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Art. 1 - VIATURAS ADMITIDAS

As constantes no quadro seguinte detentoras de ficha de homologação FIA / FPAK e suas extensões, válidas para o ano em curso e ainda as viaturas em conformidade com o art.2.7.1.c do CDI.

VIATURAS ADMITIDAS NO CAMPEONATO PORTUGAL de RALIS 2019								
CLASSES	GRUPOS		Regulamento	Peso Min (Kg)	Bride Max. (mm)			
RC2	R5 (VR5)		Art. 261 - Anexo J	1230	32			
	S2000 (2.0 atmosférico) (a)		Art. 254A - Anexo J 2013	1200	64 ± 0.25			
	R4-KIT (a)		Art. 260E - Anexo J	1230	33			
RC2N	R4 (VR4) não elegível para provas internacionais FIA (Europa) (a)		Art. 260 - Anexo J	1300	33			
	Grupo N + de 2000 cm ³ (nominal) (a)		Art. 254 - Anexo J	FH *	- / 33			
RGT (FIA)	RGT (FIA)		Art. 256 - Anexo J	PT RGT (FIA) **	PT RGT (FIA) **			
RC3	Grupo A + de 1600 cm ³ a 2000 cm ³ (nominal)		Art. 255 - Anexo J	Art. 255-4.1	- / 34			
	(VK)-S1600		Art. 255 - Anexo J	1000	60 ± 0.25			
	R3 (VR3C)	Atmosf. (cm ³ / nominal)	Turbo (cm ³ / nominal)	Art. 260 - Anexo J (2019)	1080	-		
		+ 1600 a 2000	+ 1067 a 1333			-		
	R3 (VR3T) Turbo até 1620 cm ³ (nominal)		Art. 260D - Anexo J	1080	29			
	R3 (VR3D) Turbo até 2000 cm ³ (nominal)			1150	32			
RC4 1)	RC4A	R2 (VR2C)	Atmosf. (cm ³ / nominal)	Turbo (cm ³ / nominal)	Art. 260 - Anexo J (2019)	1080	-	
		+ 1600 a 2000	+ 1067 a 1333					
RC4 B	RC4B	R2 (VR2B)	Atmosf. (cm ³ / nominal)	Turbo (cm ³ / nominal)	Art. 260 - Anexo J (2019)	1030	-	
		+ 1390 a 1600	+ 927 a 1067	Art. 260 - Anexo J 2018 (VIATURAS HOMOLOGADAS ANTES DE 31-12-2018)				
		Kit Car (VK) até 1600 cm ³		Art. 255 - Anexo J	Art. 255-6.2			-
		Grupo N: + de 1600 cm ³ até 2000 cm ³		Art. 254 - Anexo J	FH *			-
Grupo A até 1600 cm ³ (nominal)		Art. 255 - Anexo J	Art. 255-4.1	-				
RC5 1)	Grupo N até 1600 cm ³		Art. 254 - Anexo J	FH *	-			

R1 (atmosf até 1600cc - VR1A/VR1B e turbo até 1067cc - VR1A/VR1B)	Atmosf. (cm ³ / nominal)	Turbo (cm ³ / nominal)	Grupo R conforme Art. 260 - Anexo J 2018 (VR1A e VR1B homologados antes de 31/12/2018)	980	-
	<u>VR1A</u> até 1390	<u>VR1A</u> + 927 a 1067		1030	-
R1(atmosf. até 1600cc - VR1 e turbo até 1333cc- VR1)	Atmosf. (cm ³ / nominal)	Turbo (cm ³ / nominal)	Grupo R conforme Art. 260 - Anexo J (2019)	Motores atmosféricos até 1600cc e motores turbo até 1067cc	-
	até 1600	até 1067 + de 1067 a 1333		Motores turbo + de 1067 a 1333	-

* conforme o peso mencionado na ficha de homologação

** conforme passaporte técnico RGT (FIA)

1) São autorizadas as viaturas que disponham de Fichas de Homologação (FH), FIA ou FPAK, sendo que nas provas Internacionais a FH terá de ser FIA

(a) Estas viaturas não são consideradas como elegíveis para as provas do WRC, em conformidade com o artigo 4.4 e com o quadro em anexo

1.1 - Quadro de viaturas admitidas para o WRC 2019 (Rali de Portugal)

2019 FIA World Rally Championship Sporting Regulations

4.4 CLASSES OF CARS

CLASSES	GROUPS	
RC1	World Rally Cars: 1.6 T engine	<ul style="list-style-type: none"> - World Rally Cars, complying with the 2019 Appendix J, Art. 255A, when driven by a driver who has obtained the approval of the FIA - World Rally Cars homologated before 31.12.2013, complying with homologation extension 100/01 KSR and its WR extension, and with the 2013 Appendix J, Art. 255A. Only WRC cars with an FIA passport issued before 31/12/2016 are allowed - World Rally Cars homologated as from 01.01.2014, complying with homologation extension 200/01 WRC and with the 2016 Appendix J, Art. 255A. Only WRC cars with an FIA passport issued before 31/12/2016 are allowed. - World Rally Cars homologated as from 01.01.2015, complying with homologation extension 300/01 WRC and with the 2016 Appendix J, Art. 255A. Only WRC cars with an FIA passport issued before 31/12/2016 are allowed.
RC2	Group R5 (VR5)	- Group R5 cars conforming to the 2019 Appendix J, Art. 261.
RGT	RGT cars	- Group RGT cars conforming to the 2019 Appendix J, Art. 256.
RC3	R3 (atmo / over 1600cc and up to 2000cc - VR3C and turbo over 1067cc and up to 1333cc - VR3C)	- Group R cars conforming to the 2019 Appendix J, Art. 260
	R3 (turbo / up to 1620cc / nominal - VR3T)	- Group R cars conforming to the 2019 Appendix J, Art. 260D.
RC4	RC4A R2 (atmo over 1600cc and up to 2000cc - VR2C and turbo over 1067cc and up to 1333cc - VR2C)	- Group R cars conforming to the 2019 Appendix J, Art. 260
	RC4B R2 (atmo over 1390cc and up to 1600cc - VR2B and turbo over 927cc and up to 1067cc - VR2B)	- Group R cars conforming to the 2019 Appendix J, Art. 260 - Group R cars conforming to the 2018 Appendix J, Art. 260 (VR2B homologated before 31/12/2018)
RC5	R1 (atmo up to 1600cc - VR1 and turbo up to 1333cc - VR1)	- Group R cars conforming to the 2019 Appendix J, Art. 260
	R1 (atmo up to 1600cc - VR1A/VR1B and turbo up to 1067cc - VR1A/VR1B)	- Group R cars conforming to the 2018 Appendix J, Art. 260 (VR1A and VR1B homologated before 31/12/2018)

Art. 2 - PESOS

2.1 - O peso mínimo da viatura é considerado: sem 1º condutor e 2º condutor/navegador, sem o respetivo equipamento e com no máximo uma roda sobressalente, conforme quadro acima.

No caso em que duas rodas sobressalentes são transportadas na viatura, a segunda roda terá de ser retirada antes de efetuar a pesagem.

2.2 - O peso mínimo da viatura nas condições do Art. 255-4.1; 260-201.3 & 4 & 5; 260D-201.3 & 4; 260E-201.4 e 261-201.4 quando com a equipa a bordo (piloto + copiloto + equipamento completo) é definido pelo quadro acima +160 Kg.

Para S1600 e Kit-Car até 1600 cm³, (Art. 255-6-2) é definido pelo quadro acima +150 Kg.

2.3 - A utilização de lastro é autorizada de acordo com o Art. 252-2.2 do Anexo J.

Art. 3 - EQUIPAMENTO SEGURANÇA

3.1 - Viatura - conforme o disposto no Art. 253 do Anexo J.

3.2 - 1º condutor e 2º condutor/navegador

3.2.1 - Capacetes - com homologação válida e em conformidade com o disposto pelo Anexo L ao CDI, Capítulo III - Art. 1. Normas FIA standard (lista técnica FIA nº 25) e/ou normas FIA 8860-2004 ou FIA 8860-2010 (lista técnica FIA nº33), FIA 8858 (lista técnica FIA nº 41) e FIA 8859 (lista técnica FIA nº49).

3.2.2 - Fato de competição, roupa interior; balaclava; luvas e sapatos - com homologação válida e em conformidade com o disposto pelo Anexo L ao CDI, Capítulo III Art. 2 - norma FIA 8856-2000 (lista técnica FIA nº 27). Não é obrigatório o uso de luvas para o copiloto.

3.2.3 - Sistema de retenção de cabeça (HANS-FHR) - com homologação válida e em conformidade com o disposto pelo Anexo L ao CDI, Capítulo III - Art. 3. Normas FIA 8858-2002 e/ou FIA 8858-2010 (lista técnica FIA nº 29). (**consultar Anexo I - compatibilidade**)

Art. 4 - PNEUS

4.1 - Roda de reserva - em cada prova será obrigatória a instalação de pelo menos um pneu suplente devidamente fixado no carro, controlável em qualquer momento da prova.

4.2 - Tipo de pneus a utilizar nas Super Especiais (SE) - os pneus a utilizar nas SE, serão obrigatoriamente do mesmo tipo de piso que corresponda ao das restantes PEC's que integrem essa Prova, conforme Art. 13.7.3 das PER.

4.3 - Para asfalto - é proibido o uso de pneus *slick* conforme Art. 13.3 das PER.

(**Anexo IV**) e cujo desenho do piso é apresentado no (**Anexo V**) abaixo.

A lista dos pneus homologados pode sofrer alterações e/ou atualizações.

Todos os pneus devem estar em conformidade com o Anexo V das Prescrições Específicas dos Campeonatos de Ralis FIA e apresentarem os códigos de barras de identificação FIA.

É proibido utilizar qualquer dispositivo para aquecer os pneus depois de montados nas suas jantes.

É proibido alterar o desenho original do piso quer seja por corte ou recorte (**consultar Anexo IV**).

4.4 - Para terra - os pneus de terra são livres contudo não é permitido alterar o desenho original do piso quer seja por corte ou recorte e apresentarem os códigos de barras de identificação FIA.

4.5 - Dispositivo que permite o pneu conservar a sua performance - é proibido a utilização de qualquer dispositivo que permita regular a pressão dos pneus, aquando da viatura em movimento.

4.6 - Marcação / Limite a utilizar

- Todas as viaturas dos concorrentes que disputem provas do CPR (Terra ou Asfalto), independentemente de estarem ou não inscritos no mesmo, poderão utilizar até **12 pneus** por prova, os quais serão objecto de verificação e marcação.

- Exclusivamente para as "**Free Practice**" **Shakedown**, **QS** ou **Super Especiais** das provas em piso de terra ou asfalto, os pneus utilizados não serão objecto de marcação.

- Todos os concorrentes disputando provas do CPR têm de preencher um formulário referenciando quais os pneus a utilizar até ao número máximo permitido (conforme formulário em **Anexo III**).

- Tal facto não é impeditivo de controle e marcação de Pneus.

- O controle de Pneus poderá ser efectuado à saída do **PA**, num **Reagrupamento** ou no final de qualquer uma das **PEC** que compõem o Rali.

4.6.1 - Provas Internacionais - que integram o CPR, nestas, o procedimento para a marcação de pneus segue a regulamentação própria dos campeonatos onde se inserem.

a) Independentemente de estarem inscritos no CPR ou não, os concorrentes Nacionais, participantes nas provas do WRC/ERC/ERT, terão de preencher o formulário de Pneus a utilizar e entregar o mesmo ao DT FPAK.

b) Serão objecto de controle da quantidade e identificação dos pneus utilizados nas viaturas com que iniciam a secção de PEC, bem como com que a terminam.

Quer dizer que, quer se apresentem com cinco ou seis pneus no início da secção, terão de regressar com os mesmos pneus com que iniciaram essa secção.

Art. 5 - CÂMARAS FILMAR

5.1 - Instalação - a instalação da (s) câmara (s) de filmar tem de estar em conformidade com o disposto no menu Técnica → (Listas Técnicas) → Câmaras de Filmar, no site da FPAK.

Art. 6 - SELAGEM TURBOCOMPRESSOR (VULGO TURBO)

6.1 - É obrigatório para as viaturas com turbocompressor (vulgo Turbo), que nas VTI o "Turbo" esteja em conformidade e respeite a localização dos pontos de passagem do fio de selagem conforme se descreve no **Anexo II**.

ACTUALIZAÇÕES

Art. / Data	Estado	Art. / Data	Estado	Art. / Data	Estado
1/ 25.01	Actualizado	1/29.01	Actualizado	Anexo IV (Kumho) / 28.02	Actualizado
Anexo IV (Hoiser) /28.05	Actualizado				

VIATURAS ADMITIDAS NO CAMPEONATO NACIONAL de RALIS 2018

Grupo	Descritivo	Regulamento	Peso Min (Kg)	Bride Max. (mm)			
RC2	R5 (VR5)	Art. 261 - Anexo J	1230	32			
	S2000 (2.0 atmosférico) (a)	Art. 254A - Anexo J 2013	1200	64 ± 0.25			
	R4-KIT (a)	Art. 260E - Anexo J	1230	33			
RC2N	R4 (VR4) não elegível para provas internacionais FIA (Europa) (a)	Art. 260 - Anexo J	1300	33			
	Grupo N + de 2000 cm ³ (nominal) (a)	Art. 254 - Anexo J	FH *	- / 33			
RGT (FIA)	RGT (FIA)	Art. 256 - Anexo J	PT RGT (FIA) **	PT RGT (FIA) **			
RC3	Grupo A + de 1600 cm ³ a 2000 cm ³ (nominal)		Art. 255 - Anexo J	Art. 255-4.1	- / 34		
	(VK)-S1600		Art. 255 - Anexo J	1000	60 ± 0.25		
	R2 (VR2C)	Atmosf. (cm ³ /nominal)	Turbo (cm ³ /nominal)	Art. 260 - Anexo J	1080	-	
	R3 (VR3C)	+ 1600 a 2000	+ 1067 a 1333			-	
	R3 (VR3T) Turbo até 1620 cm ³ (nominal)		Art. 260D - Anexo J	1080	29		
	R3 (VR3D) Turbo até 2000 cm ³ (nominal)			1150	32		
RC4 ¹⁾	Grupo A até 1600 cm ³ (nominal)		Art. 255 - Anexo J	Art. 255-4.1	-		
	R2 (VR2B)	Atmosf. (cm ³ /nominal)	Turbo (cm ³ /nominal)	Art. 260 - Anexo J	1030	-	
	+ 1390 a 1600		+ 927 a 1067				
	Kit Car (VK) até 1600 cm ³		Art. 255 - Anexo J	Art. 255-6.2	-		
	Grupo N: + de 1600 cm ³ até 2000 cm ³		Art. 254 - Anexo J	FH *	-		
RC5 ¹⁾	Grupo N até 1600 cm ³		Art. 254 - Anexo J	FH *	-		
	R1(VR1A/V R1B)	Atmosf. (cm ³ /nominal)	Turbo (cm ³ /nominal)	Art. 260 - Anexo J	980	-	
		Até 1390					Até 927
		Atmosf. (cm ³ /nominal)	Turbo (cm ³ /nominal)				1030
+ 1390 a 1600		+ 927 a 1067					

Art. 1

VIATURAS ADMITIDAS NO CAMPEONATO PORTUGAL de RALIS 2019

Grupo	Descritivo	Regulamento	Peso Min (Kg)	Bride Max. (mm)
RC2	R5 (VR5)	Art. 261 - Anexo J	1230	32
	S2000 (2.0 atmosférico) (a)	Art. 254A - Anexo J 2013	1200	64 ± 0.25
	R4-KIT (a)	Art. 260E - Anexo J	1230	33
RC2N	R4 (VR4) não elegível para provas internacionais FIA (Europa) (a)	Art. 260 - Anexo J	1300	33
	Grupo N + de 2000 cm ³ (nominal) (a)	Art. 254 - Anexo J	FH *	- / 33

Art. 1

RGT (FIA)	RGT (FIA)		Art. 256 - Anexo J	PT RGT (FIA) **	PT RGT (FIA) **	
RC3	Grupo A + de 1600 cm ³ a 2000 cm ³ (nominal)		Art. 255 - Anexo J	Art. 255-4.1	- / 34	
	(VK)-S1600		Art. 255 - Anexo J	1000	60 ± 0.25	
	R3 (VR3C)	Atmos f. (cm ³ / nominal)	Turbo (cm ³ / nominal)	Art. 260 - Anexo J (2019)	1080	-
		+ 1600	+ 1067 a 1333			-
	R3 (VR3T) Turbo até 1620 cm ³ (nominal)		Art. 260D - Anexo J	1080	29	
	R3 (VR3D) Turbo até 2000 cm ³ (nominal)			1150	32	
RC4 A	R2 (VR2C)	Atmos f. (cm ³ / nominal)	Turbo (cm ³ / nominal)	Art. 260 - Anexo J (2019)	1080	
		+ 1600 a 2000				+ 1067 a 1333
	R2 (VR2B)	Atmos f. (cm ³ / nominal)	Turbo (cm ³ / nominal)	Art. 260 - Anexo J (2019) Art. 260 - Anexo J 2018 (VIATURAS HOMOLOGADAS ANTES DE 31-12-2018)	1030	-
		+ 1390 a 1600	+ 927 a 1067			
	Kit Car (VK) até 1600 cm ³		Art. 255 - Anexo J	Art. 255-6.2	-	
	Grupo N: + de 1600 cm ³ até 2000 cm ³		Art. 254 - Anexo J	FH *	-	
	Grupo A até 1600 cm ³ (nominal)		Art. 255 - Anexo J	Art. 255-4.1	-	
RC5 1)	Grupo N até 1600 cm ³		Art. 254 - Anexo J	FH *	-	
	R1 (atmosf até 1600cc - VR1A/VR1B e turbo até 1067cc - VR1A/VR1B)	Atmos f. (cm ³ / nominal)	Turbo (cm ³ / nominal)	Grupo R conforme Art. 260 - Anexo J 2018 (VR1A e VR1B homologados antes de 31/12/2018)	980	
		VR1A até 1390	VR1A + 927 a 1067		1030	
	R1 (atmosf. até 1600cc)	Atmos f. (cm ³ / nominal)	Turbo (cm ³ / nominal)	Grupo R conforme Art. 260 - Anexo J (2019)	Motores atmosféricos até 1600cc e motores turbo até 1067cc 1030 kg	
até 1600		até 1067	-			

		c – VR1 e turbo		+ de 1067 a 1333		Motores turbo + de 1067 a 1333 1080 kg		-
Anexo Iv (Kumho)	KUMHO TYRES							
	15"			180 / 580 R15				TM 02
	16"			190 / 600 R16				TM 02
	17"			190 / 630 R17				TM 02
	17"			210 / 645 R17				TW 02
	18"			210 / 645 R18				TM 01
	18"			210 / 645 R18				TM 02
	18"			210 / 645 R18				TM 02
Anexo Iv (Hoosier)	HOOSIER RACING TIRE							
	15"			185 / 580 R15				ROAD RALLY
	16"			195 / 50R16				TARMAC RALLY
	17"			195 / 50R17				TARMAC RALLY
	18"			200 / 650 R18				ROAD RALLY
	18"			225 / 40 R18				RALLY TARMAC

ANEXO I

COMPATIBILIDADE CAPACETES SISTEMA (HANS-FHR)

in compliance with FIA standard 8858-2002
 Manufacturer: xxxxxx
 Model: xxxxxx

FIA 8858-2010

FIA 8858-2002

FIA 8858-2002

Helmet tether anchorages fitted by the manufacturer in compliance with FIA standard 8858-2002

FIA Standard 8860-2004
 Manufacturer: Helmet Inc.
 Model: xxxxxxxx
 Size: XX

FIA 8858-2010

FIA 8858-2002

FIA 8858-2002

FIA 8860-2004

in compliance with FIA Standard 8858-2010

Manufacturer: xxxxxx
 Model: xxxxxx
 Date of Manufacture: JAN 2013

in compliance with FIA Standard 8858-2010

Manufacturer: Helm, Helm of Manufacturer
 Model: xxxxxx
 Date of Manufacture: JAN 2013

FIA 8858-2010

FIA 8858-2010

FIA 8858-2002

in compliance with FIA Standard 8858-2010

Manufacturer: Helm, Helm of Manufacturer
 Model: xxxxxx
 Date of Manufacture: JAN 2013

in compliance with FIA Standard 8858-2010

Manufacturer: Helm, Helm of Manufacturer
 Model: xxxxxx
 Date of Manufacture: JAN 2013

in compliance with FIA Standard 8858-2010

Manufacturer: Helm, Helm of Manufacturer
 Model: xxxxxx
 Date of Manufacture: JAN 2013

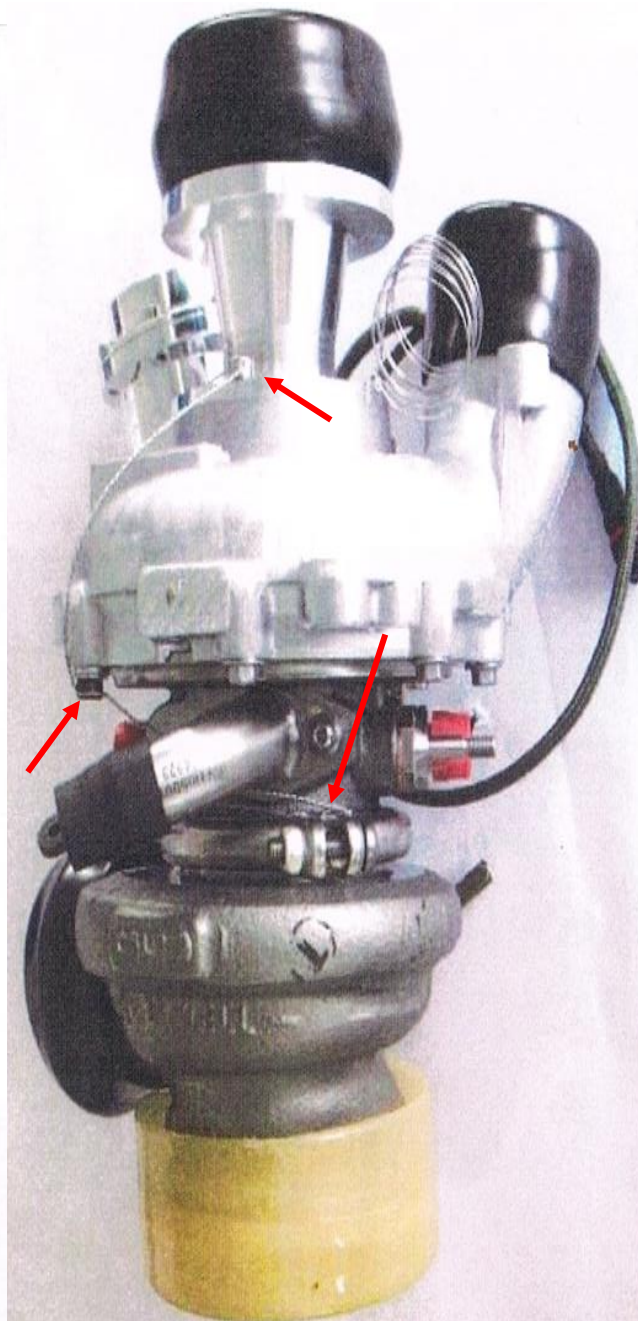
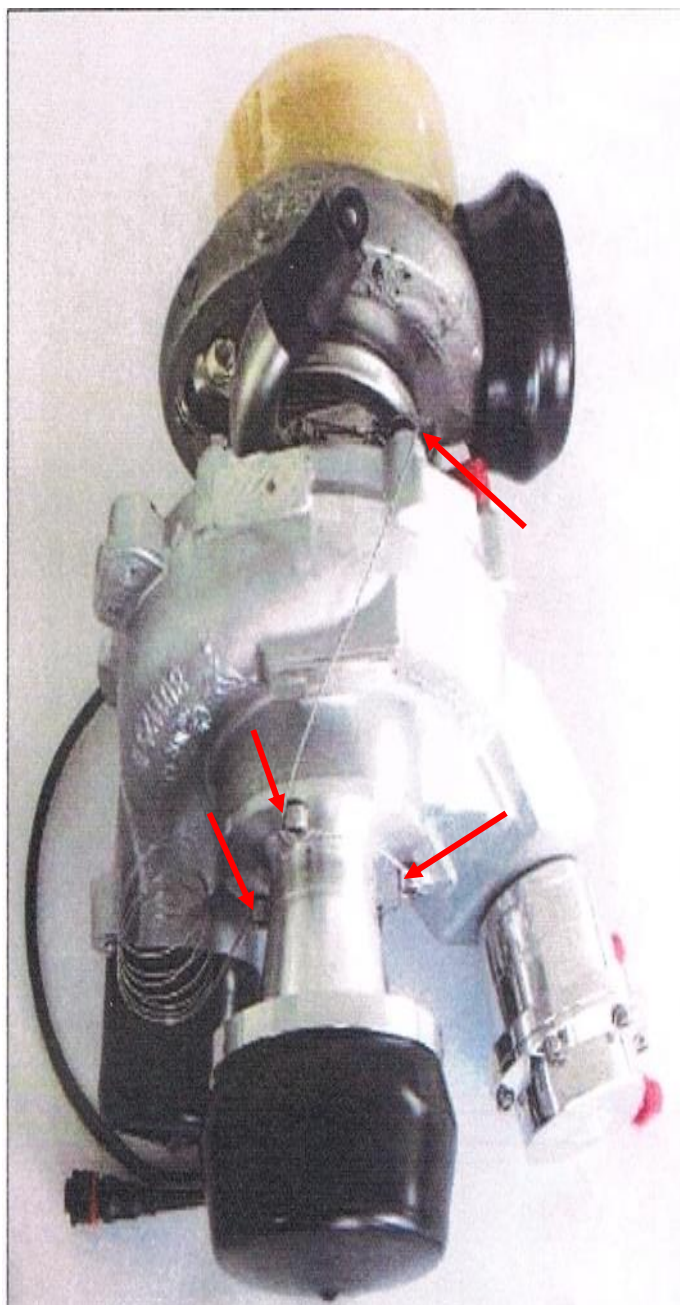
FIA 8858-2010

FIA 8858-2010

FIA 8858-2002

FIA 8859-2015
 FIA 8858-2010
 FIA 8860-2010

ANEXO II
SELAGEM DO TURBOCOMPRESSOR (TURBO)

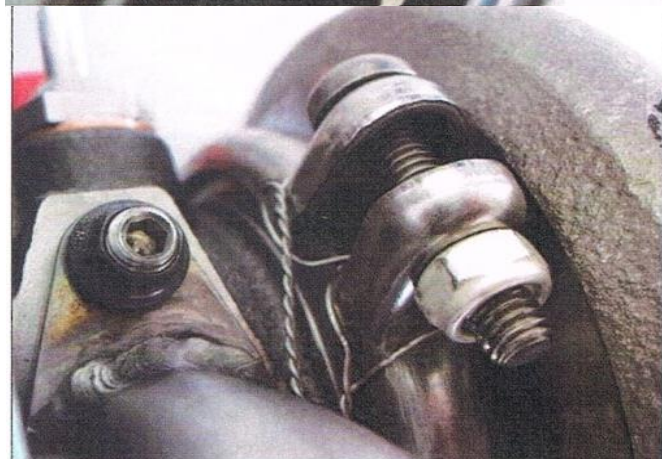


ZOOM DE PONTOS DE PASSAGEM DO FIO DE SELAGEM

LADO DO COMPRESSOR



LADO DA TURBINA



ANEXO III



CPR/WRC/ERT (CONCORRENTES NACIONAIS) DECLARAÇÃO DE PNEUS

CONCORRENTE Nº:

.....

Eu., com o número de licença
..... e como concorrente da viatura com o número referenciado acima , declaro que os
códigos de barras dos pneus que a utilizar na Secção nº serão:

Pneu 1:

Pneu 2:

Pneu 3:

Pneu 4:

Pneu Suplente 5:

Pneu Suplente 6:

E para que assim conste assino a presente, de de

Assinatura.:

Nº de licença:

ANEXO IV
PNEUS DE ASFALTO SEGUNDO LISTA CPR 2019

MICHELIN		
JANTE	MEDIDA	TIPO
15"	19 / 58 -15	Pilot Sport R
16"	19 / 60 -16	Pilot Sport R
17"	19 / 63 -17	Pilot Sport R
18"	20 / 65 -18	Pilot Sport R
18"	18/ 65 - 18	Pilot Sport FW3(WRC Wet)
18"	24 / 65 -18	Rally Asfalt - RGT-FIA(frnt.drt)
18"	24 / 65 -18	Rally Asfalt - RGT-FIA(frnt.esq)
18"	24/ 65-18	Rally Asfalt – RGT-FIA
18"	29 / 65 -18	Rally Asfalt - RGT-FIA(tras drt)
18"	29 / 65 -18	Rally Asfalt - RGT-FIA(tras esq)
18"	29 / 65-18	Rally Asfalt - RGT
DMACK		
14"	175 / 60-14	DMT-RC
15"	195 / 50-15	DMT-RC
15"	195 / 50-15	DMT-RC2
16"	195 / 50-16	DMT-RC
16"	195 / 50-16	DMT RC2
17"	195 / 50-17	DMT-RC
17"	205 / 45-17	DMT-RC2
17"	225 / 45-17	DMT-RC
18"	225 / 40-18	DMT-RC2
18"	225 /40-ZR18	DMT-RC
18"	225 / 40-18	DMT-RC22
18"	225 / 40-18	eWet
PIRELLI		
15"	195 / 50-15	RK
16"	195 / 50-16	RW
16"	195 / 50-16	RK
17"	205 / 45-17	RK
18"	235 / 40-18	RA
18"	235 / 40-18	RK
18"	235 / 40-18	RW
YOKOHAMA		
15"	190 / 580-15	ADVAN A051T
16"	190 / 600-16	ADVAN A051T
17"	190 / 625-17	ADVAN A051T
17"	210 / 625-17	ADVAN A051T
18"	235 / 40-18 (210 / 650 R18)	ADVAN A051T
HANKOOK		
15"	200 / 580R15	VENTUS Z205
16"	180 / 600 R16	VENTUS Z205
17"	210 / 625R17	VENTUS Z205
17"	180 / 625 R17	VENTUS Z205
18"	210 / 650 R18	VENTUS Z205

18"	210 / 650 R18	VENTUS Z210
KUMHO TYRES		
15"	180 / 580 R15	TM 02
16"	190 / 600 R16	TM 02
17"	190 / 630 R17	TM 02
18"	210 / 645 R18	TM 01
18"	210 / 645 R18	TM 02
18"	210 / 645 R18	TM 02
18"	210 / 645 R18	TW 03
HOOSIER RACING TIRE		
15"	185 / 580 R15	ROAD RALLY
16"	195 / 50R16	TARMAC RALLY
17"	195 / 50R17	TARMAC RALLY
18"	200 / 650 R18	ROAD RALLY
18"	225 / 40 R18	RALLY TARMAC
TOYO TIRES		
15"	185 / 580 R15	PROXES 888RT
18"	205 / 640 R18	PROXES 888RT
MRF TYRES		
15"	195 / 50 R15	ZTA1 TL
16"	195 / 50 R16	ZTA1 TL
17"	205 / 45 R17	ZTA1 TL
18"	235 / 50 R18	ZTA1 TL

ANEXO V

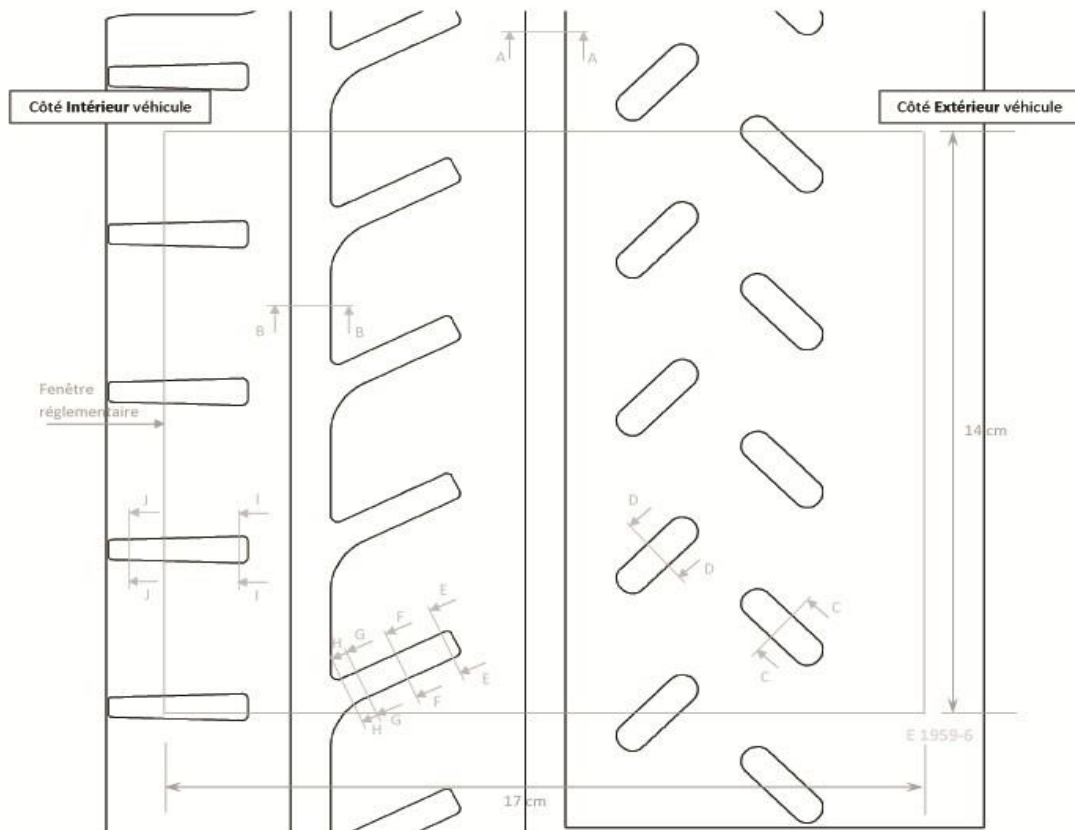
DESENHOS DO PISO DOS PNEUS DE ASFALTO LISTA CPR 2018

18" - 20/65-18

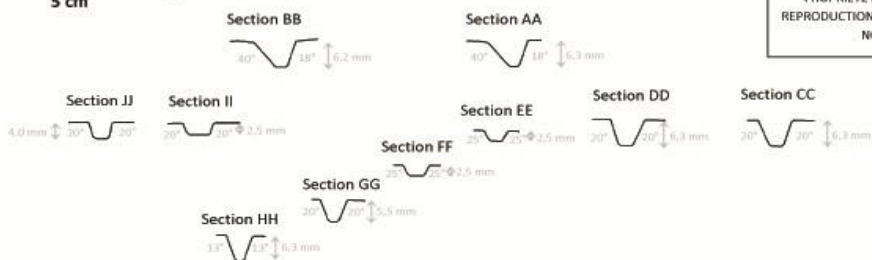


Domaine : Rallye Asphalte
 Dimension : 20 / 65 – 18
 Plan de la sculpture : Pilot Sport R
 Entaillement Surfamique dans fenêtre réglementaire : 21,51 %

Clermont-Ferrand le 05/12/2013



Echelle 1:1
 5 cm



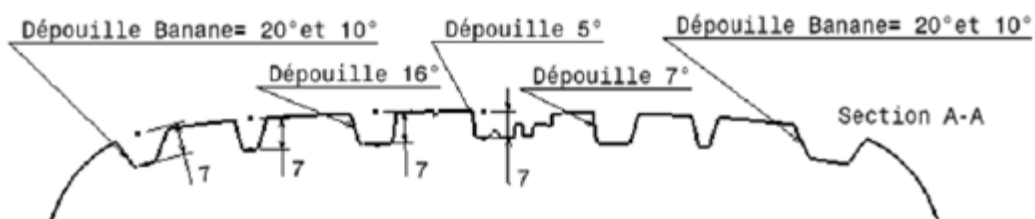
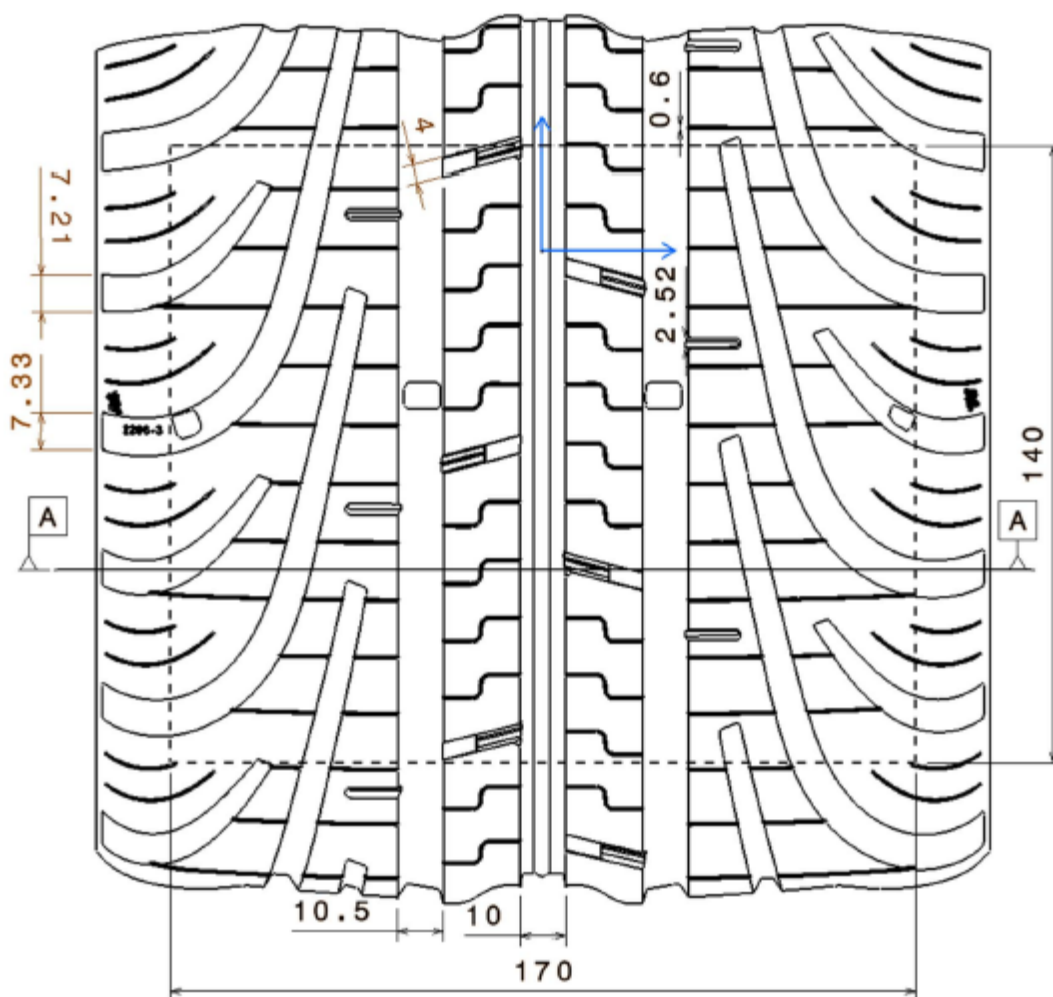
MANUFACTURE FRANCAISE DES PNEUMATIQUES
 MICHELIN CLERMONT-FERRAND
 PROPRIETE EXCLUSIVE DE NOTRE SOCIETE
 REPRODUCTION OU UTILISATION INTERDITE SANS
 NOTRE ACCORD ECRIT

18" - 18/65-18



Clermont-Ferrand le : 15/12/2016
Domaine : Rallye Asphalte WRC Wet
Dimension : 18 / 65 - 18
Plan de la sculpture : Pilot Sport FW3
Entaillement Surfaccie sur entaille $\geq 5,5\text{mm}$ de profondeur : 27.5%

MANUFACTURE FRANCAISE DES PNEUMATIQUES
MICHELIN CLERMONT-FERRAND
PROPRIETE EXCLUSIVE DE NOTRE SOCIETE
REPRODUCTION OU UTILISATION INTERDITE SANS
NOTRE ACCORD ECRIT

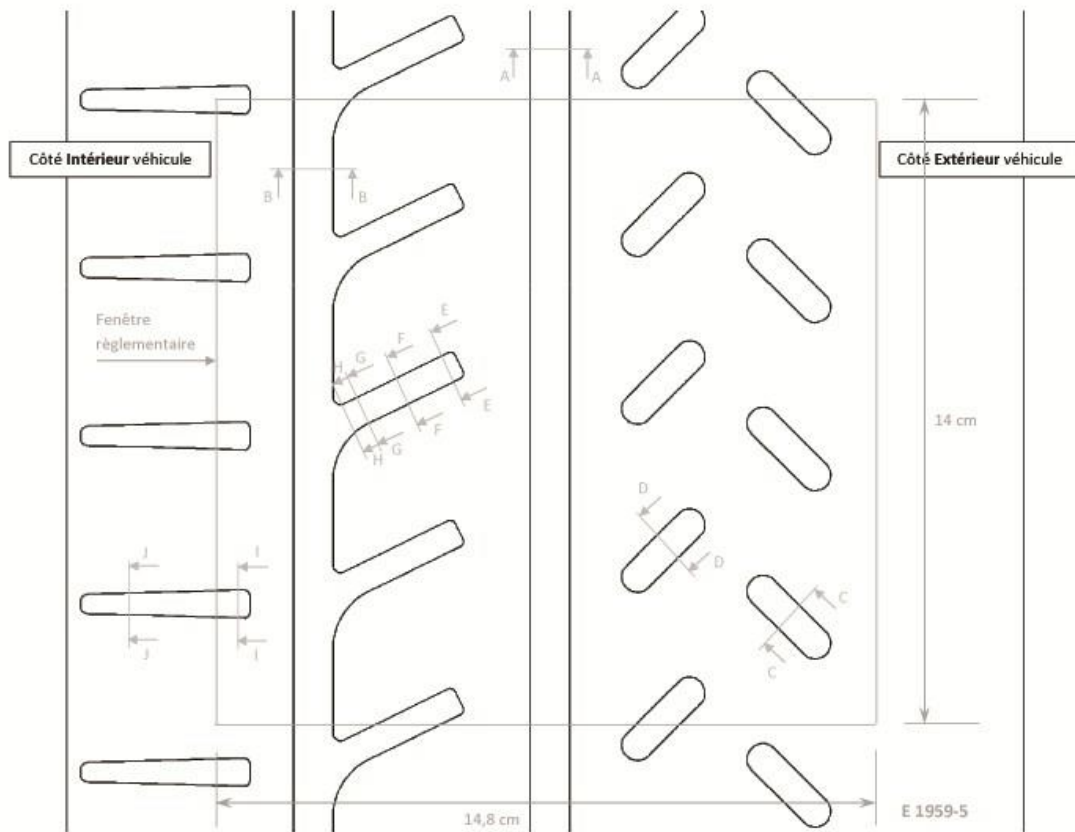


17" - 19/63-17

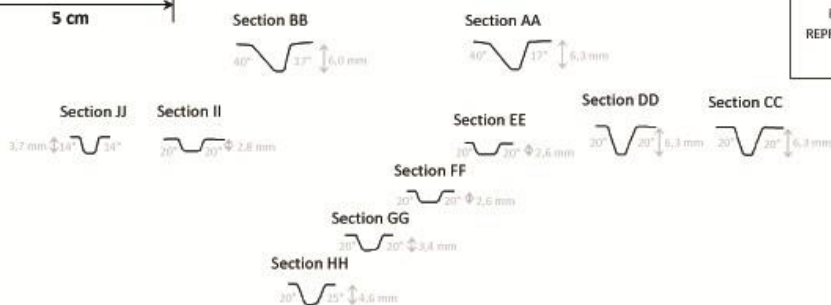


Domaine : Rallye Asphalte
 Dimension : 19 / 63 – 17
 Plan de la sculpture : Pilot Sport R
 Entaillement surfacique sur fenêtre réglementaire : 21,51 %

Clermont-Ferrand le 05/12/2013



Echelle 1:1
 5 cm



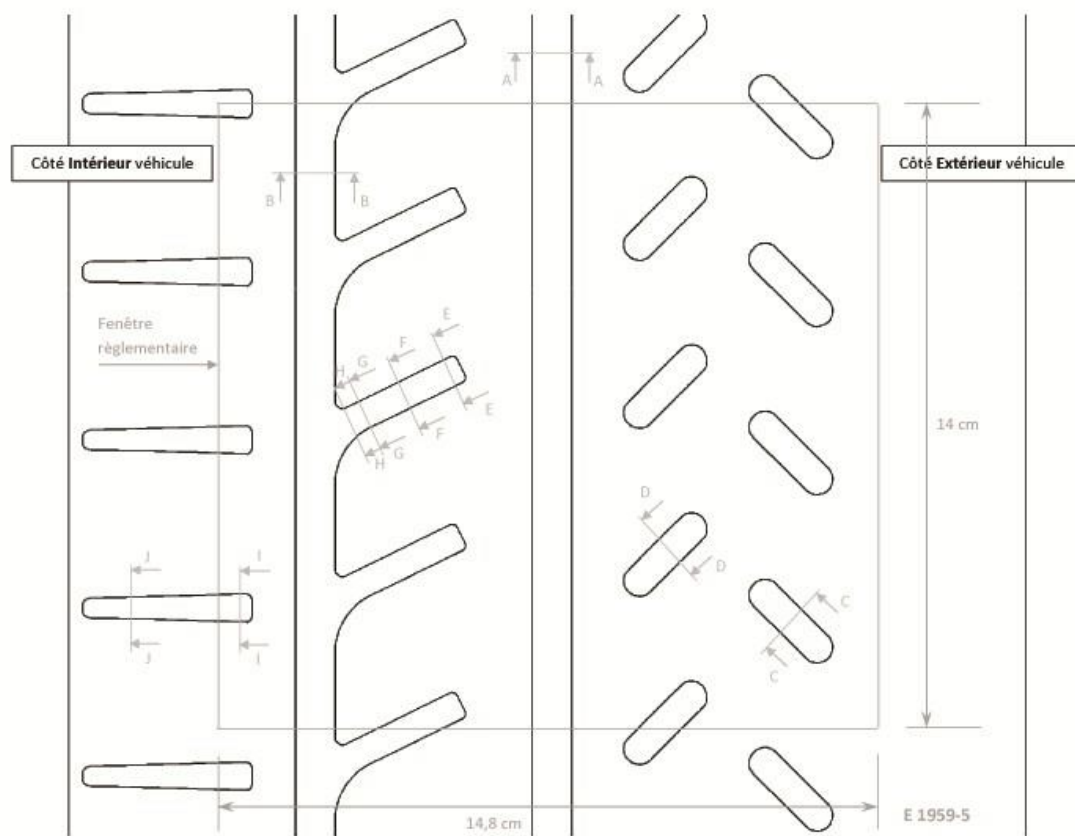
MANUFACTURE FRANCAISE DES PNEUMATIQUES
 MICHELIN CLERMONT-FERRAND
 PROPRIETE EXCLUSIVE DE NOTRE SOCIETE
 REPRODUCTION OU UTILISATION INTERDITE SANS
 NOTRE ACCORD ECRIT

16" – 19/60-16

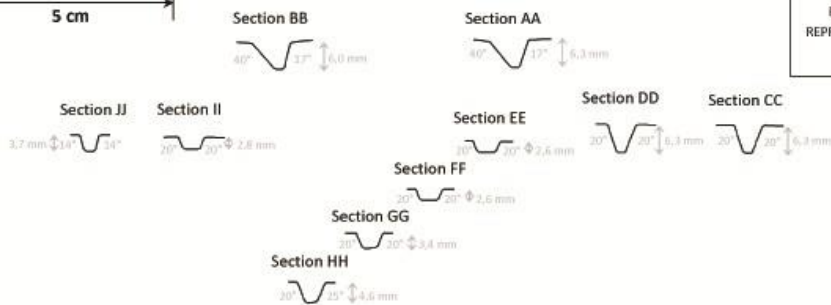


Domaine : Rallye Asphalte
 Dimension : 19 / 60 – 16
 Plan de la sculpture : Pilot Sport R
 Entaillement surfacique sur fenêtre réglementaire : 21,51 %

Clermont-Ferrand le 05/12/2013



Echelle 1:1
 5 cm



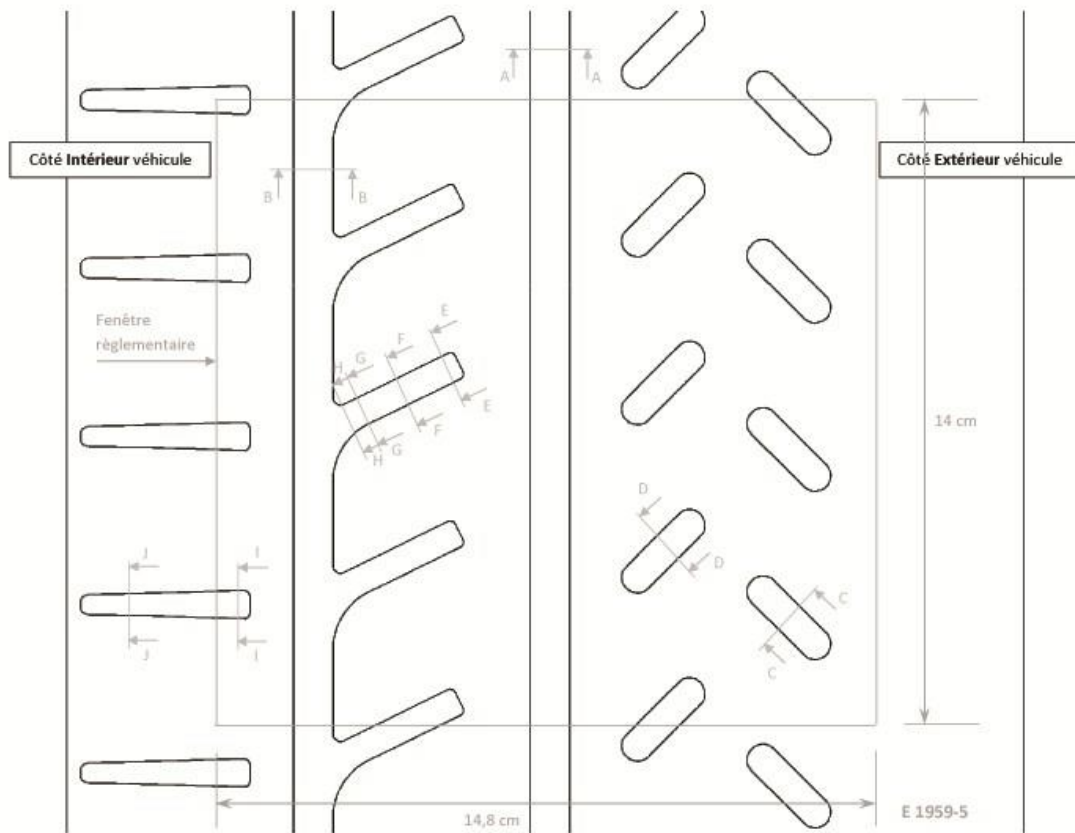
MANUFACTURE FRANCAISE DES PNEUMATIQUES
 MICHELIN CLERMONT-FERRAND
 PROPRIETE EXCLUSIVE DE NOTRE SOCIETE
 REPRODUCTION OU UTILISATION INTERDITE SANS
 NOTRE ACCORD ECRIT

15" – 19/58-15

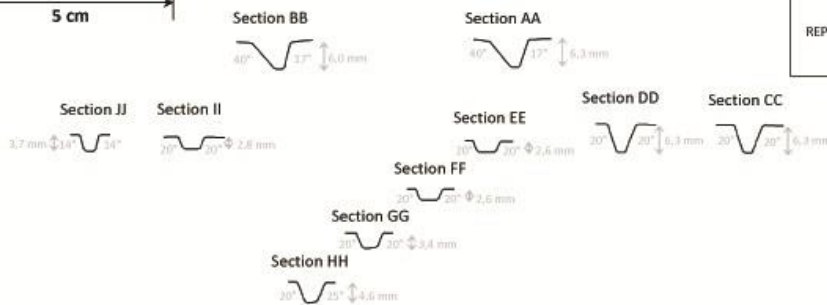


Domaine : Rallye Asphalte
 Dimension : 19 / 58 – 15
 Plan de la sculpture : Pilot Sport R
 Entaillement surfacique sur fenêtre réglementaire : 21,51 %

Clermont-Ferrand le 05/12/2013



Echelle 1:1
 5 cm



MANUFACTURE FRANCAISE DES PNEUMATIQUES
 MICHELIN CLERMONT-FERRAND
 PROPRIETE EXCLUSIVE DE NOTRE SOCIETE
 REPRODUCTION OU UTILISATION INTERDITE SANS
 NOTRE ACCORD ECRIT

RGT only – 24/65-18

Circonférentielles sont manuellement coupées.

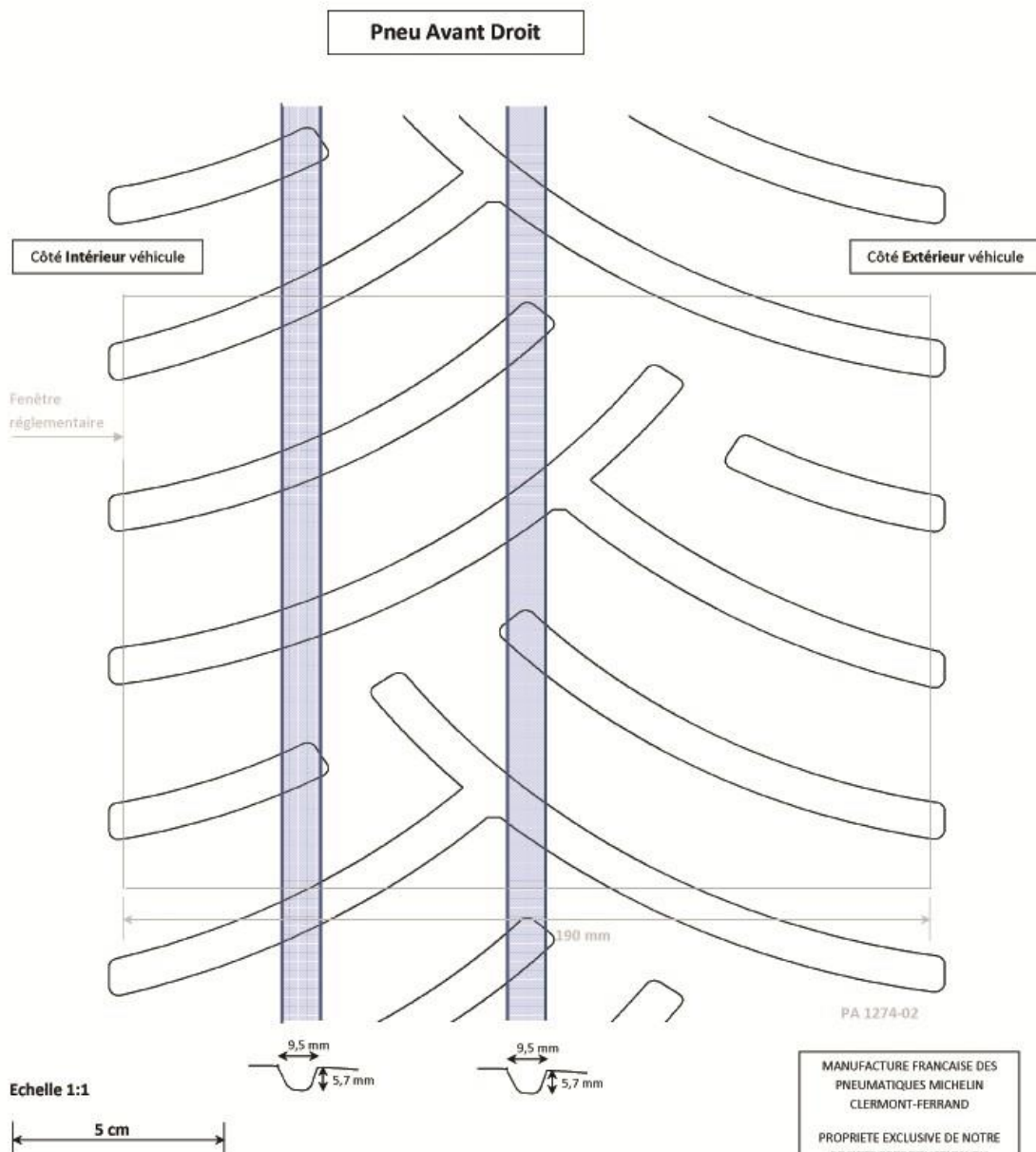


Domaine : Rallye Asphalte

Dimension : 24 / 65 - 18

Entaillement surfacique sur une fenêtre de 190 mm de large : 32,8 %

Clermont-Ferrand le 18/12/2013



RGT only – 24/65-18

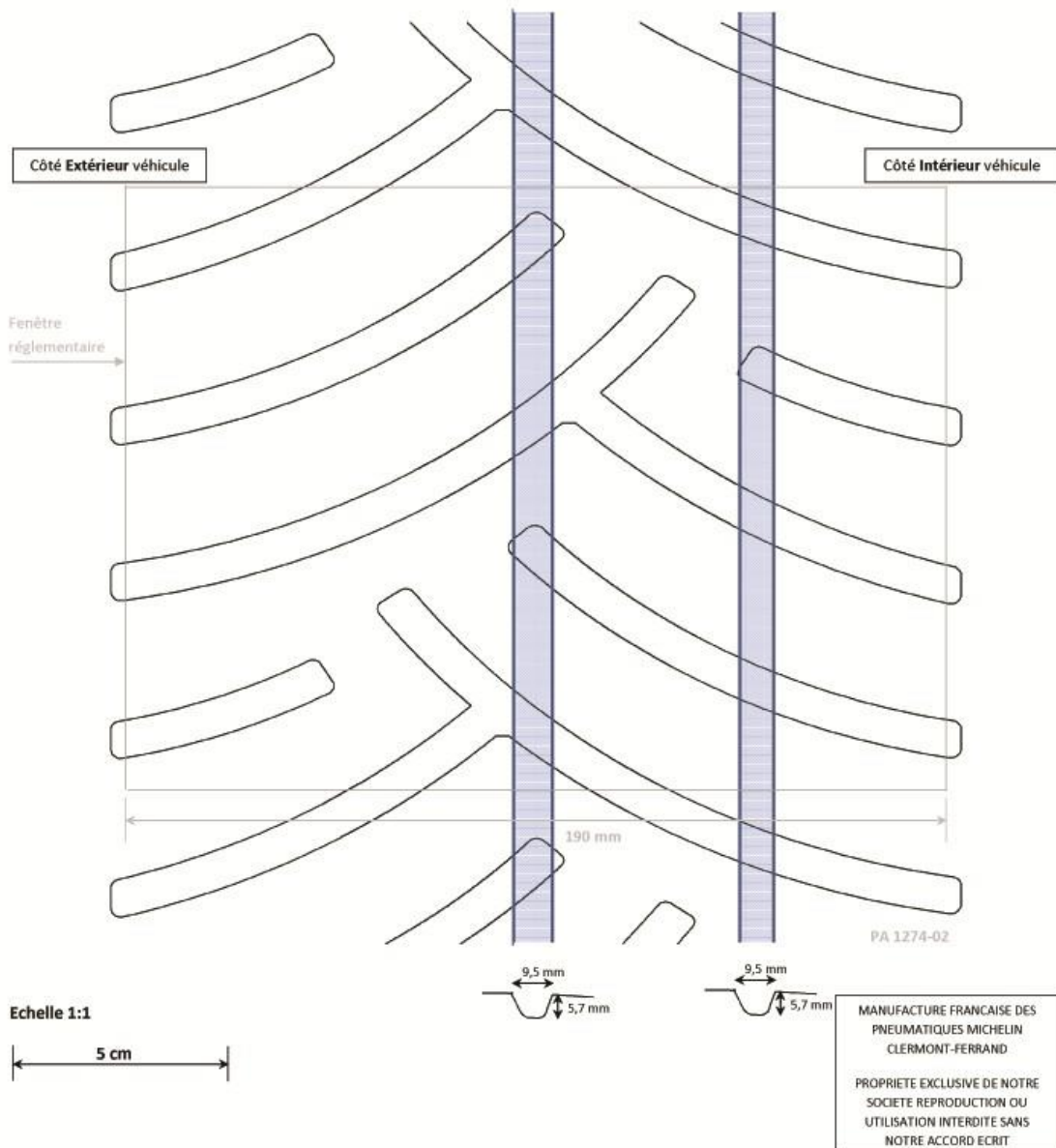
Circonférentielles sont manuellement coupées.



Domaine : Rallye Asphalte
Dimension : 24 / 65 - 18
Entaillement surfacique global : 32,8 %

Clermont-Ferrand le 18/12/2013

Pneu Avant Gauche



RGT only – 24/65-18



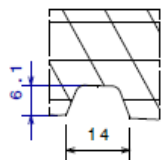
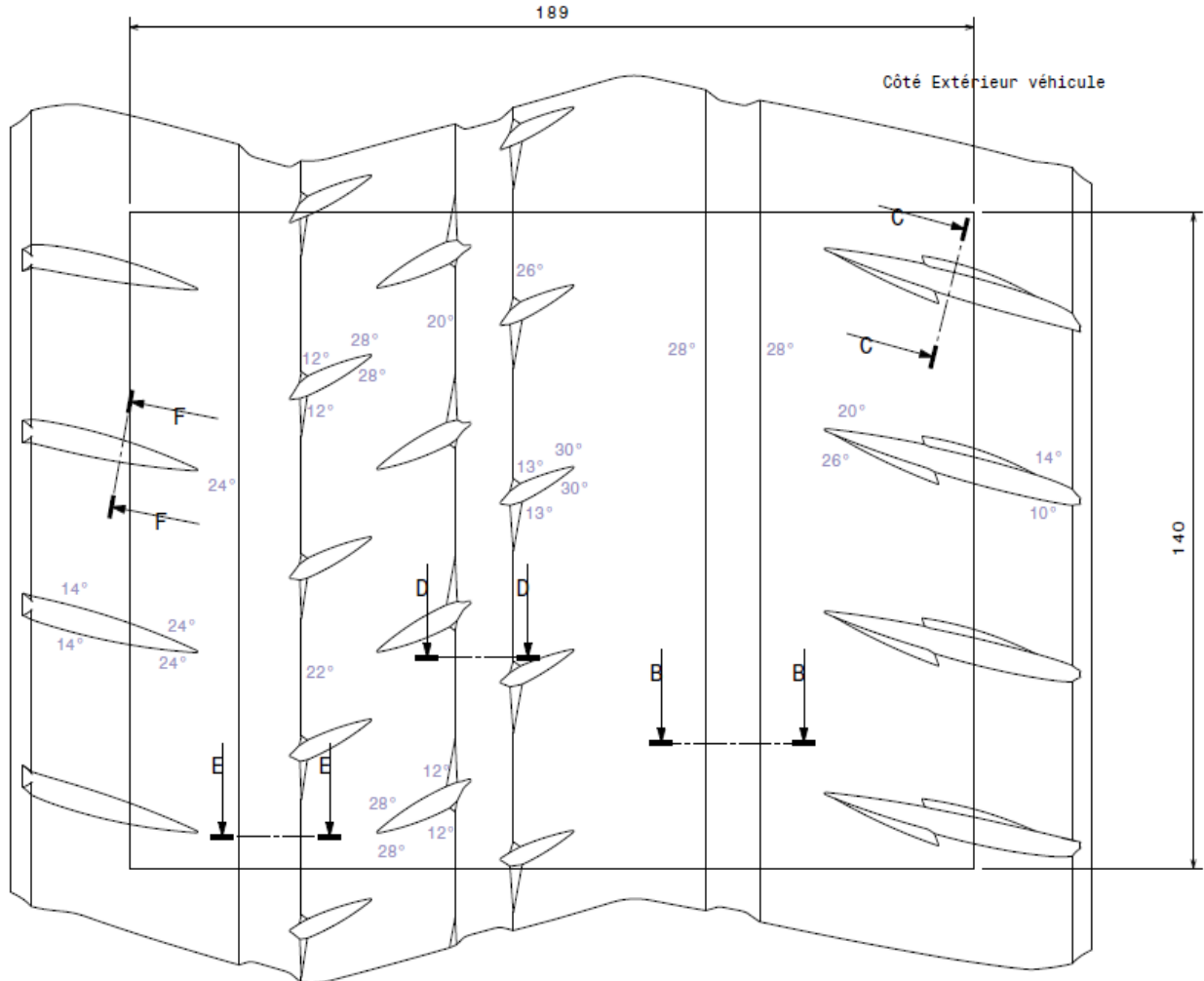
Domaine : Rallye Asphalte

Dimension : 24/65 R18

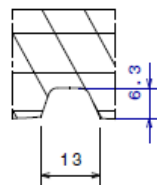
Plan de la sculpture : Pilot Sport R

Entaillement Surfaccique dans fenêtre règlementaire : 21.7 % à 1.8 mm d'usure
: 17 % à 5.5 mm d'usure

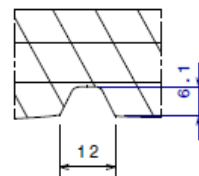
Clermont-Ferrand le 28/02/2018



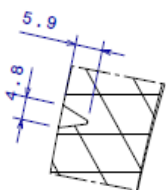
Coupe E-E



Coupe D-D

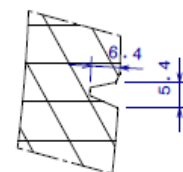


Coupe B-B



Coupe F-F

MANUFACTURE FRANCAISE DES PNEUMATIQUES
MICHELIN CLERMONT-FERRAND
PROPRIETE EXCLUSIVE DE NOTRE SOCIETE
REPRODUCTION OU UTILISATION INTERDITE
SANS NOTRE ACCORD ECRIT

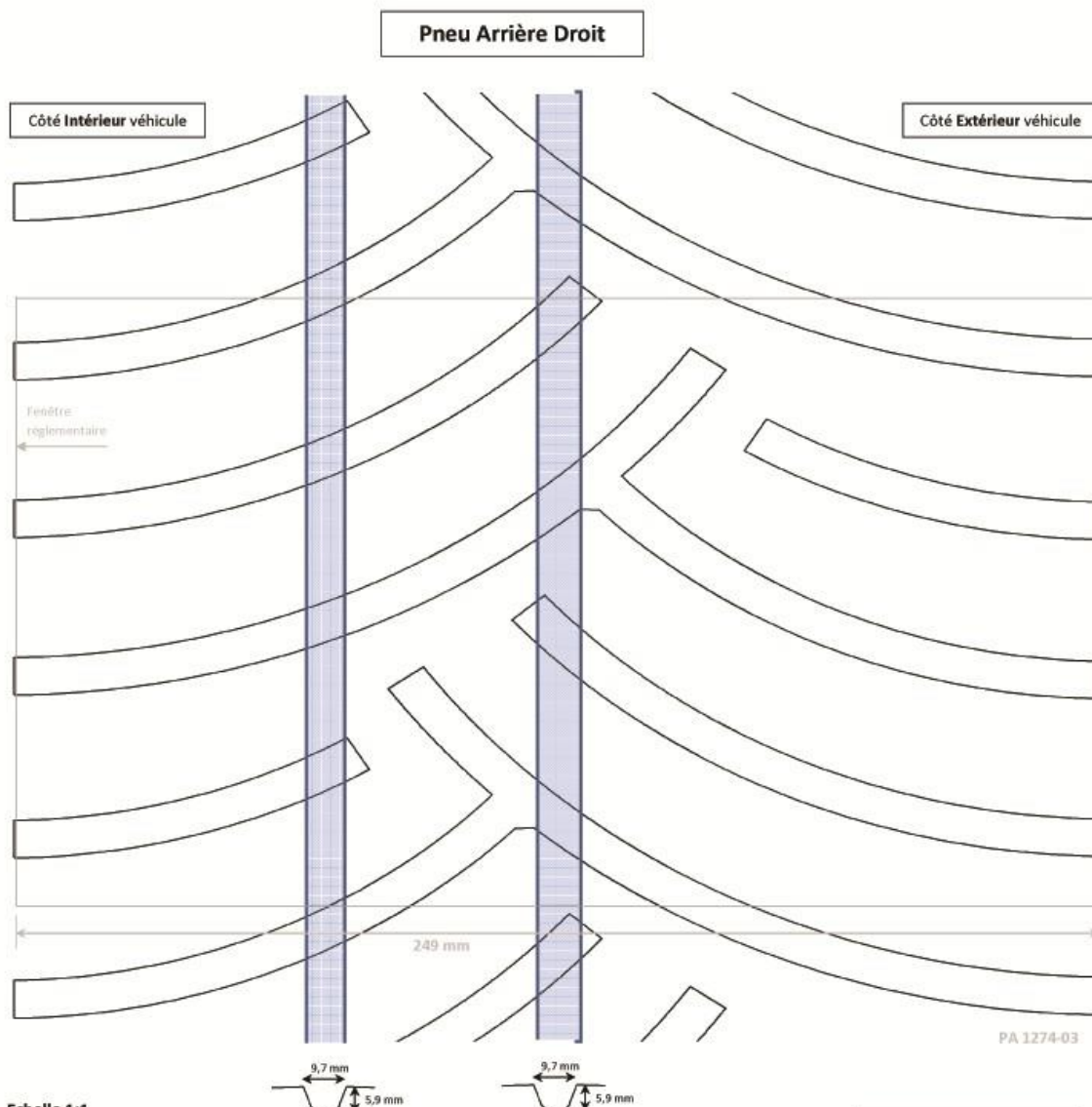


Coupe C-C



Domaine : Rallye Asphalte
Dimension : 29 / 65 - 18
Entaillement surfacique sur fenêtre de 249 mm de large : 31 %

Clermont-Ferrand le 18/12/2013



Echelle 1:1
5 cm

MANUFACTURE FRANCAISE DES
PNEUMATIQUES MICHELIN
CLERMONT-FERRAND

PROPRIETE EXCLUSIVE DE NOTRE
SOCIETE REPRODUCTION OU
UTILISATION INTERDITE SANS
NOTRE ACCORD ECRIT

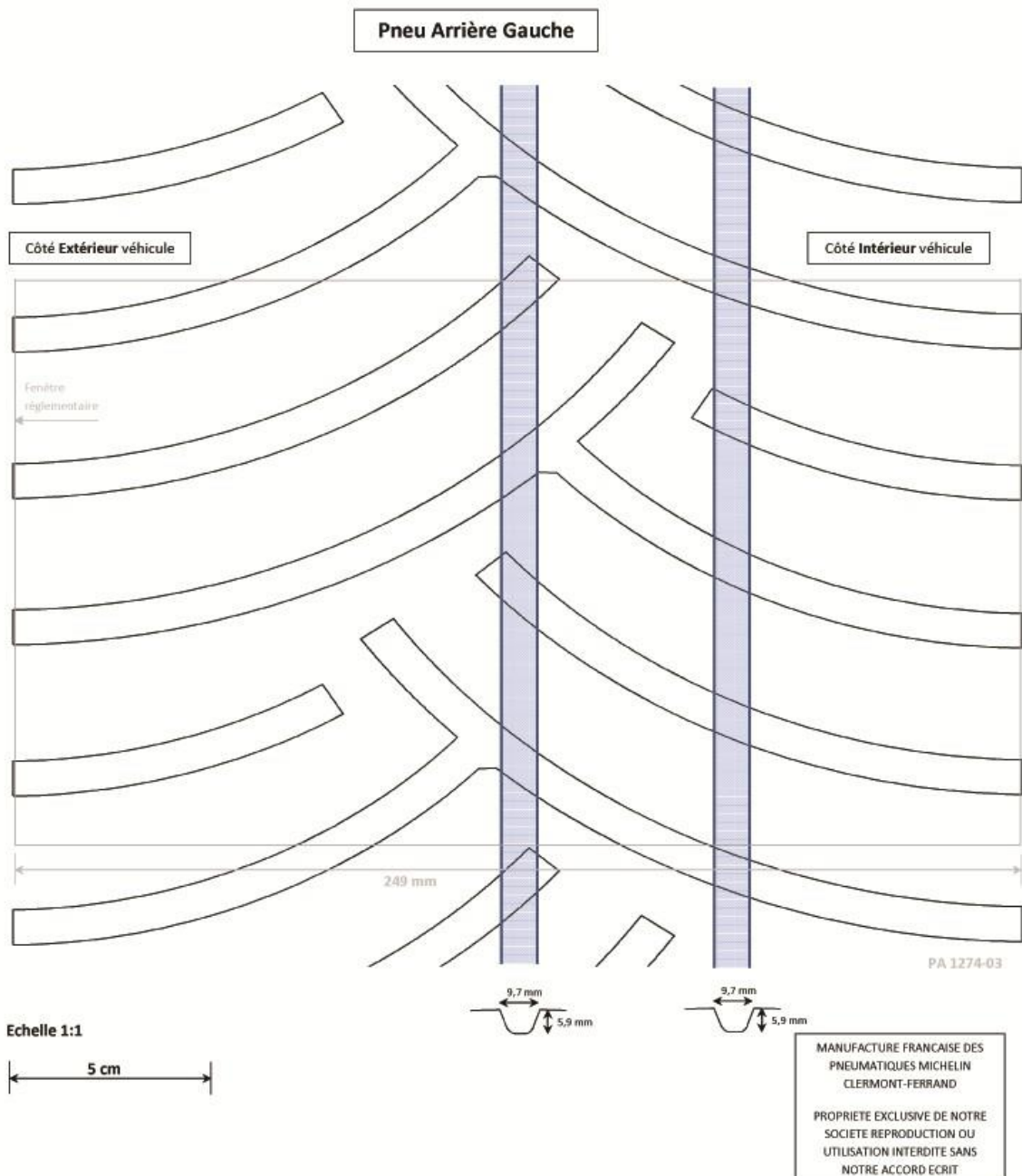
RGT only – 29/65-18

Circonférentielles sont manuellement coupées.



Domaine : Rallye Asphalte
Dimension : 29 / 65 – 18
Entaillement surfacique sur fenêtre de 249 mm de large : 31 %

Clermont-Ferrand le 18/12/2013

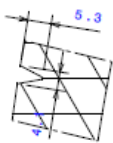
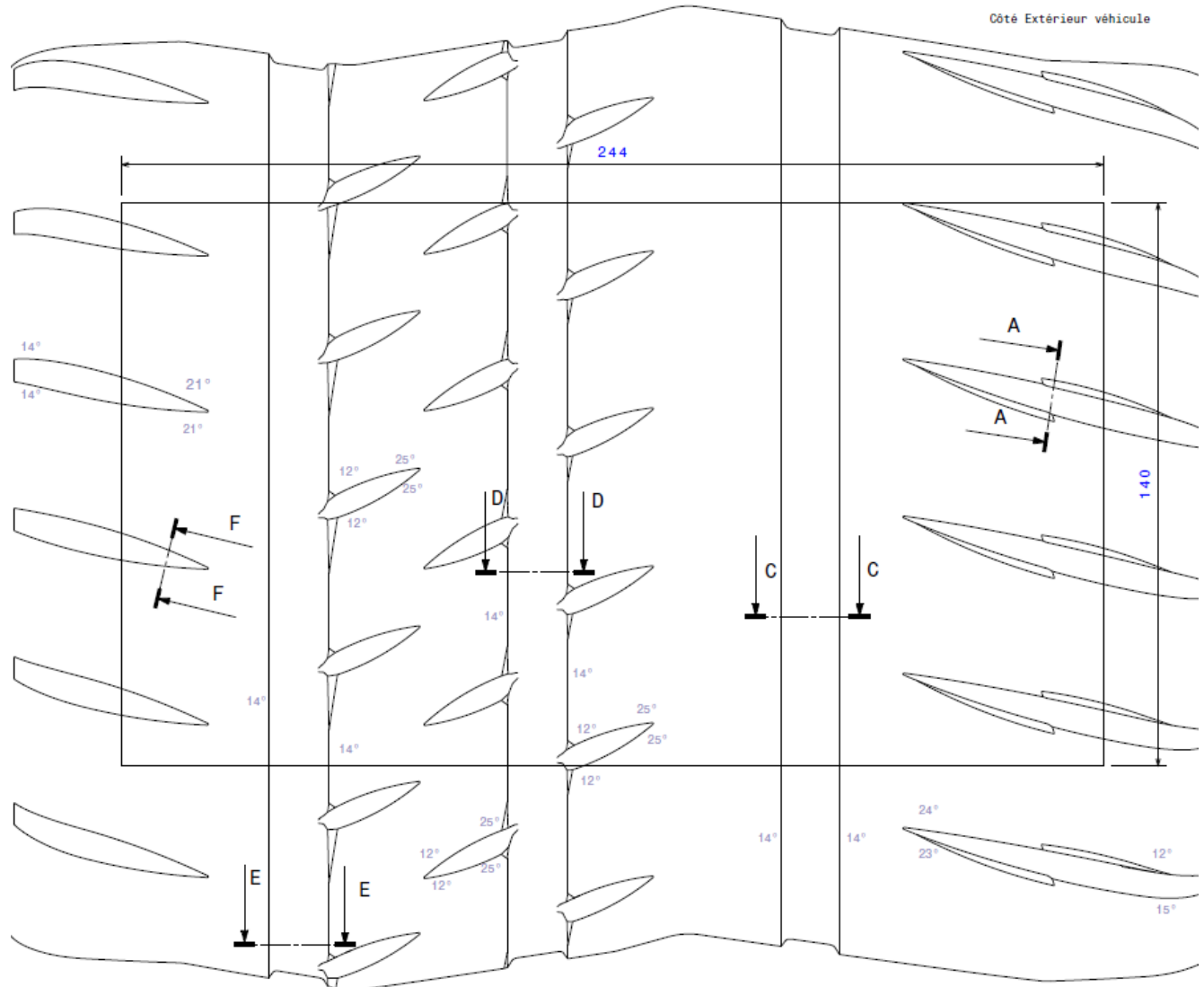


RGT only – 29/65-18

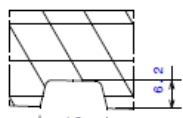


Domaine : Rallye Asphalte
 Dimension : 29/65 R18
 Plan de la sculpture : Pilot Sport R
 Entaillement Superficiel dans fenêtre réglementaire : 22.6 % à 1.8 mm d'usure
 : 19.2 % à 5.5 mm d'usure

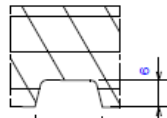
Clermont-Ferrand le 28/02/2018



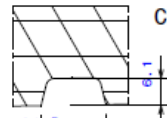
Coupe F-F



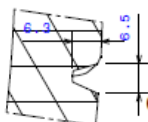
Coupe E-E



Coupe D-D



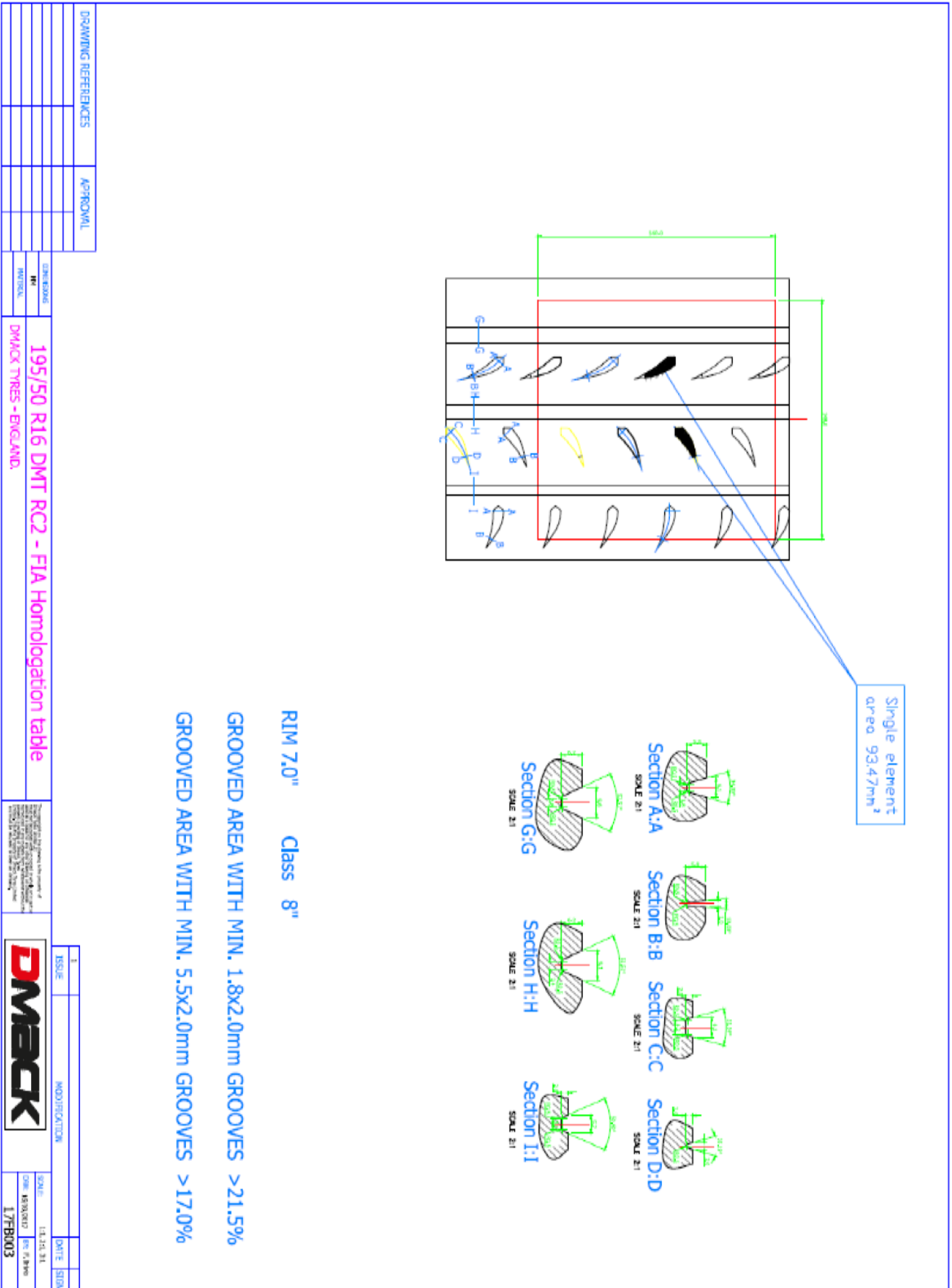
Coupe C-C



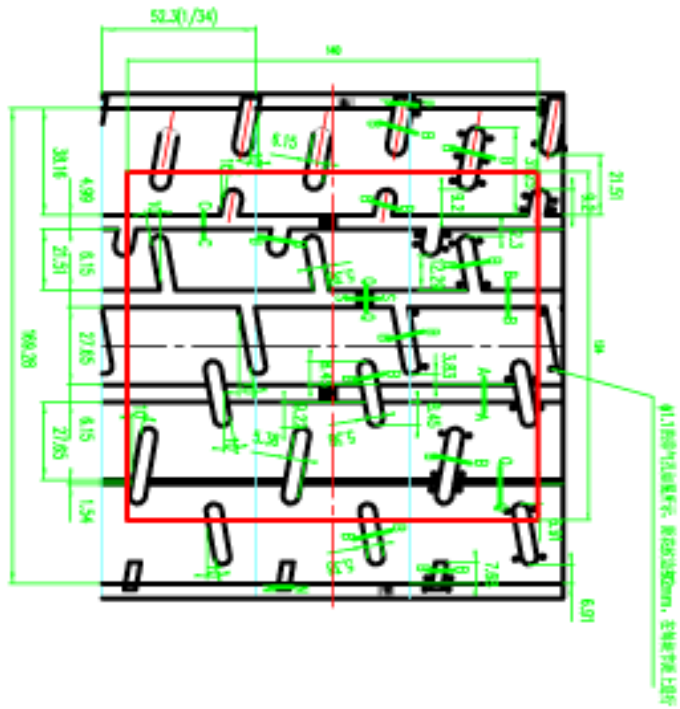
Coupe A-A

MANUFACTURE FRANCAISE DES PNEUMATIQUES MICHELIN
 CLERMONT-FERRAND
 PROPRIETE EXCLUSIVE DE NOTRE SOCIETE
 REPRODUCTION OU UTILISATION INTERDITE SANS
 NOTRE ACCORD ECRIT

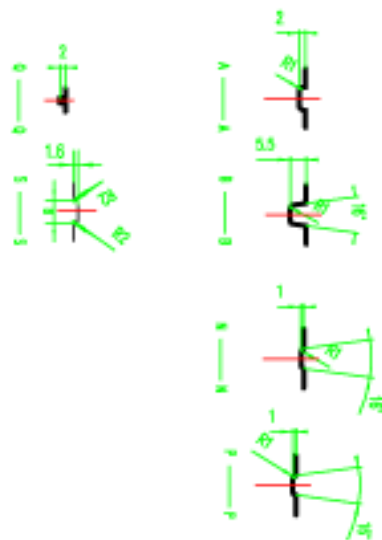
16" – 195/50-16



14" – 175/60-14



注: TWI字高3mm, 线粗1mm, 线高0.8mm, 圆周六等分



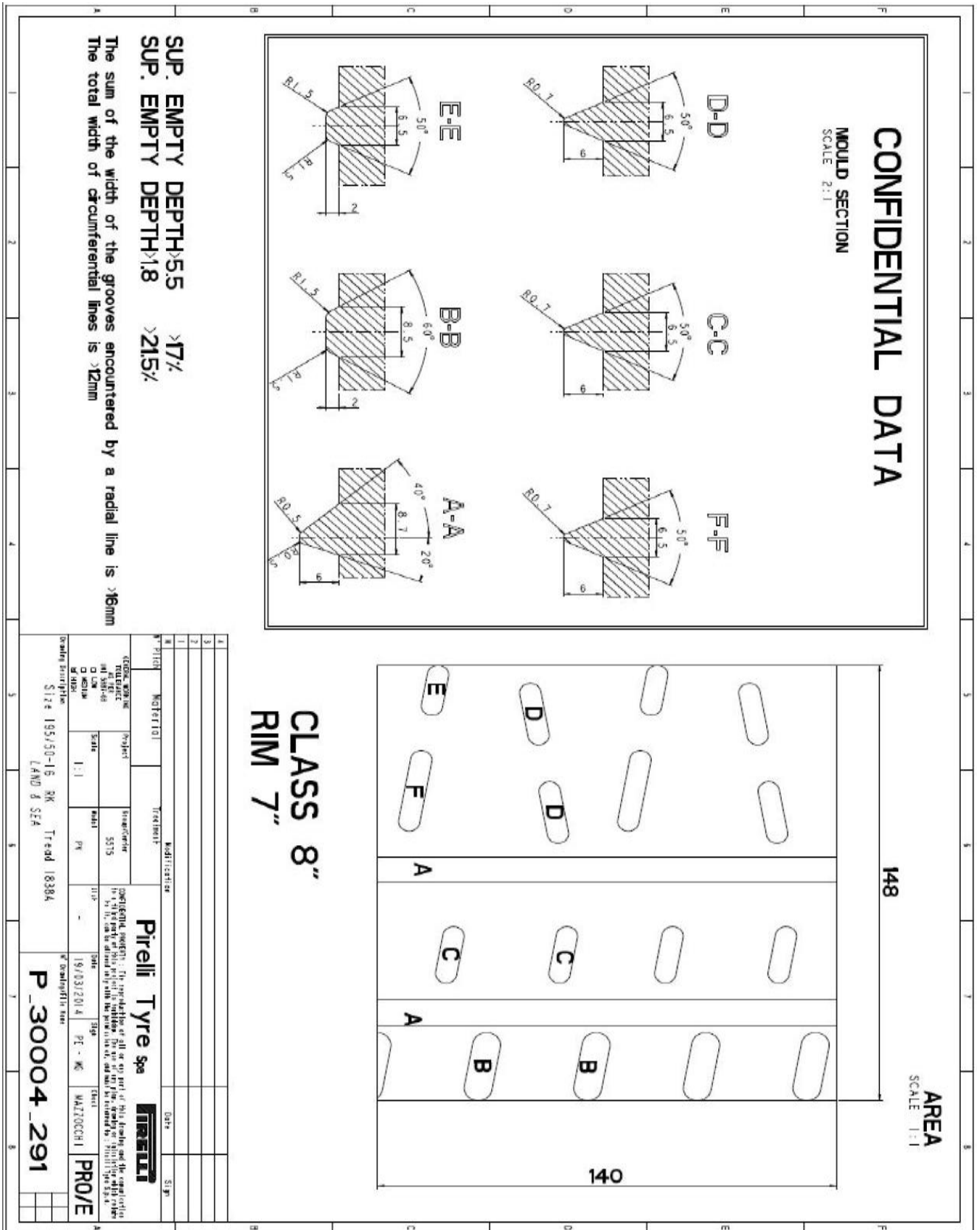
GROOVES SURFACE AREA=4292.808;
CONTROL SURFACE 17360;
4292.808/17360=24.728%

项目	日期	名称	编号
设计		TREAD	175/60R14 DMT-RC
制图			
校核			
审核			
工艺			
批准			

DMACK TYRES LTD



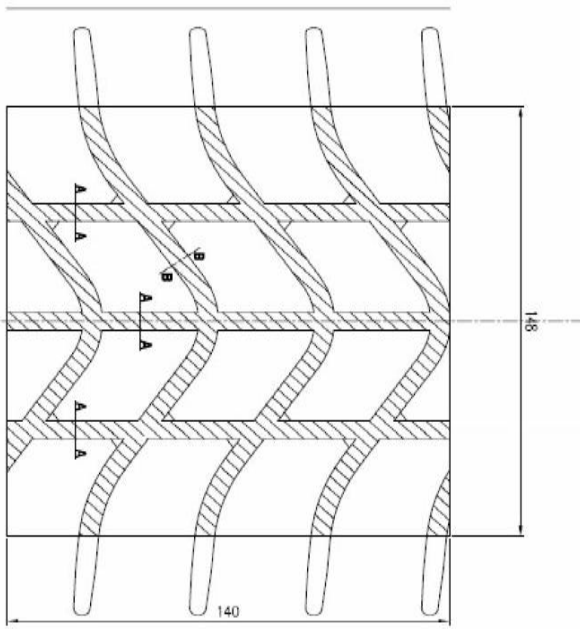
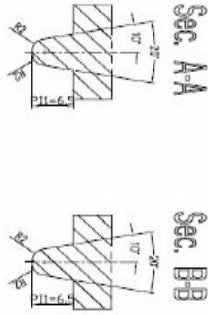
16" – 195/50-16





16" – 195/50-16

CONFIDENTIAL DATA



SUP. EMPTY DEPTH > 5.5 > 17.0 %
 SUP. EMPTY DEPTH > 1.8 > 21.5 %
 The sum of the width of the grooves encountered by a radial line is > 16mm
 The total width of the circumferential lines is > 12mm

Class 8"
 Rim 6.5"

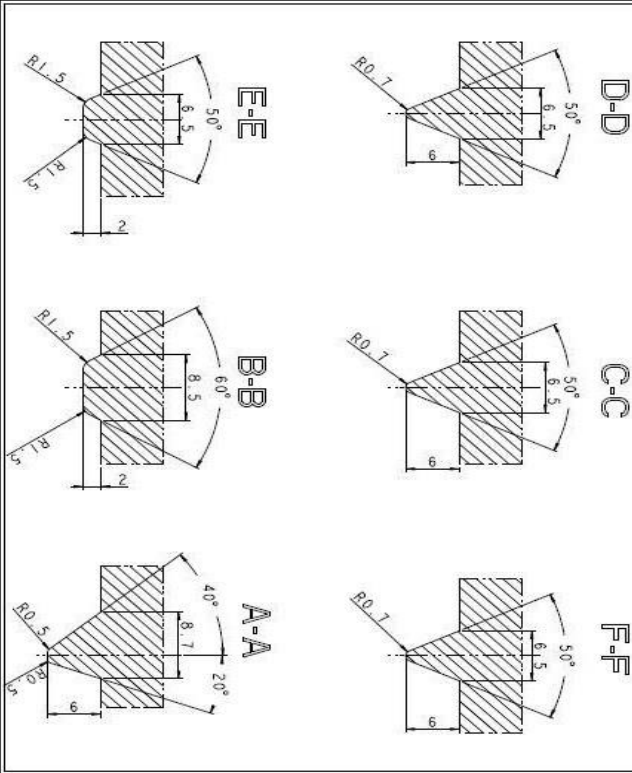
1	2	3	4	5	6	7	8	9	10	11	12
GENERAL INFORMATION		DESCRIPTION		CLASSIFICATION		REVISIONS		DATE		BY	
DESIGN: MONTICELLI DRAWING NO: 35375 DATE: 01/05/2016 SCALE: 1:1		CONFIDENTIAL DOCUMENT This document is the property of Pirelli & Co. S.p.A. and its use is restricted to the project for which it was prepared. It is not to be distributed outside the project.		Pirelli Type: EV 		SR 		Size: 195/50 R16 RW Tread: 2044 LAND AND SEA		P_30016_172	



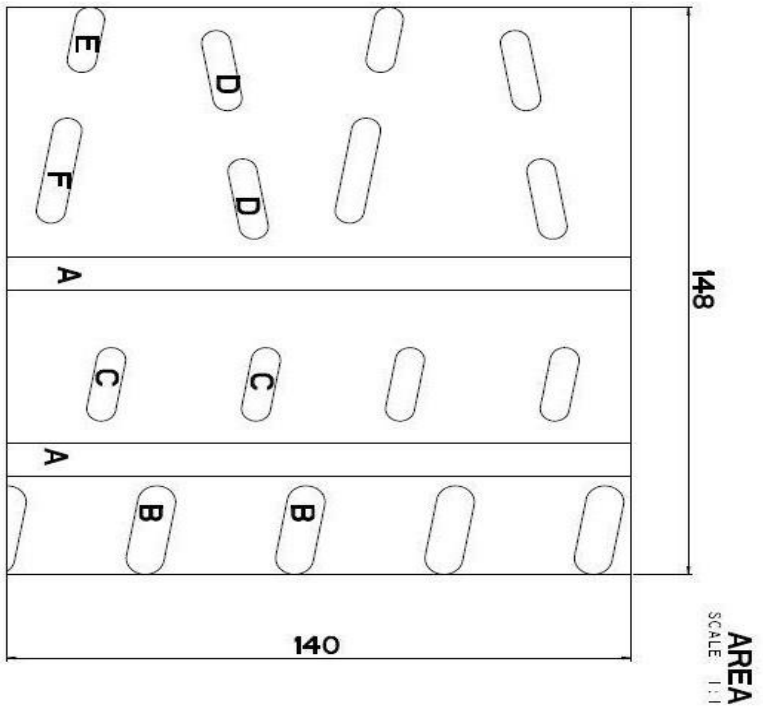
15" – 195/50-15

CONFIDENTIAL DATA

MOULD SECTION
SCALE 2:1



SUP. EMPTY DEPTH > 5.5 > 17%
 SUP. EMPTY DEPTH > 1.8 > 21.5%
 The sum of the width of the grooves encountered by a radial line is > 16mm
 The total width of circumferential lines is > 12mm



**CLASS 8"
RIM 7"**

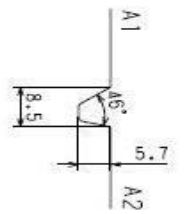
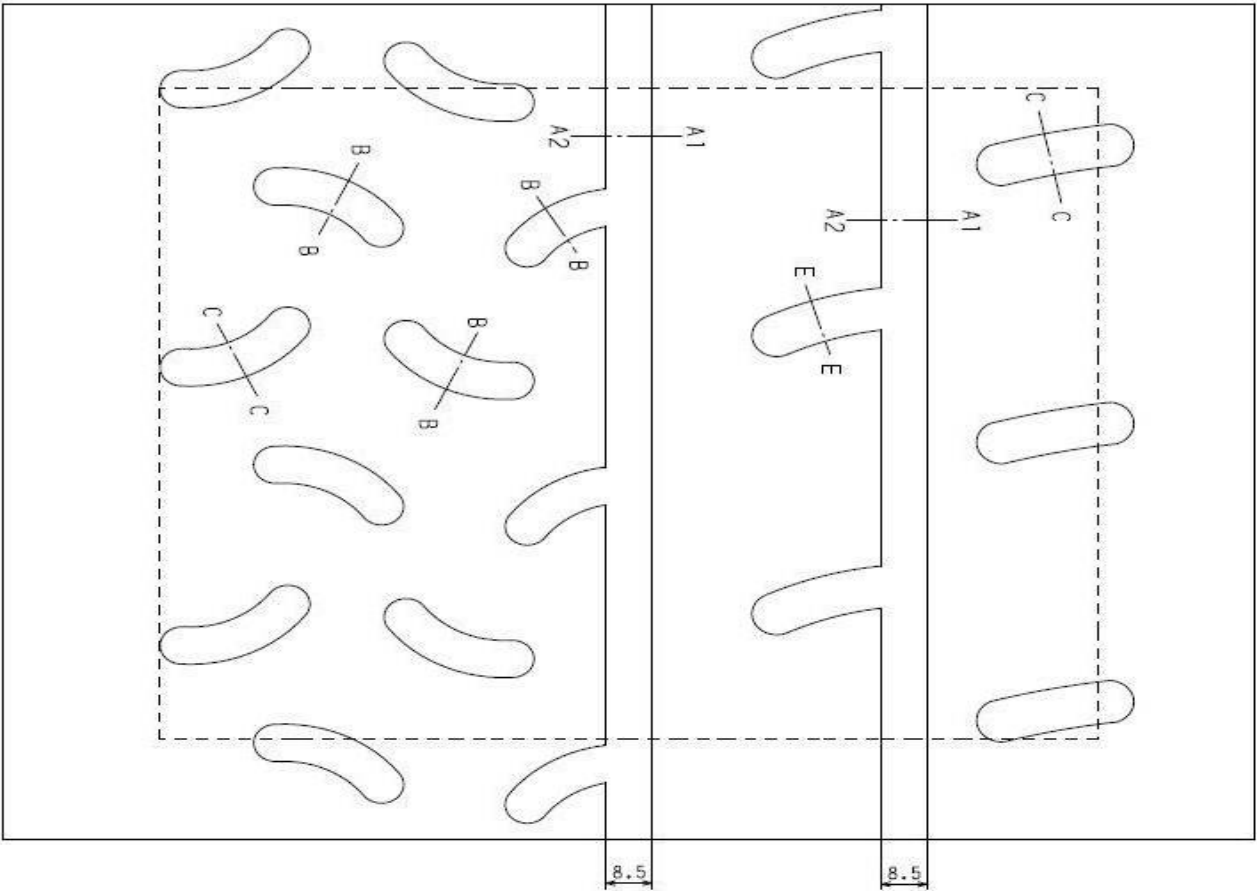
AREA
SCALE 1:1

N°	ITEM	MATERIAL	TREATMENT	MODIFICATION	DATE	SIGN
1						
2						
3						
4						

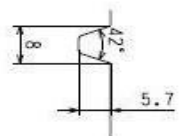
DESIGNER	Project	CONCEPT	Project
DATE	19/03/2014	SCALE	1:1
DRAWN	19/03/2014	DATE	19/03/2014
CHECKED	19/03/2014	DATE	19/03/2014
APPROVED	19/03/2014	DATE	19/03/2014

MOULD SECTION	Size 195/50-15 BK Tread 1838A
LAND & SEA	
Pirelli Tyre spa	
MAZUCCHI	
PRO/E	
P_30004_290	

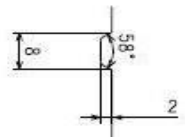
18" – 235/40-18



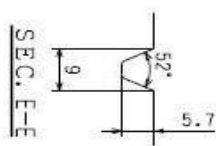
SEC. A1-A2



SEC. B-B



SEC. C-C



SEC. E-E

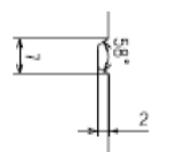
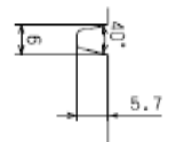
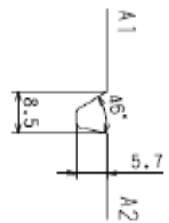
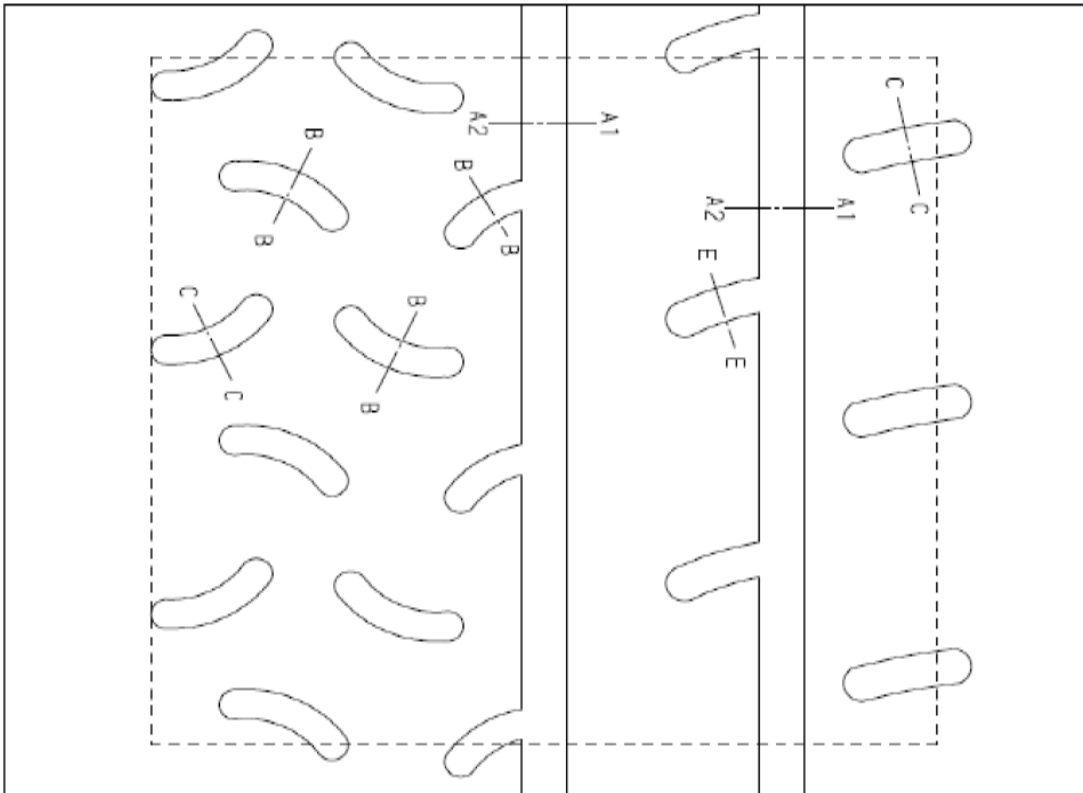
In the control area
 5.5mm grooves-18.1%
 Total grooves-22.2%

----- Control area 170X140
 Tyre weight 9.7kg

PRODUCT NAME
YOKOHAMA ADVAN AD51T

PATTERN NAME
AD51A

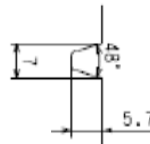
SIZE 210/650R18



SEC. A1-A2

SEC. B-B

SEC. C-C



SEC. E-E

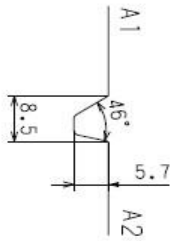
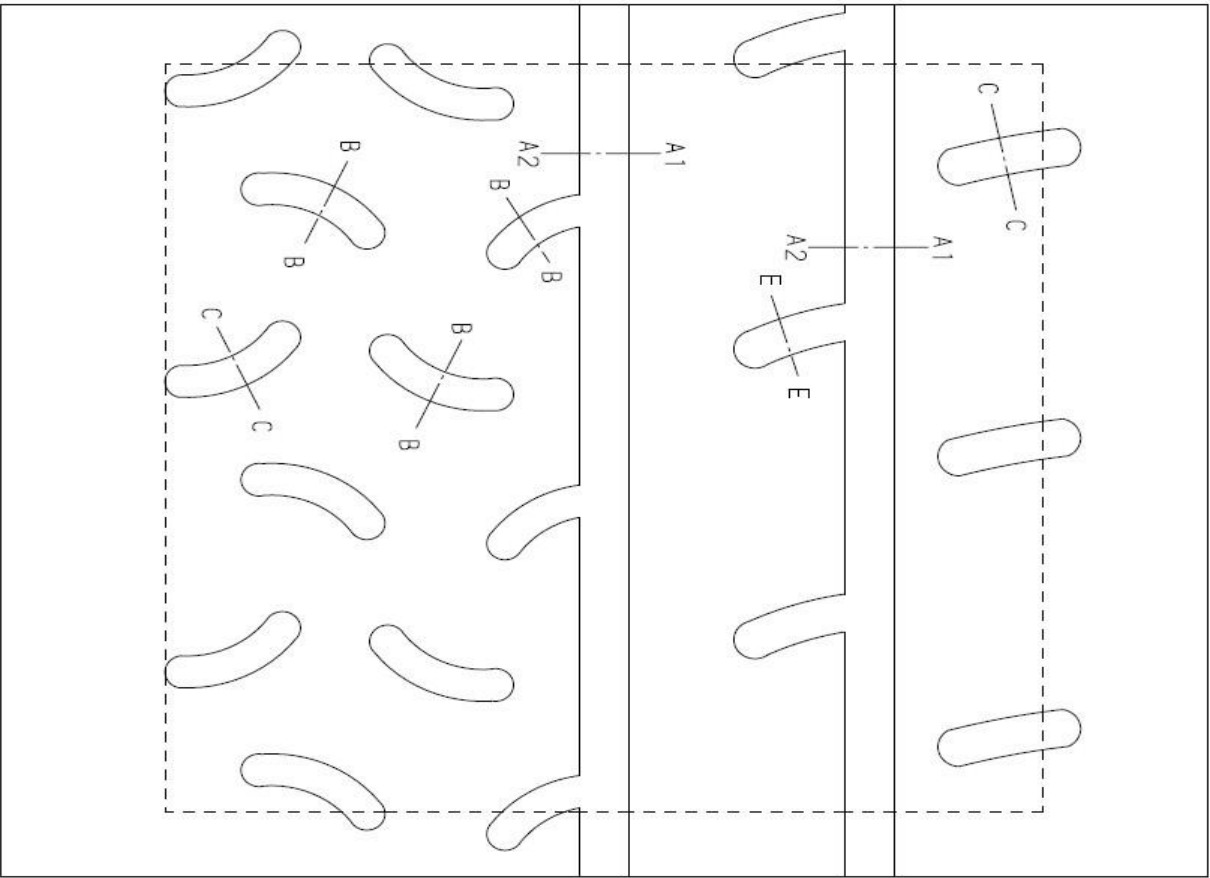
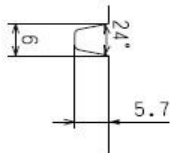
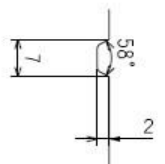
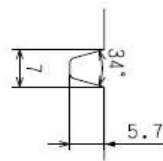
In the control area
 5.5mm grooves-17.9%
 Total grooves-21.6%

----- Control area 170X140

PRODUCT NAME
YOKOHAMA ADVAN AD517

PATTERN NAME
AD51A

SIZE 210/625R17


SEC. A1-A2

SEC. B-B

SEC. C-C

SEC. E-E

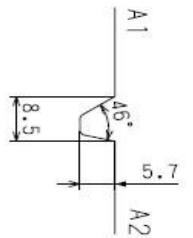
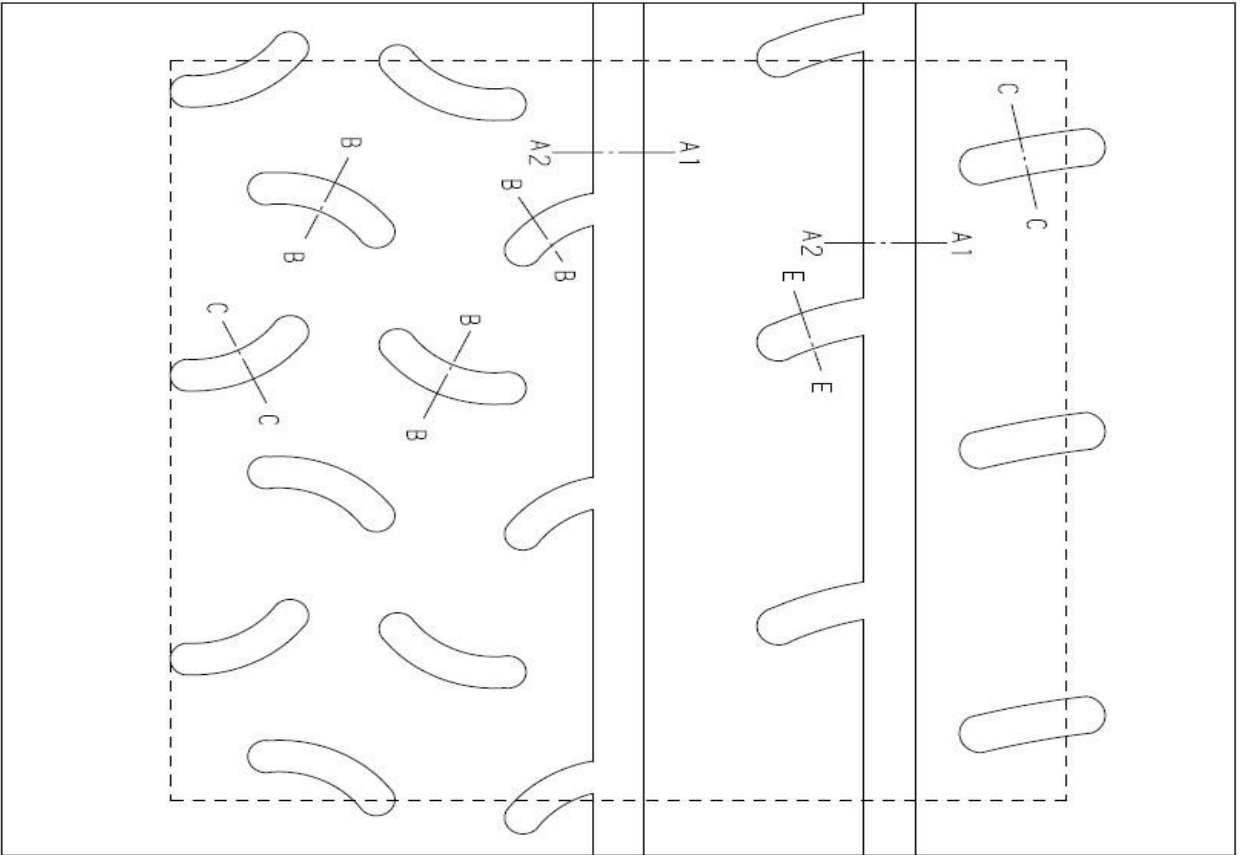
In the control area
 5.5mm grooves-18.2%
 Total grooves-22.0%

----- Control area 148X140

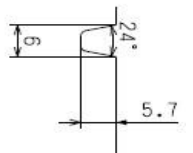
PRODUCT NAME
YOKOHAMA ADVAN A051T

PATTERN NAME
A051A

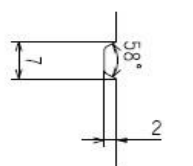
SIZE 190/625R17



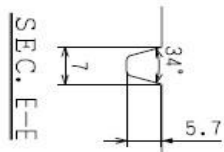
SEC. A1-A2



SEC. B-B



SEC. C-C



SEC. E-E

In the control area
5.5mm grooves-18.1%
Total grooves-21.9%

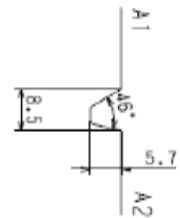
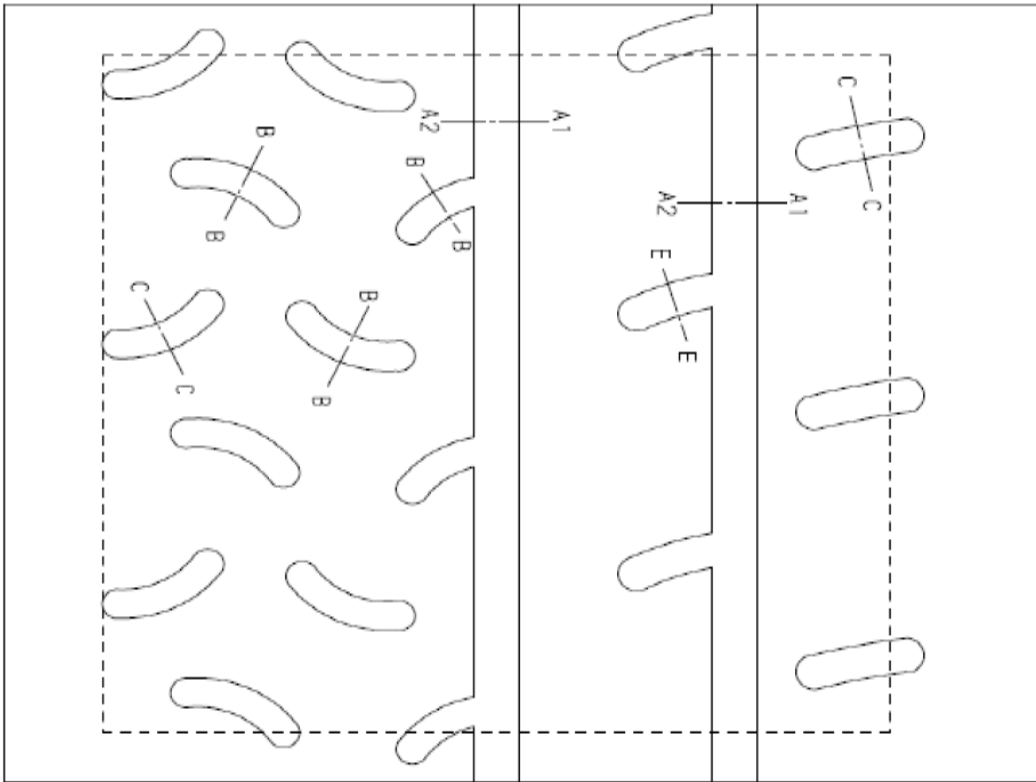
----- Control area 148X140

PRODUCT NAME
YOKOHAMA ADVAN AD51T

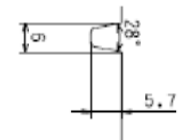
PATTERN NAME
AD51A

SIZE 190/600R16

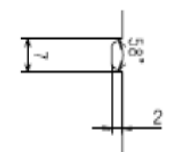
15" – 190/580-15



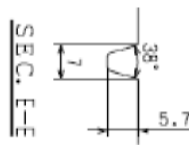
SEC. A1-A2



SEC. B-B



SEC. C-C



SEC. E-E

In the control area
 5.5mm grooves-18.2%
 Total grooves-21.6%

----- Control area 148X140

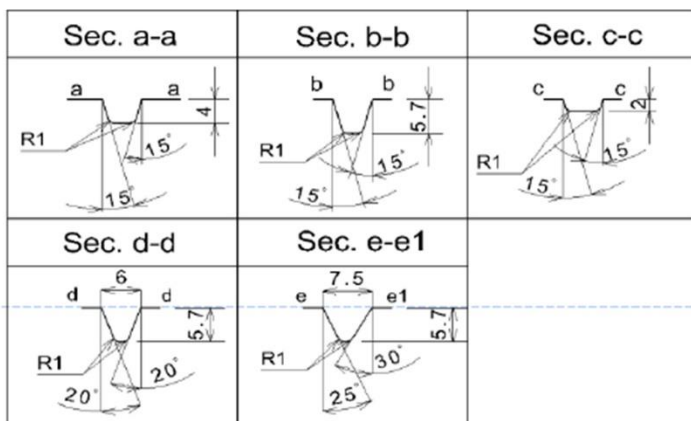
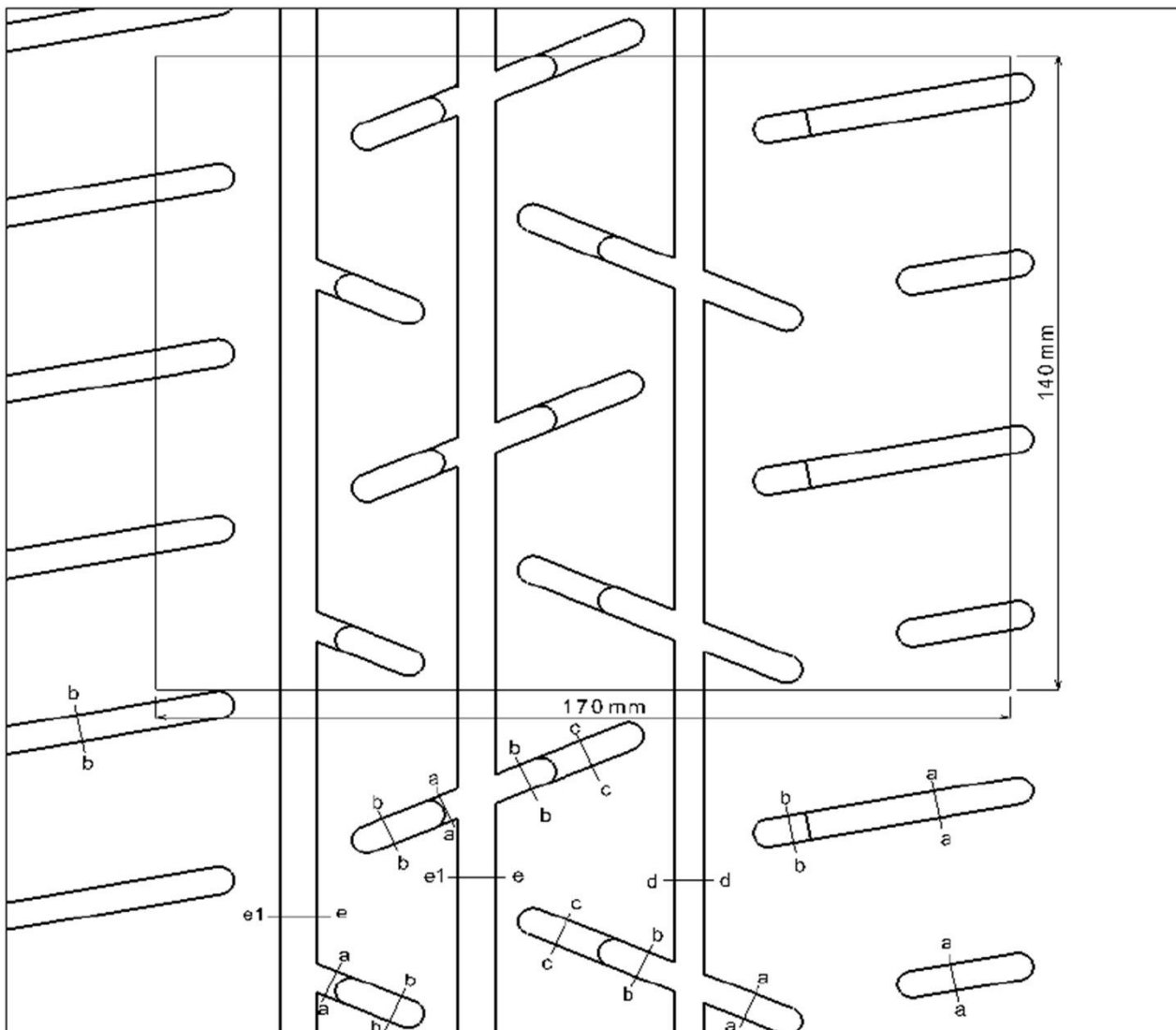
PRODUCT NAME
YOKOHAMA ADVAN AD517

PATTERN NAME
AD51A

SIZE 190/580R15

18" - 210/650R18

Product:Ventus Z205



Class 9" (Rim 8")

Empty Depth > 5.5mm : 17.07%

Empty Depth > 1.8mm : 23.30%

GROOVE SURFACE AREA = 554540 mm²

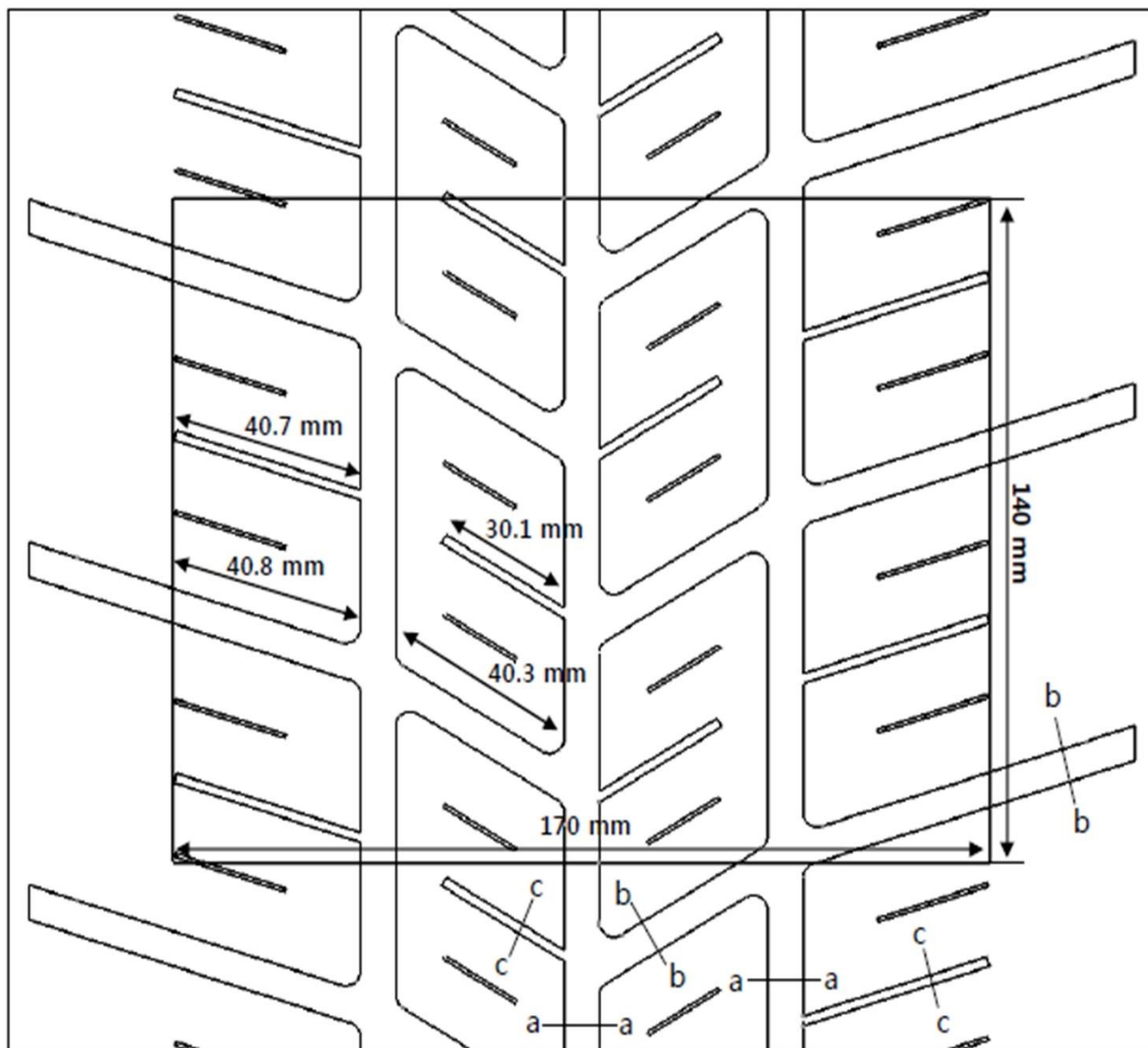
Control Surface = 23800 mm²



HANKOOK

18" - 210/650R18

Product:VentusZ210



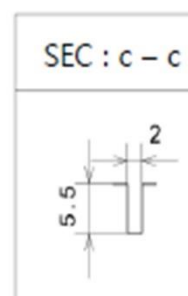
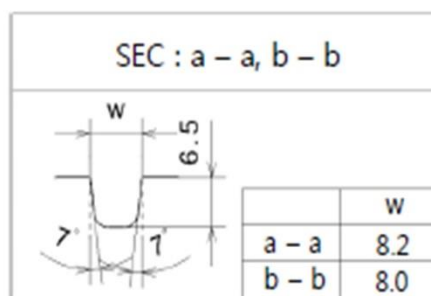
Class 9" (Rim 8")

a - a groove width / depth : 8.2 mm / 6.5 mm

b - b groove width / depth : 8.0 mm / 6.5 mm

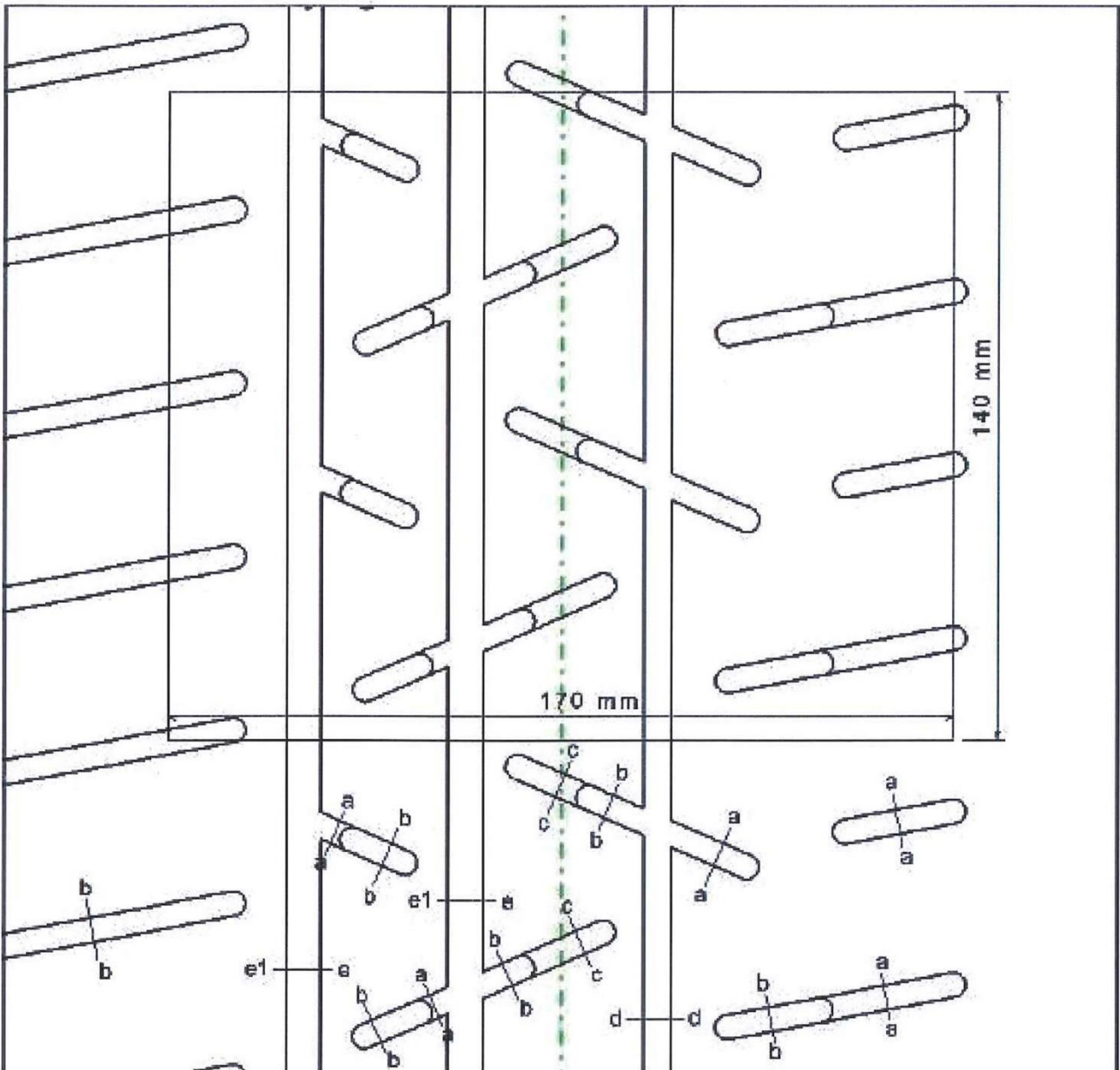
Empty Depth > 5.5mm : 27.5%

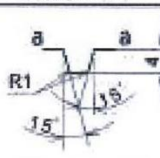
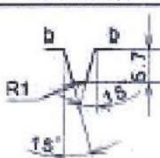
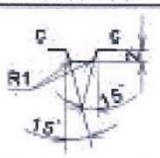
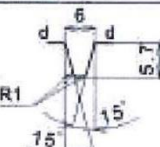
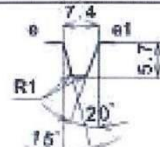
Control Surface = 23800 mm²



17" - 210/625 R17

Product :Ventus Z205



Sec. a-a	Sec. b-b	Sec. c-c
		
Sec. d-d	Sec. e-e1	
		

Class 9" (Rim 7.5")

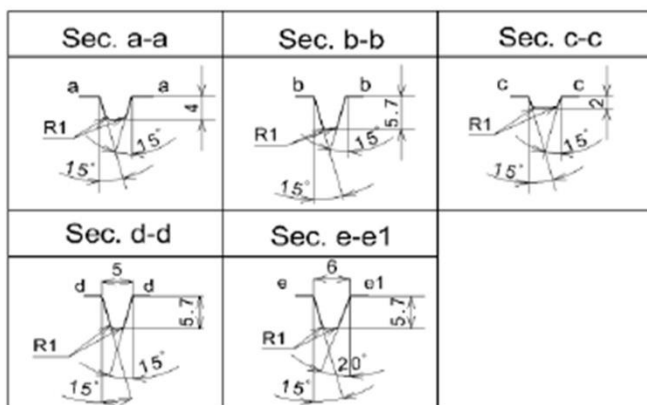
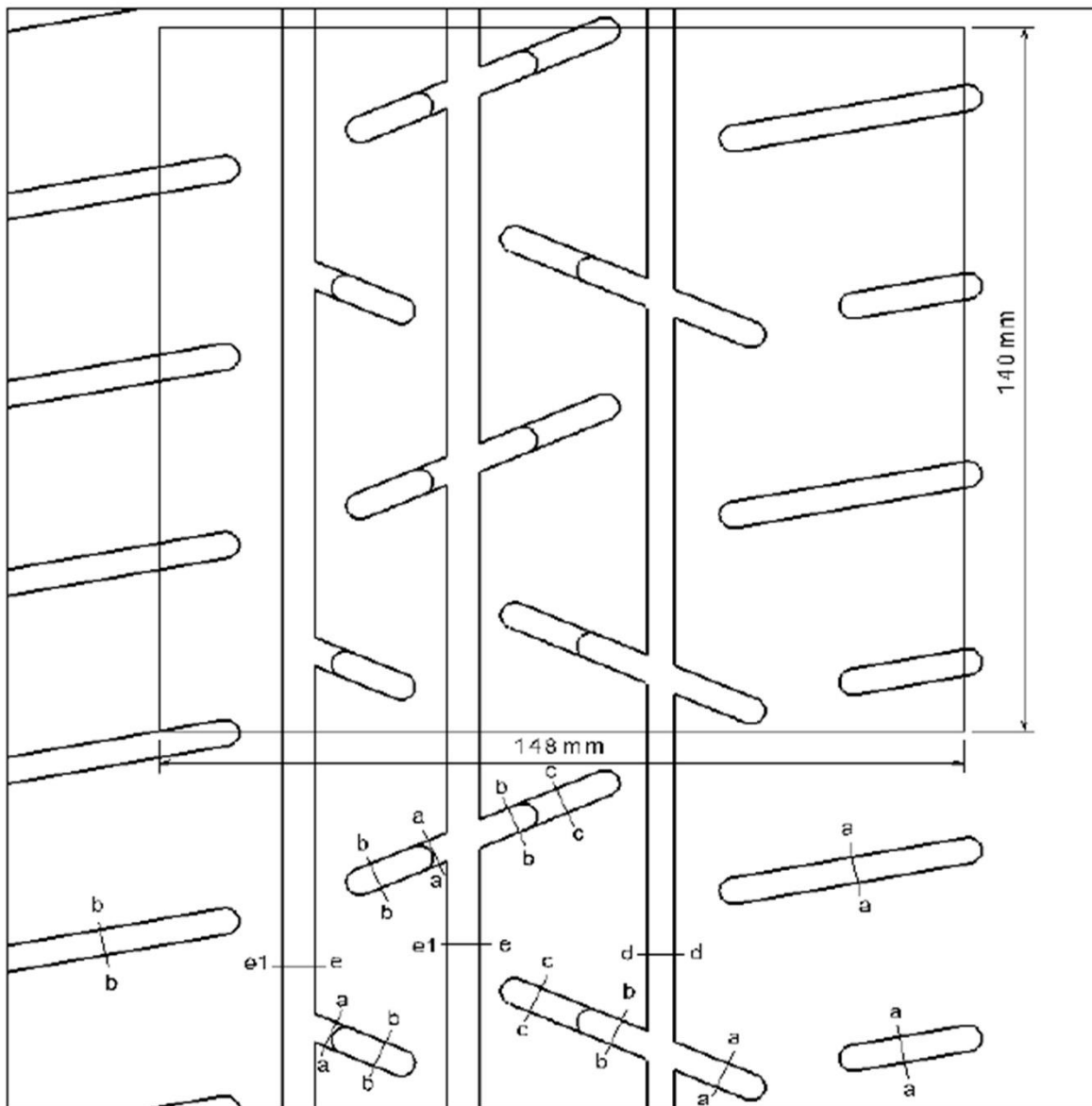
Empty Depth > 5.5mm : 17.05%

Empty Depth > 1.8mm : 25.08%

Control Surface = 23800 mm²

17" - 180/625 R17

Product :Ventus Z205



Class 8" (Rim 7")

Empty Depth > 5.5mm : 17.06%

Empty Depth > 1.8mm : 22.48%

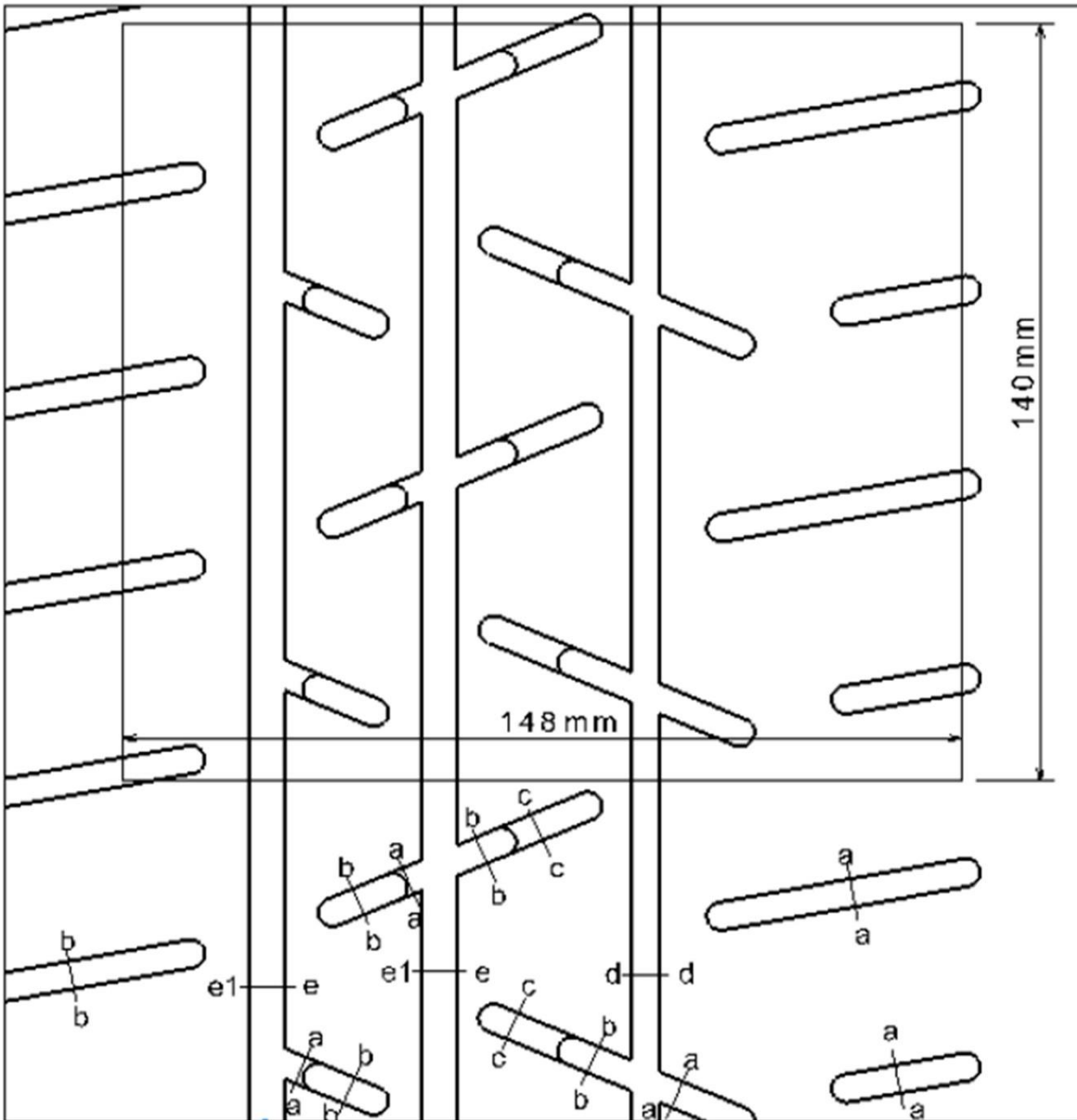
8

GROOVE SURFACE AREA = 353483.2 mm²

Control Surface = 20720 mm²

16" - 180/600R16

Product :Ventus Z205



Sec. a-a	Sec. b-b	Sec. c-c
Sec. d-d	Sec. e-e1	

Class 8" (Rim 6.5")

Empty Depth > 5.5mm : 17.30%

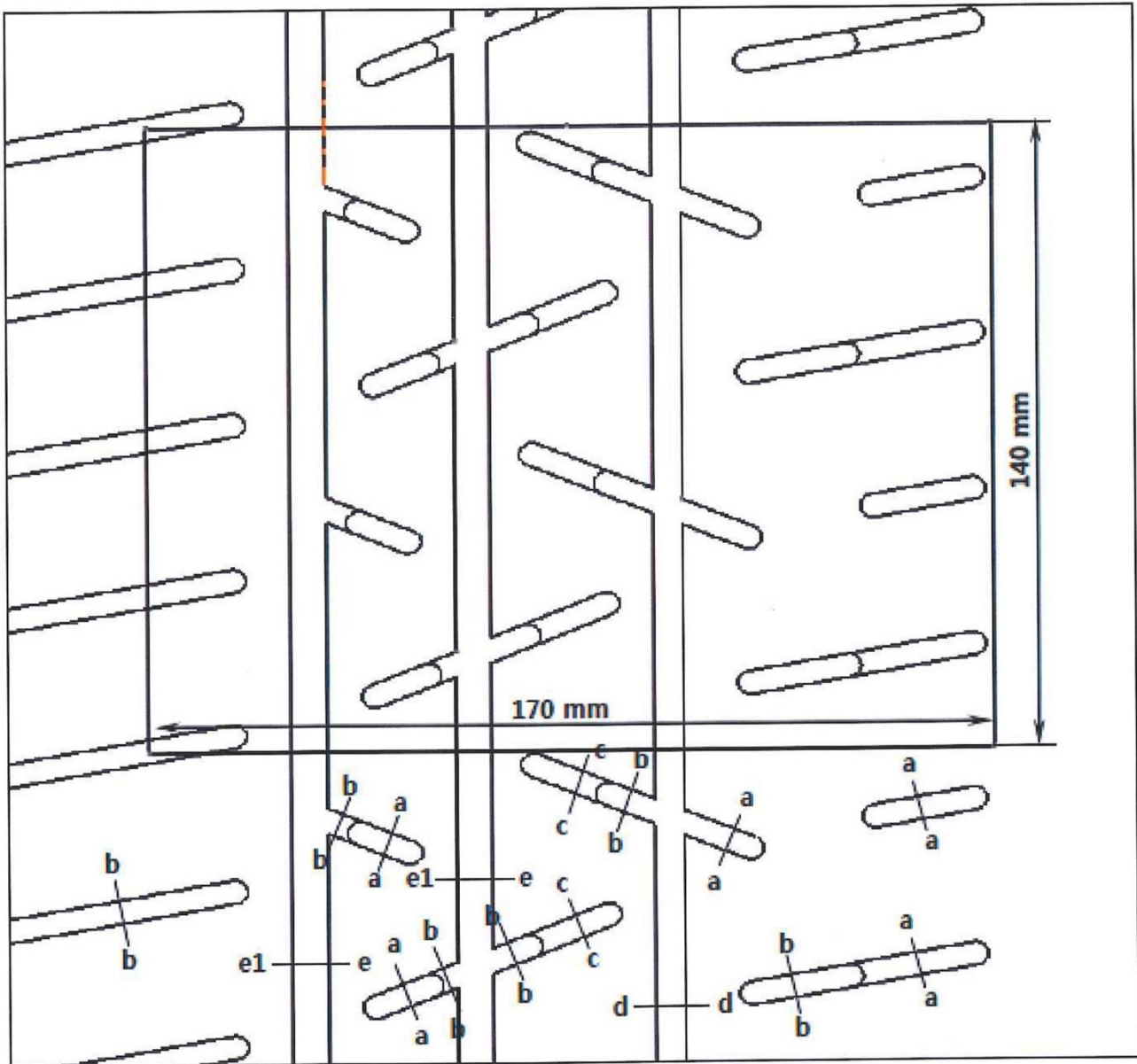
Empty Depth > 1.8mm : 22.95%

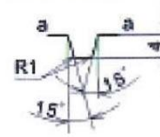
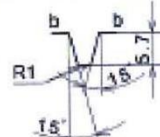
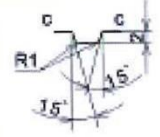
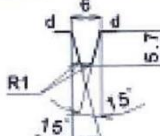
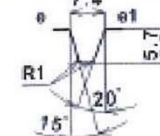
GROOVE SURFACE AREA = 358456 mm²

Control Surface = 20720 mm²

15" - 200/580R15

Product :Ventus Z205



<p>Sec. a-a</p> 	<p>Sec. b-b</p> 	<p>Sec. c-c</p> 
<p>Sec. d-d</p> 	<p>Sec. e-e1</p> 	

Class 9" (Rim 7.0")

Empty Depth > 5.5mm : 17.06%

Empty Depth > 1.8mm : 25.07%

Control Surface = 23800 mm²



18" - 210/645R18

KUMHO TYRES

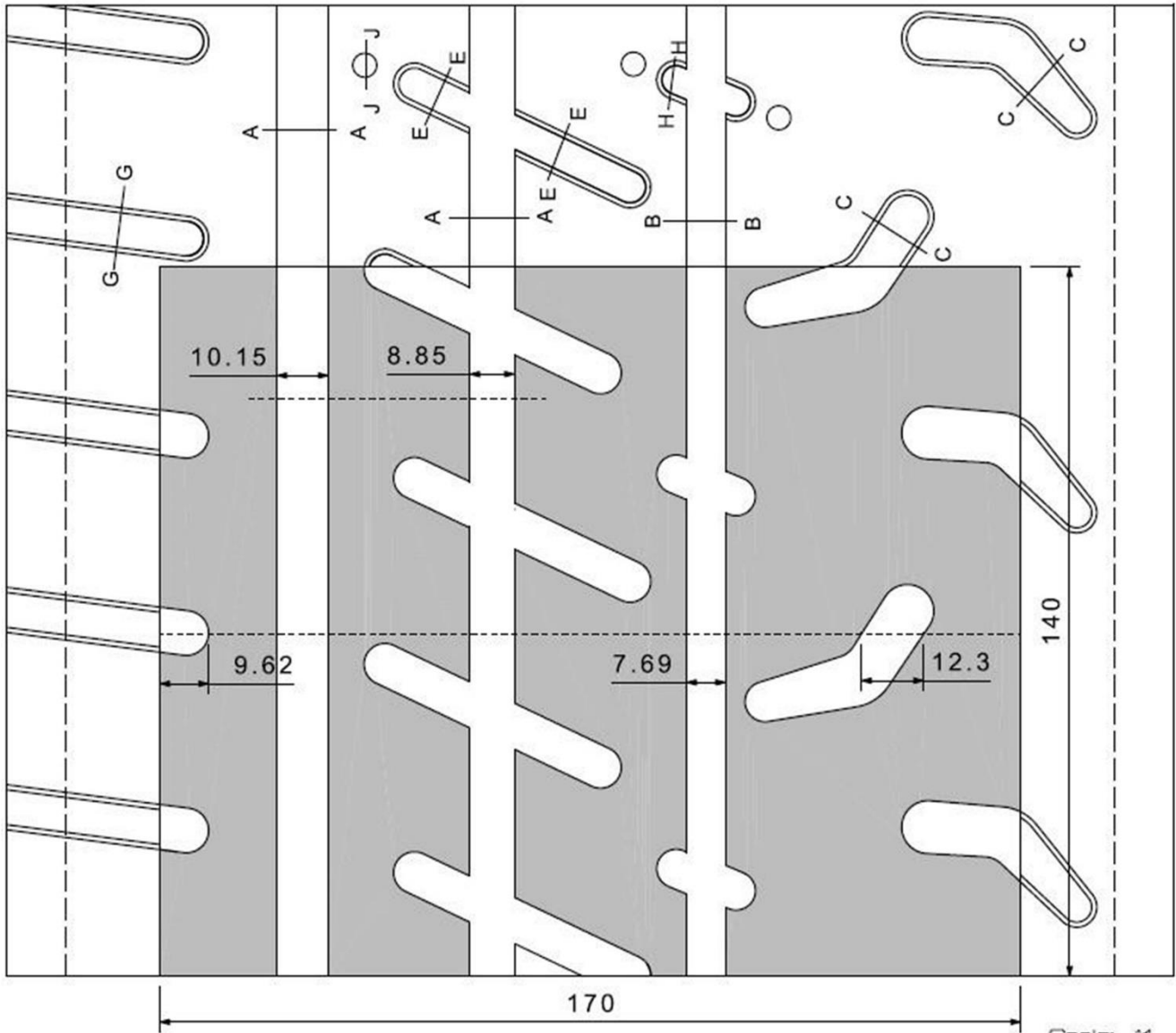
Moulded tyre for FIA homologation

Size : 210/645R18

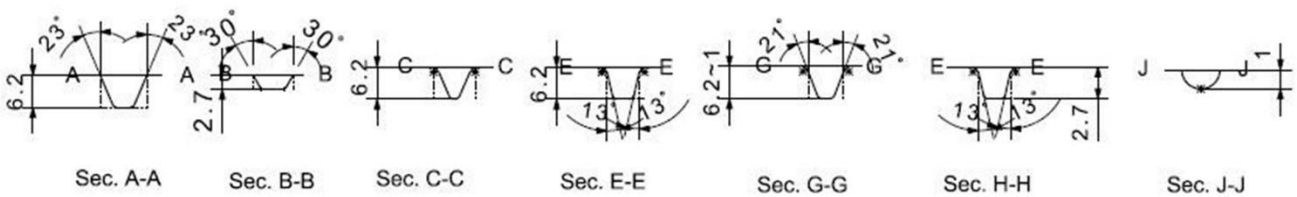
Pattern : TM01

On the basis of a tread pattern width of 170mm and circumference of 140mm

- * The surface taken up by grooves at least 5.5 mm deep, with a maximum angle of 60° between the block in section and 2mm wide, must occupy at least 17% of the total surface.
- * The surface taken up by grooves at least 1.8 mm deep, with a maximum angle of 60° between the block in section and 2mm wide, must occupy at least 21.5% of the total surface.
- * The sum of the width of the grooves encountered by a radial line must be at least 16mm
- * At least 2 circumferential lines / Minimum total width of circumferential lines at least 12mm



Groove Area by 170 x 140 at least 1.8mm deep : 5815.4mm²
 Void % : 24.4%
 Groove Area by 170 x 140 at least 5.5mm deep : 4580.7mm²
 Void % : 19.2%





KUMHO TYRES

18" - 210/645R18

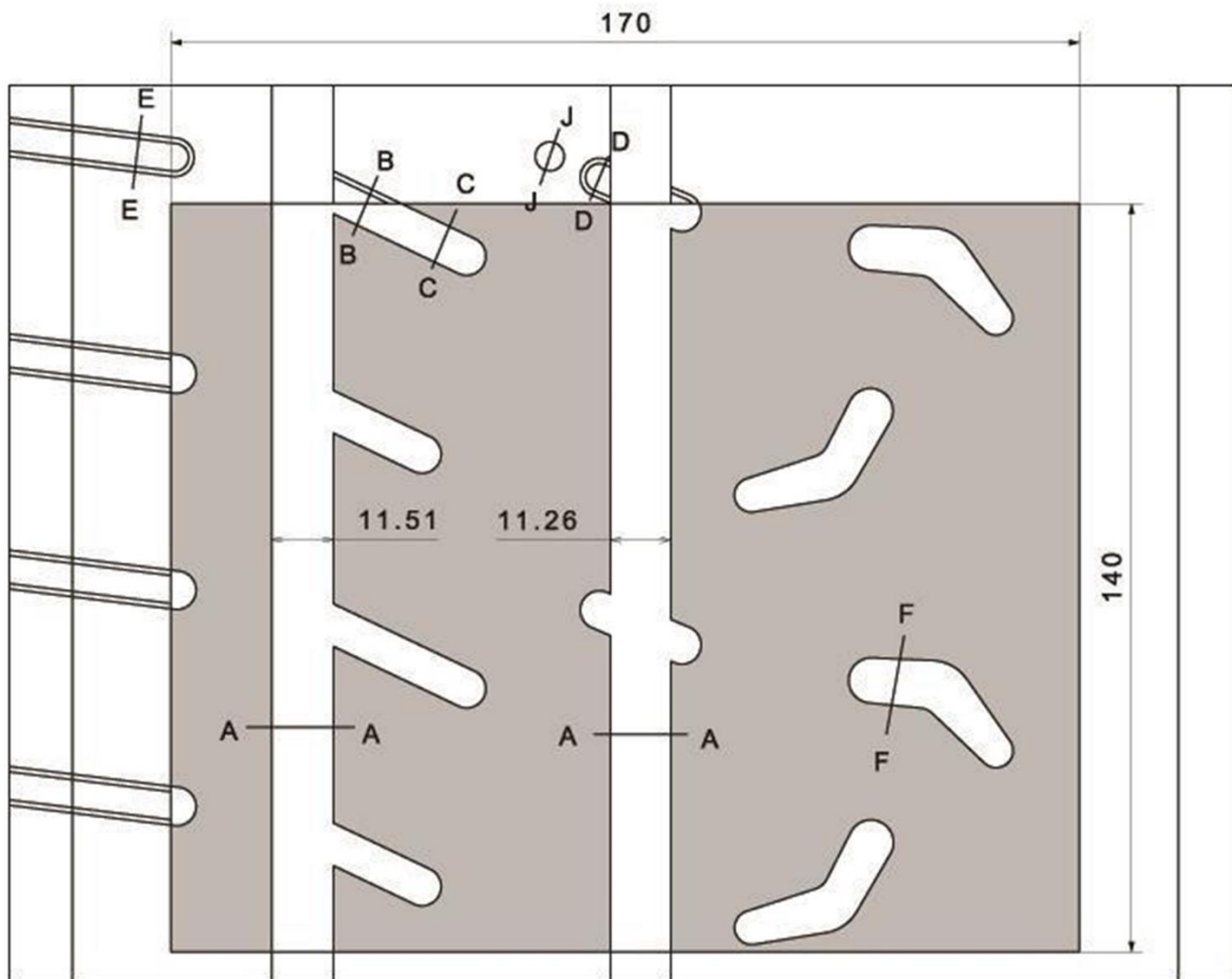
Moulded tyre for FIA homologation

Size : 210/645R18

Pattern : TM02

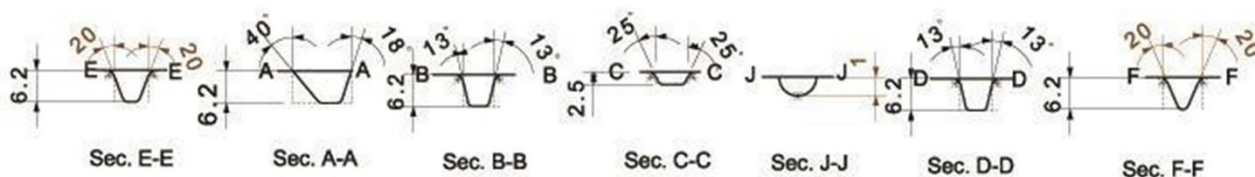
On the basis of a tread pattern width of 170mm and circumference of 140mm

- The surface taken up by grooves at least 5.5 mm deep, with a maximum angle of 60° between the block in section and 2mm wide, must occupy at least 17% of the total surface.
- The surface taken up by grooves at least 1.8 mm deep, with a maximum angle of 60° between the block in section and 2mm wide, must occupy at least 21.5% of the total surface.
- The sum of the width of the grooves encountered by a radial line must be at least 16mm
- At least 2 circumferential lines / Minimum total width of circumferential lines at least 12mm



Scale 1:1

Groove Area by 170 x 140 at least 1.8mm deep : 5159mm²
 Void % : 21.7%
 Groove Area by 170 x 140 at least 5.5mm deep : 4446mm²
 Void % : 18.7%





KUMHO TYRES

18" - 210/645R18

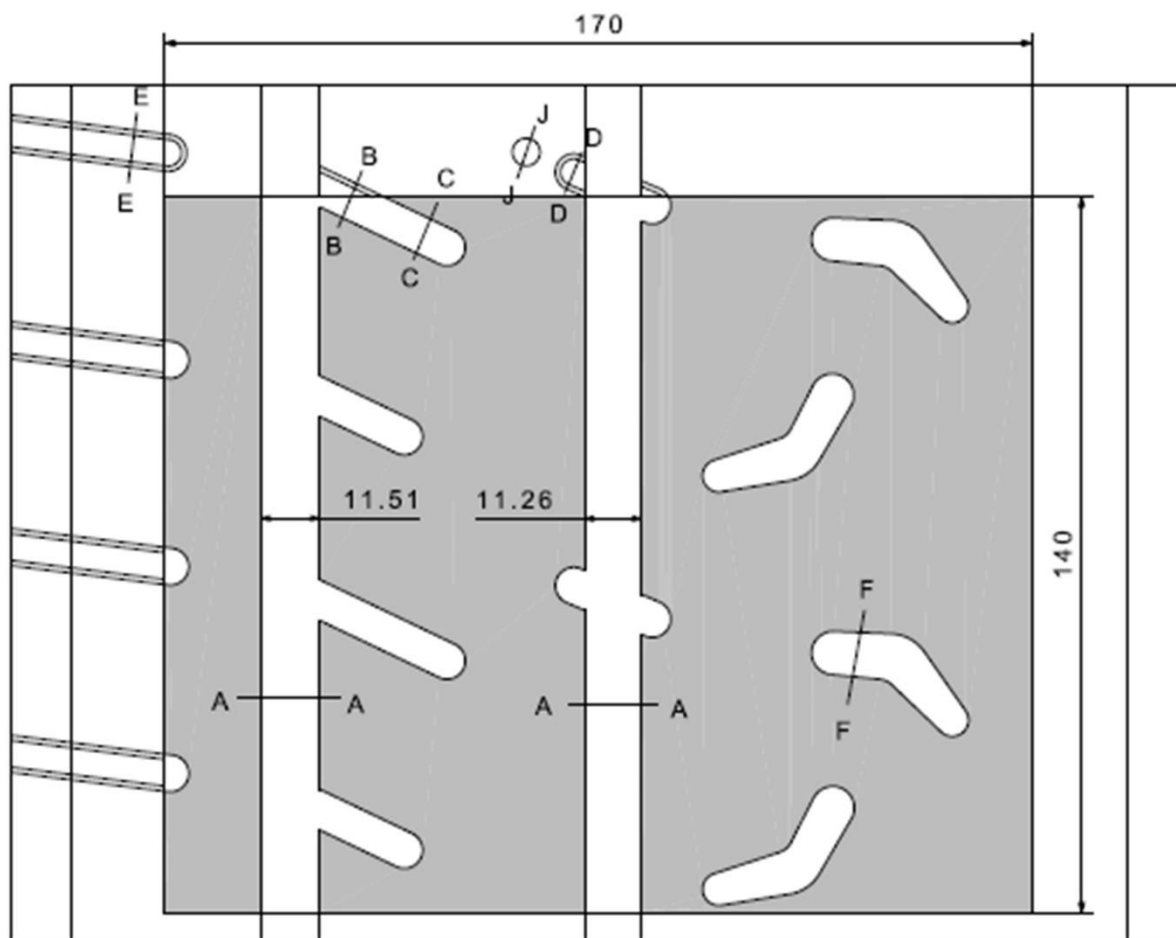
Moulded tyre for FIA homologation

Size : 210/645R18

Pattern : TM02

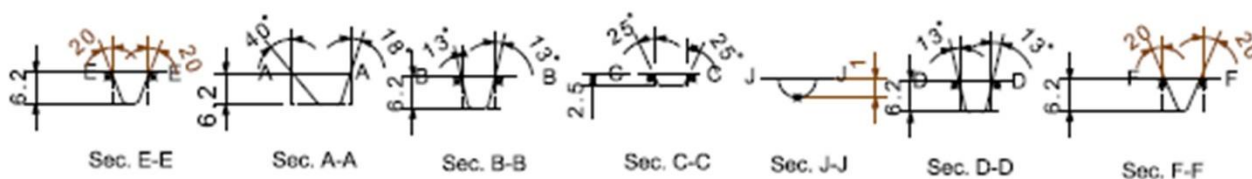
On the basis of a tread pattern width of 170mm and circumference of 140mm

- The surface taken up by grooves at least 5.5 mm deep, with a maximum angle of 60° between the block in section and 2mm wide, must occupy at least 17% of the total surface.
- The surface taken up by grooves at least 1.8 mm deep, with a maximum angle of 60° between the block in section and 2mm wide, must occupy at least 21.5% of the total surface.
- The sum of the width of the grooves encountered by a radial line must be at least 16mm
- At least 2 circumferential lines / Minimum total width of circumferential lines at least 12mm



Scale 1:1

Groove Area by 170 x 140 at least 1.8mm deep : 5159mm²
 Void % : 21.7%
 Groove Area by 170 x 140 at least 5.5mm deep : 4446mm²
 Void % : 18.7%





KUMHO TYRES

18" - 210/645R18

NOVO

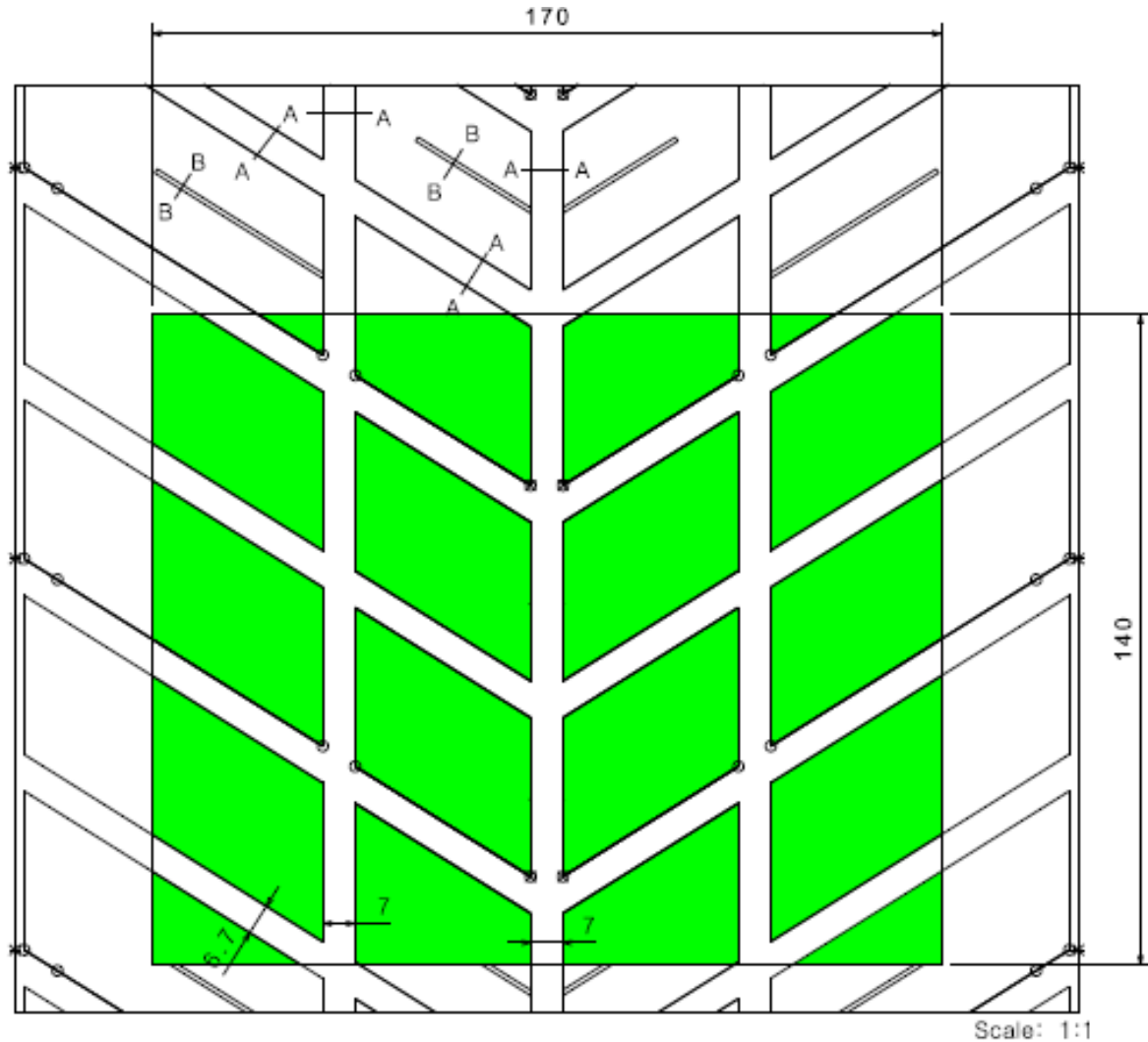
Moulded tyre for FIA homologation

Size : 210/645R18

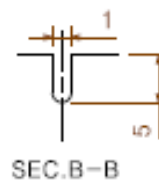
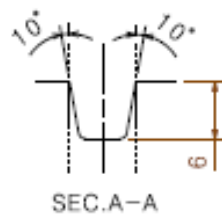
Pattern : TW03

On the basis of a tread pattern width of 170mm and circumference of 140mm

- The surface taken up by grooves at least 5.5mm deep must occupy at least 27.5% of the total surface.
- The sum of the width of the grooves encountered by a radial line must be at least 16mm
- At least 3 circumferential lines / Minimum total width of circumferential lines at least 4mm



Groove Area by 170 x 140 at least 5.5mm deep : 6789.4mm²
 Void % : 28.5%





KUMHO TYRES

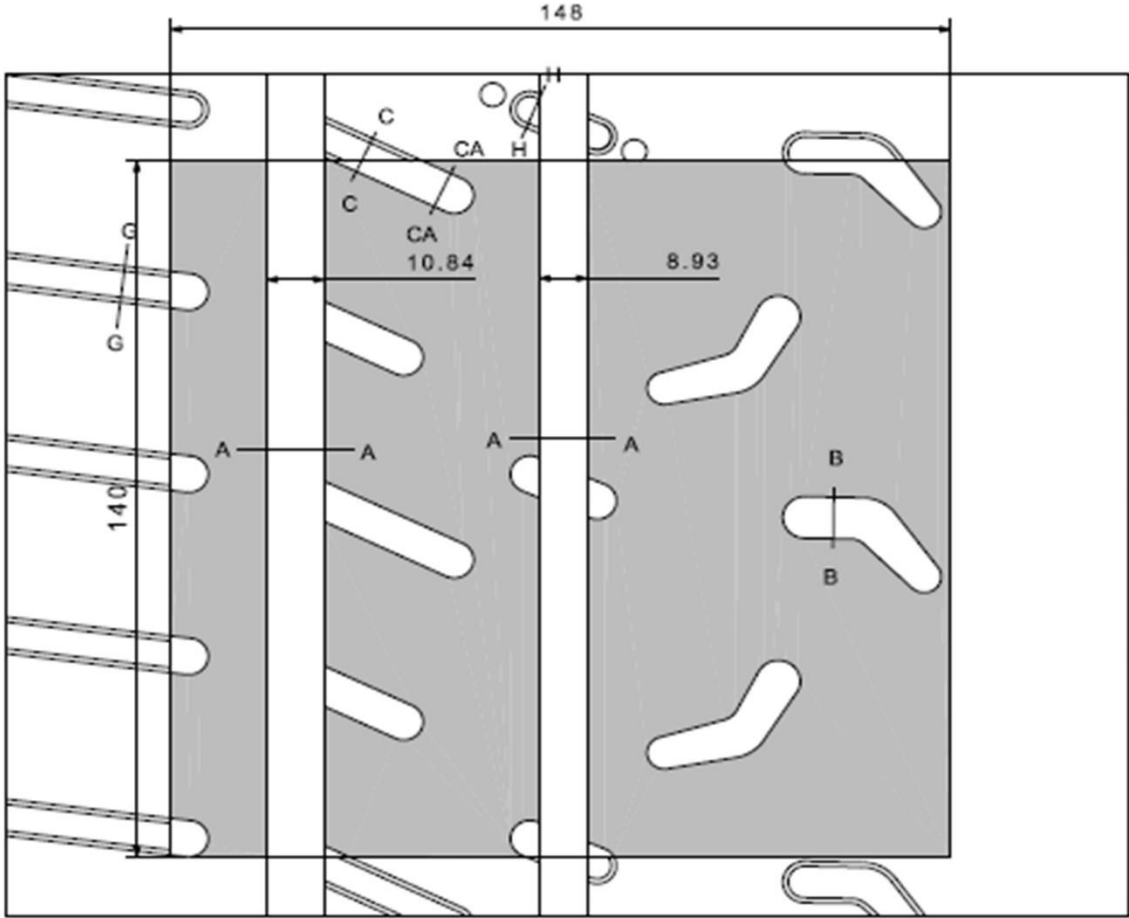
17" - 190/630R17

Moulded tyre for FIA homologation

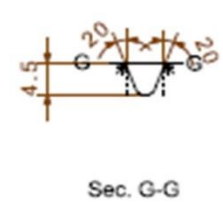
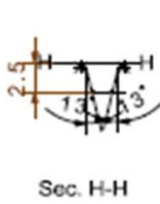
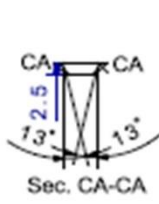
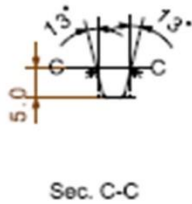
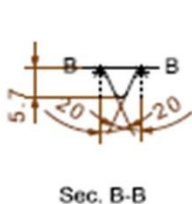
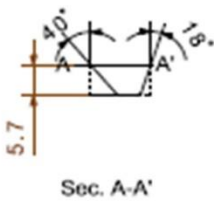
Size : 190/630 R17

Pattern : TM02

- On the basis of a tread pattern width of 148mm and circumference of 140mm
- The surface taken up by grooves at least 5.5 mm deep, with a maximum angle of 60° between the block in section and 2mm wide, must occupy at least 17% of the total surface.
 - The surface taken up by grooves at least 1.8 mm deep, with a maximum angle of 60° between the block in section and 2mm wide, must occupy at least 21.5% of the total surface.
 - The sum of the width of the grooves encountered by a radial line must be at least 16mm
 - At least 2 circumferential lines / Minimum total width of circumferential lines at least 12mm



Groove Area by 148 x 140 at least 1.8mm deep : 4579.1mm²
 Void % : 22.1%
 Groove Area by 148 x 140 at least 5.5mm deep : 3688.1mm²
 Void % : 17.8%



KUMHO TYRES

16" - 190/600R16

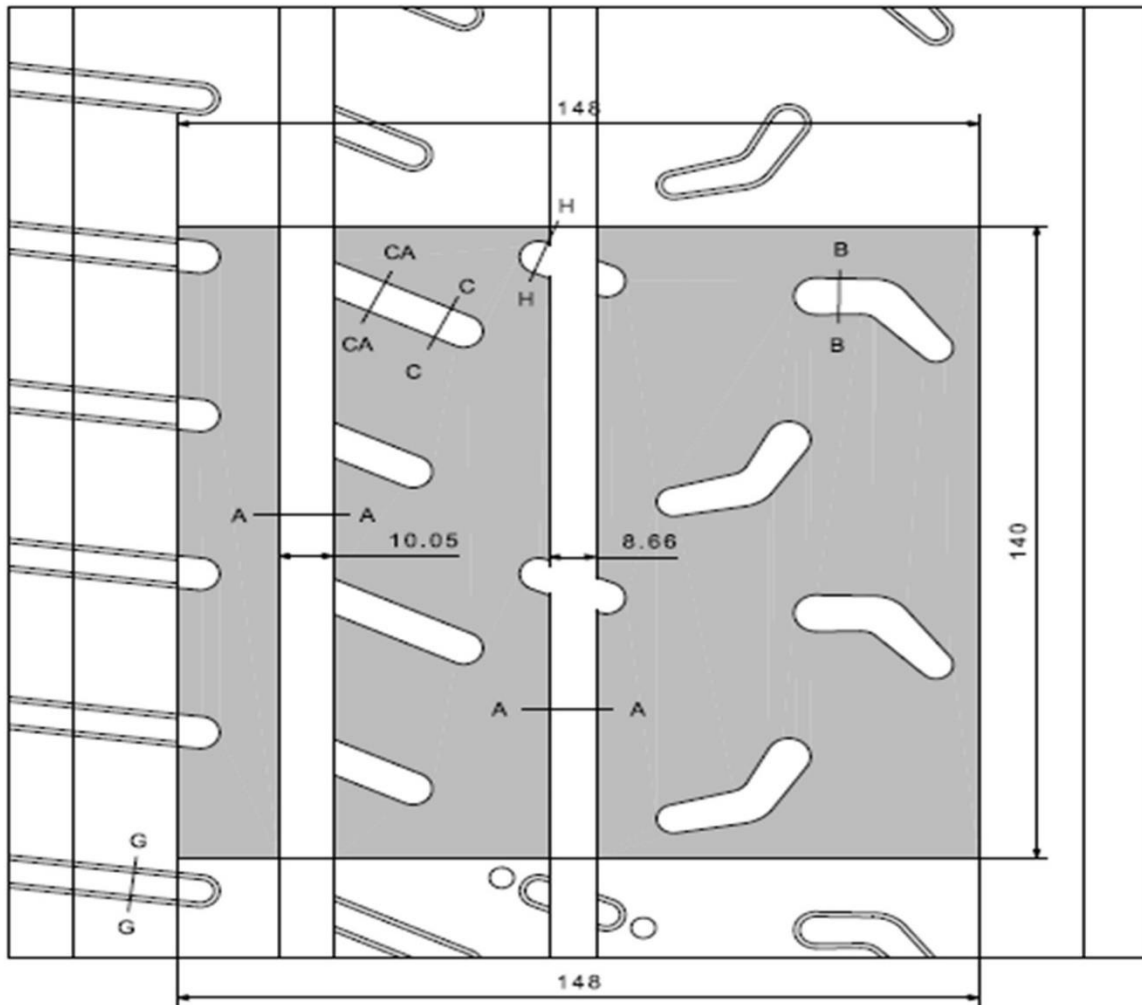
Moulded tyre for FIA homologation

Size : 190/600 R16

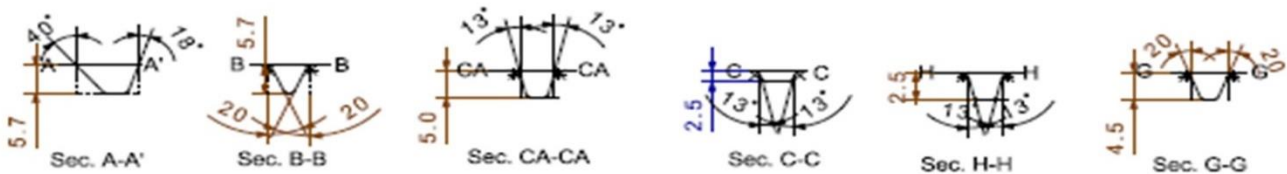
Pattern : TM02

On the basis of a tread pattern width of 148mm and circumference of 140mm

- The surface taken up by grooves at least 5.5 mm deep, with a maximum angle of 60° between the block in section and 2mm wide, must occupy at least 17% of the total surface.
- The surface taken up by grooves at least 1.8 mm deep, with a maximum angle of 60° between the block in section and 2mm wide, must occupy at least 21.5% of the total surface.
- The sum of the width of the grooves encountered by a radial line must be at least 16mm
- At least 2 circumferential lines / Minimum total width of circumferential lines at least 12mm



Groove Area by 148 x 140 at least 1.8mm deep : 4579.1mm²
 Void % : 22.1%
 Groove Area by 148 x 140 at least 5.5mm deep : 3584.5mm²
 Void % : 17.3%





KUMHO TYRES

15" - 180/580R15

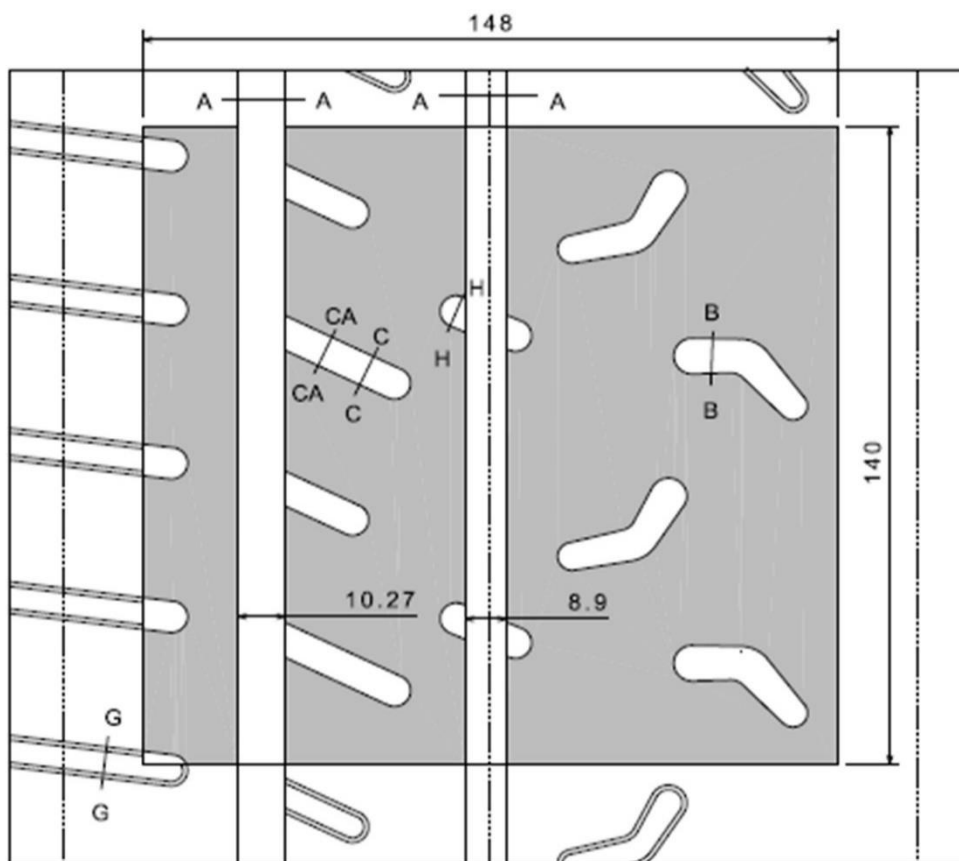
Moulded tyre for FIA homologation

Size : 180/580 R15

Pattern : TM02

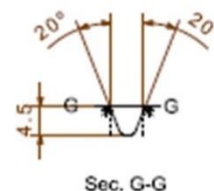
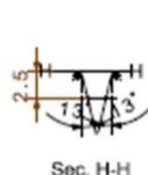
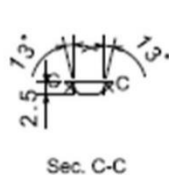
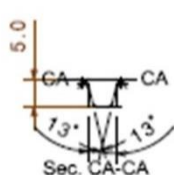
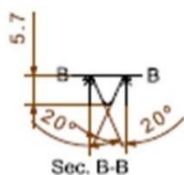
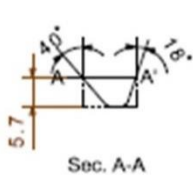
On the basis of a tread pattern width of 148mm and circumference of 140mm

- The surface taken up by grooves at least 5.5 mm deep, with a maximum angle of 60° between the block in section and 2mm wide, must occupy at least 17% of the total surface.
- The surface taken up by grooves at least 1.8 mm deep, with a maximum angle of 60° between the block in section and 2mm wide, must occupy at least 21.5% of the total surface.
- The sum of the width of the grooves encountered by a radial line must be at least 16mm
- At least 2 circumferential lines / Minimum total width of circumferential lines at least 12mm



Scale 1:1

Groove Area by 148 x 140 at least 1.8mm deep : 4599.8mm²
 Void % : 22.2%
 Groove Area by 148 x 140 at least 5.5mm deep : 3563.8mm²
 Void % : 17.2%

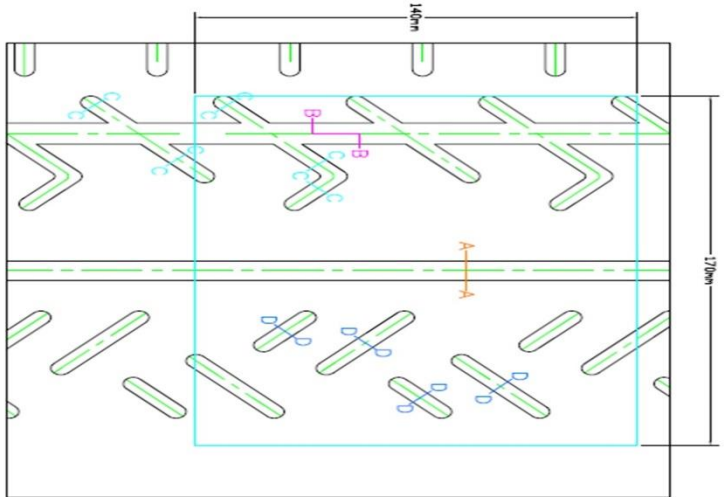


Hoosier

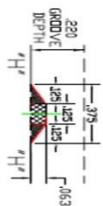
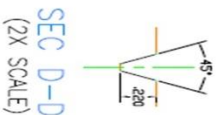
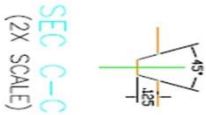
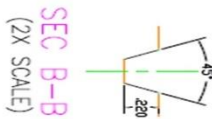
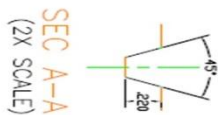
RACING TIRE

18" - 225/40R18

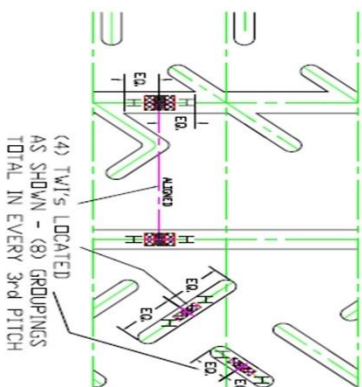
NOVO



CONTROL SURFACE = 23.800mm²
 GROOVES >5.5mm DEEP = 4124.1mm² = 17.33%
 GROOVES >1.8MM DEEP = 5084.9mm² = 22.05%



(8) T/W'S PER CIRCUMFER. GROOVE
 AND TREAD ELEMENTS AS SHOWN.
 (32) TOTAL FOR THE MOLD.

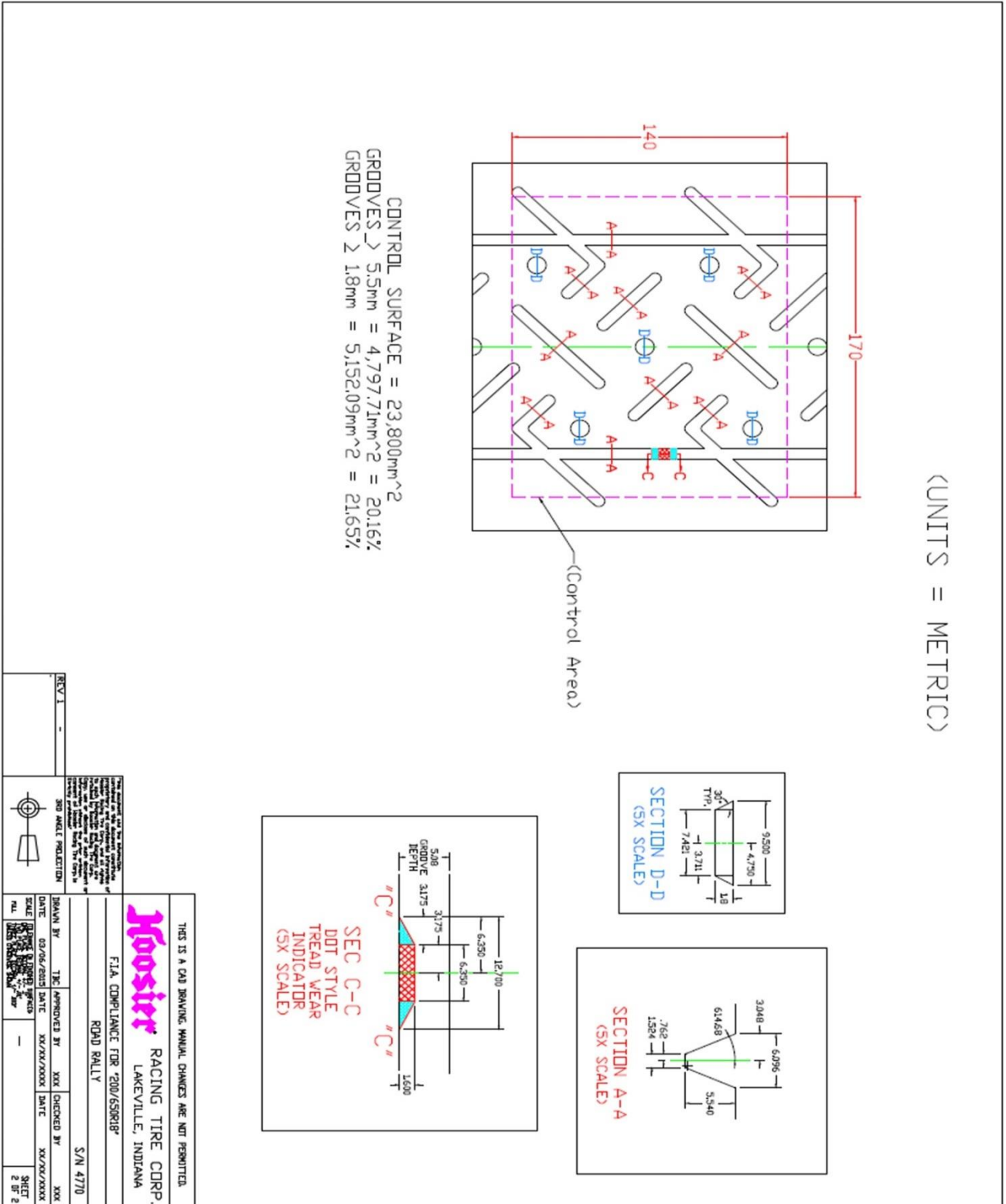


THIS IS A CAD DRAWING. MINOR CHANGES ARE NOT PERMITTED. Hoosier RACING TIRE CORP. LAKEVILLE, INDIANA	
225/40R18 RALLY TANK	
S/N 4972	
DESIGNED BY: KJB	APPROVED BY: KJB
DRAWN BY: KJB	DATE: 02-21-10
CHECKED BY: KJB	DATE: 02-21-10
SCALE: 1:1	SHEET: 2
3D WALL PROJECTION THE WALL PROJECTION IS THE WALL OF THE TIRE. IT IS NOT THE TREAD PATTERN. IT IS THE WALL OF THE TIRE. IT IS NOT THE TREAD PATTERN. IT IS THE WALL OF THE TIRE. IT IS NOT THE TREAD PATTERN.	

Hoosier

RACING TIRE

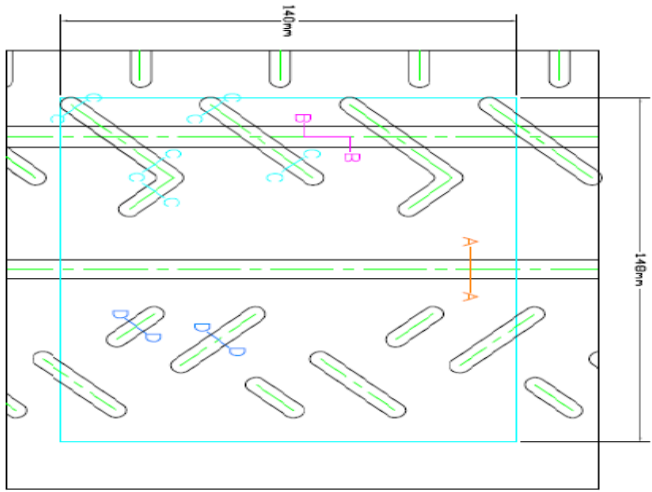
18" - 200/650R18



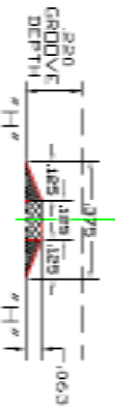
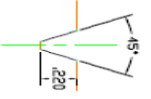
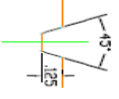
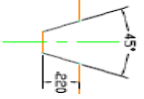
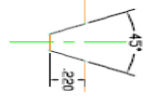
Hoosier

RACING TIRE

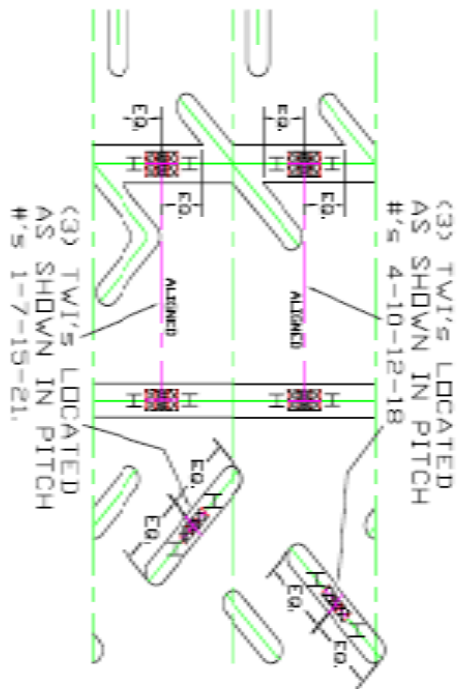
17" - 195/50R17



CONTROL SURFACE = $20,720\text{mm}^2$
 GROOVES >5.5mm DEEP = $3617,7\text{mm}^2 = 17,46\%$
 GROOVES >1.8MM DEEP = $4638,2\text{mm}^2 = 22,39\%$



(8) TWI'S PER CIRCUMFL GROOVE
 AND TREAD ELEMENTS AS SHOWN.
 (24) TOTAL FOR THE MOLD.



THIS IS A CAD DRAWING. MANUAL CHANGES ARE NOT PERMITTED.

Hoosier RACING TIRE CORP.
 LAKEVILLE, INDIANA

195/50R17 TARMAC RALLY

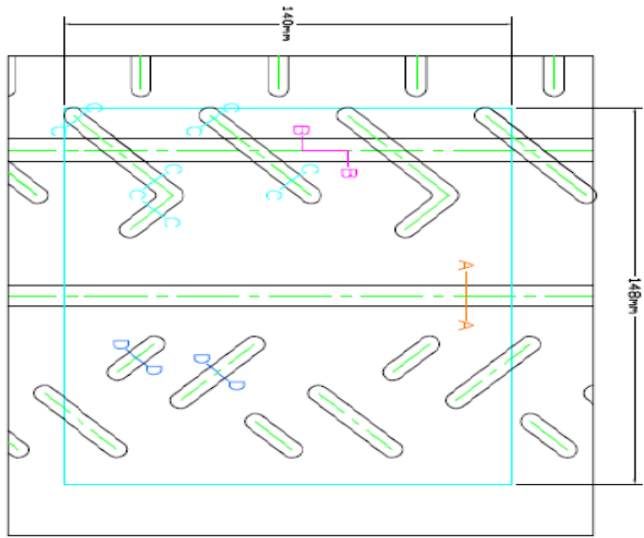
S/N 4927

3RD ANGLE PROJECTION		DRAWN BY: KSB		APPROVED BY: KXX		CHECKED BY: KSB	
DATE: 04-09-2010		DATE: 04-09-2010		DATE: 04-09-2010		DATE: 04-09-2010	
SCALE: 1:1		SCALE: 1:1		SCALE: 1:1		SCALE: 1:1	
TITEL: 195/50R17 TARMAC RALLY		SHEET: 1		SHEET: 1		SHEET: 1	

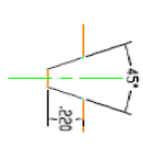
Hoosier

RACING TIRE

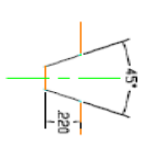
16" - 195/50R16



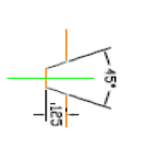
CONTROL SURFACE = $20,720\text{mm}^2$
 GROOVES $>5.5\text{mm}$ DEEP = $3617,7\text{mm}^2$ = 17,46%
 GROOVES $>1.8\text{mm}$ DEEP = $4638,2\text{mm}^2$ = 22,39%



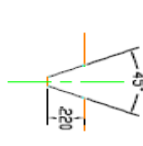
SEC A-A
(2X SCALE)



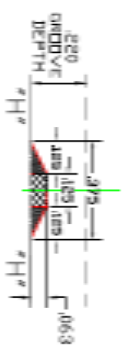
SEC B-B
(2X SCALE)



SEC C-C
(2X SCALE)



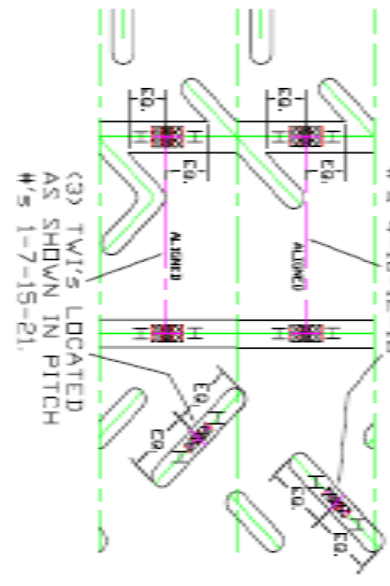
SEC D-D
(2X SCALE)



SEC H-H
DOT STYLE
TREAD WEAR
INDICATOR
(2X SCALE)

(8) TWI'S PER CIRCUMFL GROOVE
 AND TREAD ELEMENTS AS SHOWN.
 (24) TOTAL FOR THE MOLD.

(3) TWI'S LOCATED
 AS SHOWN IN PITCH
 #S 4-10-12-18



(3) TWI'S LOCATED
 AS SHOWN IN PITCH
 #S 1-7-15-21.

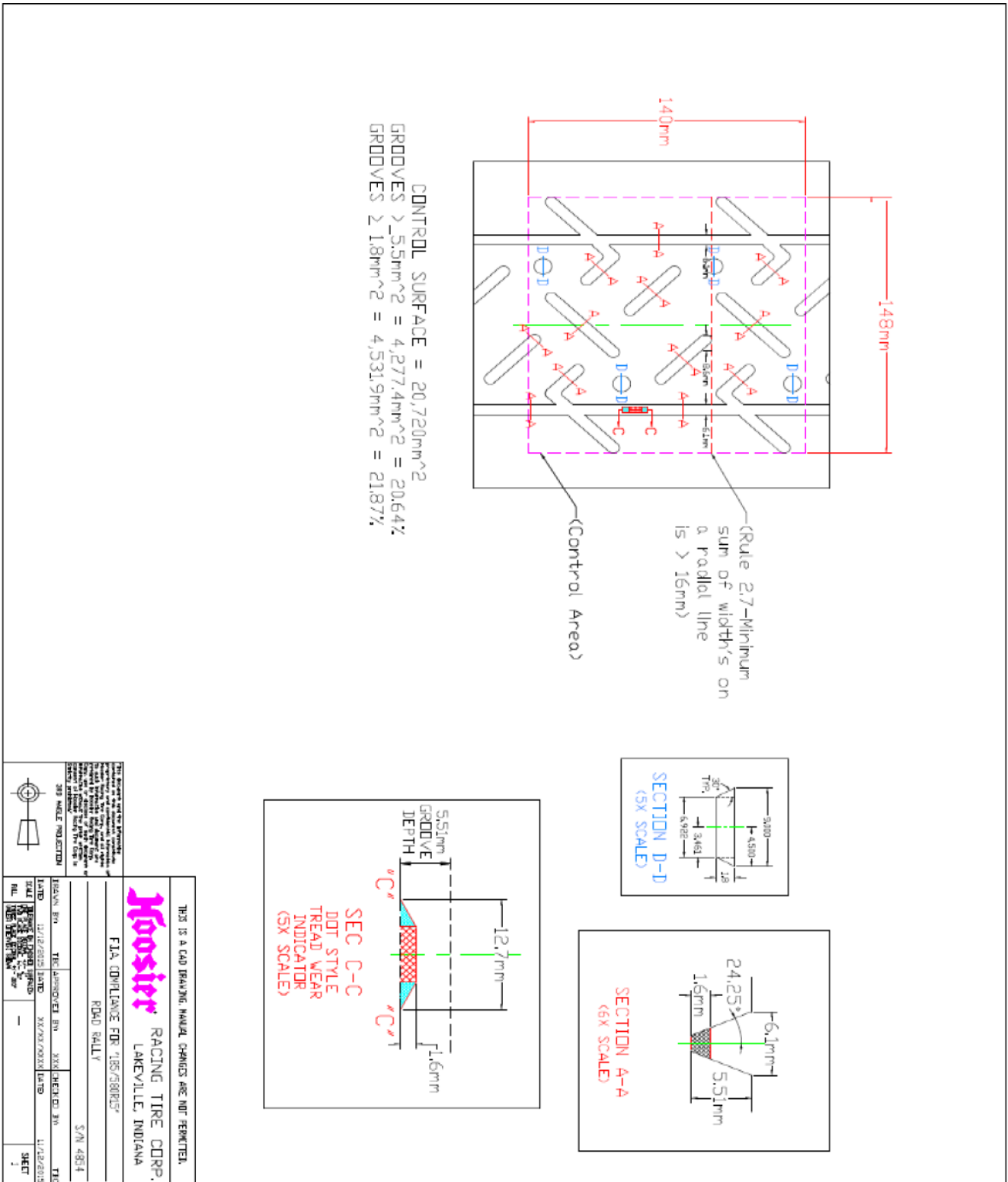
THIS IS A CAD DRAWING. MANUAL CHANGES ARE NOT PERMITTED.

Hoosier RACING TIRE CORP.
LAKEVILLE, INDIANA

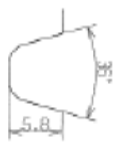
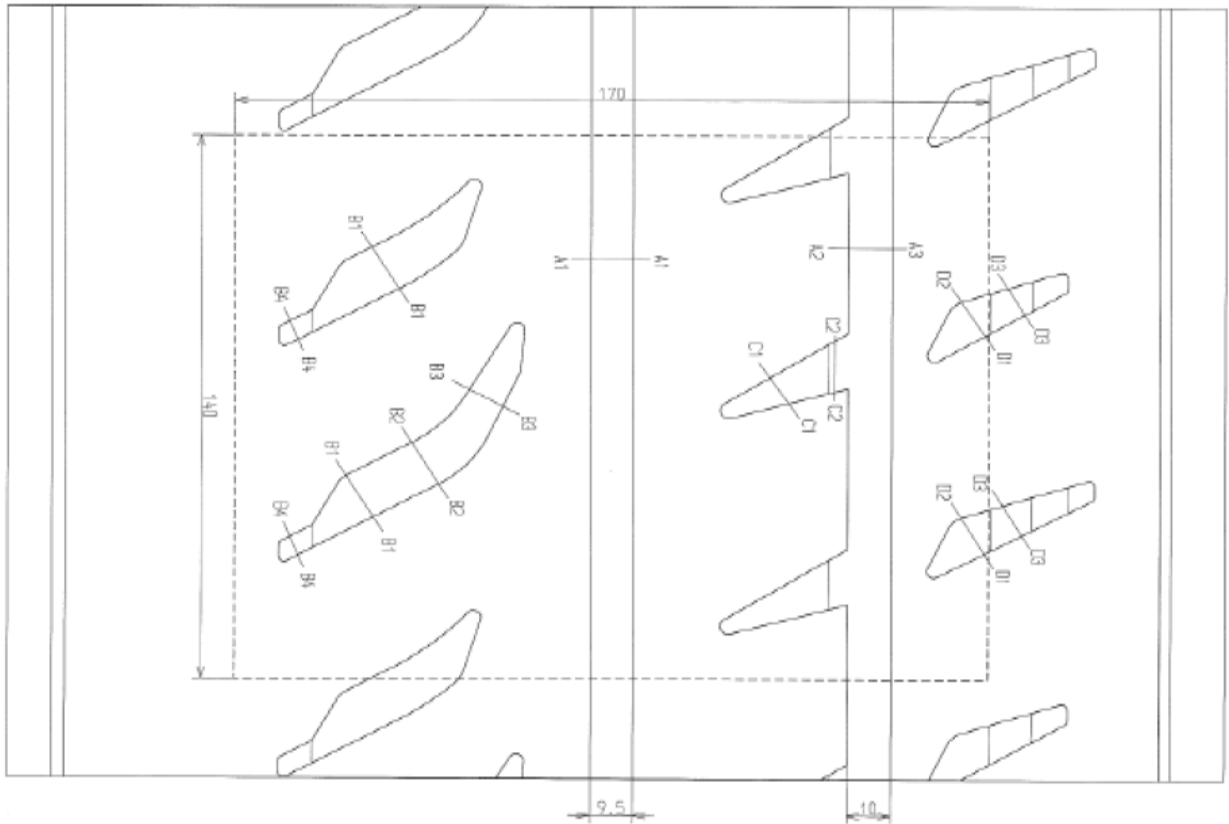
195/50R16 TARMAC RALLY S/N 4936

DRAWN BY: KSB	APPROVED BY: KSB	DATE: 08-09-2008	DATE: 08-09-2008
DATE: 08-09-2008	DATE: 08-09-2008	DATE: 08-09-2008	DATE: 08-09-2008
TITLE: 195/50R16 TARMAC RALLY	DATE: 08-09-2008	DATE: 08-09-2008	DATE: 08-09-2008
DATE: 08-09-2008	DATE: 08-09-2008	DATE: 08-09-2008	DATE: 08-09-2008

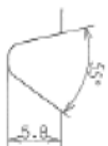
15" - 185/580R15



18" - 205/640R18



SEC.A1-A1



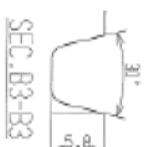
SEC.A2-A3



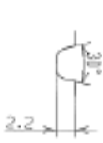
SEC.B1-B1



SEC.B2-B2



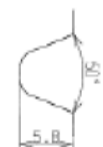
SEC.B3-B3



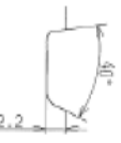
SEC.B4-B4



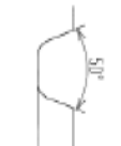
SEC.C1-C1



SEC.C2-C2



SEC.D1-D2



SEC.D3-D3

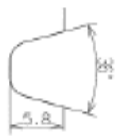
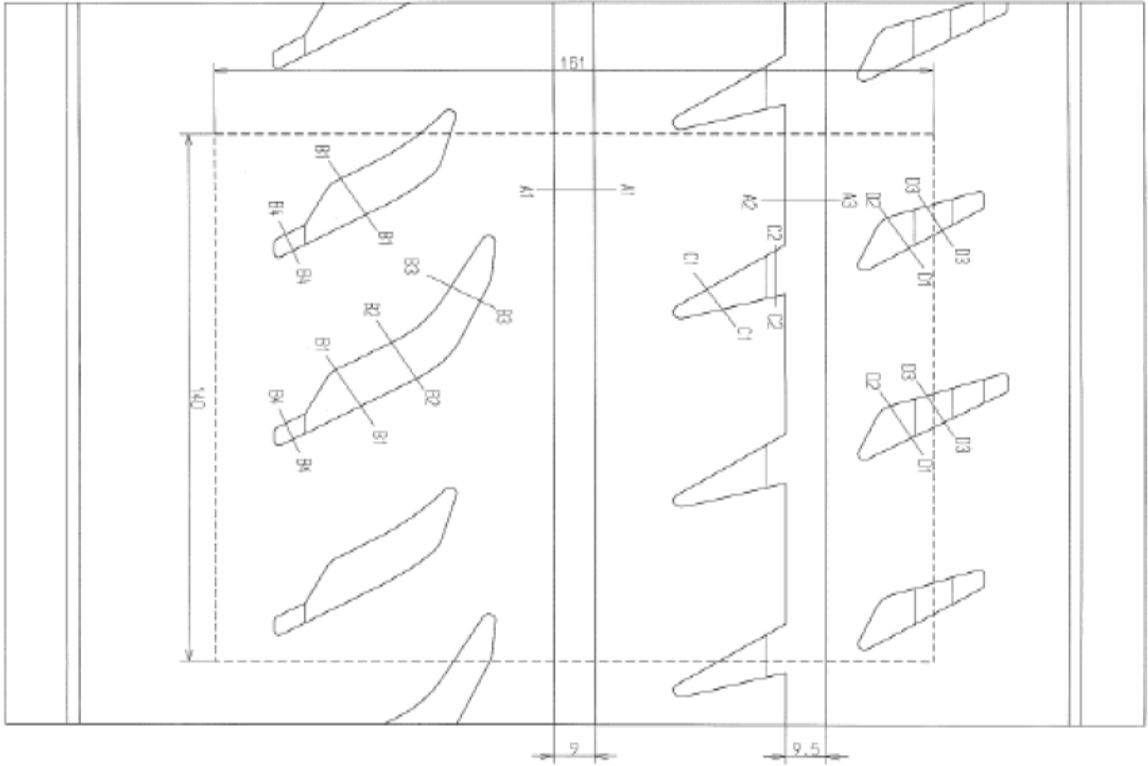
In the control area
5.5mm grooves - 18, 22
Total grooves 22, 36

-----Control area(170x140)

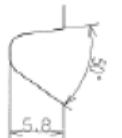
PRODUCT NAME
TOYO PROXES 888RT

SIZE 205/640R18

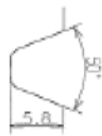
15" - 185/580R15



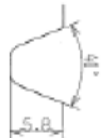
SEC.A1-A1



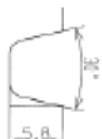
SEC.A2-A3



SEC.B1-B1



SEC.B2-B2



SEC.B3-B3



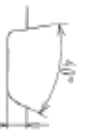
SEC.B4-B4



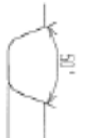
SEC.C1-C1



SEC.C2-C2



SEC.D1-D2



SEC.D3-D3

In the control area
5.5mm grooves - 18, 22
Total grooves 22,3x

-----Control area(181 x 140)

PRODUCT NAME
TOYO PROXES 888RT

SIZE 185/580R15

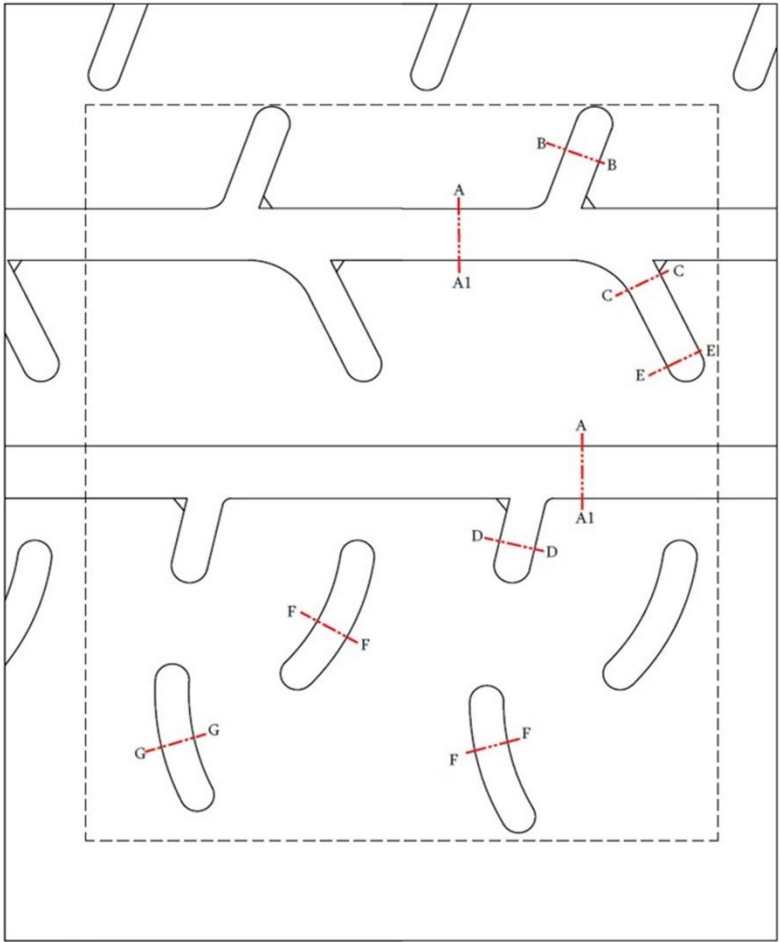


MRF TYRES

18" - 235/40R18



MRF 235/40R18 ZTA1 TL



In the control area 170x140 mm (Indicated in the dotted line)

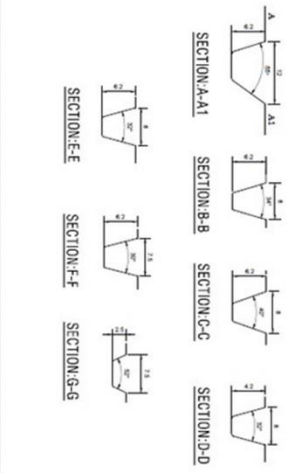
Grooved area within Min. 1.8 deep grooves > 21.5%

Grooved area within Min. 5.5 deep grooves > 17.0%

The total width of the circumferential line is >12 mm

The sum of the width of the grooves encountered by a radial line is >16 mm

**CLASS 9"
RIM 8.0"**



All dimensions are in mm, unless otherwise specified.

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6 5 4 3 2 1

S.No	DATE	DESCRIPTIONS	DRAWN	EVPRD / PDM
REVISIONS				
CHENNAI				
DRAWN		APPROVED		SCALE
SIGNATURE		T.N.Sundar		NTS
DATE		29.01.18		

F.I.A COMPLIANCE FOR 235/40R18 ZTA1 TL

CORPORATE TECHNICAL MOULD DESIGN DRG No. RR-235/40R18_0518 REVISION No. 00

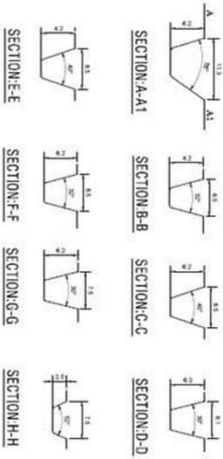
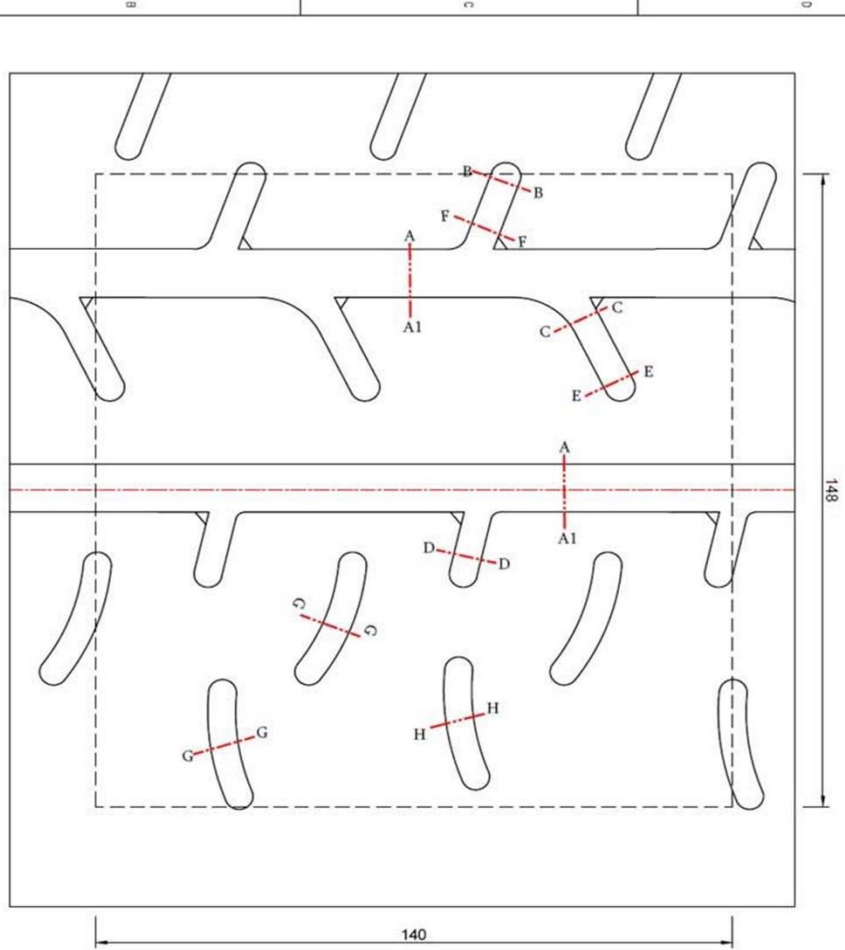


MRF TYRES

17" - 205/45R17



MRF 205/45R17 ZTA1 TL



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NOT TO SCALE

In the control area 148x140 mm (indicated in the dotted line)

Grooved area within Min. 1.8 deep grooves > 21.5%

Grooved area within Min. 5.5 deep grooves > 17.0%

The total width of the circumferential line is >12 mm

The sum of the width of the grooves encountered by a radial line is >16 mm

**CLASS 8"
RIM 7.0"**

S.No.	DATE	DESCRIPTIONS	DRAWN	EVPRD / PDM

SIGNATURE		DATE	
G. Kumbhakar	DE	25.01.18	
T.N. Sundar	EVPRD / PDM	29.01.18	

F.I.A COMPLIANCE FOR 205/45R17 ZTA1 TL

CORPORATE TECHNICAL MOLD DESIGN	DRG No.	RR-205/45R17_0518	REVISION No.	00
SAP DOCUMENT TYPE	SAP DOCUMENT No.		VER	

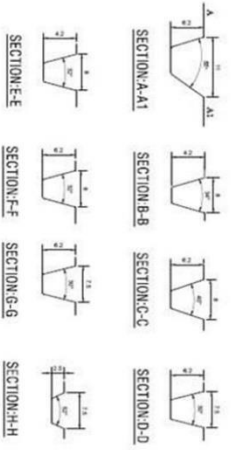
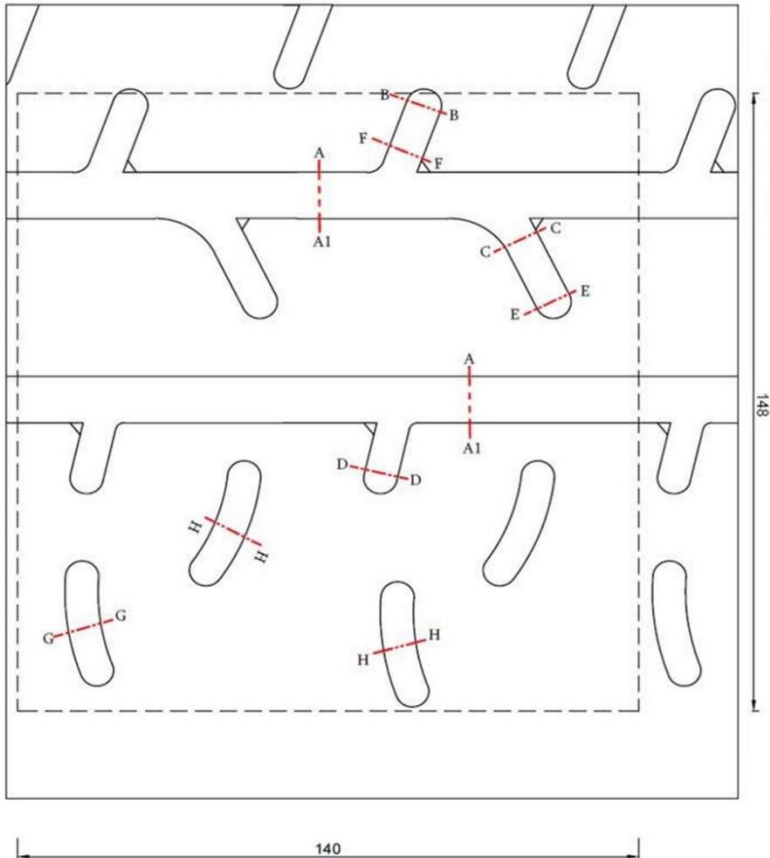


MRF TYRES

16" - 195/50R16



MRF 195/50R16 ZTA1 TL



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IF IN DOUBT ASK...

In the control area 148x140 mm (indicated in the dotted line)

Grooved area within Min. 1.8 deep grooves > 21.5%

Grooved area within Min. 5.5 deep grooves > 17.0%

The total width of the circumferential line is >12 mm

The sum of the width of the grooves encountered by a radial line is >16 mm

**CLASS 8"
RIM 6.5"**

S.No	DATE	DESCRIPTIONS	DRAWN	EVPRD / PDM

CHENNAI

MRF INDIA

DRAWN: G. Kumbhakar

APPROVED: T. N. Sundar

SIGNATURE: DE

EVPRD / PDM

DATE: 25.01.18

29.01.18

F.I.A COMPLIANCE FOR 195/50R16 ZTA1 TL

CORPORATE TECHNICAL MOULD DESIGN

DRG No: RR-195/50R16_0518

SAP DOCUMENT TYPE: SAP DOCUMENT No: VER: REVISION No: 00

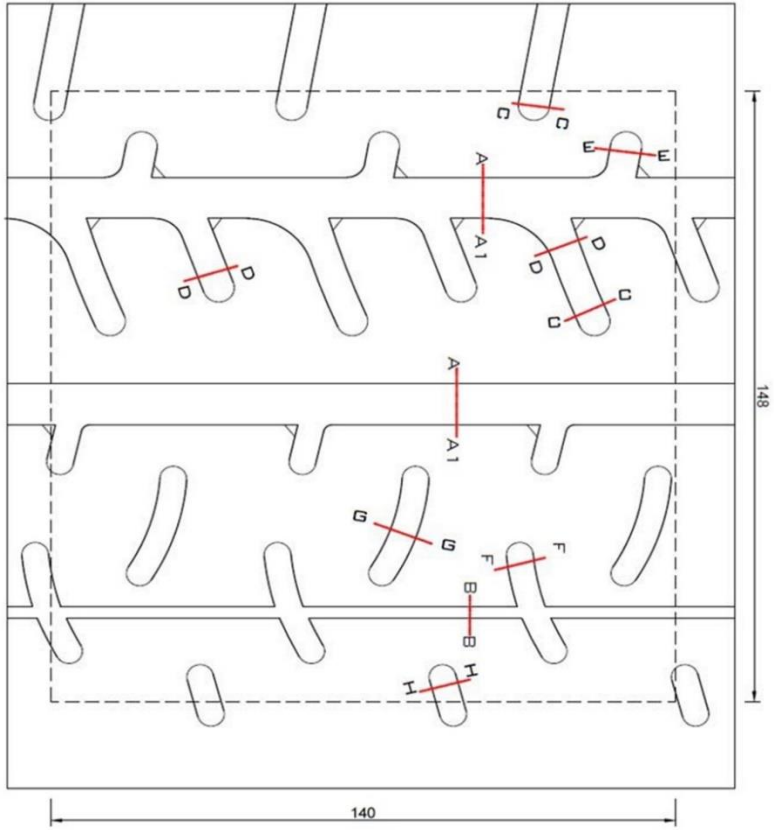


MRF TYRES

15" - 195/50R15



MRF 195/50R15 ZTA1 TL



In the control area 148x140 mm (indicated in the dotted line)

Grooved area within Min. 1.8 deep grooves > 21.5%

Grooved area within Min. 5.5 deep grooves > 17.0%

The total width of the circumferential line is >12 mm

The sum of the width of the grooves encountered by a radial line is >16 mm

**CLASS 8"
RIM 6.5"**

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All dimensions are in mm, unless otherwise specified.

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S.No.	DATE	DESCRIPTIONS	DRAWN	EVPRD / PDM

CHENNAI		INDIA	
MRF		APPROVED	
DRAWN		T.N. SUNDAR	
SIGNATURE	G. Kishanhar	EVPRD / PDM	NTS
DATE	25.01.18	29.01.18	

F.I.A COMPLIANCE FOR 195/50R15 ZTA1 TL

CORPORATE TECHNICAL MOLD DESIGN	DRG No.	RR-195/50R15_0518	REVISION No.	00
SAP DOCUMENT TYPE:	SAP DOCUMENT No.		VER	