

New thinks new *advantages...*

Yeni fikirler, yeni *fırsatlar...*



ORBIS Seating System Solution (M3)

Personal (Intercity & Inter-Urban) Seat



Prepared by Teknotrim Sales & Marketing Department and date is 01.01.2021

Company Location



- ✓ As Teknotrim , we produce seating system in 6.000m² closed production area
- ✓ We have welding , foaming , molding , stamping , profile bending , cutting , sewing , final assembly workshops with incoming and outgoing storages.
- ✓ With all necessary production lines and machineries, we are completely integrated Corporation.



THE HISTORY OF TEKNOTRIM

2015

Teknotrim started to make his own cinema , conference and theatre seating system solution for respectable clients.

2019

Teknotrim decided to access of the commercial vehicle industry by generating the new generation passenger , co -driver, ambulance and special seating system solutions with contemporary design, building upon to start of R&D studies.

Furthermore , Teknotrim obtained ISO TS 9001 ; 14001 and OHSAS 18001 certifications.

2013

Teknotrim Co. has been established to produce main integral metal parts , PU parts and seat foam as semi finished materials for seat manufacturers globally.

2016

In order to hold an integrated facility completely, profile bending technology, stamping , welding technology and robotic systems have been adapted.

2020

Orbis 100 Intercity passenger seat , Apeiron DC and Nobilis DC ambulance seats are designed in scope of the creting the new generation seating system solutions

Teknotrim scheduled to obtaing of ISO TS 16949 quality certification

ERP software of is integrated to all departments to follow all process up through the system in order to hold a full of control on the tracebility , production planning , ordering , R&D activities , quality management , finance and logistic activities.

Welding & Foaming Process



We have 10 manual welding cells and robotic welding operations



We can make our own foam design and production capability. We produce more than 420.000 units backrest and seat cushion foam per year.



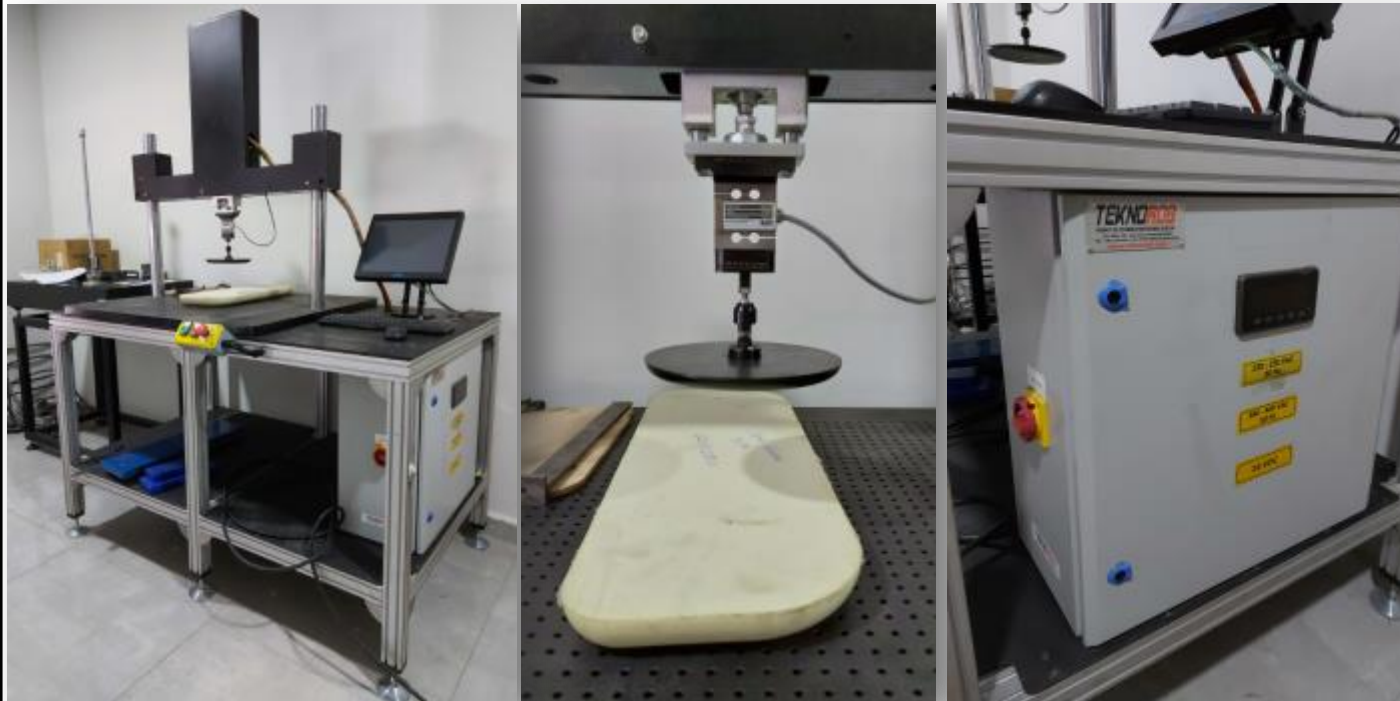
TEKNOROB is our group company and all automation and linear robotic system needs are satisfied , developed and integrated by our group.



With highest and flexible robotic system usage advantage , all welding operations are made by robotic welding machines and all necessary welding apparatus and fixations are designed appropriate for robotic welding process



Foam Density Control Process



The foam density control machine has been designed and produced by our group company of TEKNOROB for our laboratory.

Hereby holding this machinery , we can make density control in prototype , pre-serial and serial phase of the product in various periods and all datas have been reported and followed up by our Quality Department regularly.

The foam density control machine is controlled , tested and funded due to it is considered as a national technology by The Scientific And Technological Research Council Of Turkey. The machinery is also patented by TEKNOROB.

www.teknorob.com



«...research is to see what everybody else has seen , and to think what nobody else has thought...»

Albert Sizent

Research & Development Capability

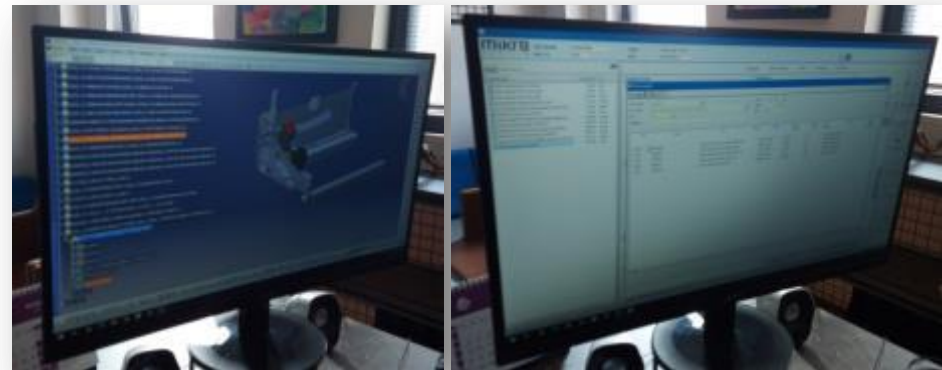
Research & Development consists of two main departments as Industrial & Mechanical Design Center and Product Development & Application Center

Our technical capability can be considered with following topics;

- 1.Industrial Product Design*
- 2.Mechanical Design*
- 3.Product Development & Applications*
- 4.Software & electrical design and application supported by Teknorob R&D*
- 5.Test & Documentation Process*
- 6.Project Management*

Data Base Management

We use Catia V5 and Autocad program and also ERP data base system program called MICROFLY PROFESSIONAL which has been developed mad most of the interface software codes by our R&D Software Specialists



Sewing & Last Montage & Storages



Packing & Storage Process

Management

Mustafa Samancı
General Manager

Bilgehan Gültekin
Sales & Marketing Manager

Fatih Vural
Foreign Trade Manager

Şenol Aladağ
R & D / Strategic Purchasing Manager

Sevilay Samancı
Account Manager

Sevilcan Ceylan
Quality Manager

Taner Peker
Logistic & Production Manager

Cüneyt Çetin
Project Executive

Abdullah Ayduğan
Quality Chief

Mustafa Tokmak
Metal Production Line Chief

Özgür Ece
Foaming Production Line Chief

Kazım Temel
Upholstery & Last Montage

- Totally we have 28 white collar and 95 blue collar staff
- Total worker is 123



Commercial Vehicle
Seating Systems



Orbis

(M3)

Intercity / Inter Urban



- Constructed based on M3 main structure
- Contemporary design
- Highest ergonomic
- Special unique main structure
- Minimized welding process
- Security
- Weight advantage
- Modular production technology
- Accessory variations



Orbis

(M3)

Intercity / Inter Urban

Commercial Vehicle Seating System ORBIS New Generation Intercity Passenger Seat

Industrial Design And Modular Technology

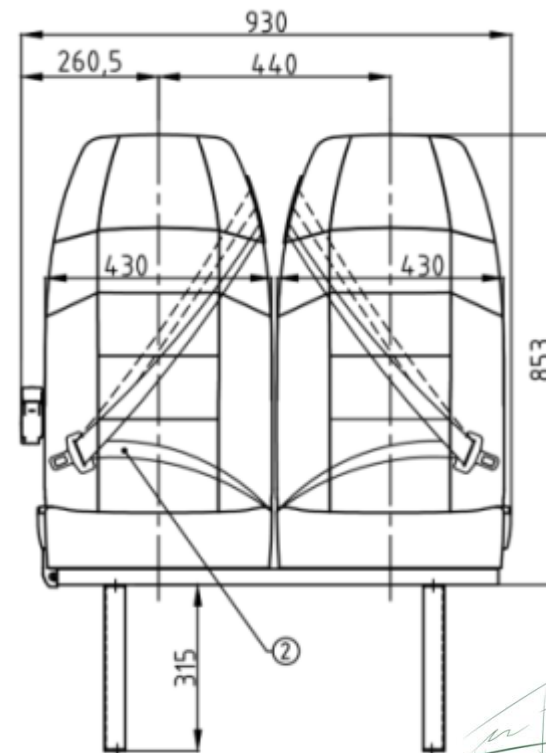
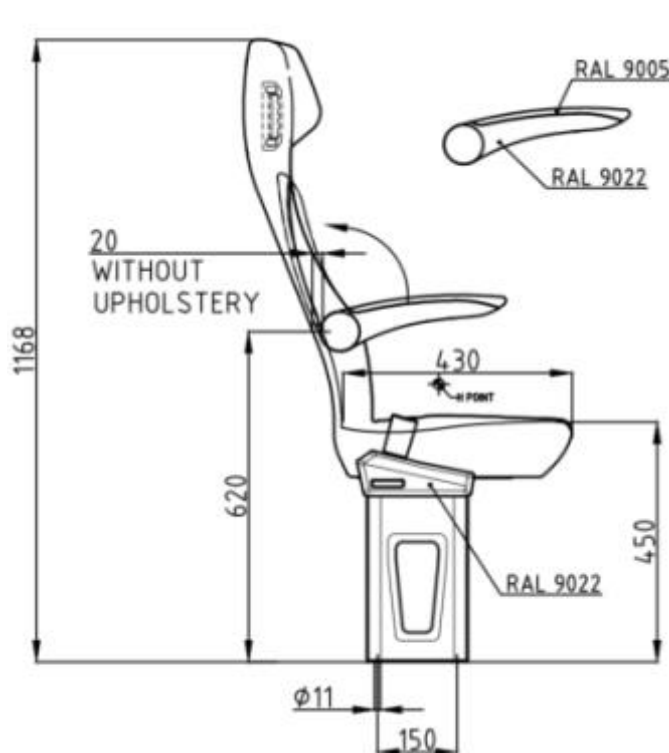


Orbis (M3)

Intercity / Inter Urban

Commercial Vehicle Seating System
ORBIS New Generation Intercity Passenger Seat

2D Main Dimensions Of The Seat



Orbis

(M3)

Intercity / Inter Urban

Orbis 100 M3 Intercity Seating System Solution

Orbis 100 Intercity Seating System solution has been designed and constructed based on fixed backrest with all necessary accessory and upholstery variations

Orbis 100 Intercity Seating System solution consists of two different backrest foam shape as ORBIS 100 FLAT and ORBIS 100 Sharp illustrated as below.



ORBIS 100 Flat



ORBIS 100 Sharp

Solely main difference between Orbis 100 Flat and Sharp version is that headrest foam shape is completely different. Other rest of the functional and visual specs are completely the same.



Orbis (M2 / M3)

Intercity / Inter Urban

ORBIS Feature Matrix

Seat Model	ORBIS	STANDART	OPTIONAL
Segment	M2 / M3		
Main Structure & Dimensions			
Fixed Backrest (No Back Reclining)		★	
430mm Backrest & Seat Cushion Width		★	
430mm Seat Cushion Depth		★	
450mm Seat Cushion W (Width) and 450mm Depth			★
Constructed Based On Metal Chassis		★	
Aluminum Chasis			★
Security & Connection			
2P Automatic Safety Belt		★	
3P Automatic "ALL AGE" Safety Belt Running Inside Of The Backrest			★
Double Corridor Leg Connection		★	
Accessories			
Horizontal Or Vertical Plastic Handle / Ral 9022		★	
Corridor Handle On Top Corner Of The Backrest / Ral 9022			★
Side Plastic Cover On Aisle Side / Ral 9022		★	
Upward Foldable Armrest On Aisle Side / Ral 9022			★
Foldable Table / Ral 9022			★
Magazine Net / Ral 9022			★
3 Steps Footrest / Ral 9022			★
USB Application			★
Smart Phone Holder			★
Bag Holder Bar			★
Upholstery			
Standart		★	
Flair			★
Top Flair			★
Joker			★
Free Wings			★



Seating System

Commercial Vehicle Seating System
ORBIS New Generation Intercity Passenger Seat

Contemporary Design With Highest Ergonomic



To use logo of TEKNOTRIM is a standard application. But it is also available to adapt of the our respectable clients.



Orbis

Intercity / Inter Urban



Seat Weight With Standard Features

- 430mm backrest and seat cushion width
- With base frame
- 2P automatic safety belt
- Plastic side cover on aisle side / Ral 9022
- 2P automatic safety belt buckle space
- Standard 2P corridor leg and wall connection
- Standard upholstery

Double Seat Weight With Standard Features is

19,00 Kg



Orbis

Intercity / Inter Urban

3P Automatic Safety Belt Running Inside Of The Backrest
The New Generation Security Method As «Basic Standard» For Our Respectable Clients



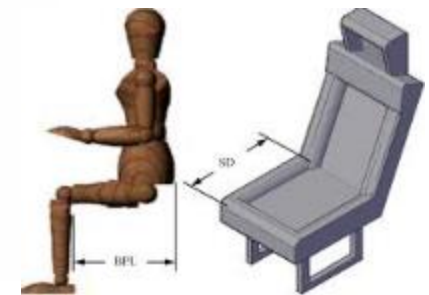
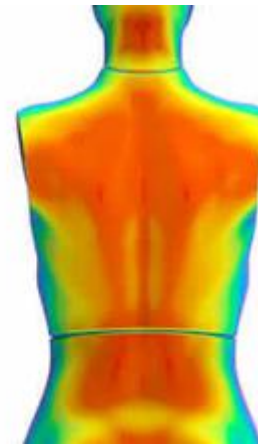
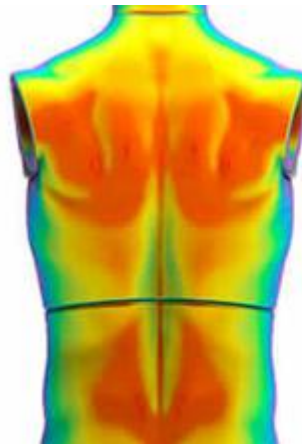
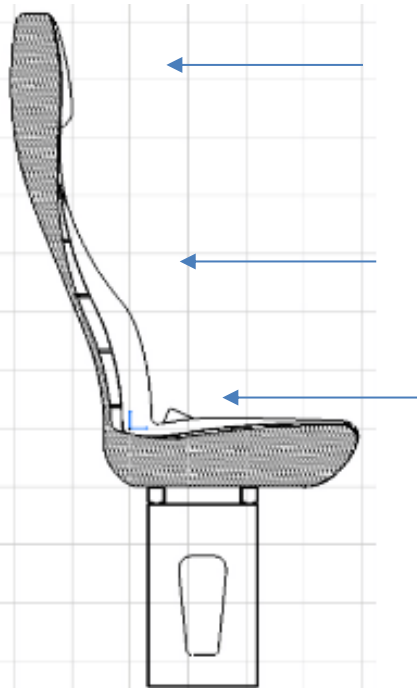
3P Safety belt retractor is placed inside of the headrest with direction kit.

3D automatic safety belt is running inside of the backrest. With this innovation , it is absolutely avoided of a touching and sounding matter notably when the 3D belts are placed on top of the backrest between the seats as you can see the illustration above.

Direction of the 3P safety belt can be changed for both sides.



Commercial Vehicle Seating System
ORBIS New Generation M2 / M3 Intercity Passenger Seat



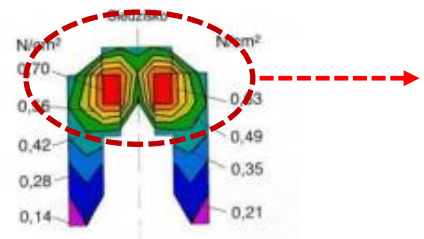
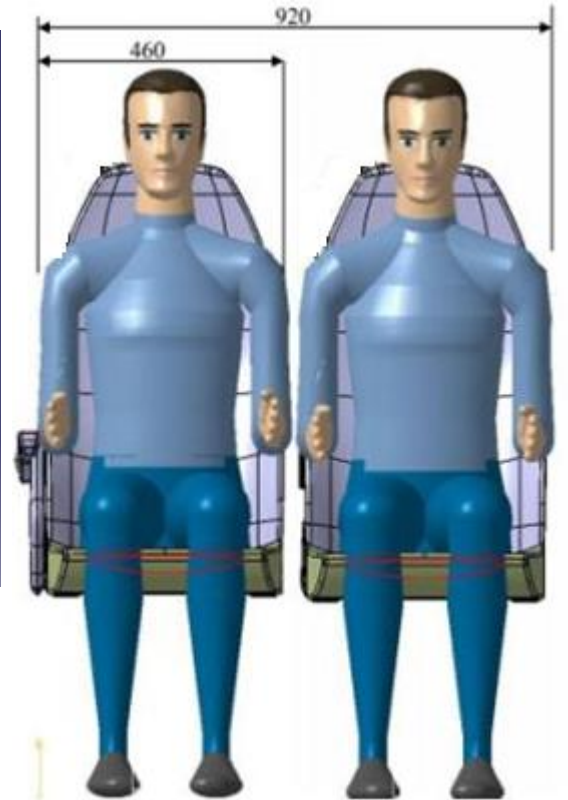
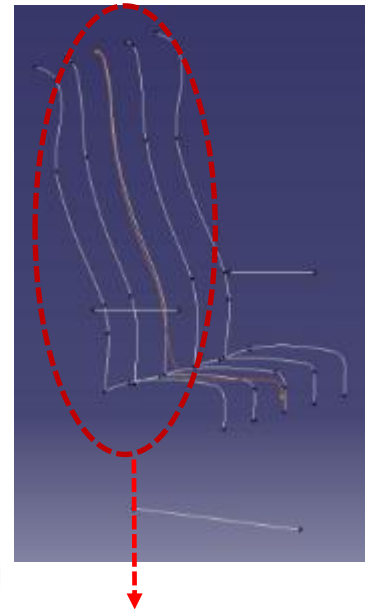
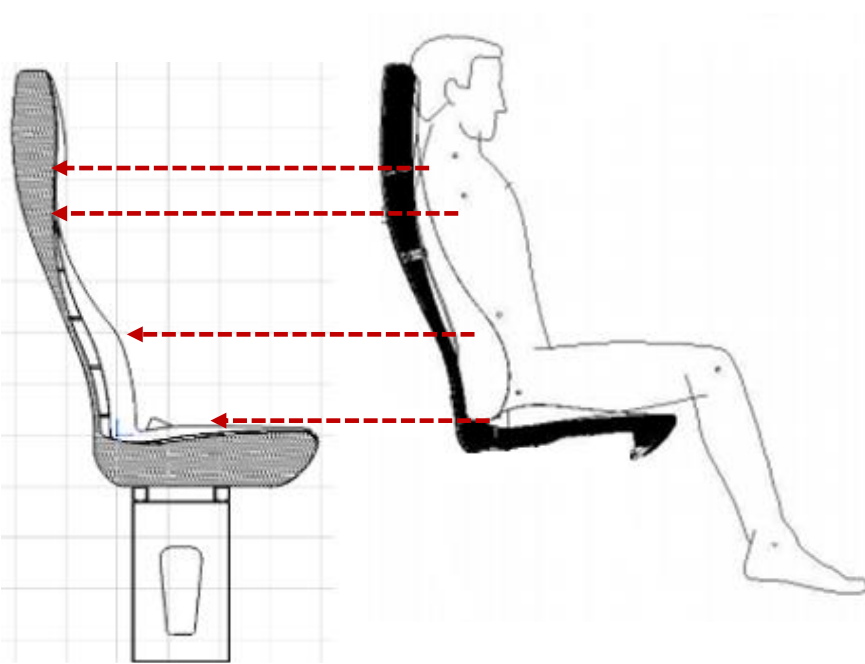
You can see body pressure points colored red in the illustration getting from a ergonomic report . In order to decrease of the body pressure effect , a main shape of the backrest foam of the seat has been designed as thinner and with special «S» form

With special foaming technology , we provide you «THE MAXIMUM COMFORT WITH NEW GENERATION THINNER BACKREST»



Seating System

Commercial Vehicle Seating System
ORBIS New Generation M2 / M3 Intercity Passenger Seat



You can see the stress points of the seating area in the illustration. With ORBIS , there is a special collapse area designed in order to feel tiredness during a voyage



Orbis

(M3)

Intercity / Inter Urban

ORBIS 100 Flat
Upholstery Variations



Upholstery Specification

Standard	Flair	Top Flair
<p>All portions of the seat are trimmed by the same upholstery material</p> <p>Therefore it is not important to use original ,artificial leather or any kind of fabric</p>	<p>Specified headrest limited by sewing operation is trimmed by the different upholstery material from other remaining portions of the seat. It is called «FLAIR»</p>	<p>Specified headrest and side parts limited by sewing operation is trimmed by the different upholstery material from other remaining portions of the seat. It is called «TOP FLAIR»</p>



Orbis

(M3)

Intercity / Inter Urban

ORBIS 100 Sharp
Upholstery Variations

Upholstery Specification



Standard	Flair	Top Flair
<p>All portions of the seat are trimmed by the same upholstery material</p> <p>Therefore it is not important to use original ,artificial leather or any kind of fabric</p>	<p>Specified headrest limited by sewing operation is trimmed by the different upholstery material from other remaining portions of the seat. It is called «FLAIR»</p>	<p>Specified headrest and side parts limited by sewing operation is trimmed by the different upholstery material from other remaining portions of the seat. It is called «TOP FLAIR»</p>
		

Seating System

Special Upholstery Variations



Orbis 100 Advance

Intercity / Inter Urban



Orbis 100 Advance Intercity passenger seat has been designed for M2/ M3 segment as fixed backrest with full accessory options.



Seating System

Orbis 100 Advance

Intercity / Inter Urban



Orbis M2/M3 Intercity seat has been constructed based on fixed unique structure in order to get weight advantage.

Due to Orbis has been constructed based on unique structure, he has optimized welding operation.



New thinks new *advantages...*

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THANK YOU

Prepared by Teknotrim Sales & Marketing Department and date is 01.01.2021

