

INFORMATION FOLDER / DOCUMENT:
OKB/RAM02-00

PURSUANT TO UN/ECE REGULATION No. 14
“UNIFORM PROVISIONS CONCERNING THE APPROVAL
OF VEHICLES WITH REGARD TO SAFETY-BELT
ANCHORAGES, ISOFIX ANCHORAGES SYSTEMS
AND ISOFIX TOP TETHER ANCHORAGES“
(as last amended)

FOR A SEATS TYPE

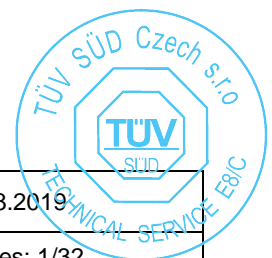
RAM02



Damian Goliński
CO-OWNER

Total number of pages: 32
Date of issue: 23.08.2019

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Confirmation

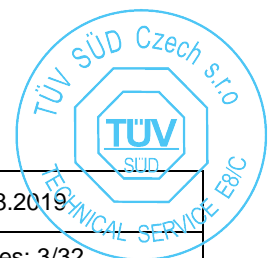
We hereby declare that the vehicle specimens submitted for this approval test have been manufactured and assembled on conditions of ordinary mass production and that they are compatible with the enclosed documentation.

Date of issue: 23th August 2019



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0.	GENERAL	
0.1	Make (trade name of manufacturer):	OKBee
0.2	Type:	RAM02
0.2.1	Commercial name(s) (if available):	OKBeeRAM02
0.2.2	Dedicated to the vehicle(s):	Mercedes Sprinter: Model 906 – production date: 2006-2018 type: 906BB35, 906BB50 Model 907 – production date: 2018-... type: 906BB35, 906BB50 Model 910 – production date: 2018-... type: KL3A4, KL3A5 Volkswagen Crafter: production date: 2006-2016 type: 2EK?(?) Fiat Ducato: Type: 250 Peugeot Boxer: Type: Y Citroen Jumper: Type: Y
0.3	Means of identification of type:	N/A
0.3.1	Location of that marking:	N/A
0.4	Category of vehicle:	M1
0.5	Name and address of manufacturer:	OKB Sp. z o.o. ul. Rokicińska 108/110 95-006 Bukowiec Poland
0.8	Name(s) and address(es) of assembly plant(s):	OKB Sp. z o.o. ul. Rokicińska 108/110 95-006 Bukowiec Poland

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1.	GENERAL CONSTRUCTION CHARACTERISTICS OF THE VEHICLE	
1.1	Photographs and/or drawings of a representative vehicle:	N/A
9.	BODYWORK	
9.1	Type of bodywork using the codes set out in Part C of Annex II of Directive 2007/46/EC:	N/A
9.10	Interior arrangement	N/A
9.10.3	Seats	
9.10.3.1	Number of seating positions:	N/A
9.10.3.1.1	Location and arrangement:	N/A
9.10.3.2	Seat(s) designated for use only when the vehicle is stationary:	N/A
9.10.3.3	Mass:	RAM02 – 62 kg – mass of the heaviest configuration
		RAM02 is double seat frame with two single seat S1NOV01
9.10.3.4	Characteristics: for seats not type-approved as components, description and drawings of	
9.10.3.4.1	The seats and their anchorages:	See Enclosure 2, Enclosure 3
9.10.3.4.2	The adjustment system:	N/A
9.10.3.4.3	The displacement and locking systems:	N/A
9.10.3.4.4	The seat-belt anchorages (if incorporated in the seat structure):	RAM02 – see Enclosure 2
9.10.3.4.5	The parts of the vehicle used as anchorages:	N/A
9.10.3.5	Coordinates or drawing of the R-point	
9.10.3.5.1	Driver's seat:	N/A
9.10.3.5.2	All other seating positions:	RAM02 – see Enclosure 2
9.10.3.6	Design torso angle	
9.10.3.6.1	Driver's seat:	N/A
9.10.3.6.2	All other seating positions:	RAM02 – see Enclosure 2
9.10.3.7	Range of seat adjustment	
9.10.3.7.1	Driver's seat:	N/A
9.10.3.7.2	All other seating positions:	N/A

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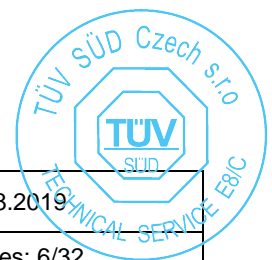
- 9.10.4. Head restraints
- 9.10.4.1. Type(s) of head restraints: RAM02 – integrated
- 9.10.4.2. Type-approval number(s), if available: N/A
- 9.10.4.3. For head restraints not yet approved N/A
- 9.13 Safety belt anchorages
- 9.13.1 Photographs and/or drawings of the bodywork showing the position and dimensions of the actual and effective anchorages including the R-points: See Enclosures
- 9.13.2 Drawings of the belt anchorages and parts of the vehicle structure where they are attached (with the material indication): See Enclosure 2
- 9.13.3 Designation of the types of safety belt authorised for fitting to the anchorages with which the vehicle is equipped:

	Anchorage location	
	Vehicle structure	Seat structure
First row of seats	N/A	N/A

Second row of seats			Anchorage location	
			Vehicle structure	Seat structure
Left-hand seat	Lower anchorages	outboard	--	Ar
		inboard	--	Ar
	Upper anchorages	--	Ar	
Right-hand seat	Lower anchorages	outboard	--	Ar
		inboard	--	Ar
	Upper anchorages	--	Ar	

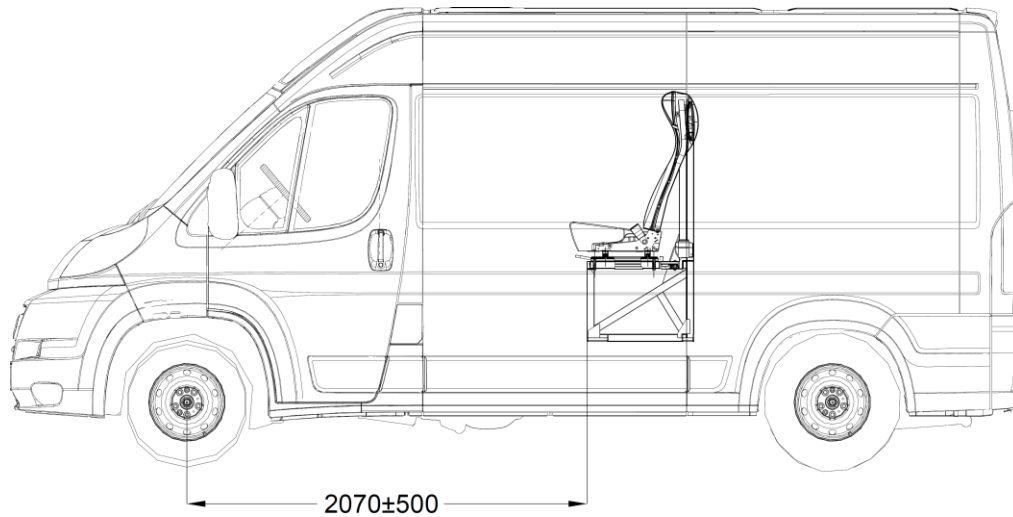
- 9.13.4 Description of a particular type of safety belt where an anchorage is located in the seat backrest or incorporates an energy dissipating device: Ar4m

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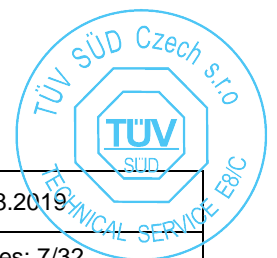
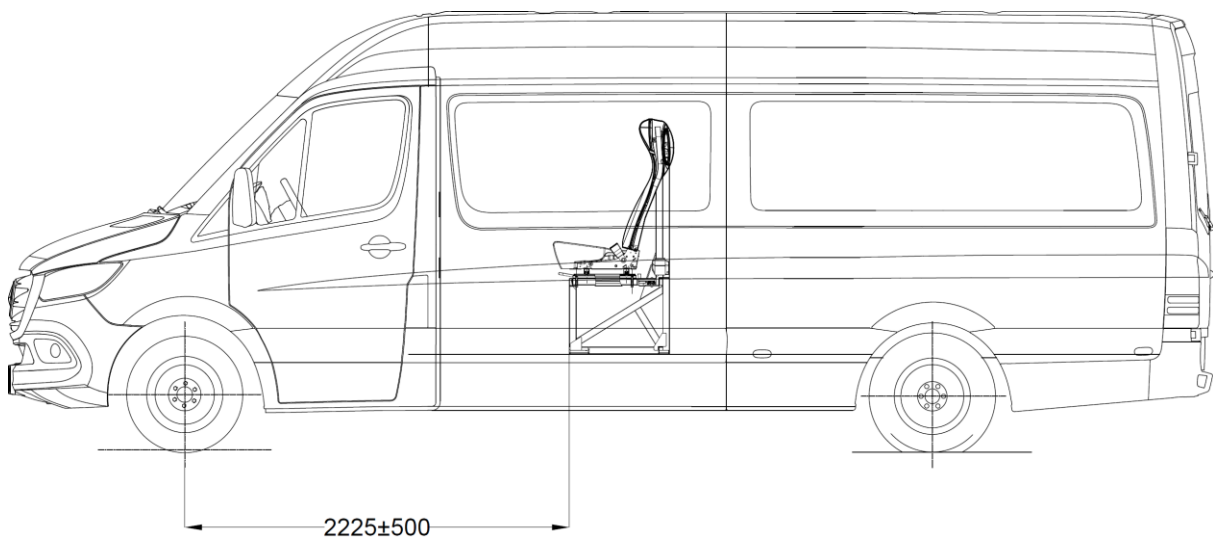


Enclosure 1: LOCATION OF THE SEATS

Location of RAM02 in Fiat Ducato/Peugeot Boxer/Citroen Jumper

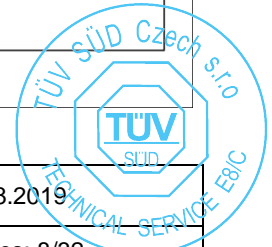
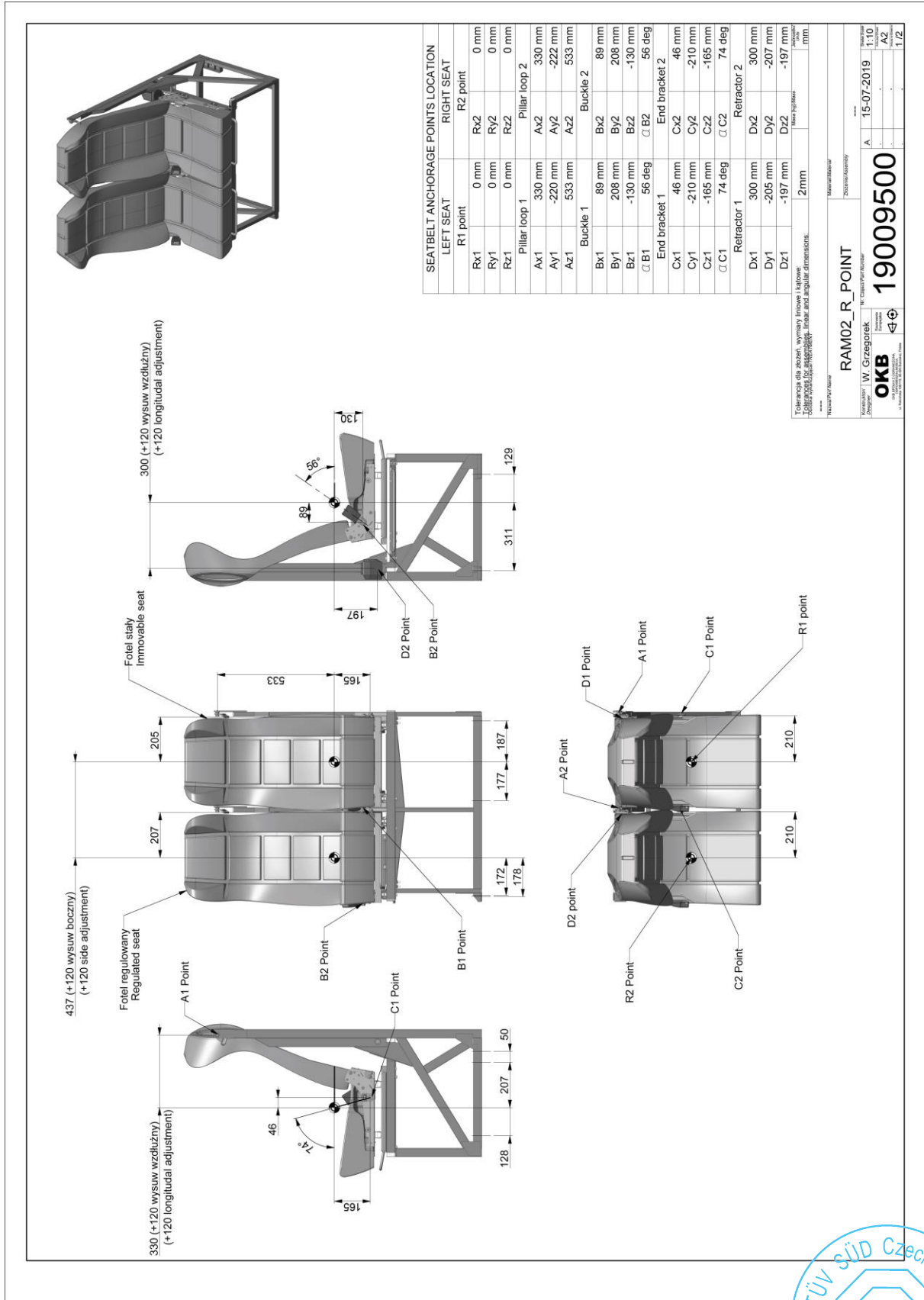


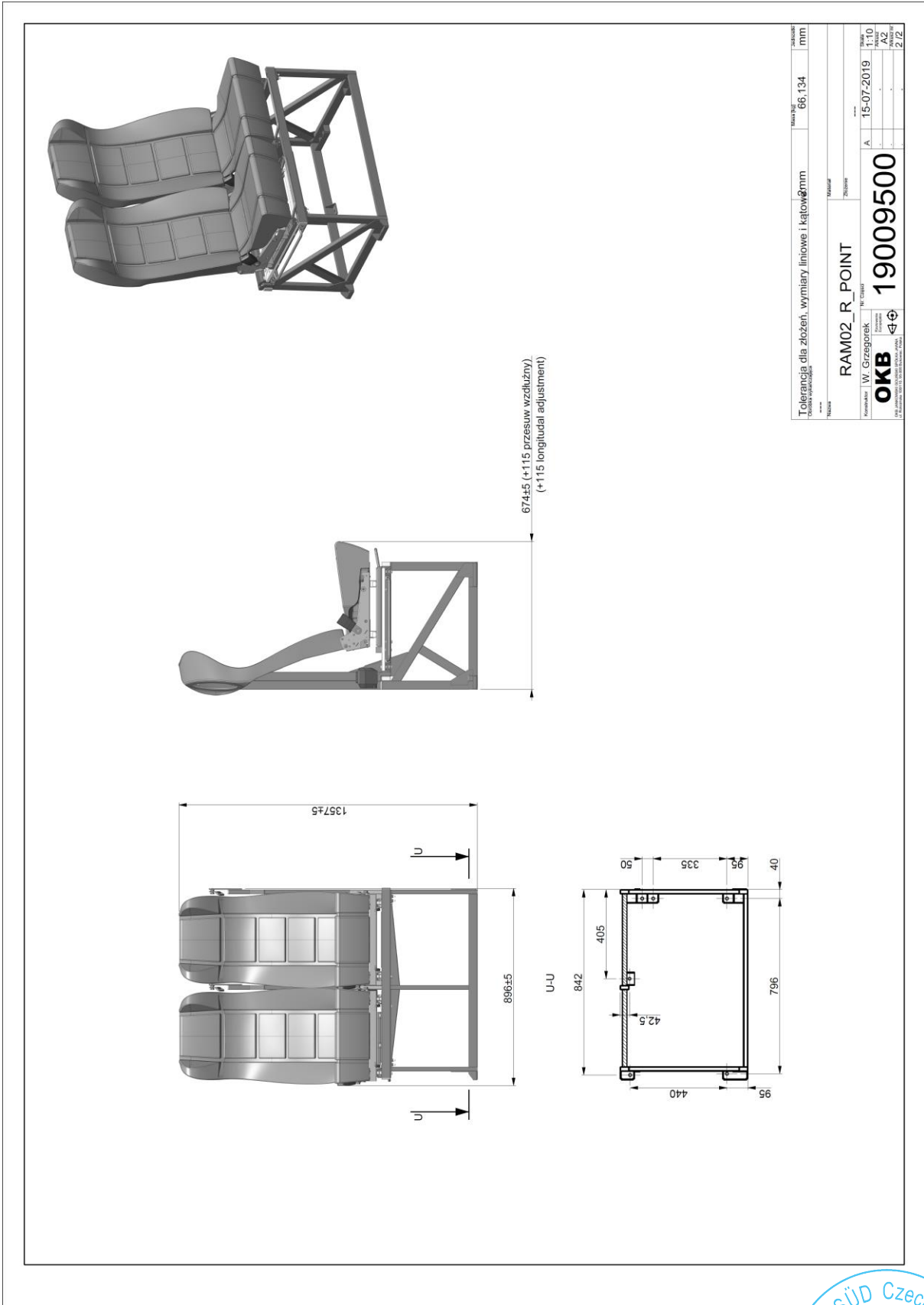
Location of RAM02 in Mercedes Sprinter/Volkswagen Crafter



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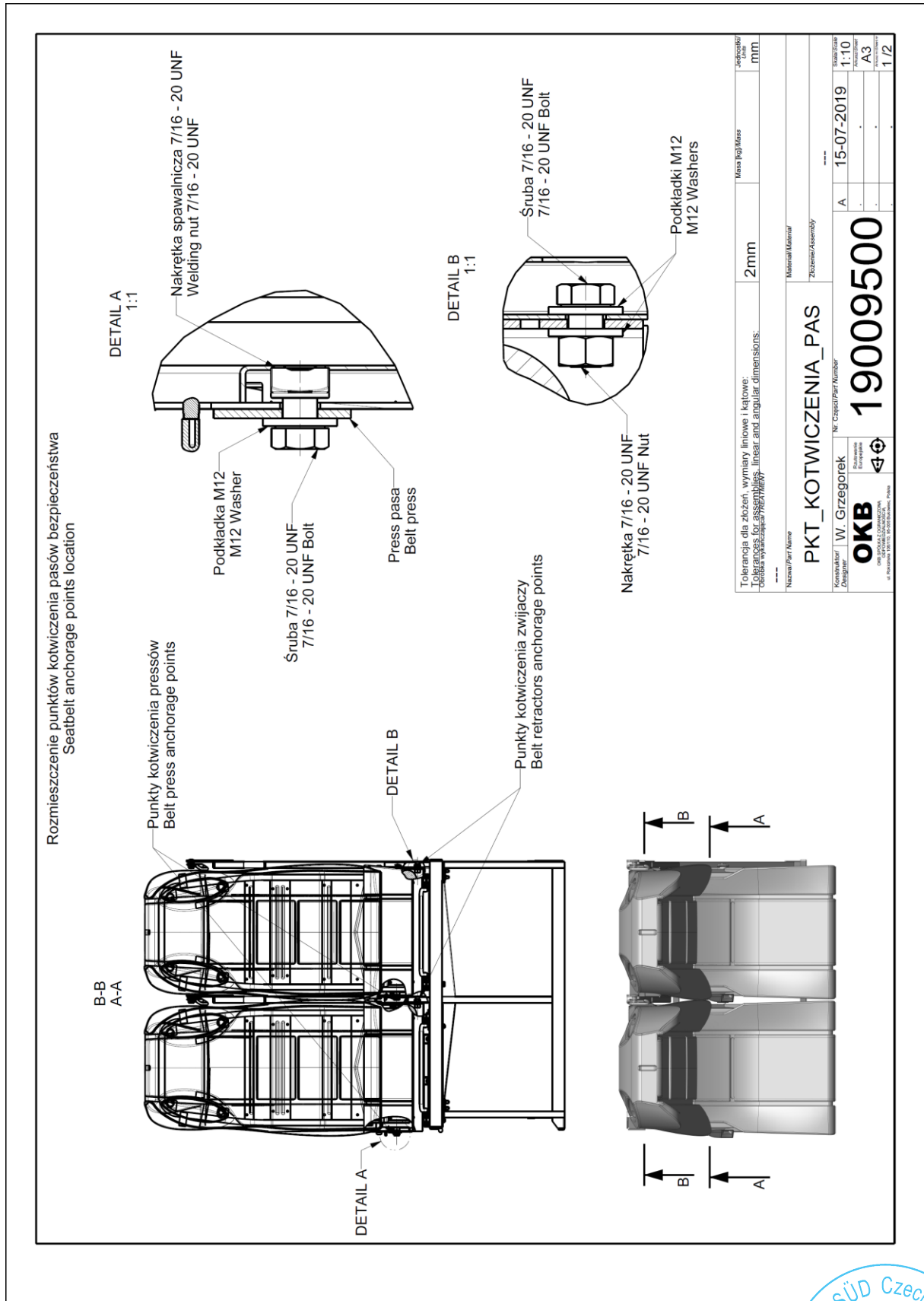
Enclosure 2: DRAWINGS OF SEATS AND SEATBELTS ANCHORAGES

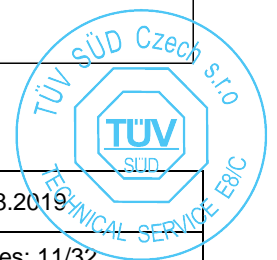
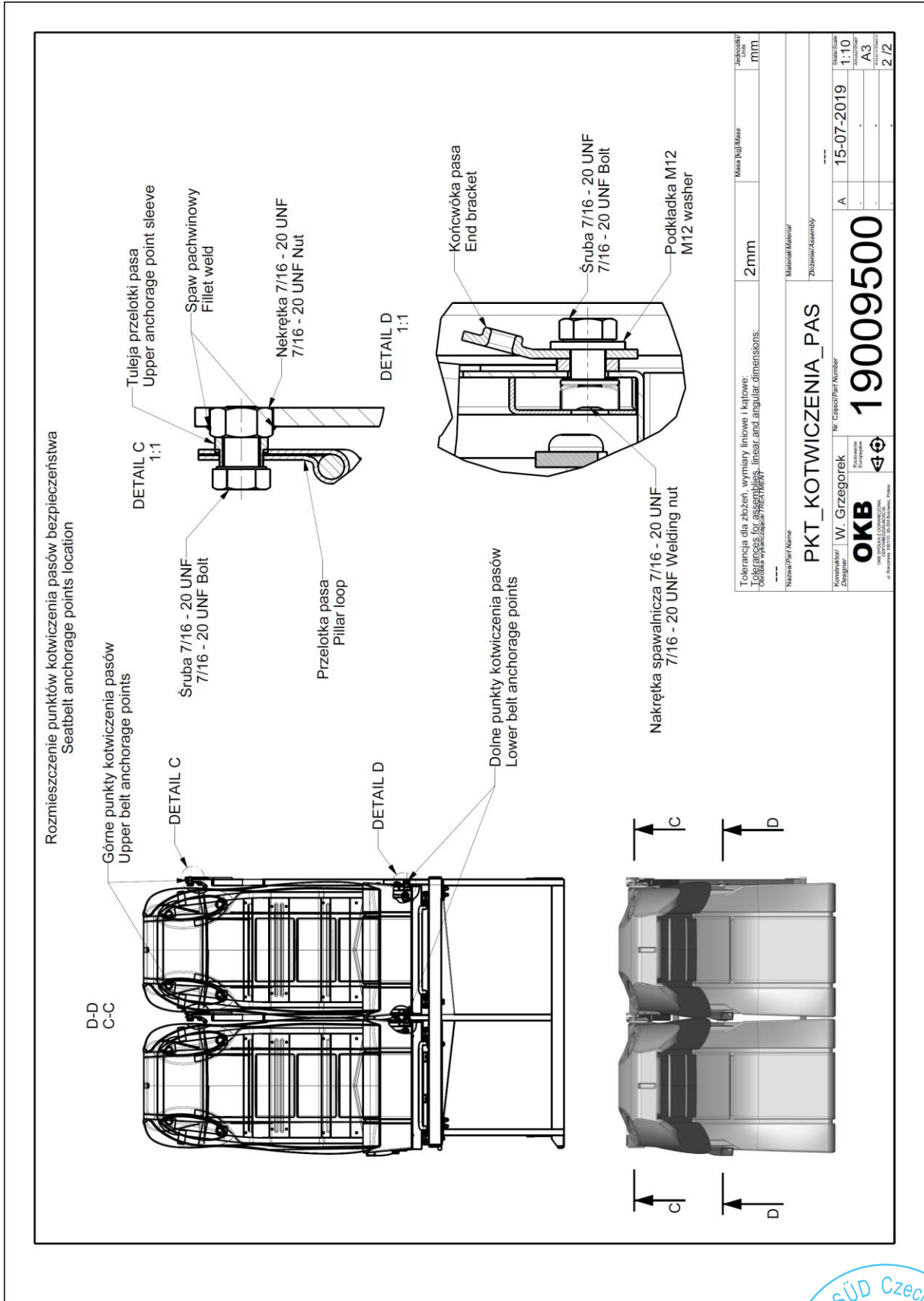




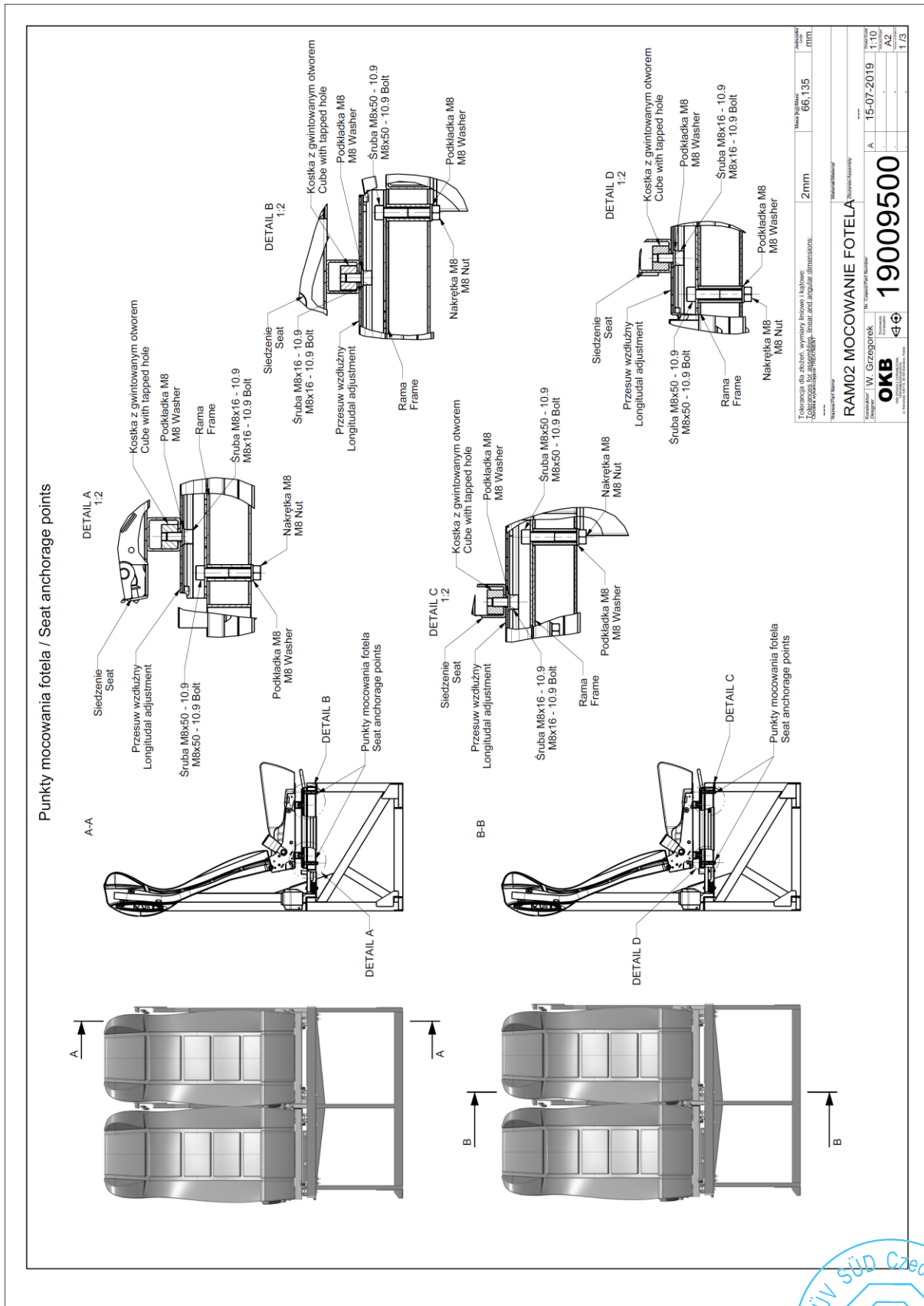
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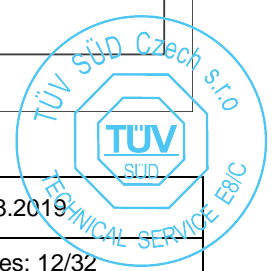




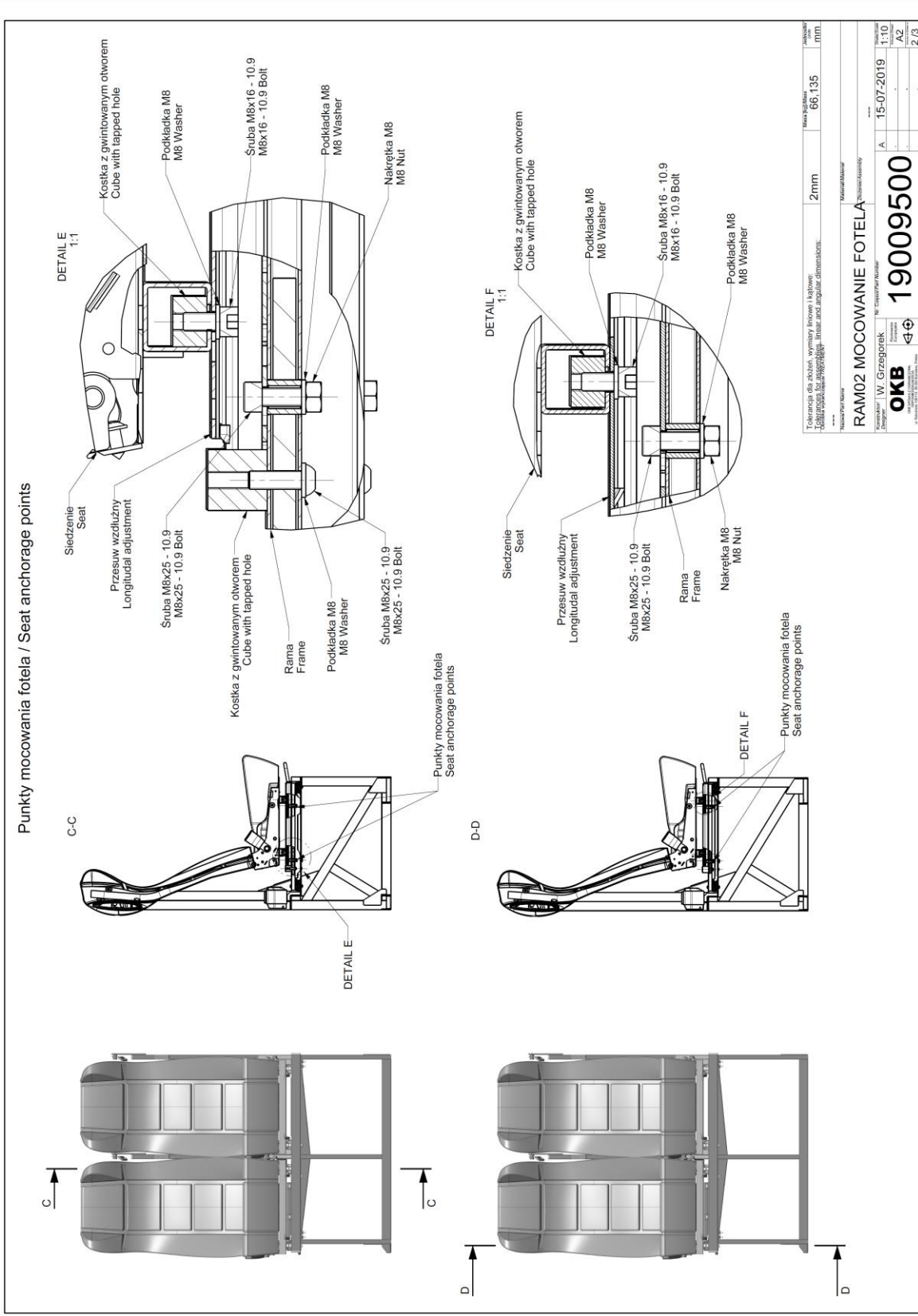
Fixation of seats to RAM02 frame



Tolerancje dla zleceń, wymiary linowe i kątowe: Tolerance for orders, linear and angular dimensions:		2mm	66,135	mm
Nazwa rysunku: RAM02 MOCOWANIE FOTELA		Materiał: 66,135		
Numer rysunku: 19009500		Data: 15-07-2019		
Projektant: W. Grzegorek		Skala: A2		
Weryfikator: OKB		Liczba: 1/3		

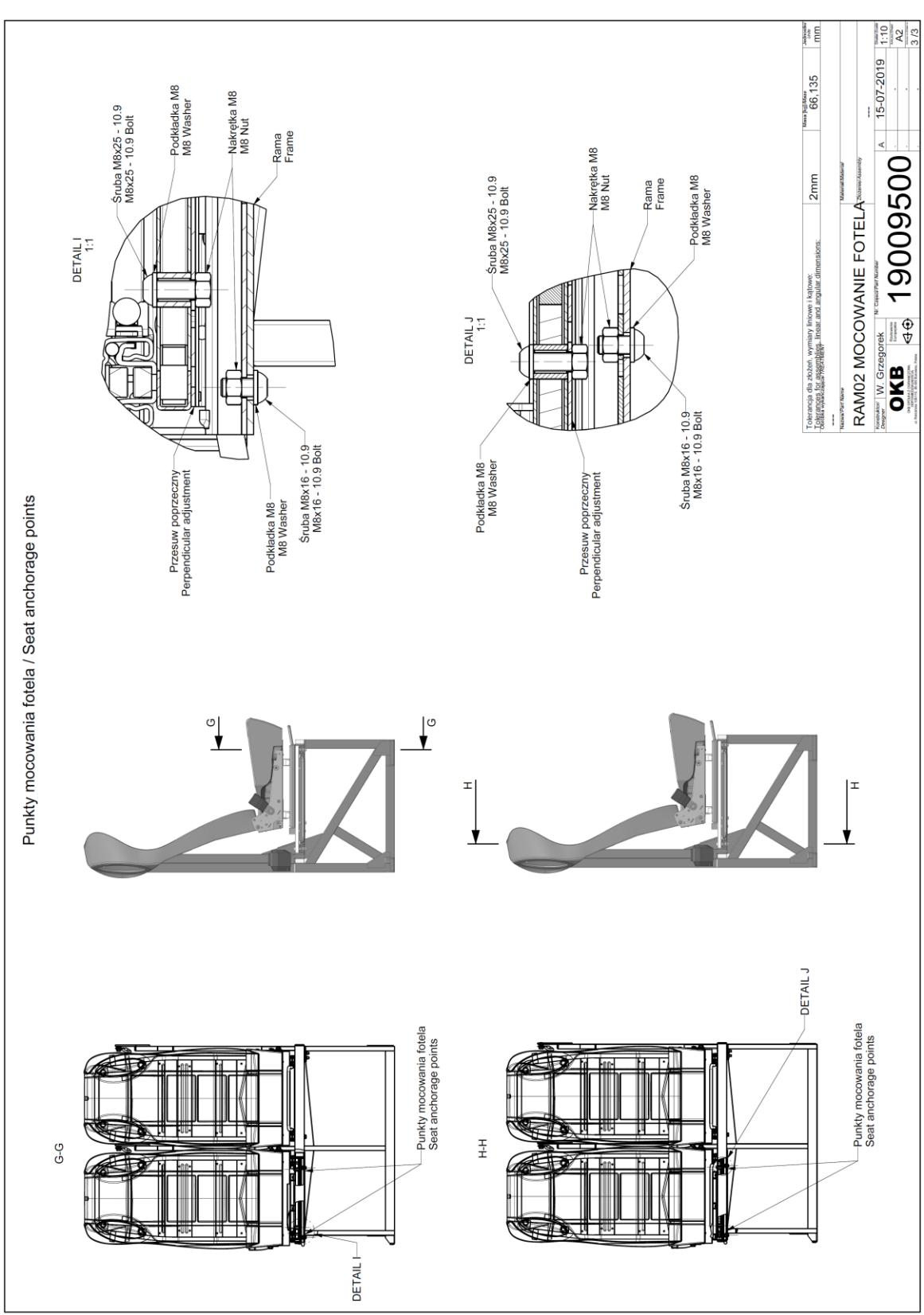


Punkty mocowania fotela / Seat anchorage points

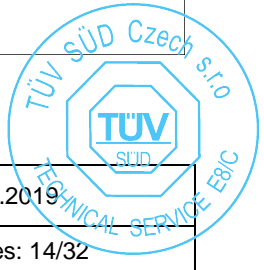


Tolerancje dla zebien, wymiary knowe i kątowe: <small>tolerances for teeth, linear and angular dimensions:</small>		Materiał: <small>Material:</small>	
0.2mm	2mm	66.135	RAML
Numer partii: RAM02 MOCOWANIE FOTELA <small>Batch number: RAM02 MOCOWANIE FOTELA</small>			
Wykonano: <small>Designed:</small>	Wzrostek: <small>Checked:</small>	Wzrostek: <small>Checked:</small>	Wzrostek: <small>Checked:</small>
W. Grzegorek	W. Grzegorek	W. Grzegorek	W. Grzegorek
Numer rysunku: 19009500 <small>Drawing number: 19009500</small>		Data: 15-07-2019 <small>Date: 15-07-2019</small>	
Skala: 1:10 <small>Scale: 1:10</small>		Skala: A2 <small>Scale: A2</small>	
Liczba arkuszy: 2/3 <small>Number of sheets: 2/3</small>		Liczba arkuszy: 2/3 <small>Number of sheets: 2/3</small>	

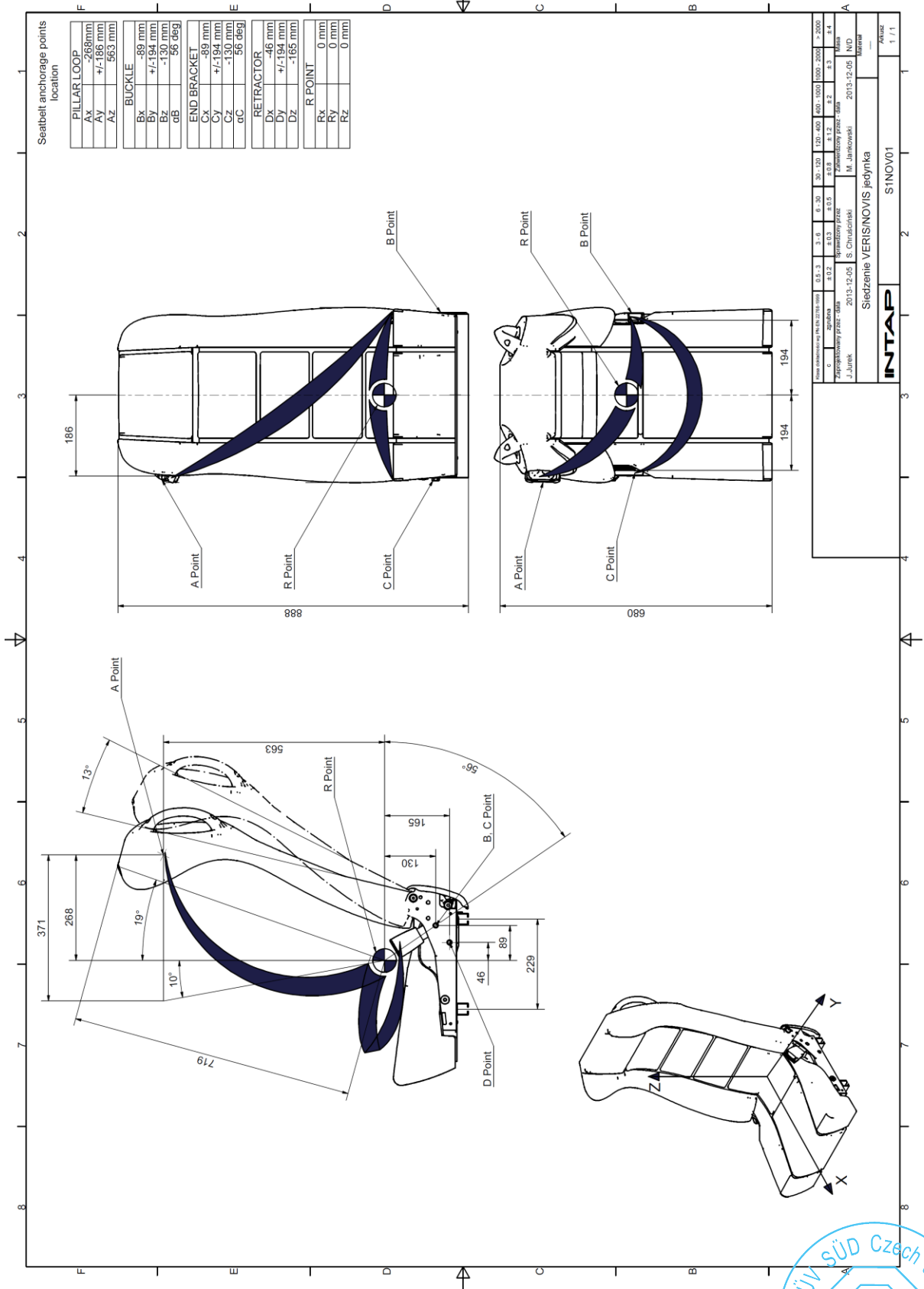
Punkty mocowania fotela / Seat anchorage points



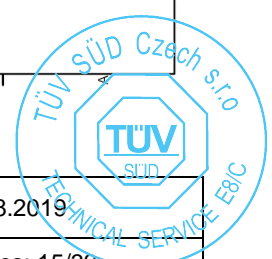
Tolerancje dla zwozeń, wymiary fitowe kątowników, kształtowników, rur, list i innych elementów: 2mm		Skala rysunku: 66,135	Skala: 1:10
Numer rysunku: RAM02 MOCOWANIE FOTELA		Wersja: A	Data: 15-07-2019
Projektant: W. Grzegorek		Numer rysunku: 19009500	
OKB		3/3	

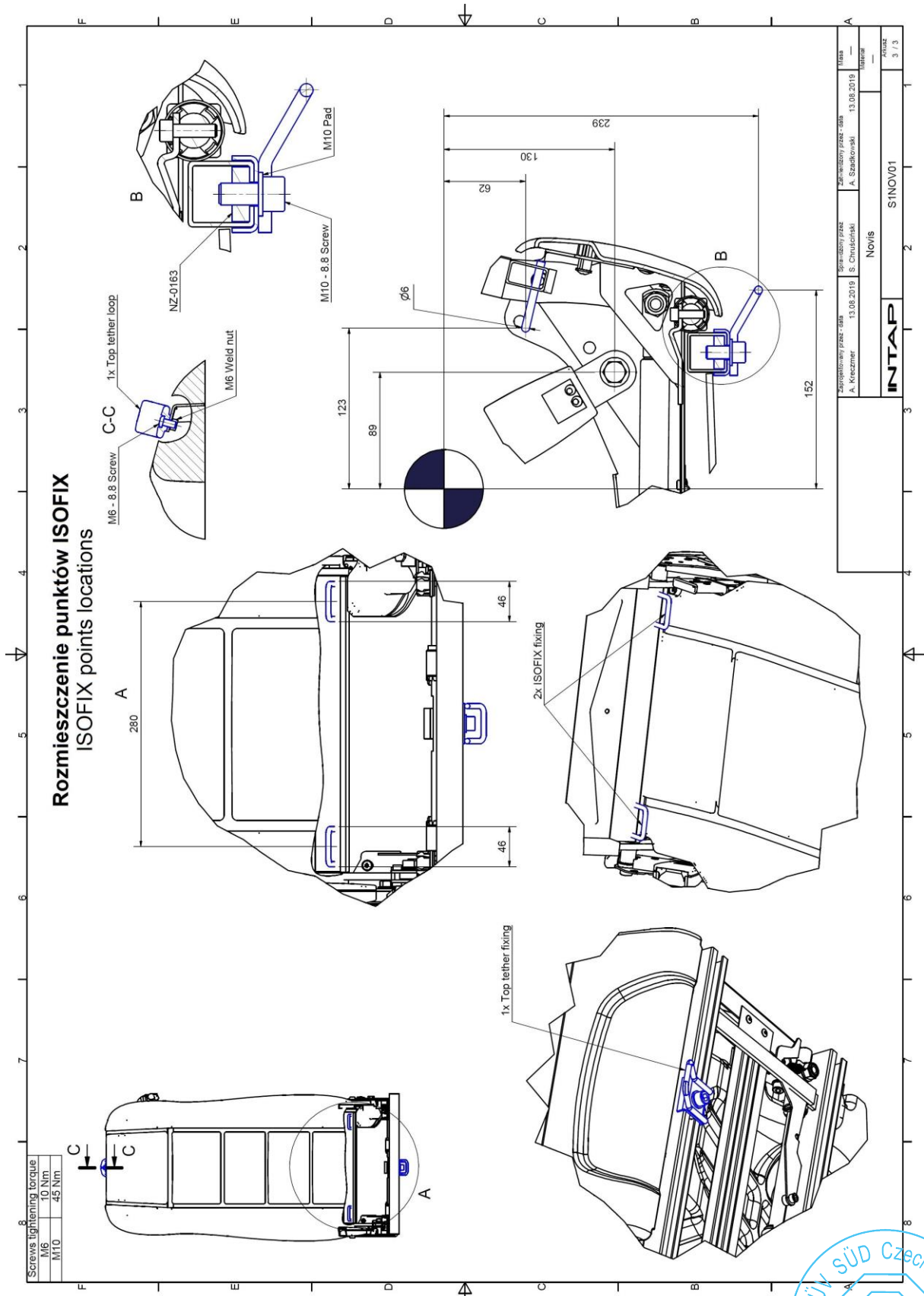


Seats mounted to RAM02 frame

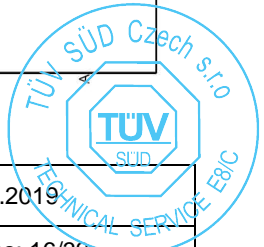


0.5	3	6	30	100	400	1000	2000	> 2000
0.01	0.02	0.05	0.1	0.2	0.5	1	2	5
Zaprojektowany przez: S. Chruściński								
Sprawdzony przez: M. Jankowski								
2013-12-05 S. Chruściński								
2013-12-05 N/D								
Materiał								
Siedzienie VERIS/NOVIS jedynka								
S1NOV01								
INTAP								
KAWAZ								
1 / 1								



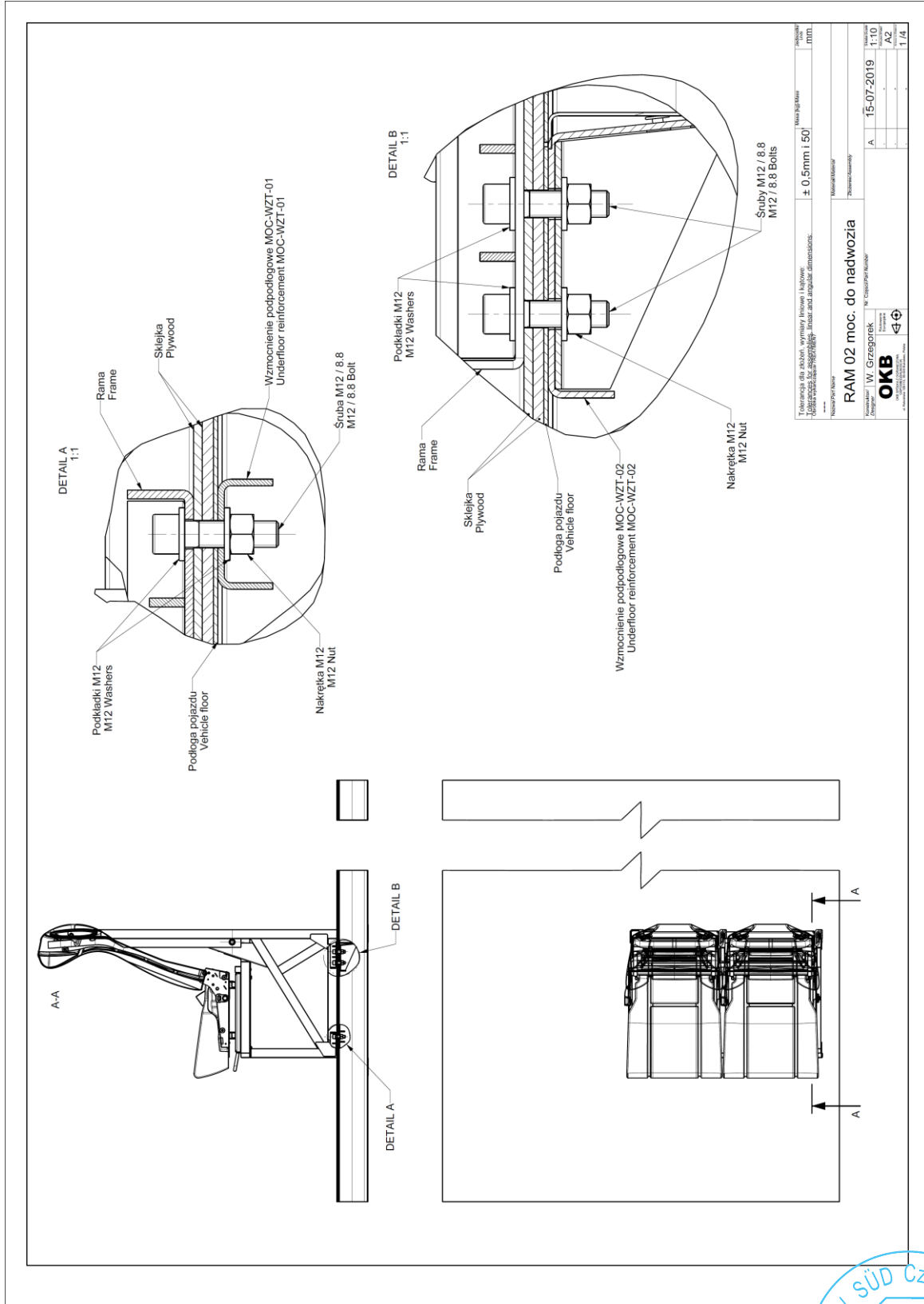


INTAP	Novis	SINOVO1	AVIAZ 3 / 3
Opracowany przez: S. Chodurka 13.08.2019 A. Kwiecien		Opracowany przez: S. Chodurka 13.08.2019 A. Szpakowski	
Max 13.08.2019		Max 13.08.2019	

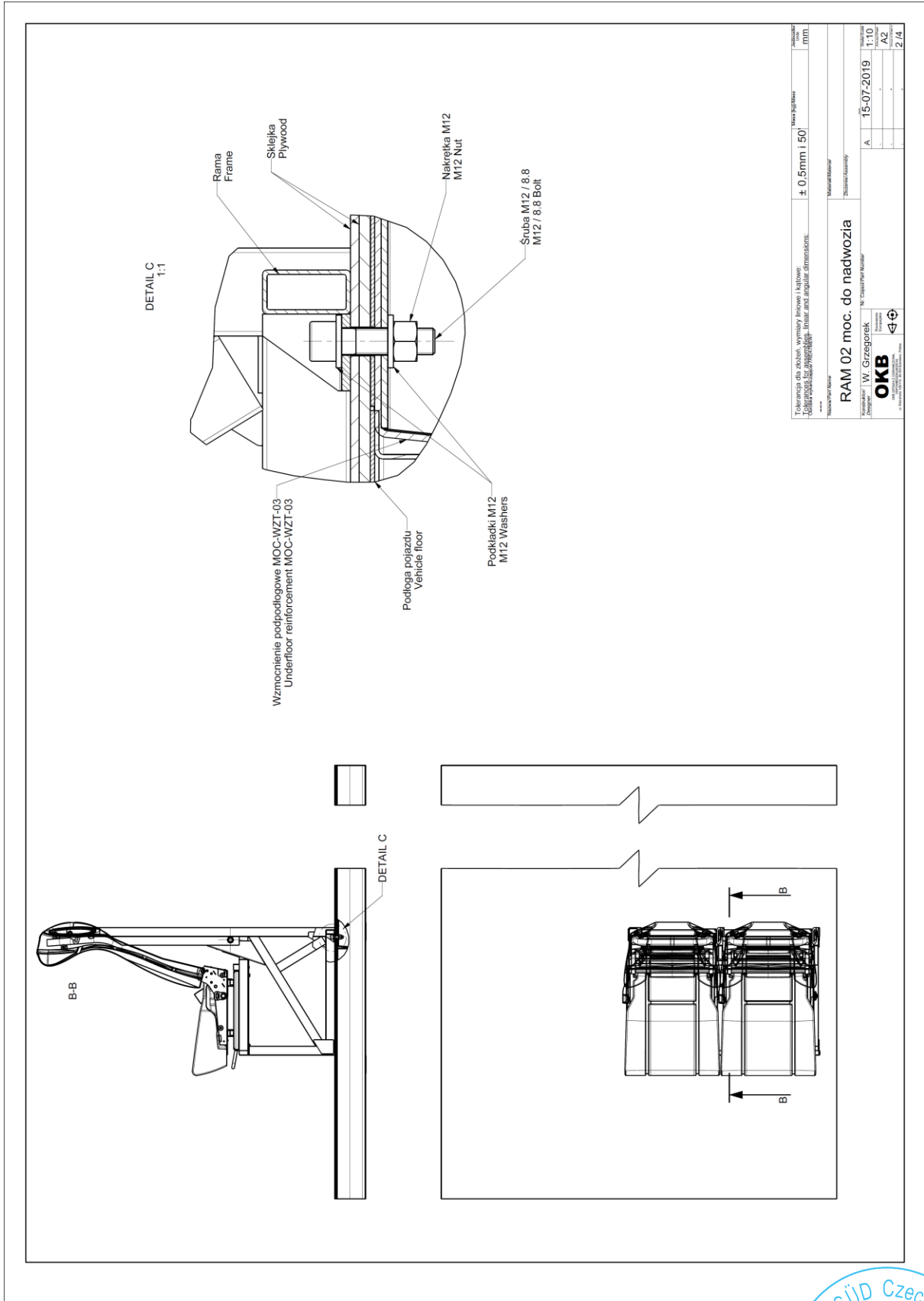


Enclosure 3: SEATS ANCHORAGES

Solution 1 – fixation of RAM02 to Fiat Ducato/Peugeot Boxer/Citroen Jumper

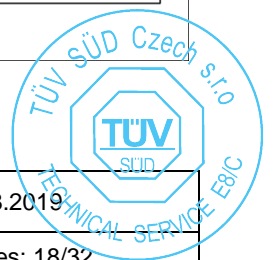


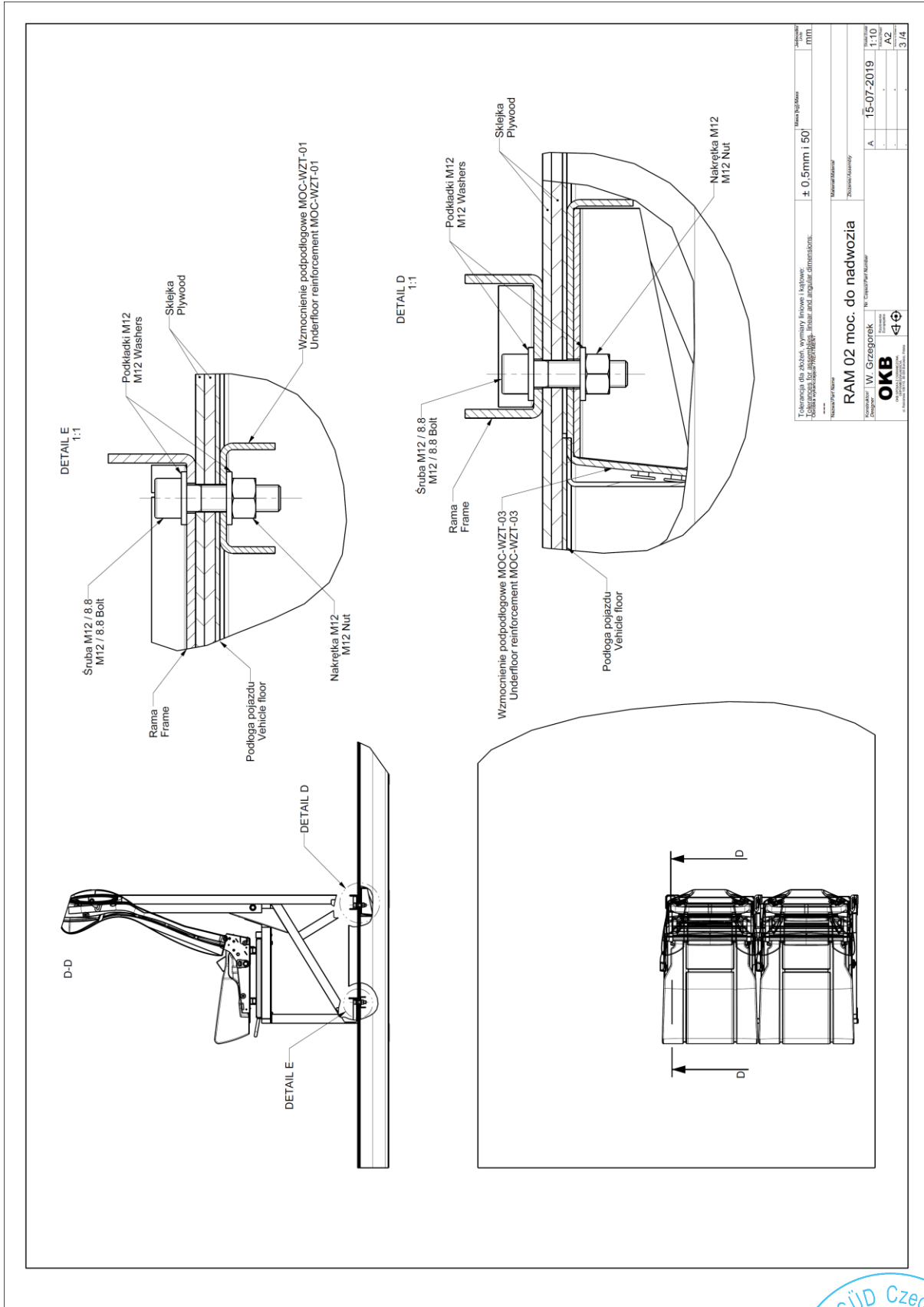
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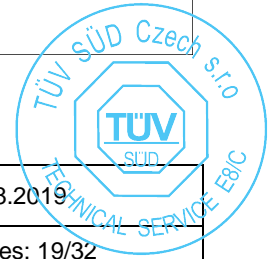
Tolerancje dla zwozów, wymiary linowe kątowne: Długości i kąty: $\pm 0,5\text{mm}$ i 50°		Wymiary PMTL	
Numer rysunku RAM 02 moc. do nadwozia		Masa całkowita	
Projektant W. Grzegorek		Zakres klasyfikacji	
Numer rysunku OKB		Data 15-07-2019	
Wersja 1		Liczba A2	
Zmiany -		Liczba 2 / 4	

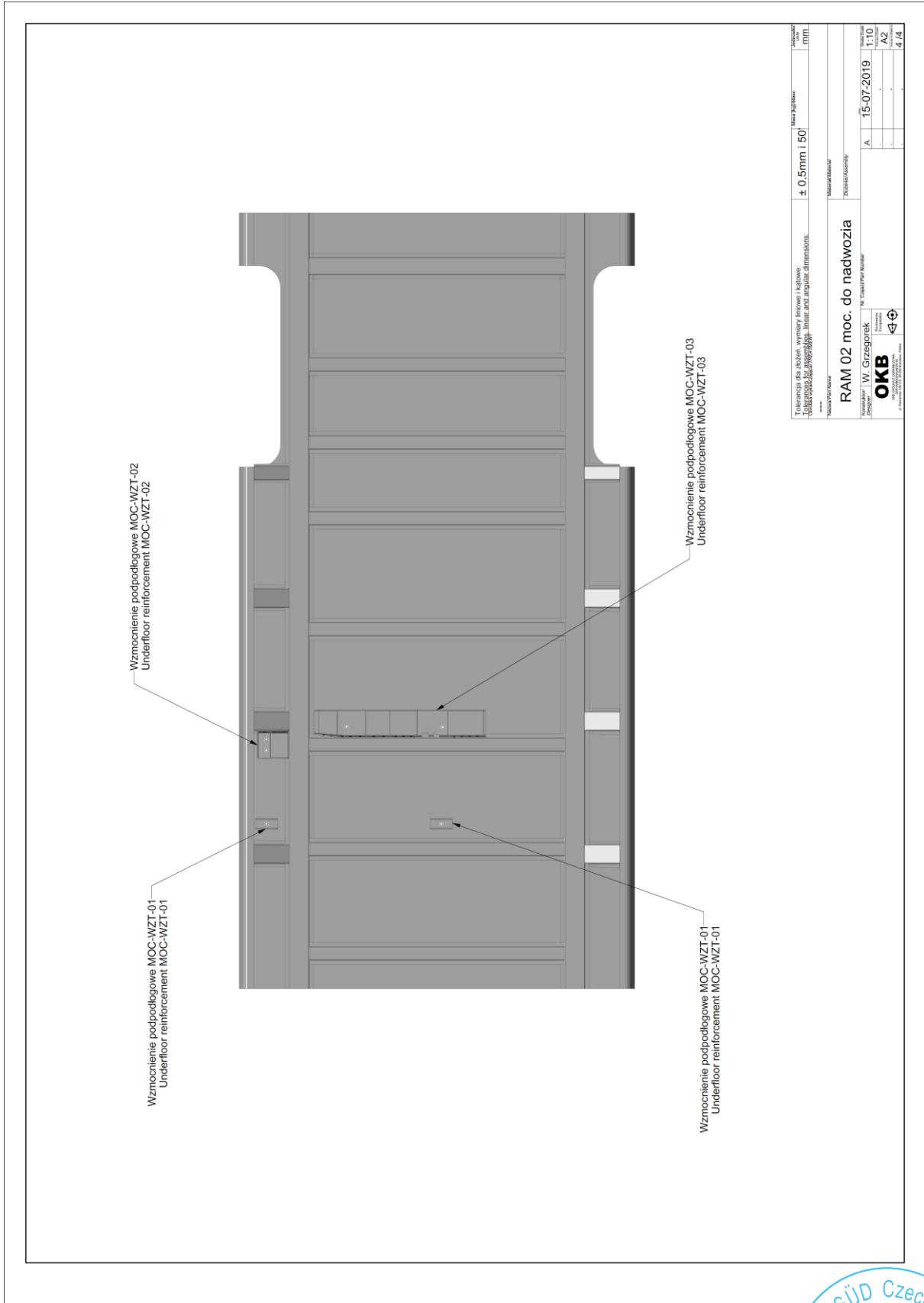
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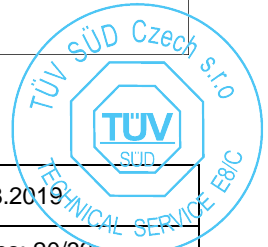
Tolerancje dla zwozeń, wymiary fitowne kątowników i kątowników z wyjątkami, liniowymi i kątowymi wymiarami:		Wymiary nominalne	
± 0.5mm i 50'		M12	
Numer partii / batch: _____			
Nazwa / Name: _____			
Zakres / Scope: _____			
Data / Date: 15-07-2019			
Projektant / Designer: W. Grzegorek			
Numer / No: _____			
Wersja / Version: _____			
Liczba / Number: _____			
Strona / Page: 3 / 4			

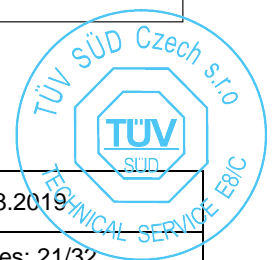
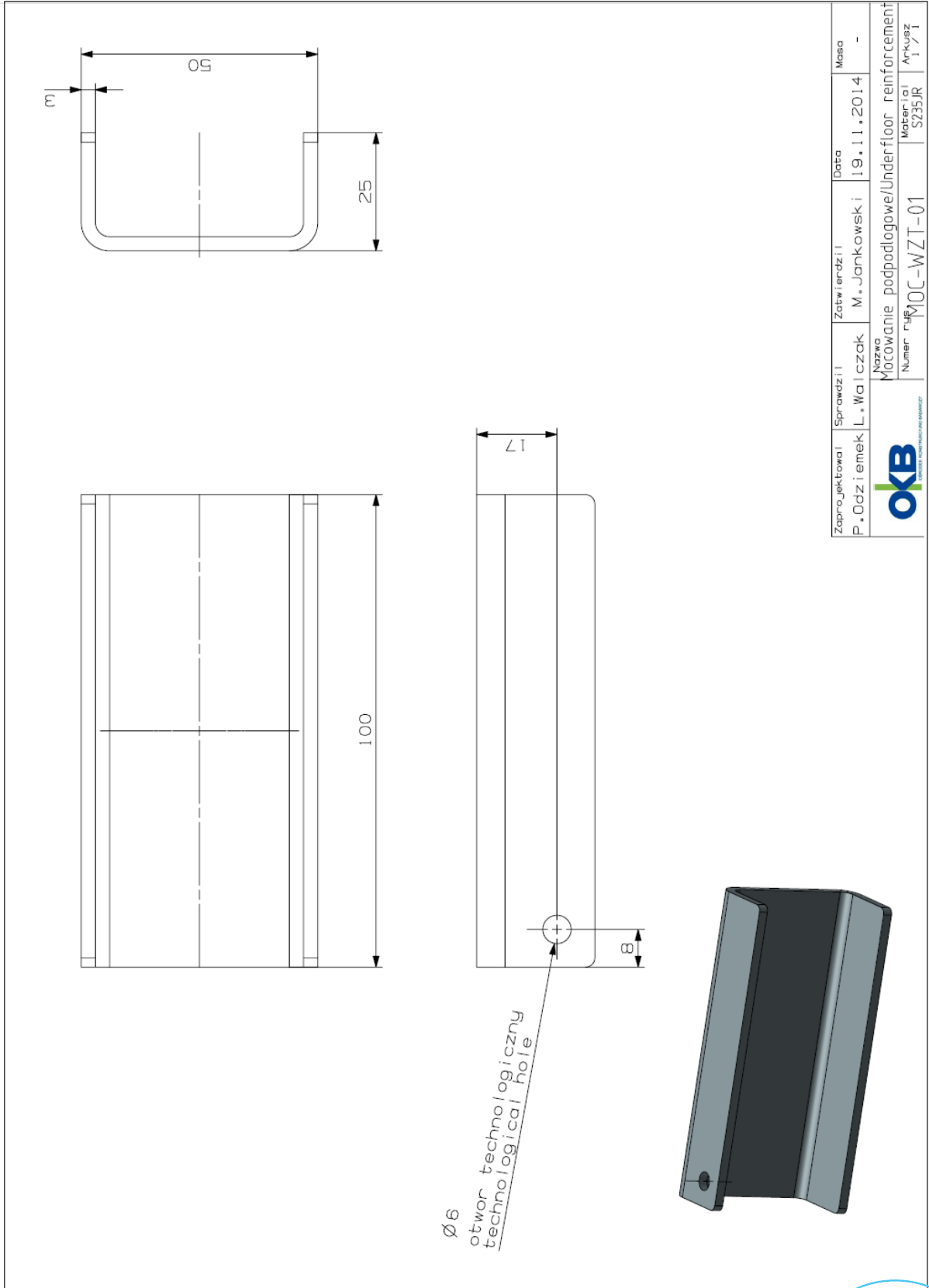


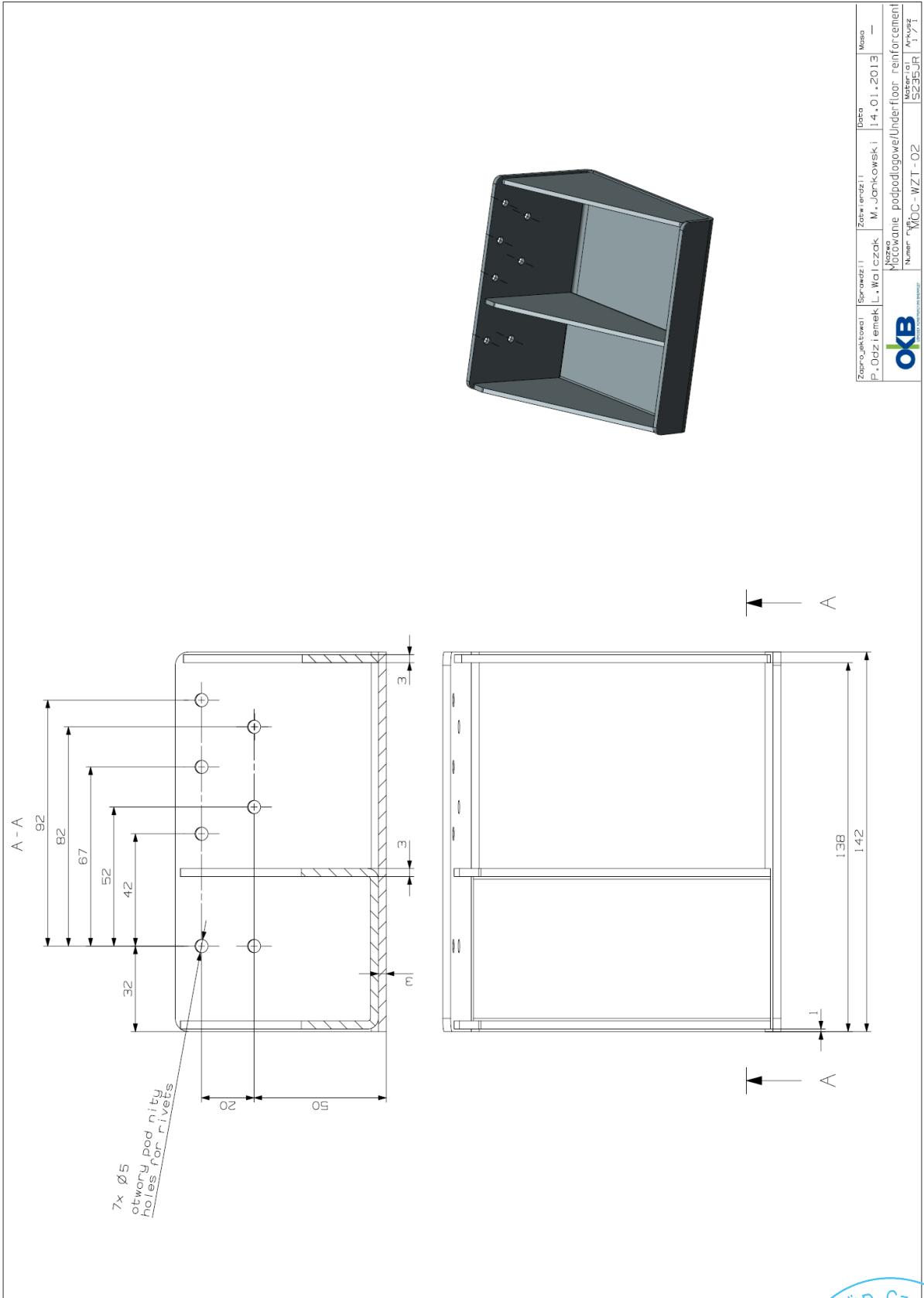


Tolerancje dla zbrojeń, wymiary i kątowe: Tolerances for reinforcement, linear and angular dimensions:		Wymiary: Dimensions:	Skala: Scale:
± 0.5mm i 50°		± 0.5mm i 50°	1:10
Numer projektu: Project Number:		Wariant: Variant:	Wariant: Variant:
RAM 02 moc. do nadwozia		Wariant: Variant:	Wariant: Variant:
Projektant: Designer:		Wariant: Variant:	Wariant: Variant:
OKB		Wariant: Variant:	Wariant: Variant:
15-07-2019		Wariant: Variant:	Wariant: Variant:
A		Wariant: Variant:	Wariant: Variant:
A2		Wariant: Variant:	Wariant: Variant:
4 / 4		Wariant: Variant:	Wariant: Variant:

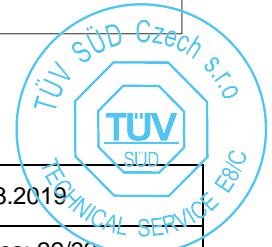
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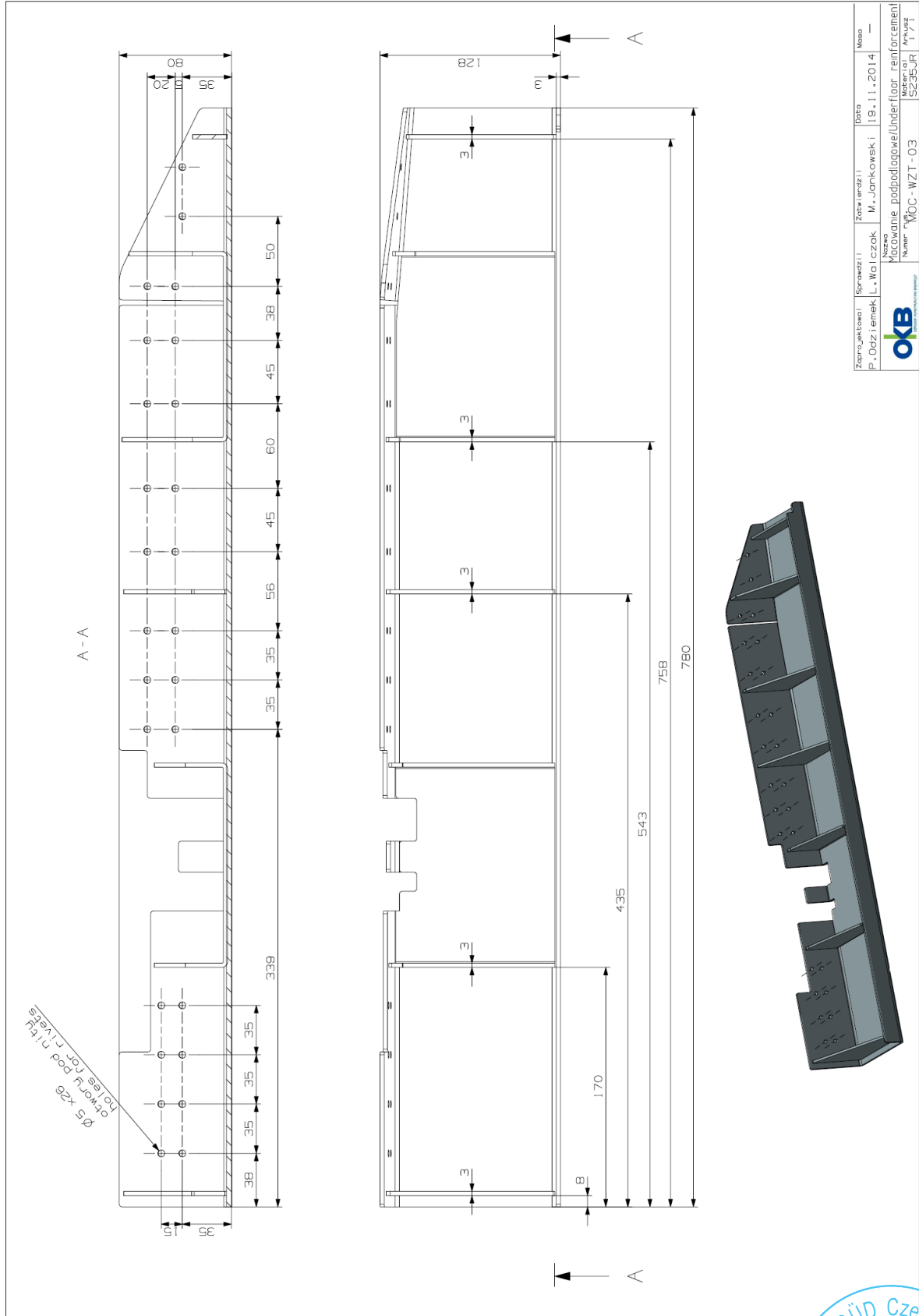




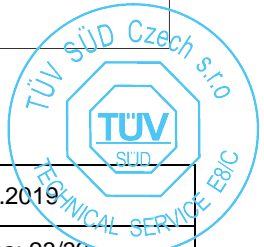


Zaprojektował P. Dądziałek	Sprawił L. Walczak	Zatwierdził M. Jankowski	Data 14.01.2013	Masa —
Nazwa Podłoga podłogowa/Underfloor reinforcement			Numer MOC-WZT-02	
OKB			Numer projektu 3235JR	

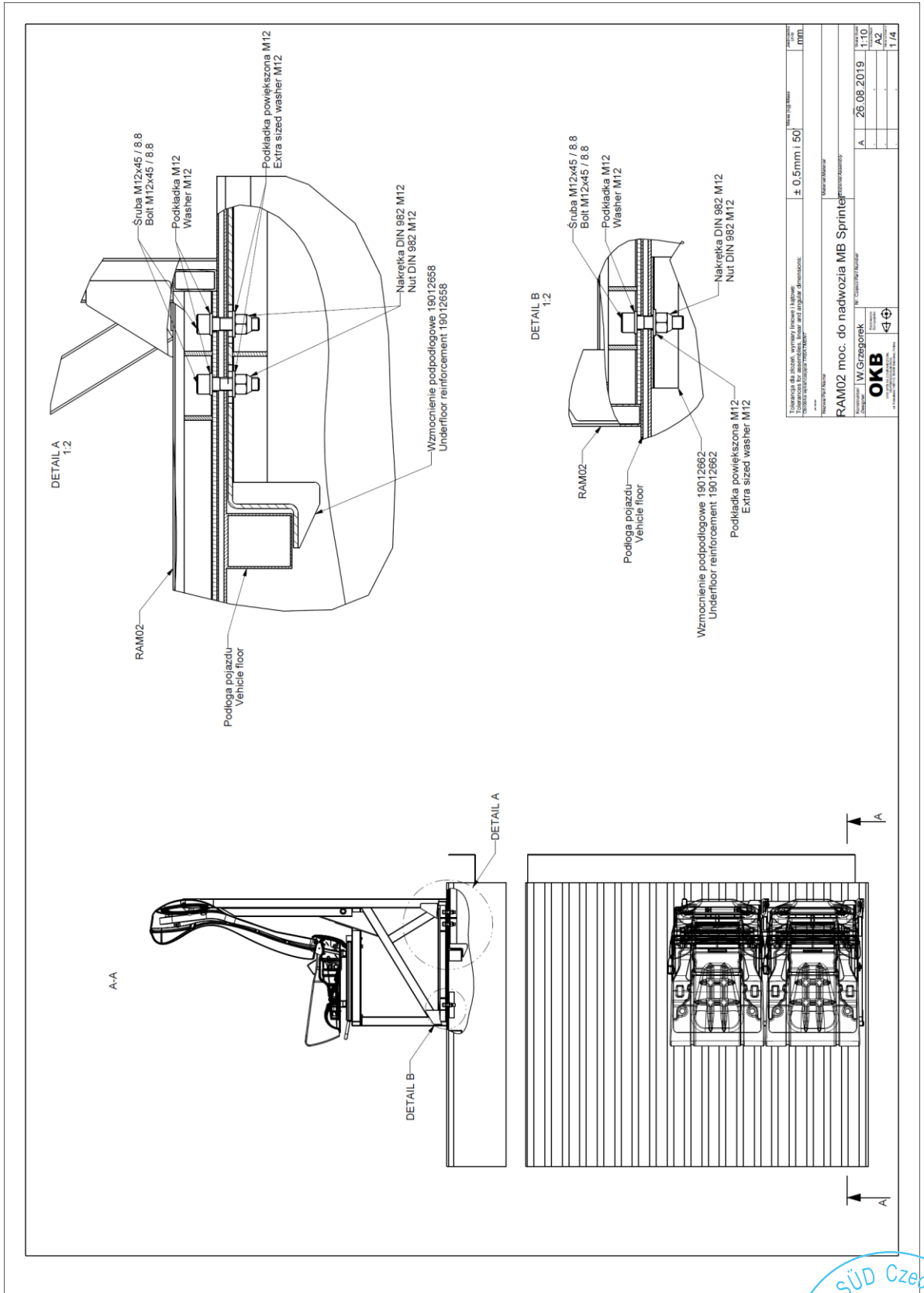




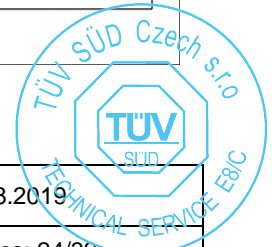
Zamawiający	Sprawozdanie	Zakaznik	Data	Masa
P. Olsztyński	L. Wójcik	M. Jankowski	19.11.2014	—
Nazwa: Wzrostanie podłogowe/Underfloor reinforcement				
Numer: WOC-WZT-03				
Numer: 5235JR				

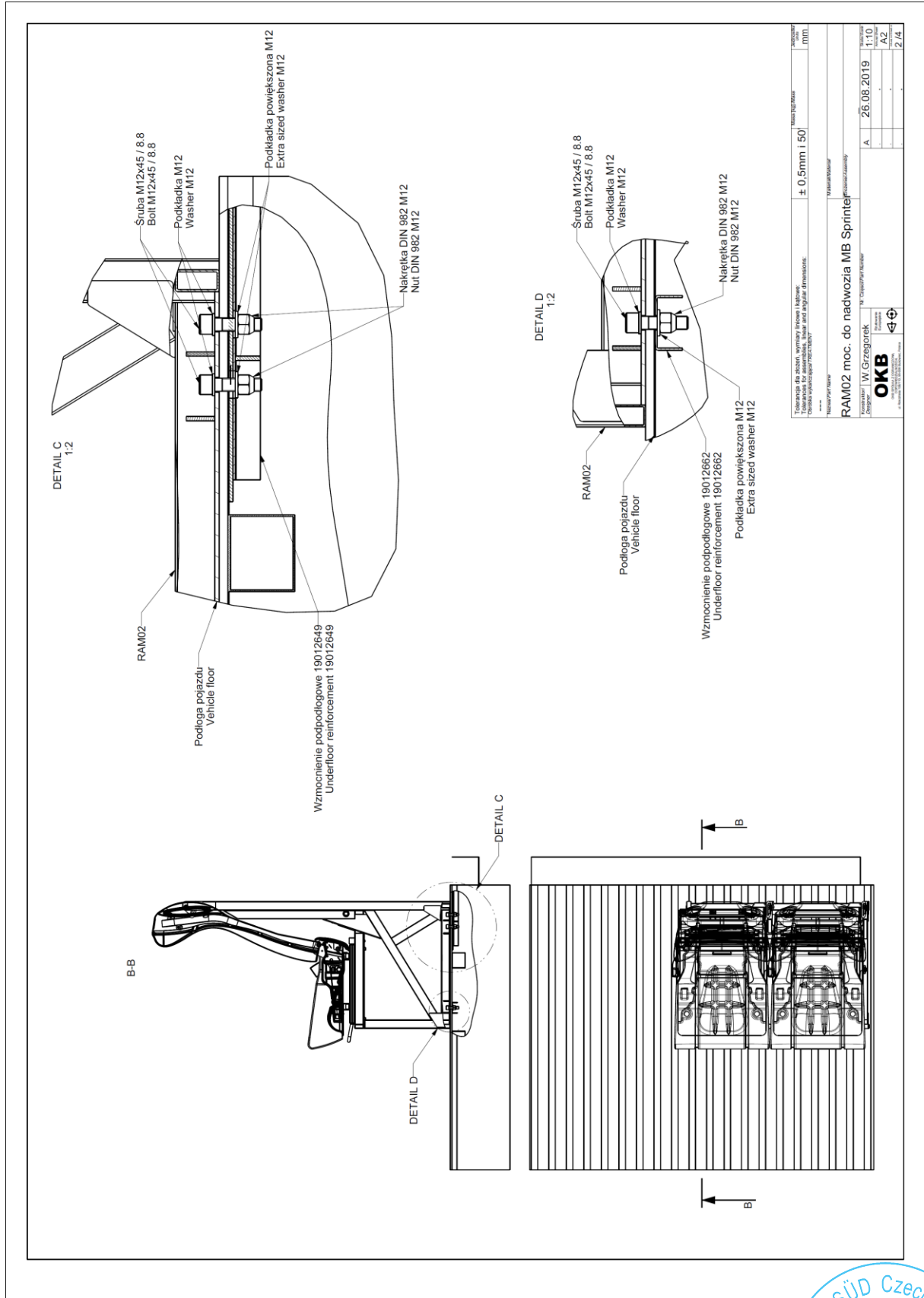


Solution 2 – fixation of RAM02 to Mercedes Sprinter/Volkswagen Crafter

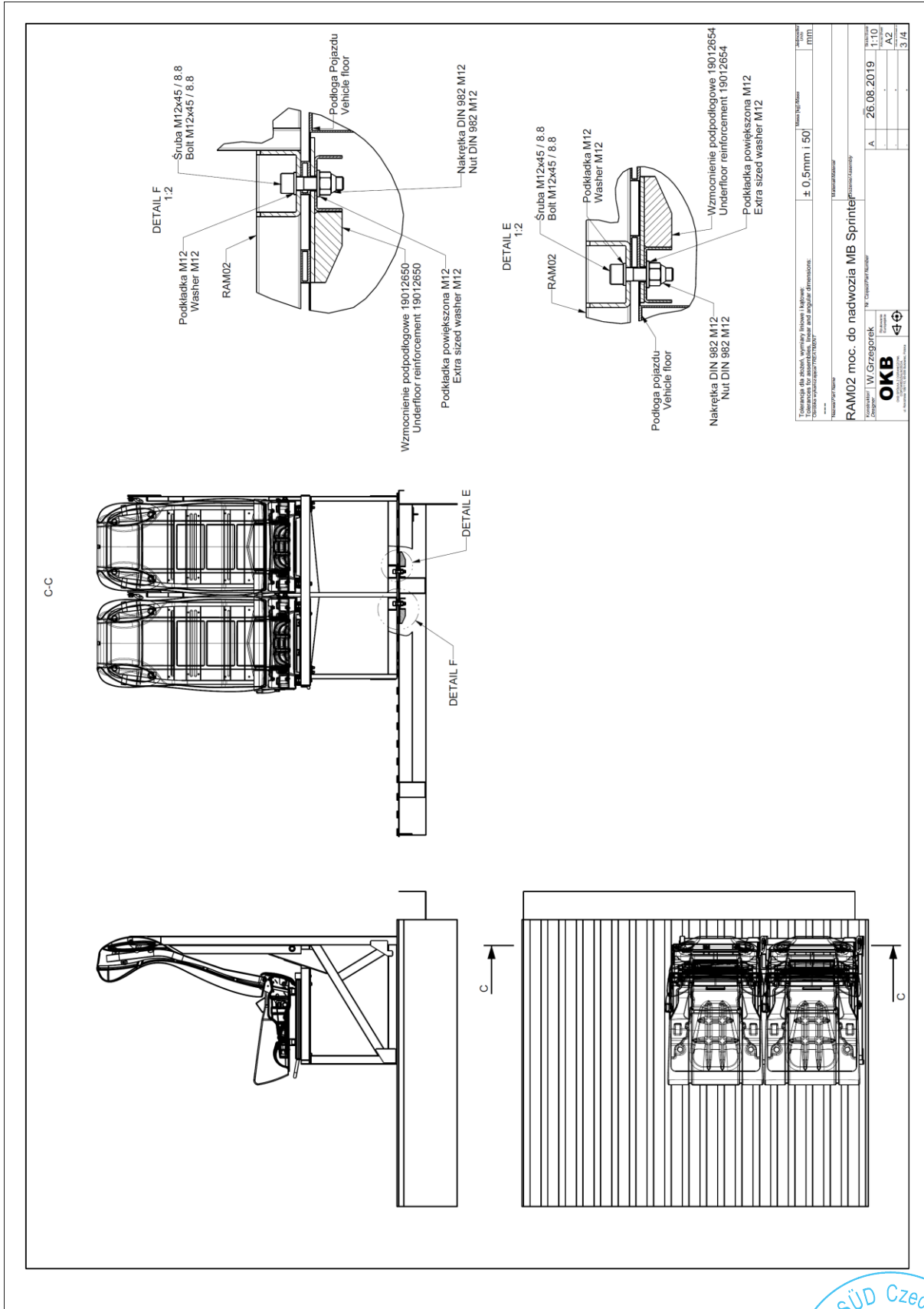


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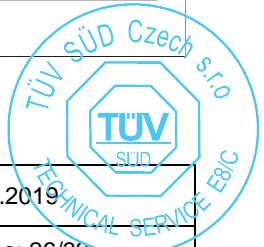


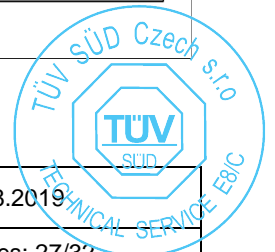
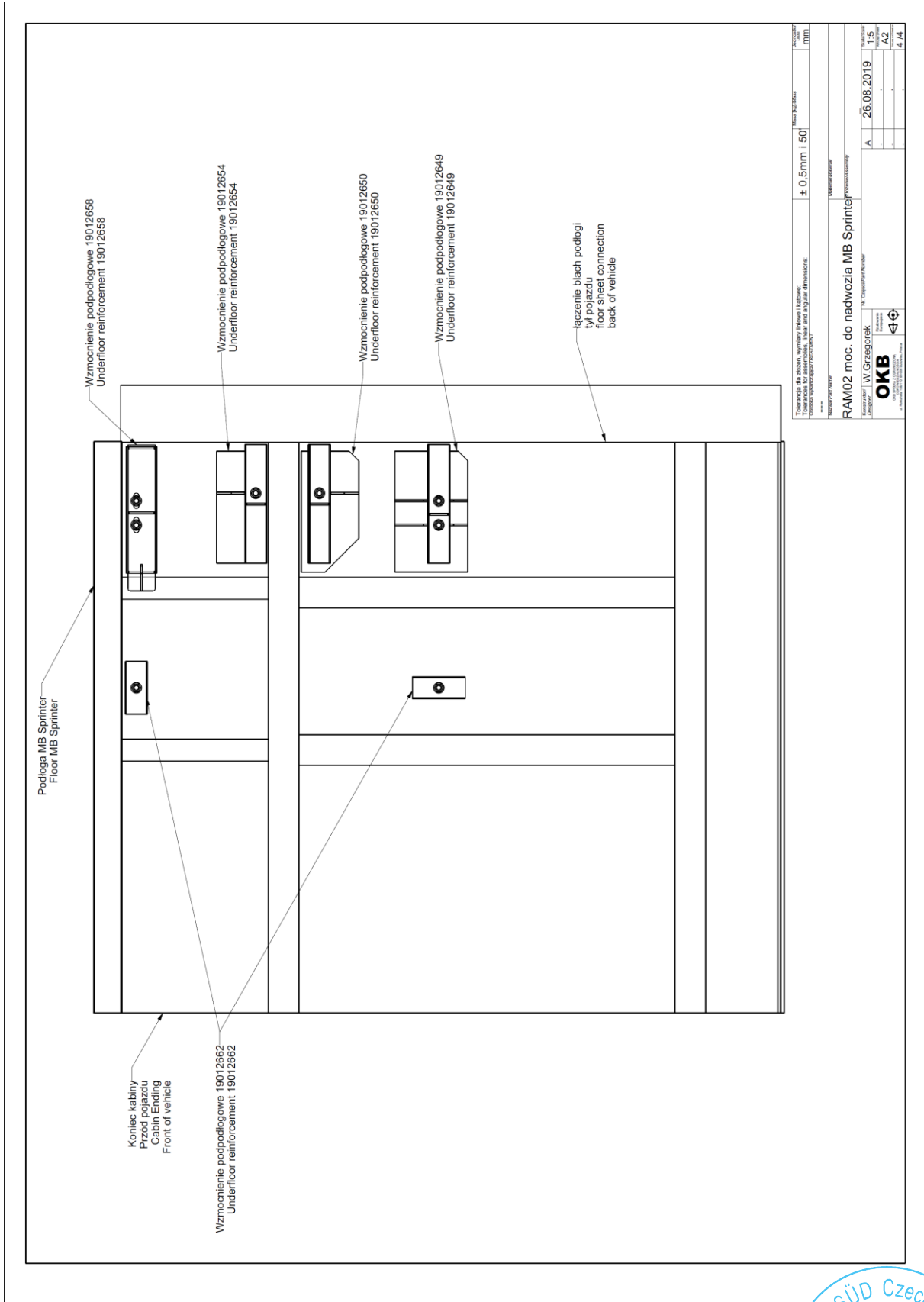


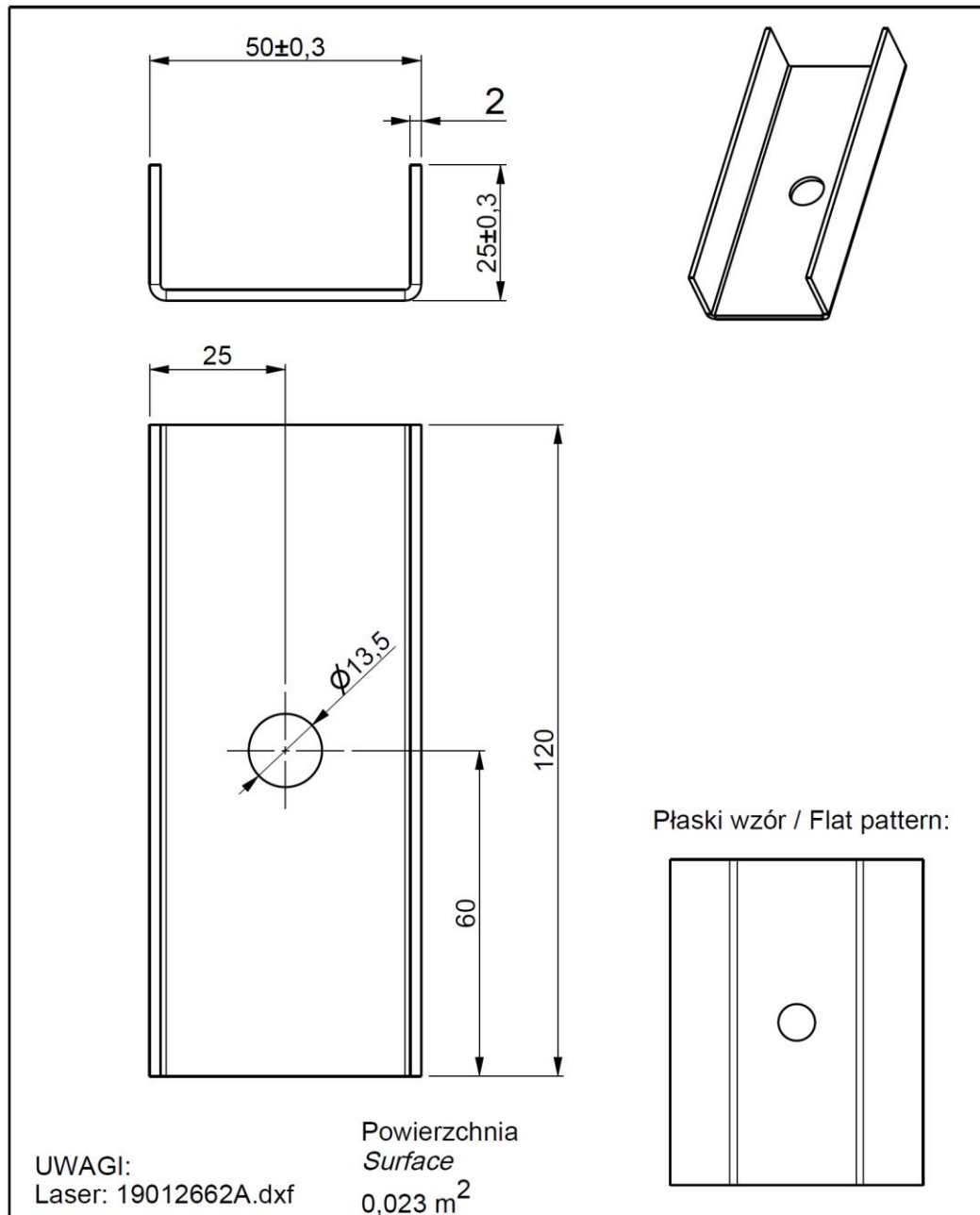
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Tolerancje dla zbrozi, wzmocnień i łączników Tolerances for reinforcement and angular dimensions Tolerances for reinforcement and angular dimensions		Wzrost/Height ± 0.5mm i 50'	Waga/Wt. FUTILL
Numer projektu RAM02 moc. do nadwozia MB Sprinter			
Numer rysunku RAM02 moc. do nadwozia MB Sprinter			
Projektant W. Grzegorek		Wzrost/Height 1,10	
OKB		Waga/Wt. A2	
26.08.2019		Wzrost/Height 3/4	

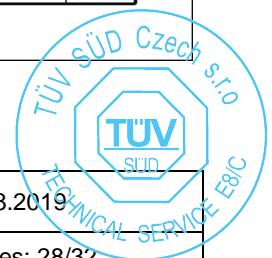


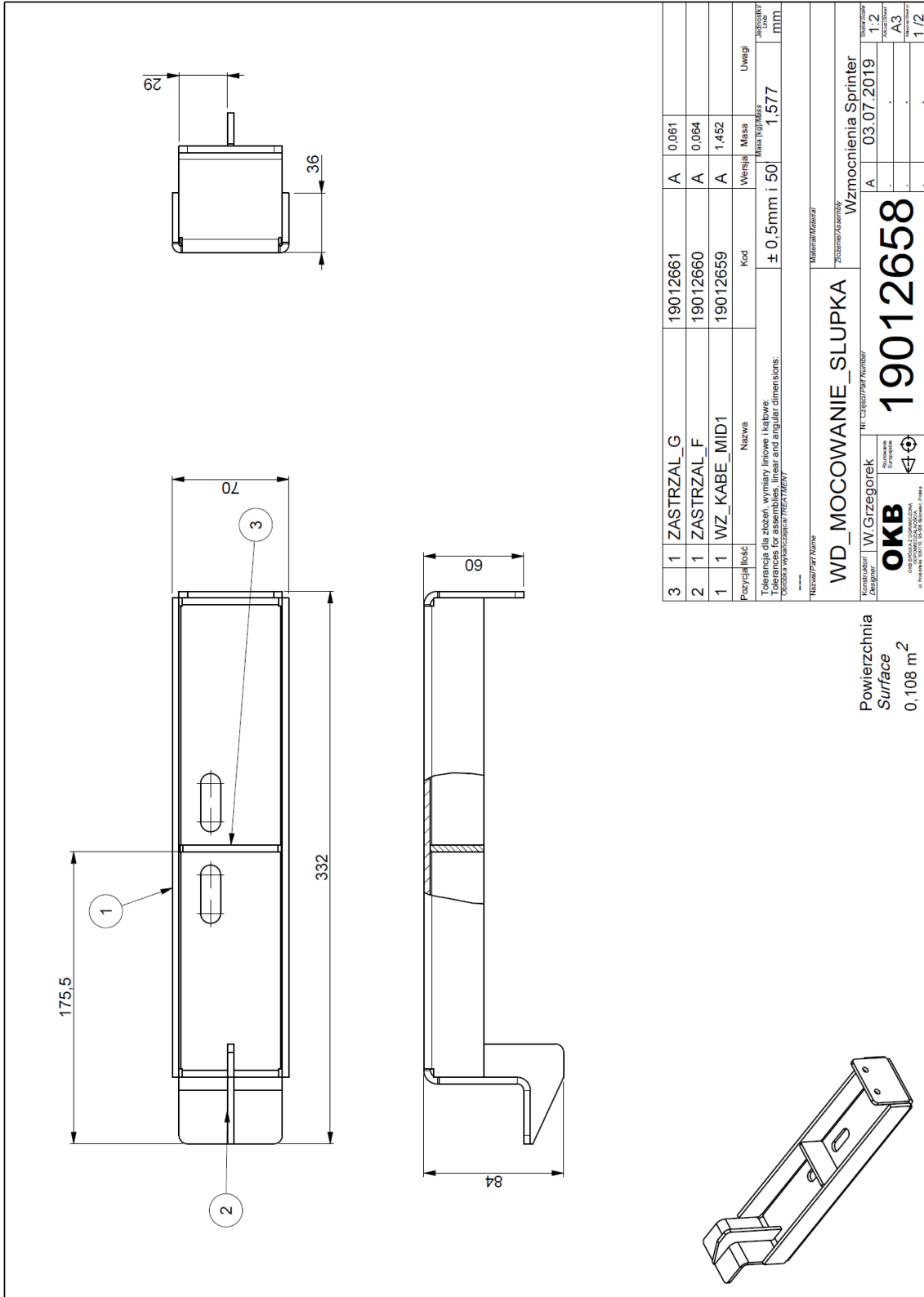




Tolerancje wg ISO 2768-1 i ISO2768-2, klasa: Tolerances according to ISO 2768-1; ISO2768-2, class: <small>Obrobka wykonująca/TREATMENT</small>		mK	Masa [kg]/Mass 0,175	Jednostki/ Units mm
Nazwa/Part Name WZP01		Material/Material S355JR (EN 10027-1) <small>Złożenie/Assembly</small>		
Konstruktor/ Designer S.Chrzanowski	Nr. Części/Part Number 19012662	A	18-06-2019	Skala/Scale 1:1
 <small>OKB SPÓŁKA Z OGRANICZONĄ ODPOWIEDZIALNOŚCIĄ ul. Rokietnica 108/110, 95-008 Bukowiec, Polska</small>		.	.	Arkusz/Sheet A4
		.	.	Arkusz nr/Sheet nr 1/2
		.	.	

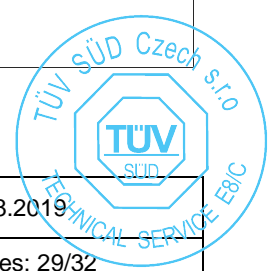
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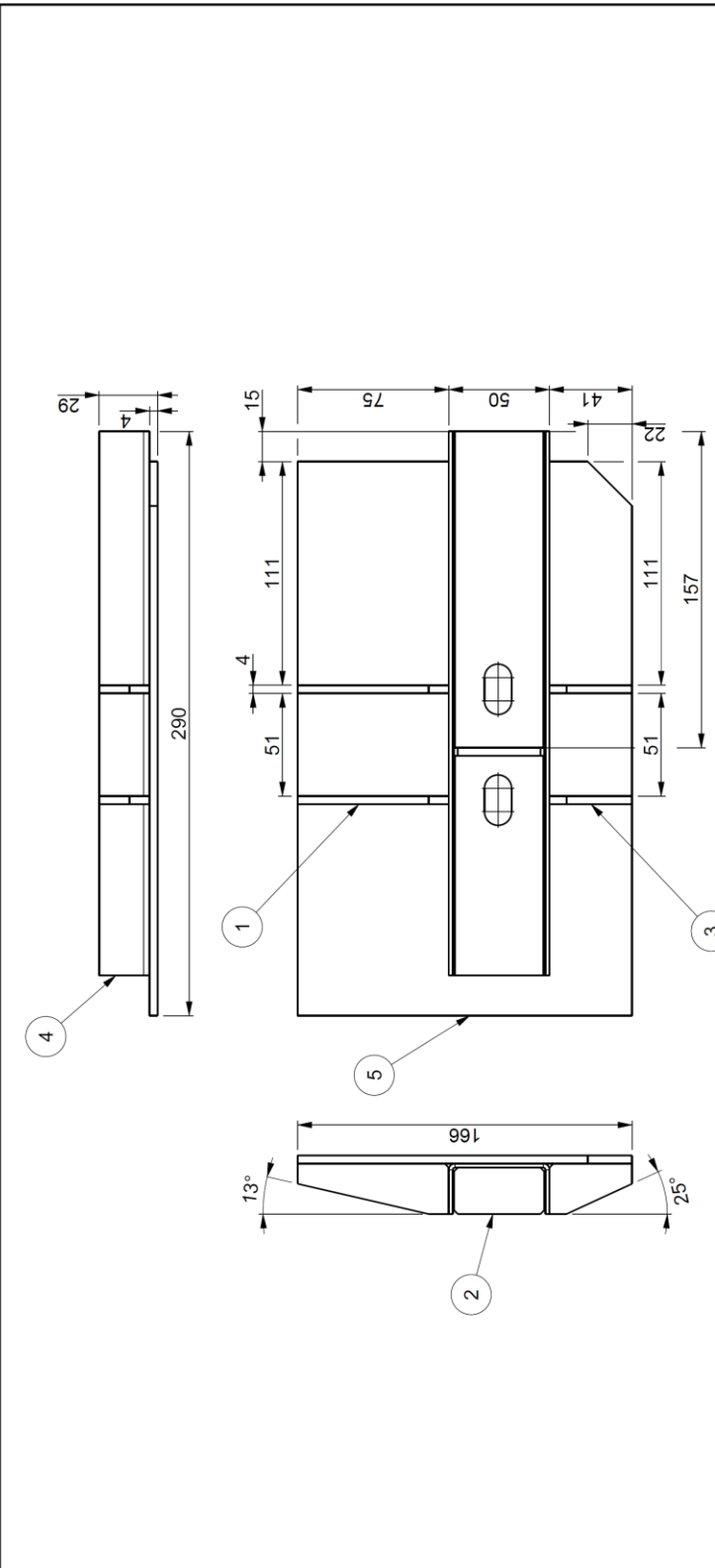




3	1	ZASTRZAL_G	19012661	A	0,061
2	1	ZASTRZAL_F	19012660	A	0,064
1	1	WZ_KABE_MID1	19012659	A	1,452
Pozycja Ilość		Nazwa	Kod	Wersja	Masa
					Masa ięgi/Mass
					1,577
					mm
Tolerancja dla elementów i kłębów: Tolerances for assemblies, linear and angular dimensions: Tolerances for assemblies/TREATMENT					

Nazwa/Part Name					
WD_MOCOWANIE_SLUPKA					
Zobacz/Assembly					
Wzmocnienia Sprinter					
Konstruktor/Designer		W.Grzegorek		Data/Date	
				03.07.2019	
Powierzchnia/Surface		0,108 m ²		Wersja/Version	
				1.2	
				A3	
				1/2	
OKB		19012658			
ORGANIZACJA WYKONANIA OKB Sp. z o.o. ul. Sileska 35/37, 40-002 Katowice, Polska					





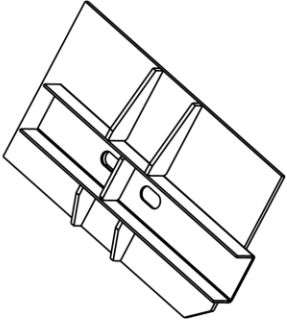
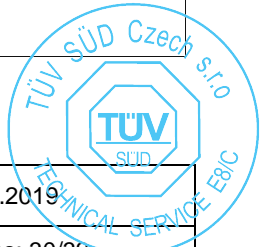
5	1	BLACHA_MOCUJACA	19012648	A	1,416
4	1	CEOWNIK_WZMACNIAJACY	19012647	A	0,390
3	2	ZASTRZAL_C	19012646	A	0,024
2	1	ZASTRZAL_A	19012645	A	0,032
1	2	ZASTRZAL_B	19012644	A	0,044

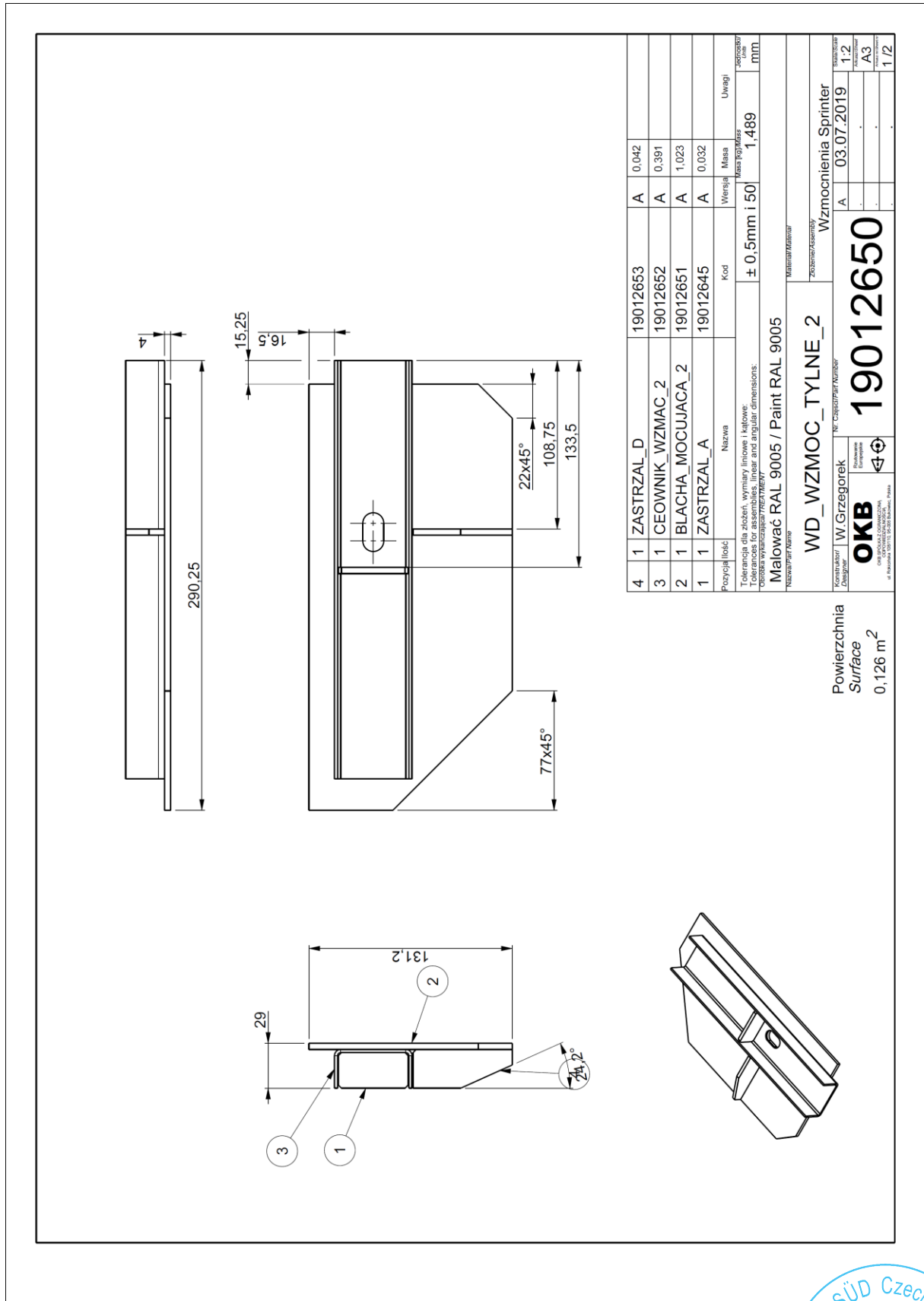
Pozycja/Ilość	Nazwa	Kod	Wersja	Masa	Uwagi
	Tolerancja dla obiektu w milimetrach i kalibrach Tolerances for assemblies in millimeters and gauges dimensions Toleranzen für Bauelemente in Millimetern und Kalibermessungen				
	Malować RAL 9005 / Paint RAL 9005			± 0,5mm i 50'	
	Nazwa/Płat/Notes			Masa kg/mass	
				1,975	

WD_WZMOC_TYLNE_1		Wzmocnienia Sprinter	
Konstruktor/ Designer	W.Grzegorek	Wersja	A
OKB		Wzrost/Assembly	03.07.2019
Powierzchnia Surface		Wzrost/Assembly	1.2
0,159 m ²		Wzrost/Assembly	A3
		Wzrost/Assembly	1/2

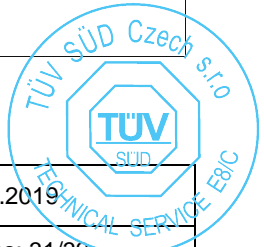
19012649

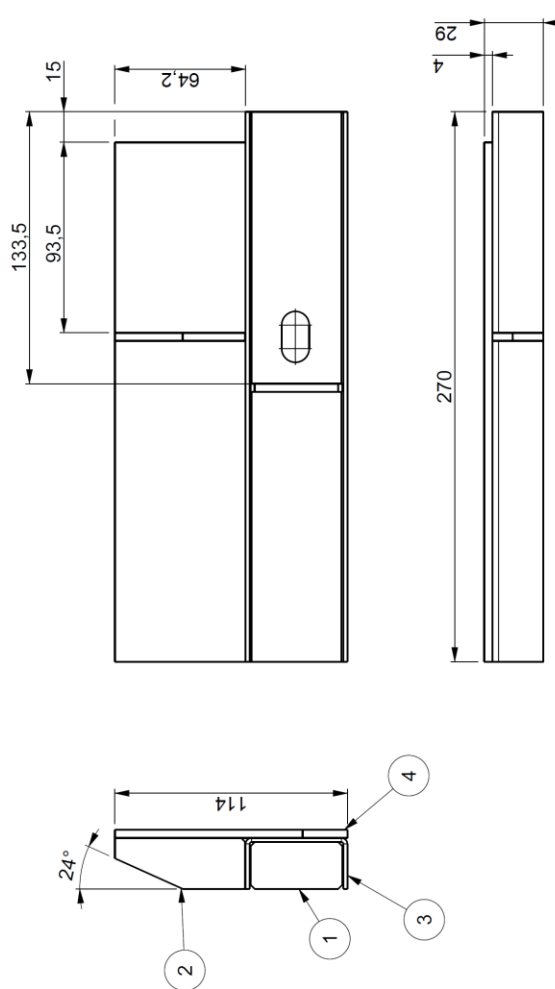
OKB
OŚRODEK KONSTRUKCYJNO BADAWCZY
ul. Rybnicka 10/117 40-002 Katowice, Polska



4	1	ZASTRZAL_D	19012653	A	0.042	
3	1	CEOWNIK_WZMAC_2	19012652	A	0.391	
2	1	BLACHA_MOCUJACA_2	19012651	A	1.023	
1	1	ZASTRZAL_A	19012645	A	0.032	
Pozycja/Ilość		Nazwa	Kod	Wersja	Masa	Uwagi
		Tolerancja dla obiektów wymiarów liniowych i kątowych: Tolerances for assemblies (linear and angular dimensions): Toleranzen für Bauelemente/TOLERANZEN	± 0,5mm i 50'		Masa Netto/Net Mass	1,489
		Malować RAL 9005 / Paint RAL 9005				
		Nazwa/PART Name	Wzrost/Assembly			
		WD_WZMOC_TYLNE_2	Wzmocnienia Sprinter			
Powierzchnia Surface		0,126 m ²	Data/Date		03.07.2019	
Konstruktor/ Designer		W. Grzegorek	Wersja/Version		A3	
Numer/Number		19012650	Wersja/Version		1/2	
Logo OKB		OKB Sp. z o.o. ul. Piłsudskiego 10/12, 01-484 Warszawa, Polska				





4	1 BLACHA_MOCUJACA_3	19012656	A	0.897
3	1 CEOWNIK_WZMAC_3	19012655	A	0.395
2	1 ZASTRZAL_D	19012653	A	0.042
1	1 ZASTRZAL_A	19012645	A	0.032

Pozycja/lość: _____ Nazwa: _____ Kod: _____
 Wersja: _____ Masa: _____ Uwagi: _____
 Masa kg/Massa: _____
 Tolerancja dla obiektu w mm / Tolerance for assembly in mm / Tolerance for assembly in mm and angular dimensions: _____
 Toleranční výkres / TOLERANCE: _____
 Malować RAL 9005 / Paint RAL 9005
 Wzrost / Rise: _____
 Wzmocnienie / Reinforcement: _____
 Wzmocnienia Sprinter

Powierzchnia Surface: 0,118 m²
 OKB
 OŚRODEK KONSTRUKCYJNO-BADAWCZY
 ul. Rybnicka 107/115 40-002 Katowice, Poland
 19012654
 Wzmocnienia Sprinter
 A 03.07.2019
 1.2
 A3
 1/2

