



**Dental Treatment Center** 



# Belmont is a World-Renowned Brand for

# **Quality Equipment**

### From Japan to the World

When customers around the world are satisfied and our industry is thriving, we all grow and prosper. With this in mind, Belmont has expanded its overseas business bases to 11 countries. We are constantly developing our local business connections. Both domestically and internationally, we are working to deliver genuine satisfaction and comfort.

# Form and Function Combine to Create New Standards for Health

Our wide range of products and services are aimed at supporting the success of professionals such as dentists and doctors. At Belmont, we are in the business of helping anyone who aspires to a healthy life. Our products and services are used where and when it counts.



## A History of Growth and Excellence

n 1921, Hidenobu Yoshikawa founded Belmont as a manufacturer of equipment for barbershops and beauty salons. By the 1950s, the company held a leading share of the Japanese market, thanks to the superiority of its designs and the outstanding functionality of its equipment. Belmont began expanding overseas in the 1950s, establishing subsidiaries in the USA, Canada, Europe, and South America. In the 1960s, we drew on our advanced hydraulic technology and began manufacturing dental chairs, which were soon followed by other dental equipment. Nowadays, Belmont operates subsidiaries in many regions around the world. In each plant, we enforce a rigid quality control system to manufacture reliable, trouble- free equipment incorporating our innovative designs—that's the Belmont way.

# Pursuing Advanced Technologies to Manufacture Safe, High-Quality Products

Hydraulic devices offer the advantages of high power, safety, durability, and quiet and smooth operation. Although these devices were traditionally used for industrial purposes in factory equipment, machine tools, and aircraft, Belmont envisaged a wider range of applications that would be possible if they were made smaller and if maintenance problems were eliminated. Incorporated into our daily lives, hydraulic devices would provide new levels of comfort for us all. The realization of this dream began in 1957 with Belmont's original low-pressure electro-hydraulic devices.















# Belmont—the Mark of Reliable, Durable, and Top-Quality Dental Equipment

Belmont has been manufacturing dental equipment and selling it worldwide since the 1960s. From the very beginning, we have built a solid reputation for outstanding reliability.

Belmont dental chairs use an electro-hydraulic system that we have been continuously improving since the launch of our first hydraulic chair in 1936. Our chairs have been embraced in many parts of the world thanks to their accurate and smooth operation, their high load capacity, and—above all—their durability. Ergonomically designed, our chairs are built to ensure the comfort of the patient and dentist alike.

Our dental units incorporate a pneumatic system which is simple, durable, and very easy to service. Japanese manufacturing expertise ensures that the valves and fittings work accurately and require very little servicing.

Belmont maintains strict quality control of products and parts, both within the company and in dealings with vendors. The company adopted an established quality management system based on international standards, and this has been transplanted to all of our manufacturing bases around the world.



**Dental Treatment Center** 

# **Dentist's Section**



### Holder Type

#### Keep Everything within Arm's Reach

The large and spacious tray section has a curved shape that allows you to reach everything with minimal effort.



# Instrument Holders of Universal Size for Easy Handling

The instrument holders are designed to stably hold different sizes of instruments.

#### Chair Control Panel



- LP: Rinsing position and last position
- 0: Initial position
- 1: Programmed position 1
- 2: Programmed position 2



## Rod Type (Continental Type)

#### Minimize Fatigue

The rods that hold the handpiece tubing maintain optimal tension to support the tubing during dental procedures. Little effort is required to put the instruments back in the tray. The rods have a smooth surface that is easy to clean.

#### Tray Holder



Trays are not included.

#### Chair Control Panel



- LP: Rinsing position and last position
- 0: Initial position
- 1: Programmed position 1
- 2: Programmed position 2





# **Cuspidor and Assistant Instruments**





#### Easy to Maintain

The porcelain cuspidor bowl is detachable and easy to clean. Switches to activate cup filling are easily accessible, both for the patient and the assistant



#### **Assistant Instruments**

Instruments that assistants can use including a three-way syringe, an HVE, and a saliva ejector with adjustable flow control. A water service outlet with flow control and a toggle switch for flushing the bowl are located on the front panel.



Clean water system with cover

#### Clinical Flexibility

#### Right or Left-Handed

The dentist's section is symmetrically designed and the cuspidor body supports installation for left-handed dentists.

#### Two-Handed or Four-Handed

A flexible arm enables the assistant's instruments to be positioned conveniently for either two- or four-handed dental work.

#### Chair

#### Patient Comfortable



#### Various Treatment Positions

With a wide range of movement, this chair supports a practical working environment that meets all the operator's requirements.

#### Smooth Motion and Heavy Lifting Capability

The chair's high-quality electro-hydraulic system provides smooth motion while handling patients weighing up to 200 kg. The j.box can be located up to 800 mm in front of the chair.



#### Patient Comfort

The ergonomic reclining backrest supports the patient in comfort and accommodates natural body movements.



#### Hands-Free Operation

Hands-free manual chair movement is made possible by a fast-responding foot switch located at the base of the machine. This design eliminates the need for wired foot switches, thereby reducing clutter at the operator's feet and making it easier to clean around the machine.



#### Flexible and Comfortable Positioning

This model features a twin-axis headrest with an elongated post to accommodate taller patients. The flexibility of this dual-articulating system means that the chair can be set up to provide a comfortable seating position for a wide range of patients. It can even be set up backwards for patients in wheelchairs.



#### Easy Entry

Right and left armrests come standard. The swivel armrest helps easy entry of the patients

### **Color Choices**

**Operator's Stool** 



Scarlet Red



This stool, which features a

473 mm to 623 mm.

backrest with an adjustable angle, can be set up at any height from

Mint Blue







ES24



FS8



ES34

ES33 Light Gray

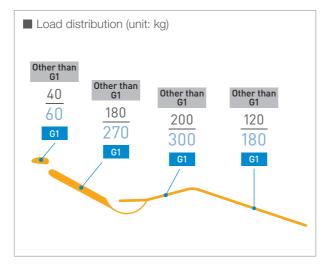


ES34

## QUALITY

#### Quality comes from within

Takara Belmont's meticulous engineering is the culmination of over 50 years of research and development. Using these production methods in partnership with high-quality hydraulic cylinders provides the ultimate patient experience. The gentle, gliding movement of the G1 ensures the patient remains comfortable as the chair changes position smoothly and silently.

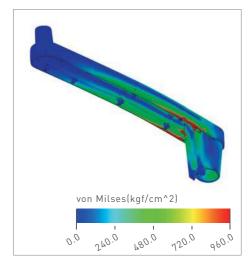


The smoothness of the chair's movement is measured under a quadruple load test.

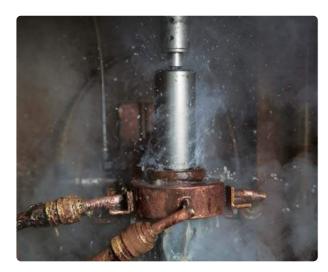
# **PRECISION**

#### Increasing patient expectations requires evolving precision

The dentist can rely on Takara Belmont equipment to maintain the highest levels of performance and precision, even after many years of use. Our products are finished in a micron powder coating that is strong and scratchproof and that also provides excellent chemical resistance.



CAD analysis is used to repeatedly verify the shape and strength of parts.



Superior durability comes from induction hardening of the cylinder's ram shaft.



Aluminum die-casting means highly accurate, streamlined parts with no wasted material.



Inspection with a color difference meter ensures color consistency across all parts and products.



Large cutting machinery gives high consistency and accuracy for all

# (Belmont

### COMFORT

#### Comfort for both dentist and patient

Versatility of movement for the dentist and comfort for the patient are priorities in every practice

Our equipment is put through extensive ergonomic testing to ensure these priorities are facilitated to the highest standard possible.



To achieve stable movement of the chair, an accelerometer is used to closely check warping of the unit during operation.

# DURABILITY

#### Dependable and durable

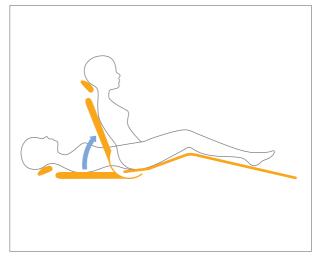
Durability testing is vital to the development of our equipment.

Valves undergo up to one million repetitions of testing before they are deemed up to Takara Belmont standards.



All valves undergo 1 million repetitions of durability testing.

The seat of the dental chair undergoes up to 100,000 repetitions of impact testing to ensure it meets the highest standards of durability.



Since the 1980s, Takara Belmont's research into ergonomics has constantly improved the shape and movement of the backrest mechanism.

## **ACCURACY**

#### Crisp, sharp lighting for defined dental care

Lighting allows a clear view inside the patient's mouth. Besides focusing a ray of light on specific points, the lighting mechanism employs high-quality, made-in-Japan LEDs for stable illumination. The result is crisp, sharp lighting that guarantees accurate dental care and patient safety and peace-of-mind.



High-quality LEDs provide stable illumination with up to 20,000 hours\* of service life.

\* Time until lighting intensity drops below 70%.

# **LED Dental Light**



#### **Touchless Activation**

Light operation function is activated by a touchless sensor, so it is unnecessary to look away from patients. ON/OFF and Composite Safe Mode activation is done without operators ever contacting the light.



#### Easy on the Eyes - For Dentists and Patients Alike

LED operatory lights have been engineered to minimize operator eye fatigue and to prevent light from shining directly into the patient's eyes. The brightest light is directed into the oral cavity and becomes gradually less bright across the patient's cheek area.



# Positioning Flexibility

The light head may be rotated around 3 axes, for maximum positioning flexibility.

Operators can effortlessly direct illumination where it is needed using one hand.



#### The Exact Brightness You Need

Each operatory has different ambient light conditions. With this in mind, LED lights include a stepless intensity control to adjust brightness to suit the actual operatory lighting conditions. LED output can be adjusted between 3,100 lx and 28,000 lx, while maintaining the 5,000 K color temperature that is ideal for tooth shade matching.

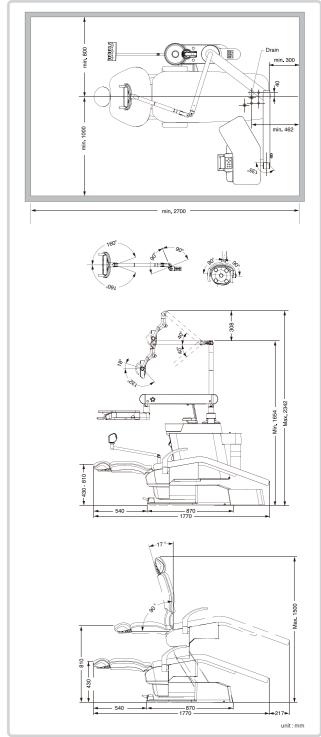
# **Specifications**

Dentist's Section		
Delivery type	Over the patient using balance arm with manual brake	•
Umbilical hoses	Internal umbilical	•
Control	Pneumatic	•
Handpiece delivery	Holder type (traditional)	<b>A</b>
	Rod type (continental)	_
Control panel	Membrane switches for chair operation (manual and	
	programmed positions) / Cupfiller switch	•
Instrument positions	Four positions, including three-way syringe	•
	Five positions, including three-way syringe	<b>A</b>
Others	Handpiece oil mist separator	•
	Transformer 24 V/4 A	•
	Flush out of water line with a toggle switch	<b>A</b>
	Intraoral-size film viewer (126 mm x 46 mm)	•
Dentist's instruments	Three-way syringe	•
	Four hole tubing (Midwest type)	<b>A</b>
	Four hole tubing for fiber-optic instrument (Midwest type)	<b>A</b>
	Three-hole tubing (Borden type)	<b>A</b>
	Ultrasonic scaler (dealer option)	
Cuspidor Section		
Type of mount	Chair mounted	•
Cuspidor bowl	Detachable, porcelain	•
Cupfiller	Air timer	•
	Water heater for cupfiller	•
Bowl flush	Controlled with air timer. Linked with cupfiller and activated	
	with toggle on front panel	•
Vacuum and saliva ejector	Central vacuum, central saliva ejector	<b>A</b>
	Air vacuum, air saliva ejector	•
Light post	Straight light post, \$\phi\$ 42.7 mm with hole for monitor bracket	
	and rotatable curved post	•
Control panel	Water service outlet with flow-adjustment valve	•
	Toggle switch for bowl flush	•
Water supply	City water	•
	Clean water system with 750 ml bottle	<b>A</b>
Assistant instrument's arm	Swing arm and three instrument holders	•
	Vacuum handpiece. Detachable and autoclavable.	
	ID ф 11 mm	_
	SE handpiece. Detachable and autoclavable	•
Accessories	Chair control panel	Δ
	Monitor bracket	Δ
	Vials × 5	Δ
	Cotton containers × 2	Δ
	Stainless steel waste receptacle	Δ
	Male connector for water service outlet	Δ
	Panorama size film viewer (315 mm × 150 mm)	

- Provided as standard
  Option. Not selectable individually. Consult dealer
- △ Purchase separately
- ☐ Dealer option

Dental Chair		
Patient capacity	200 kg	
Seat	430 mm-810 mm via electrohydraulic action	
Backrest	0°-73° via electrohydraulic action	
Seat angle	Fixed at 10°	
Armrest	Fixed. Long swivel armrest (one side only)	
Headrest	Double articulating. Manually adjustable	
Operation	Joystick switch on chair base (Up, Down, Forward, Back) and membrane	
	switch on dental unit (Up, Down, Forward, Back, P1, P2, LP, 0)	
Safety lockout switches	Safety switch under chair	
	Safety switch activated by foot control on dental unit	
Dental Light		
Light source	Five LEDs	
Focal distance	650 mm	
Intensity	3100 lux-28000 lux	
Composite mode	4300 lux	
Color temperature	5000 K	
Light pattern	85 mm × 155 mm	

# **Dimensions**



AC 110 V, 120 V ; 50Hz AC 220 V, 230 V ; 50Hz/60Hz

AC 240 V ; 50Hz

Total 225 kg-235 kg Chair 141 kg, Unit 70 kg-80 kg, Light 4 kg, Stool 10 kg