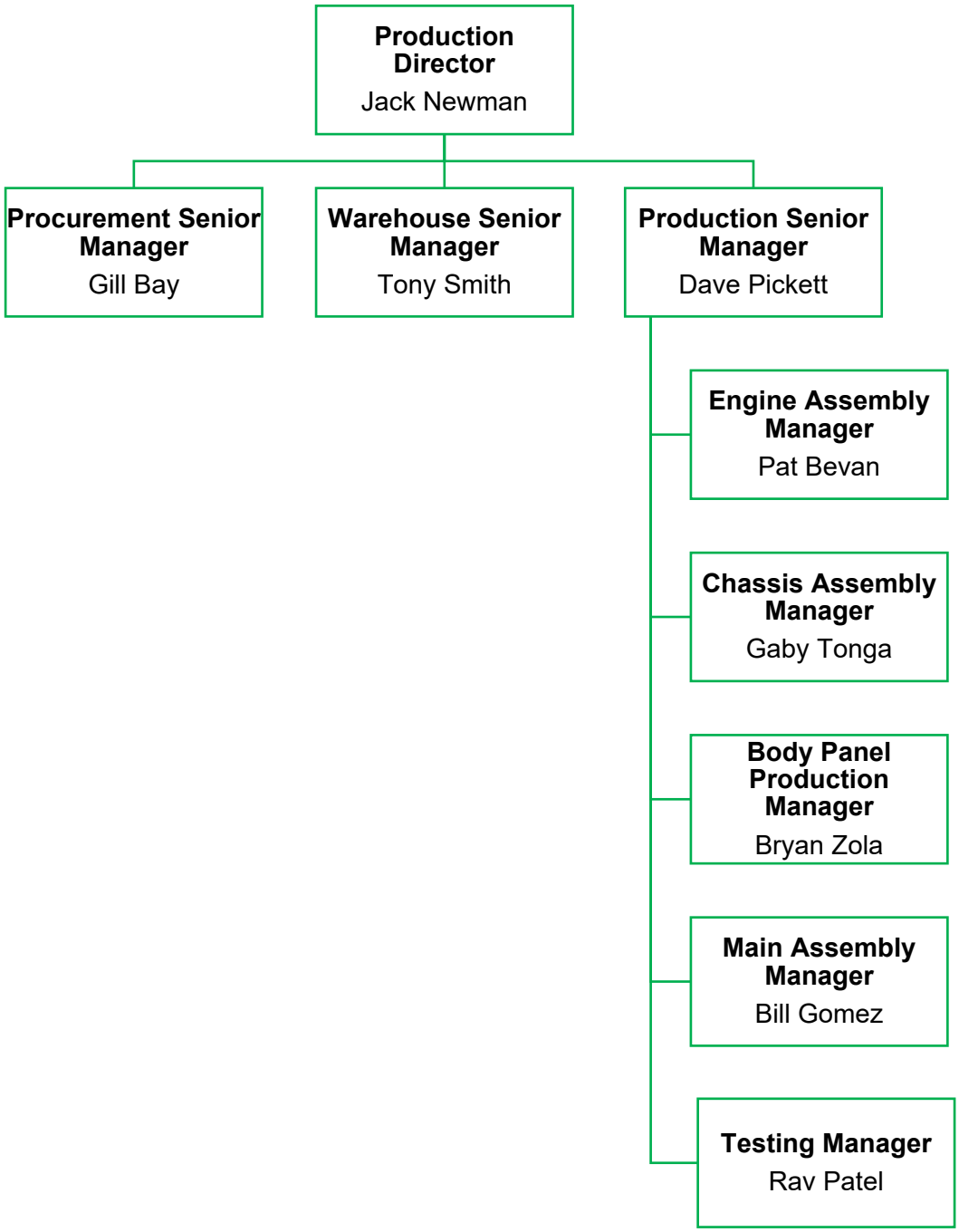
Sales:



Finance:

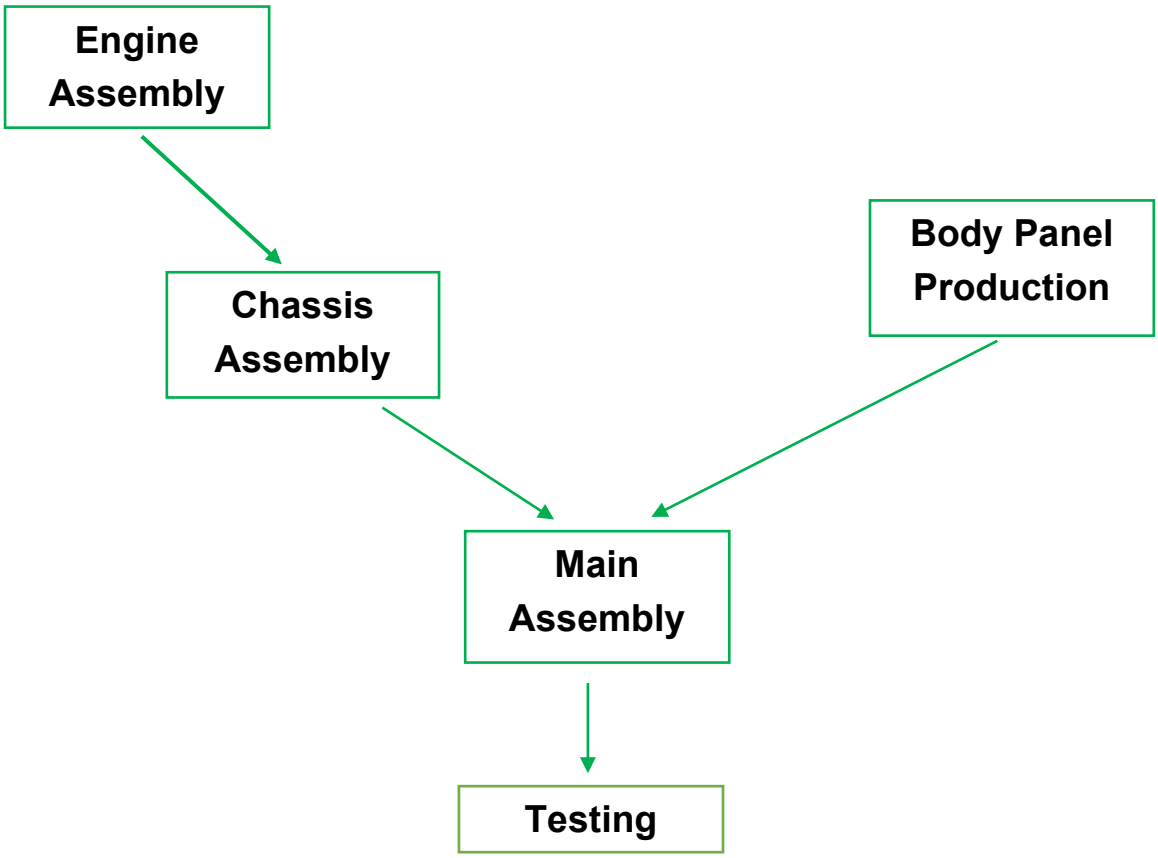


Production:



Overview of the manufacturing process

All the tractors sold by Tracs Europe are produced at the company's single Production Facility, located in the west of Teeland. There are five production departments and the flow of work between these departments is as follows:



Engine Assembly Department:

In the Engine Assembly Department, engines are assembled from scratch using parts, components and sub-assemblies bought in from trusted suppliers. Each engine is assembled on a block so that it can be moved through the department.

There are five stages to the engine assembly process, each requiring different highly-skilled specialist mechanics to assemble and fit the parts, components and sub-assemblies as required for that stage of the process. Some stages require a single mechanic, while others require multiple mechanics.

As each stage is completed, the partly finished engine, mounted on its block, is moved to the next assembly area via an automated track system that runs through the department. When the engine assembly is complete, there is a quality control and testing check. The engine is then removed from the block and moved to the Chassis Assembly Department by a system of chains, pulleys and winches, where it is stored until it can be incorporated into a chassis.

Chassis Assembly Department:

The Chassis Assembly Department is where the chassis of the tractor is created. This starts with a chassis frame into which the engine, transmission and gears, rear and front axles, steering system and so on are built.

The chassis frame is made from sections of high-grade steel which are precision cut by a machine and welded together by robots. Before any elements are added, the chassis frame is dipped into a vat of cleaning chemicals and then manually sprayed with a single coat of paint. Chassis frame production is a mixture of mechanised and manual processes.

The rest of the chassis assembly process is largely manual. To the chassis frame, front and rear axles and the steering system are manually welded into place and then tested. The part-finished chassis then moves along a production line to another section of the department where the engine is carefully mounted onto the chassis and the transmission and gear system are built. A small inventory of completed chassis are kept in the department, ready to be moved to the Main Assembly Department when required.

Body Panel Production Department:

The Body Panel Production Department is where body panels for the tractor bodies are made. These body panels include front and back wheel arches and the casing around the engine at the front of the tractor.

To create the body panels, large steel sheets are fed into hydraulic presses which are programmed to create the relevant shape. Once created, the body panels are moved by machine to the painting area where they are first dipped in cleaning solution and then spray painted by robots. Each panel receives three coats of paint to ensure a high-quality finish.

This part of the production process is highly mechanised, following a significant investment in new equipment 2 years ago.

Main Assembly Department:

The Main Assembly Department is where tractors are put together on a large production line track that runs through the department. At the start of the production line, a completed tractor chassis delivered from the Chassis Assembly Department is loaded onto a block which can be manoeuvred up and down as required and will move along the production track.

To the chassis, a cab (which is bought in from another group company) is moved into position using digitally controlled lifting equipment and manually connected. All other parts, components and sub-assemblies are then added, including tyres, lights, front grills and body panels.

Testing Department:

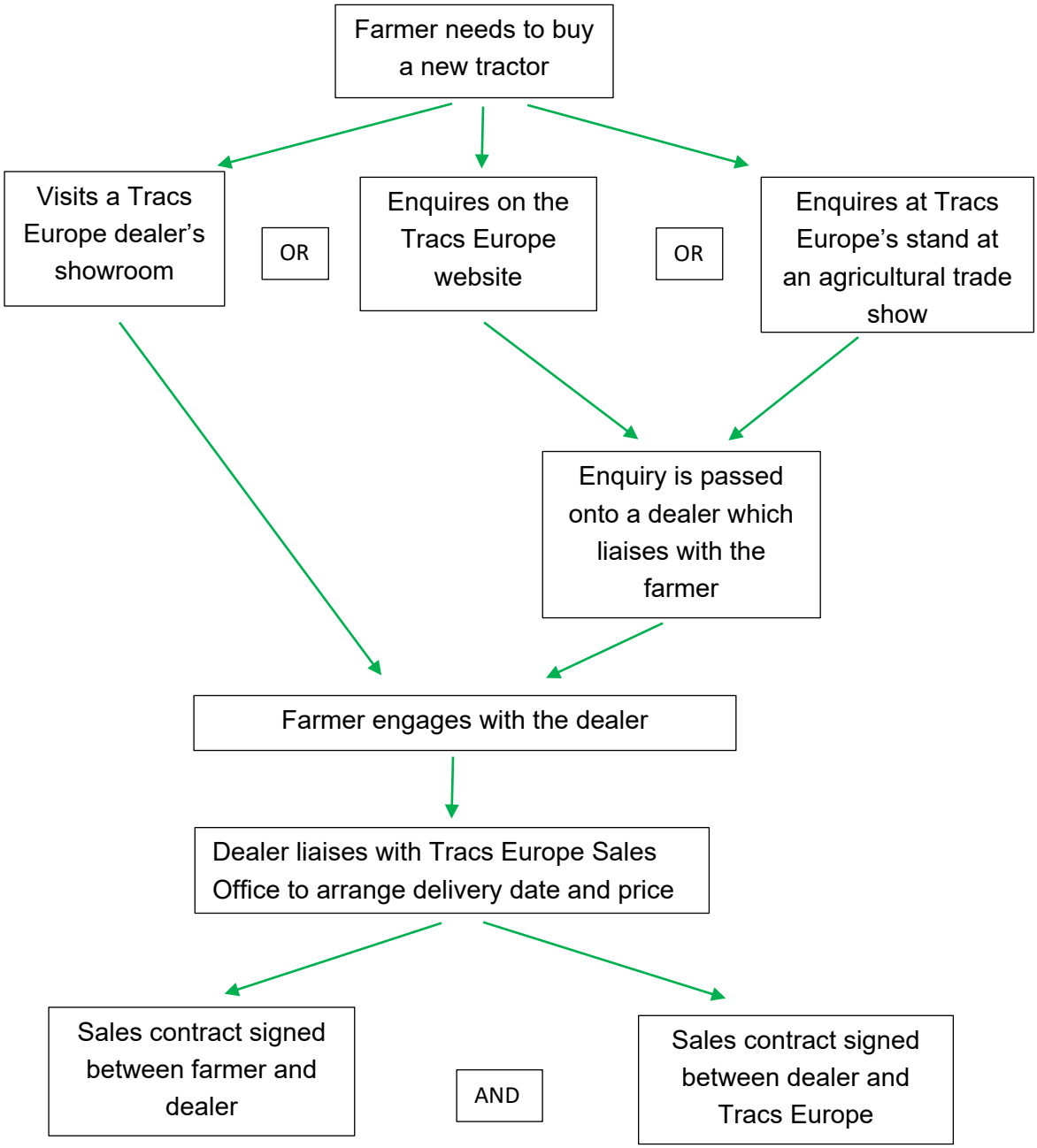
All finished tractors are tested in the Testing Department before being certified as complete. Testing involves running the tractor on a specifically designed treadmill that simulates the tractor's working environment.

Other information about company operations

Sales:

All the tractors manufactured at the Tracs Europe Production Facility are sold to the end consumer in Europe through a European network of dealers. Currently, Tracs Europe does not sell any of the tractors that it manufactures outside of Europe.

All the tractors currently manufactured by Tracs Europe are for agricultural use. Therefore, almost all of Tracs Europe's end consumers are farmers. The sales enquiry and order processes are shown below:



Tracs Europe has three regional sales offices (one each for Teeland, Southern Europe and Northern Europe). Each sales office is located within the relevant region and has a sales team headed by a Sales Senior Manager. Sales teams are set ambitious sales targets by the Sales & Distribution Director and earn commissions on top of their salaries based on achievement of these targets.

The sales teams are very knowledgeable about tractor specifications and performance and are responsible for:

- Signing up new dealers.
- Ongoing management of the relationship with dealers.
- Ensuring that dealers have sufficient promotional materials.
- Dealing with queries from dealers.
- Dealing with online and telephone queries about tractor specifications and so on from farmers.
- Interacting with dealers to arrange delivery times.
- Ensuring that tractors are distributed to dealers in accordance with agreed delivery times.

Each sales team is also responsible for setting up and staffing trade stands at agricultural shows across their regions, where demonstration tractors are displayed and potential customers can ask questions.

Tracs Europe's sales contracts are between the company and the dealer rather than the end customer. A sale is recorded by Tracs Europe when a tractor is delivered to the dealer (which is usually a day or two before the dealer delivers the tractor to the farmer).

Sales teams have the authority to negotiate discounts with dealers of up to 15% of the normal selling price of a tractor. Contracts with dealers specify that the price that the dealer charges to the end user (the farmer) should be the price agreed between the dealer and the Tracs Europe sales teams plus an agreed percentage to give the dealer a margin.

Most dealers are given a standard credit period of 30 days, although some of the larger dealers have negotiated longer payment periods. Relationships between dealers and the sales teams are generally very good, and most dealers pay within their agreed credit period.

Production Facility:

Tracs Europe operates from a single Production Facility, which is one of the largest production facilities in Europe. The site includes:

- The Tractor Product Development Centre, which was built 6 months ago. This is the tractor development centre for the AgRi group, with the function having been moved to Europe from America.
- Warehousing for the various raw materials, parts, components and sub-assemblies which are bought in.
- A huge assembly plant, which includes the Engine Assembly Department, the Body Panel Pressing Department, the Chassis Assembly Department and the Main Assembly Department.
- A testing facility where tractors are tested before despatch to dealers.
- Finished goods warehouses where tractors are stored prior to despatch.

Suppliers:

To ensure quality, Tracs Europe sources steel plate and paint from single suppliers. Both of these suppliers are large companies that service a lot of the vehicle manufacturers that operate in Teeland.

Tractor cabs are bought in already assembled from CaBs, a fellow subsidiary in the AgRi group. CaBs is based in Teeland and manufactures cab units for tractors and combine harvesters.

Parts, components and sub-assemblies are bought in from suppliers which are mainly located close to Tracs Europe's Production Facility. Many of the components and sub-assemblies are specific to Tracs Europe and are made by the suppliers using dies and tooling that have been approved for use by Tracs Europe.

Supplier bulk discount and payment terms vary. Where feasible, the company does seek to take advantage of bulk discounts. Payment terms range from 30 days to 60 days depending on the supplier.

Servicing and parts:

Tracs Europe does not provide servicing and repairs services for its tractors. Instead, this is provided by the dealers as part of their relationship with the customer.

Tracs Europe does though sell parts, components and sub-assemblies to dealers and to other agricultural equipment maintenance providers.

Product development:

Product development for all AgRi tractors is undertaken at the Tractor Product Development Centre, located in Teeland. Product development involves developing new tractor ranges and models as well as refining existing models. Within the development team, there are mechanical engineers and vehicle designers using computer-aided technology.

There are also mechanics and technicians that work on developing some of the parts, components and sub-assemblies that are incorporated into new or refined models. Within the Centre, there is a small foundry which allows parts and components to be cast from molten metal and workshops where trial parts, components and sub-assemblies are created. Once a part, component or sub-assembly is developed, the development team liaises closely with suppliers to ensure that the exact specifications can be achieved.

Employees

Tracs Europe had the following average number of employees during the year ended 31 December 2022:

	Number
Production	3,650
Sales	190
Administration	280
	4,120

Financial statements for the year ended 31 December 2022

Tracs Europe
Statement of profit or loss for the year ended 31 December 2022

	2022 T$ million	2021 T$ million
Revenue	2,990	2,795
Cost of sales	(2,216)	(2,076)
Gross profit	**774**	**719**
Selling, distribution and marketing costs	(304)	(299)
Administrative expenses	(210)	(206)
Operating profit	**260**	**214**
Finance costs	(31)	(37)
Profit before tax	**229**	**177**
Income tax expense	(70)	(56)
Profit for the year	**159**	**121**

Tracs Europe
Statement of financial position at 31 December 2022

	2022 T$ million	2022 T$ million	2021 T$ million	2021 T$ million
ASSETS				
Non-current assets				
Property, plant and equipment	946		974	
Right-of-use assets	290		320	
		1,236		1,294
Current assets				
Inventory	176		187	
Trade receivables	303		261	
Prepayments and other receivables	19		18	
Cash and cash equivalents	49		14	
		547		480
Total assets		**1,783**		**1,774**
EQUITY AND LIABILITIES				
Issued T$1 equity share capital*	1		1	
Retained earnings	202		163	
Total equity		203		164
Non-current liabilities				
Borrowings	800		800	
Lease liability	186		212	
		986		1,012
Current liabilities				
Trade payables	407		430	
Accruals and other payables	63		59	
Tax liability	70		56	
Lease liability	54		53	
		594		598
Total equity and liabilities		**1,783**		**1,774**

*Tracs Europe has 1 million $1 equity shares in issue which are all owned by AgRi.

Tracs Europe
Statement of cash flows for the year ended 31 December 2022

	2022 T$ million	2022 T$ million
Cash flows from operating activities		
Profit before tax		229
Adjustments		
Depreciation for property, plant and equipment	149	
Depreciation on right-of-use asset	30	
Finance costs	31	
		210
Movements in working capital		
Decrease in inventory	11	
Increase in trade and other receivables	(43)	
Decrease in trade and other payables	(19)	
		(51)
Cash generated from operations		**388**
Tax paid		(56)
Interest paid		(31)
Net cash inflow from operating activities		**301**
Cash flows from investing activities		
Purchase of property, plant and equipment	(121)	
Net cash outflow from investing activities		**(121)**
Cash flows from financing activities		
Dividend paid	(120)	
Repayment of lease principal	(25)	
Net cash outflow from financing activities		**(145)**
Net increase in cash and cash equivalents		**35**
Cash and cash equivalents at the start of the year		14
Cash and cash equivalents at the end of the year		**49**

Budget information for the year ending 31 December 2023

Budgeted gross profit

	A++ Power T$000	A+ Power T$000	A Power T$000	Parts T$000	Total T$000
Sales revenue	596,500	1,885,200	619,500	124,048	3,225,248
Cost of sales	(380,225)	(1,424,801)	(486,358)	(74,128)	(2,365,512)
Gross profit	**216,275**	**460,399**	**133,142**	**49,920**	**859,736**
Gross profit margin	**36.3%**	**24.4%**	**21.5%**	**40.2%**	**26.7%**

A++ Power range: sales revenue

	Model			
	Basic	**Regular**	**Premium**	
Total sales volumes (units)	1,200	2,300	600	
Net average selling price (T$)	100,000	155,000	200,000	
				Total
	T$000	**T$000**	**T$000**	**T$000**
Sales revenue	120,000	356,500	120,000	596,500

A++ Power range: cost of sales

	Model			
	Basic	**Regular**	**Premium**	
Total sales volumes (units)	1,200	2,300	600	
	T$	**T$**	**T$**	
Production cost per unit:				
Raw materials	47,595	65,760	85,926	
Direct labour	4,370	4,710	5,040	
Variable production overhead	4,679	5,275	6,007	
Fixed production overhead	14,092	21,099	24,029	
Total production cost per unit	**70,736**	**96,844**	**121,002**	
				Total
	T$000	**T$000**	**T$000**	**T$000**
Cost of sales	84,883	222,741	72,601	380,225

A+ Power range: sales revenue

	Model			
	Basic	**Regular**	**Premium**	
Total sales volumes (units)	6,400	9,100	4,100	
Net average selling price (T$)	73,000	95,000	135,000	
				Total
	T$000	**T$000**	**T$000**	**T$000**
Sales revenue	467,200	864,500	553,500	1,885,200

A+ Power range: cost of sales

	Model			
	Basic	**Regular**	**Premium**	
Total sales volumes (units)	6,400	9,100	4,100	
	T$	**T$**	**T$**	
Production cost per unit:				
Raw materials	34,234	45,351	64,468	
Direct labour	3,650	4,040	4,420	
Variable production overhead	4,007	4,679	5,335	
Fixed production overhead	16,028	18,711	21,341	
Total production cost per unit	**57,919**	**72,781**	**95,564**	
				Total
	T$000	**T$000**	**T$000**	**T$000**
Cost of sales	370,682	662,307	391,812	1,424,801

A Power range: sales revenue

	Model			
	Basic	**Regular**	**Premium**	
Total sales volumes (units)	1,100	3,900	4,200	
Net average selling price (T$)	45,000	60,000	80,000	
				Total
	T$000	**T$000**	**T$000**	**T$000**
Sales revenue	49,500	234,000	336,000	619,500

A Power range: cost of sales

	Model			
	Basic	**Regular**	**Premium**	
Total sales volumes (units)	1,100	3,900	4,200	
	T$	**T$**	**T$**	
Production cost per unit:				
Raw materials	19,850	27,913	34,975	
Direct labour	2,745	3,075	3,545	
Variable production overhead	3,099	3,130	4,432	
Fixed production overhead	12,397	14,498	17,728	
Total production cost per unit	**38,091**	**48,616**	**60,680**	
				Total
	T$000	**T$000**	**T$000**	**T$000**
Cost of sales	41,900	189,602	254,856	486,358

Example standard cost card

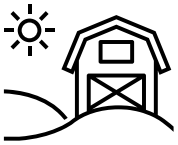
A+ Power: Regular model				
	Quantity / hours	**Standard price / rate T$**	**Standard cost T$**	**Standard cost T$**
Materials:				
Steel plate	11.0 metres^2	85.00	935	
Cab			23,000	
Paint	13.0 litres	32.00	416	
Parts, components and sub-assemblies			21,000	
Total				**45,351**
Direct labour:				
Engine assembly	60.0 DLH	30.00	1,800	
Chassis assembly	40.0 DLH	25.00	1,000	
Body panel production	4.0 DLH	20.00	80	
Main assembly	44.0 DLH	25.00	1,100	
Testing	3.0 DLH	20.00	60	
Total				**4,040**
Variable production overheads:				
Engine assembly	60.0 DLH	16.86	1,012	
Chassis assembly	40.0 DLH	32.12	1,285	
Body panel production	4.5 MH	141.19	635	
Main assembly	44.0 DLH	37.58	1,654	
Testing	3.0 DLH	30.85	93	
Total				**4,679**
Fixed production overheads:				
Engine assembly	60.0 DLH	67.46	4,048	
Chassis assembly	40.0 DLH	128.46	5,138	
Body panel production	4.5 MH	564.77	2,541	
Main assembly	44.0 DLH	150.32	6,614	
Testing	3.0 DLH	123.39	370	
Total				**18,711**
Total production cost				**72,781**

*DLH is direct labour hours, and MH is machine hours.

Notes on standard costing and budget preparation

1. The company operates a standard absorption costing system.
2. Standards are reviewed and updated annually.
3. Normal raw material losses are included in the standard cost of each product.
4. All direct labour overtime premium is treated as variable production overhead. Idle time is not budgeted for.
5. Production overheads are allocated and apportioned to production cost centres and absorbed on either a direct labour hour or a machine hour basis. There are five production cost centres, and each has its own variable and fixed production overhead absorption rates.
6. Standard selling prices are after expected dealer discounts.
7. Budgets are prepared annually on an incremental basis. Operational managers have limited involvement in budget setting.

Articles



Journal of Farming Research Zeeland

Journal of Farming Research Zeeland

Volume 36, Issue 2, March 2023, Pages 2-14

BLOCK SCIENTIFIC

PUBLISHING

Review Paper

Tractor design: Is Fashion leading the way?

Dr. L Winter-Barker, K. Saws and B. Cookson

University of Zeeland, Department of Farming

Abstract

Whilst the mechanism of tractors in the requirement for sustainability is well known, less emphasis has been given to the resource implications of obsolescence and change. Here, consideration is given to the improvement of efficiency of resource usage in tractor design by looking at developments within the fashion industry. A phenomenological methodology is used to consider future design and development within four areas:

Upgrading to extend life, precycling, the right to repair and design for disassembly.

To improve the effective use of scarce resources in tractor design, this will include the idea of right to repair to extend the life of the tractor and may also lead eventually to partial upgrades as a means of extending useful life. It has become widespread that the use of recycled materials will be considered in production and design. However, this will also be extended. There will be a consideration of material used in production during the design phase to highlight the potential impacts in terms of life length and end of life management. In addition, this area will also expand to include potential differentiation to ensure mechanical operations are available at all price points and operationally are able to adapt to all working conditions to enable global increases of production to sustain increases in population expected up to the middle of the 21st Century. Design will become centred around disassembly.

Citation Indexes: 10

Tuesday 20th May 2023

Agricultural Times

Latest news and bulletin updates

Issue #1023

Lydia Hardy

Power up

Is red diesel at the end of the road?

Whilst the debate around the potential ban for rebated (red) diesel has quietened for now, the recent furore has alerted farmers to the potential future power requirements they may have and how diesel supply may be limited in the future. In addition, there are now large agricultural producers with strict climate change agendas looking for alternative forms of power as well as those who feel morally diesel is at the end of the road.

Various alternative technologies are being put forward by different tractor manufacturers. It should be noted that farms have recently been at the forefront of alternative power generation by developing wind, solar and anaerobic digesters as alternative means of power. So, it's not unexpected they will be looking at this for their tractors too.

How tractors looked in the past.

A new generation hydrogen tractor.

The first biomethane tractors have already been put in place and of course electric tractors are in development as well. Although the potential issue for these is the space for sufficient batteries.

Some manufacturers have also gone down the hydrogen route. This is partly as the level of by products is low, with only water being produced, as well as overcoming the space requirement of batteries.

However, there are still concerns in some areas about the space required for the electrolysis to produce the hydrogen, which may mean that it is only suitable for large scale operations. There is also concern about how such engines will cope with dusty field conditions and vibrations.

So, whilst alternatives are there for red diesel, transferring from such an established power method may prove less than easy.

Tuesday 27th May 2023

Agricultural Times

Latest news and bulletin updates

Issue #1024

Albert Pargeter

Tractor Factors 2022

The demand and supply factors affecting global tractor production

The global agricultural tractor market is estimated to reach T$81.4bn by 2027, a compound growth rate of 4.2% over the period.

Whilst historically tractors have been noted for their ability to deliver huge amounts of torque from their two-wheel drive, there is now a change being seen.

There are trends growing for compact tractors for smaller farms and technical developments such as the integration of telematics within the tractors themselves.

Moreover, there has been a trend for increasing mechanization in the last few years in world markets, as farm labourers migrate to cities leading to shortages of labour in rural areas.

Whilst existing labour movements remain in place in the EU, this is not the case for all countries in the area, with some discouraging the use of foreign labour.

In addition, local unrest has also impacted on the ability of agricultural workers to move and shifting exchange rates has made potential gains from working abroad smaller.

There have also been production delays, with shutdowns in the Chinese market leading to shortages of semi-conductors. In addition, there have also been increases in steel and aluminium costs, all of which are expected to raise prices and slow market development in coming months.

Against that, some countries, such as the USA, have implemented legislation to encourage the purchase of precision agricultural machinery through discounted interest rate loans for instance. There is an increasing prevalence of robust crops, and therefore higher yields, in many areas such as the USA and South Asia.

These ideas, as well as the age of existing agricultural machinery, suggests that demand for new agriculture machines is expected to grow, especially where there is an improvement in productivity and sustainability.

There are expected to be moves to produce tractors which reduce the impact on soil and reduce human intervention and allow robots to take the place of traditional farming practices such as using organo-phosphates in weed control, which instead can be done by machine 24 hours a day.

Tax regime in Teeland

- The corporate income tax rate to be applied to taxable profits is 30%.
- Unless otherwise stated below, accounting rules on recognition and measurement are followed for tax purposes.
- The following expenses are not allowable for tax purposes:
    - accounting depreciation
    - amortisation
    - impairment charges
    - entertaining expenditure
    - donations to political parties
    - taxes paid to other public bodies.
- Tax depreciation allowances are available on all items of plant and equipment (including computer equipment) at a rate of 25% per year on a reducing balance basis. A full year's allowance is available in the year that the asset is acquired. Tax depreciation allowances are not available for property assets.
- Tax losses can be carried forward indefinitely to offset against future taxable profits from the same business.
- Sales tax is charged on all standard rated goods and services at a rate of 20%. Tax paid on inputs into a business can be netted off against the tax charged on outputs from that business. All businesses are required to pay over the net amount due on a monthly basis.