

Innovative solutions of XCTMS

Using Telematics for the benefit of the Tyres in your fleet

XCTMS is a Tyre management program that ventures into telematics. The rationale was to produce an independent tyre management software program which would enable the transporter to manage his fleet via a smart phone and removing the need for paper-based trails.



Smart phone and pressure / tread depth tool

The system works Using any android smart phone or tablet and is paired with a Bluetooth device which measures both tread depth and the pressure of the tyre enabling the transporter to know with far more degree certainty and accuracy that the vehicles leaving his depots do so with the correct inflation pressures and sufficient legal tread depth.

[Smart phone and pressure / tread depth tool](#)

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[Workflows and Accountability](#)

Tyres that are outside of the clients set parameters are flagged automatically for corrections and displayed in a graphic and excel format for easy identification and delegation for action.

As each user has a unique login every action can ultimately be traced to the person flagging the problem and the person correcting the problem. Although not the primary reason for the program it does enable you to control stock much easier.

XContent plans is to broaden this aspect of the system.

[Observations and Actions](#)

Reporting and correction cannot be easier with XCTMS. Customised observations and specified actions are logged on XCTMS via the mobile smartphone like when

feathered wear is seen on a tyre. This is logged so the alignment specialist can be sent a notification for correction on the vehicle.

A bolt lodged in a tyre tread requires the tyre to be removed and repaired by specialist in order to avoid a costly breakdown. A worn kingpin, wheel bearing, shock, bushing or other worn mechanical parts causing irregular wear needs to be reported to be corrected. Having an option to flag any problem is a feature in the reporting function on the smartphone app which allows any user who has the app to submit an observation and required action is an advantage.

The screenshot shows the 'Tyres' section of the Tyre Management System. At the top, a blue navigation bar contains the system name and user information. Below it, a red banner indicates the tyre's status: 'Scrapped: Other - Damage Beyond Recognisable Cause (RTD)'. A table lists attributes such as 'Buffed', 'Rejected', and 'Comments'. The tyre ID 'RC031217' is shown with a settings icon. A detailed table lists tyre specifications like 'Casing', 'Life', 'Pattern', 'Size', 'Active', 'Current Location', 'Last Inspection', 'Tread', and 'Observations'. A 'Lives' section includes a '+ New Tyre Life' button and a table with columns for 'Make', 'Pattern', 'OTD', 'FTD', 'Start Date', 'End Date', 'Purchase Cost', and 'Reclaim Value'. The footer contains the system name, copyright, and 'Powered by XContent' logo.

Scrapped: Other - Damage Beyond Recognisable Cause (RTD)

Buffed	false
Rejected	false
Comments	PE Route Breakdown Third party- tyre not returned

RC031217

Casing	Michelin	Current Location	None
Life	New	Last Inspection	Jun 30, 2018
Pattern	Michelin X Multi	Tread	13.94mm - 13.45mm - 12.86mm
Size	385/65R22.5		Avg - 13.4mm Min - 12.86mm
Active	false	Observations	None

Lives

+ New Tyre Life

	Make	Pattern	OTD	FTD	Start Date	End Date	Purchase Cost	Reclaim Value
Initial	Michelin	X Multi	15		Dec 15, 2017		R7,250.00	View Edit

Tyre ManagementSystem © 2018 www.tyremanagementsystem.com - Powered by

Budgeting Tool, CPK and Tyre History

One the most important aspects of a tyre program is it ability to help the user make budgeting decisions, and is dependent on the ability of the program to help ascertain the rate of wear of a tyre across the full spectrum of tyre sizes, brands, patterns including retreads. With access to data like this you can budget for your tyre purchases more accurately whether monthly or for quarterly purposes.

Another aspect that is of vital importance in a tyre program to ensure that the history of the tire from inception to disposal is accurately maintained in a progression of CPK for its first life and then subsequent retreading lives in order to reveal the overall CPK for each casing brand.

Each tyre becomes a test tyre in your fleet which is being throughout its life until you finally a scrap it. A neat feature of the XContent system is the scrapping function. Tyres are scrapped on the mobile app and a picture taken; finishing off the “cradle to grave” life cycle and the reason for failure is kept and analysed. This type of data

mining allows the user to select the best brand tyre It's for its initial life and retreading value.

Data protection and Instantaneous data access

What makes this program stand out from others is its TOTAL INDEPENDENCE. This is not run by a tyre manufacturer or tyre dealer. Having your data in the hands of your supplier is tantamount to having a fox in the henhouse as all your data is exposed and all your costs are known to the tyre supplier. And your negotiating leverage is gone. An program that has been designed with the help of tyre professionals but not in the hands of the tyre supplier or manufacturer guarantees your data stays with you and is protected. I heard of many instances where when the tyre supplier leaves the customer loses all the data as the supply agreement includes suppliers tyre program inevitably having to start Recording tyre data again from scratch and the cycle continues on and on. Having your own independent tyre program regardless of supplier is the way to go.

Knowing that the data is being recorded directly to the Internet from a smartphone via a probe the data is less prone to manipulation considerably more accurately and less labour intensive efficiently, and captures that data live on the Microsoft Azure cloud Platform making it instantaneously available to management at any location where a user can access the internet and has password access. Additionally there is no need for and expensive infrastructure, no servers on site, no IT specialists to ensure data is protected this is all down to the Microsoft platform. What do you simply need is an Internet connection. The processing power of beers your platform does most of the work

Power BI Reports – Business information plugin

Perhaps one of the most tantalising and helpful aspects to the system is that it uses Microsoft Power BI business analytics program which renders graphs and forms in a unique enabling the user to drill down on interactive data. The standard System delivers seven basic reports, which includes tyre brand and patterns, tyre pressure and tyre depth reports and graphs, workflow breakdown, scraping analysis and c.p.k reports. Some of the graphs enable you to search by vehicle registration, tyre brand, pattern even to tyre retread pattern. Additional customised BI reports are available at a small set up fee.



TMS - Tyre Pressure Evaluation

- Fleet**
- ANGLO V3
 - BWater
 - CC Transport

- Tyres in Service**
- (Blank)
 - False
 - True

- Retread**
- (Blank)
 - False
 - True

- Mounted**
- False
 - True

Vehicles Registration
All

PressureTier	Number
Within 10%	115
More Than 105%	24
Flat or no Reading	9
Between 80%-95%	81
Below 80%	3
Below 50%	1
Total	233

Tyre Numbers against Pressure Tiers



Fleet	Vehicle	Registration	Serial Num	Rec Pressure	Actual Pressure	Tyre Makes	% Inflated	Date
Centurion	HINO 500	FL87LZGP	ZZM28364	7.80	8.46	RingTread	108	8/21/2018 12:58:44 PM
Centurion	HINO	VGM636GP	ZC151117970	6.30	5.35	Aeolus	85	8/21/2018 8:52:33 AM
Centurion	HINO	VGM636GP	ZB151128568	6.30	5.14	Aeolus	82	8/21/2018 8:53:18 AM
Centurion	HINO	VGM636GP	ZA140798195	6.30	6.36	Aeolus	101	8/21/2018 8:49:32 AM
Centurion	ACTROS 2664 V6	WVC334GP	YDU81031	7.50	7.12	Formula	95	8/21/2018 7:18:34 AM
Centurion	ACTROS 2644 V6	DY92VLGP	YDU79154	7.50	7.20	Formula	96	5/3/2019 6:35:49 AM
Centurion	ACTROS 2644 V6	DY92VLGP	YDU77851	7.50	6.84	Formula	91	5/3/2019 6:36:47 AM
Centurion	ACTROS 2664 V6	WVC334GP	YDU08087	7.50	7.21	Formula	96	8/21/2018 7:17:43 AM
Centurion	HINO	DX67FDGP	YBP58063	7.00	7.18	RingTread	103	8/24/2018 5:02:32 AM
Centurion	HINO	DX67FDGP	YBN00429	7.00	6.44	RingTread	92	8/24/2018 5:08:46 AM
Centurion	HINO	DX67FDGP	YAZ69643	7.00	7.13	RingTread	102	8/24/2018 5:01:48 AM
Centurion	Trailer	ZJL406GP	Y903668	7.50	6.54	Leader Tread	87	8/21/2018 8:07:06 AM

Tyre Pressure Tiers Measurement

