Ursula Wirtz

o-atlas II

Atlas of orthodontic techniques.

DENTAURUM

Foreword

When I met Ursula Wirtz in 1999, she was a qualified dental technician working in the Orthodontic Clinic at the University Clinic in Aachen, Germany. I was immediately struck by her enthusiasm for the diversity of orthodontics and her inquisitiveness for new, innovative appliances. We worked together for many years on optimizing the fabrication of appliances for molar distalization and Class II correction in the laboratory, particularly those not requiring patient compliance. Over the years, Ursula Wirtz also worked on writing detailed descriptions of the many different orthodontic appliances and documented them in images.

The o-atlas, her "lifetime achievement", was published in 2003 together with Dentaurum. Since its publication, it has became the standard reference book for removable orthodontic appliances and techniques. It has also been translated into several languages and is read not only by dental technicians, but also dentists and orthodontists worldwide.

In the meantime, Ursula Wirtz has retired but remains active, and I am sure she will not stop documenting new orthodontic appliances, meaning the o-atlas can be updated from time to time.

I wish you the same enjoyment as I have as you read through the chapters. The o-atlas II will help to demonstrate again and again the wide range of orthodontic appliances available for treatment. Dental technicians, dental practitioners and patients alike will benefit from this compendium.

Tönisvorst, Germany, March 2017

Prof. Dr. med. dent. Gero Kinzinger

When I began describing orthodontic appliances at the University Clinic in Aachen, Germany many years ago, I had no idea that I would receive such positive feedback. In cooperation with Dentaurum, my many years of work have resulted in a reference work for removable orthodontic appliances. Since it was first published in 2003, several thousand copies of the o-atlas have been sold and it has been translated into English, Spanish and Polish. It is fair to assume that it will be translated into even more languages since interest in this illustrated compendium continues to grow.

As the feedback was so positive and many were asking for descriptions of further appliances, I continued to work on the book and have now included a further 44 appliances in this new edition. The content has been completely revised and updated. A total of 235 appliances are illustrated and more than 800 new images were taken by a specialist for macro photography. He was a master in capturing the finer details of the appliances and making them visible to the reader in the images. The images are in high quality and show details with a fascinating precision not seen before. However, it wasn't possible to replace all the images from the first edition.

o-atlas II makes clever use of the advantages of print media and online media at the same time. The 50 most interesting appliances can be viewed and studied in detail from all sides on the o-atlas II website (www.o-atlas.com).

A decisive factor in determining whether orthodontic treatment will produce the desired result lies in the treatment method used and the appliance. A good fit and secure retention are key to how effective active and passive orthodontic appliances are. The result of the treatment and the efficiency of the appliance are dependent on the competence of the dental operator, the dental technician and the patient and their cooperation.

I am quite aware that this reference book will never truly be finished since research in this field is ongoing and existing, tried-and-trusted appliances are constantly being modified and developed.

I hope that this new edition will be of help to you in your practical work and will bring you enjoyment as you study it.

U. Wirtz

Ursula Wirtz

With the purchase of this o-atlas II, you receive exclusive access to the protected area of the website www.o-atlas.com. On this website, you have the possibility of viewing and examining 50 of the most interesting orthodontic appliances from all sides.

Please register at www.o-atlas.com to gain access to the protected area.

Registration

1. Open www.o-atlas.com and click on ***360° product view***.
2. Fill in the registration form and enter your 12-digit registration code (see page 3 of this book). Click on ***Register***.
3. An activation link will be sent to the email address given. Click on the activation link to activate your user account prior to the initial login.
4. Log into www.o-atlas.com with your email address and password. You will find the Login button in the top right-hand corner on the menu bar. Confirm with "Login".

You can now look at the 360° product views.

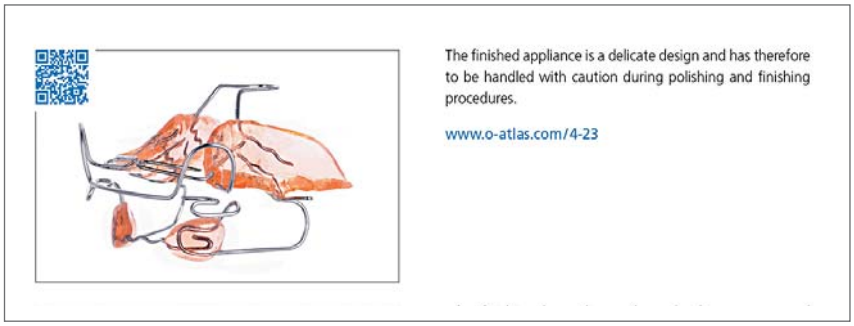
For 50 of the orthodontic appliances in this book, you will find in the top left-hand corner of the image a QR code and a web address printed in blue underneath the image caption. Scan the QR code with your smartphone/tablet or enter the web address into your internet browser to open the Login for www.o-atlas.com. Register with your email address and your password.

On pages 374 – 377 you will find an additional overview of all 360° product views.

To rotate an incisor, two hooks are soldered in opposite directions onto the labial bow around which elastics can be placed.

www.o-atlas.com/1-2

360°



The finished appliance is a delicate design and has therefore to be handled with caution during polishing and finishing procedures.

www.o-atlas.com/4-23

Chapter 1 | Models, labial bows, appliance retaining elements, support elements.

Chapter 2 | Spring elements.

Chapter 3 | Shield elements, different orthodontic plates.

Chapter 4 | Double plates, bimaxillary appliances.

Chapter 5 | Bimaxillary appliances, activators, bionators, function regulator appliances.

Chapter 6 | Wire appliances, rapid maxillary expansion (RME) appliances.

Chapter 7 | Nance and pendulum appliances, space maintainers, cleft and stimulation plates.

Chapter 8 | Retention appliances, splints, snoring appliance.

Annex | QR code overview, alphabetical index, bibliography, imprint.

Modified labial bow (0.7 – 0.9 mm spring hard).

Function: Attachment of elastics and soldering of springs.

To use elastics, different hooks can be attached by laser or by soldering, or they can be bent to shape. Force is applied on the anterior segment by the elastics and consequently the incisors are tipped in a lingual/palatal direction.

Elastics can also be installed vertically. They allow the extrusion of retained teeth. The elastics are attached at one end to fixtures which have either been soldered onto the labial bow or have been shaped on the labial bow, and at the other end to an attachment that has been bonded onto the tooth.

It is also possible to solder springs on to achieve tooth movements in different directions.

Two loops integrated into the labial bow allow elastics to be placed vertically between the loops and the attachment bonded onto the tooth in order to align the incisors.

To align the canines, a hook is soldered onto the U-shaped loop on the labial bow to engage elastics vertically.

To rotate an incisor, two hooks are soldered in opposite directions onto the labial bow around which elastics can be placed.

www.o-atlas.com/1-2

o-atlas II

The author Ursula Wirtz has succeeded in producing this unique reference work of orthodontic techniques for removable appliances with more than 1000 images. Its content is completely revised, extended and brought up-to-date. More than 800 images have been replaced with new images of high quality.

It is divided into eight chapters and gives practical tips for the fabrication of orthodontic appliances. These vary from the making of models to the making of retainers. All standard appliances, classic pieces of equipment and rare special appliances are explained in the o-atlas II with many helpful tips and enlightening images showing much detail. The book shows and describes a total of 235 different orthodontic appliances.
A 360 degree product view of the 50 most interesting orthodontic appliances is available online at www.o-atlas.com, giving the reader the opportunity to study them from all sides.

The index is very comprehensive so readers can quickly find what they are looking for. The o-atlas II is an invaluable source of knowledge for beginners and professionals as well as for students and teachers in orthodontics. It should be given a permanent place in every orthodontic library.

www.o-atlas.com

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