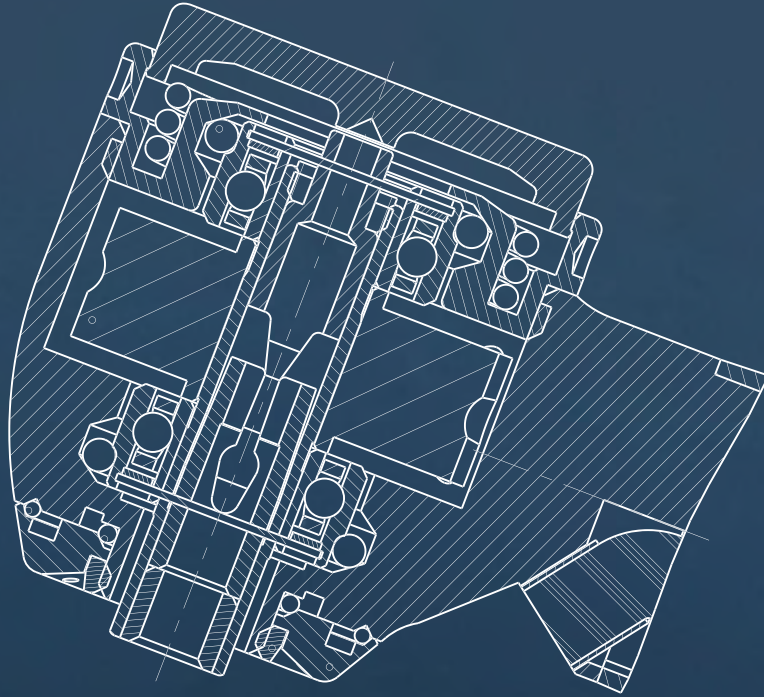




CHIRANA
Medical STARÁ
TURÁ



DENTAL INSTRUMENTS

THE QUALITY GUARANTEED BY TRADITION.
Since 1935

CHIRANA Medical, a.s.,

1/2019

DENTAL INSTRUMENTS

History
Production
Turbines
Handpieces
Micromotors
Accessories



PROUDLY MADE IN SLOVAKIA.



HISTORY

- 1935 foundations of machinery production in Stará Turá by Czech engineer Frantisek Michera
- 1967 launching of the first production series of dental units under the trademark CHIRADENT
- 1968 the company product portfolio widen by breathing and anaesthesia devices

Chronology of handpieces production

- 1989 Chirana is widening its product portfolio to produce dental instruments
- 1990 first production of straight handpieces and contra-angles in accordance with license from KaVo
- 1997 launching of light contra-angle, push-button head
- 2006 production of stainless micromotoric handpieces
- 2010 the body of micromotoric handpieces from titanium
- 2014 the development of compact handpieces blue (1:1) and red (1:5)
- 2016 from July starts the production of compact handpieces blue (1:1) and red (1:5)

Chronology of turbines production

- 1991 production of turbines with plastic spindle and with body made of brass, screw fixation
- 1993 production of turbines with push-button system, fully made of metal
- 1994 production of turbines with flexible light-rod
- 1996 production of turbines with angular connection, Chirana quick-coupling system launched
- 2005 production of stainless turbines, milled heads, only ceramic bearings
- 2007 production of turbines with quick stop function, non-oil function
- 2016 production of turbines is focused only on Multiflex standard and Midwest standard and our turbine portfolio is organized into 3 ranges – Chirana 637, Chirana 656, Chirana Easy

In 1989 CHIRANA signed historical license agreement with company KaVo to start production of dental instruments in Stara Tura. Thanks to this licensed production our company started from the beginning using the high-modern production standards, sophisticated measurement technology and especially we started cooperation with leading producers of machinery and technologies like Index, Benzinger, Chiron, Studer, Tornos, Rika, Maier, DMG-Mori, Trumpf, Fehlman, 3D measuring device Mitutoyo etc. The whole production is performing directly in Stara Tura with minimal share of suppliers and outsourcing. The processes like surface modification and metrology are performed by our sister companies (Chiragal and Chiranalab Stara Tura).

During latest years have been focused on improving the hygienic standard, autoclavability and durability of our instruments. Whole design of handpieces is getting more "clean" with minimum of seams which always are the potential source of contamination. Our internal layout of instruments allows the usage of washing or disinfecting automats (Miele) before sterilization process. The special "non-oil" bearing (lubricated for the whole lifetime, used in HF turbines and in brushless micromotors) are fully autoclavable as well. Also our used plastic materials for production of instruments are only high-tech level (PEEK – polyetheretherketone), fully hygienic and autoclavable.

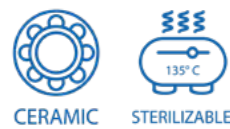


production



TGL 637A
high power turbine

excellent power vs weight ratio
clear design
ergonomic and good balanced body from stainless steel
Durable cellular glass optics
*Multiflex® Quick system connection for easy exchanging
Worldwide lightest turbine in titanium option (only 36 grams)



TG 656 / Easy
high power turbine

clear design
ergonomic and well balanced body
5-spray in standard option
only 47 grams



TGL 656 / Easy
high power turbine

clear design
ergonomic and well balanced body
durable cellular glass optics and optimal LED light
worldwide established hose connection standard
low weight, only 52 grams.



Chirana

Medical & Dental Company

STAINLES STEEL AND TITANIUM

BODIES AND FUNCTIONAL PARTS FROM STAINLESS STEEL, AND TITANIUM MEANS HIGH HIGIENIC STANDARD WITH POSSIBILITY TO USE WASHING AUTOMAT, DISINFECTION AND STERILIZATION.



TURBINES

*Multiflex® is a registered brand of company Kaltenbach & Voigt Co. KG, Biberach.



420

quick-coupling *Multiflex® compatible

stainless steel

with LED light

connection: ISO-6-Midwest



LED LIGHT



6-ISO MIDWEST



120 / 120L

contra-angle handpiece
1:1 compatible with 168 D-T head

contra-angle compatible with
*KaVo Intralux® - heads

1 contra angle = 13 different
instruments

body and functional parts from
stainless steel

separate internal cooling media

cellular optic

with / without light (120L / 120)



LIGHT



STERILIZABLE



168 D-T

head

compatible with
contra-angle 120 L / 120 D

push-button chucking system

body and functional parts from
stainless steel



PUSH-BUTTON
CHUCKING



STERILIZABLE

QUICK STOP FUNCTION

ROTOR IS STOPPED UP TO 1 SEC. THAT ELIMINATES
A RISK OF INJURING AND SUCTION FROM PATIENT'S CAVITY.



Handpieces

*KaVo Intralux® and Mutliflex® are the registered brands of company Kaltenbach & Voigt Co. KG, Biberach

Chirana
Medical & Dental Company



120 LB
 contra-angle handpiece
 with 1:1 ratio

clear design, ergonomic
 and durable body

4-spray for optimal cooling

durable cellular glass rod
 for brightness lighting

for burs with \varnothing 2,35 shank



120 LR
 contra-angle handpiece
 with 1:5 ratio

clear design,
 ergonomic and durable body

4-spray for optimal cooling

durable cellular glass rod
 for brightness lighting

for burs with \varnothing 1,6 shank



110 D
 straight handpiece 1:1

body and functional parts from
 stainless steel

separate internal cooling media

effortless control of chucking
 system

low-vibration operation



CERAMIC BEARINGS

GUARANTEE RELIABILITY AND LONG LIFE.
 QUIET, VIBRATION-FREE OPERATION.



Handpieces



CH 660 Bless
brushless micromotor

quiet and vibration free operation
stable torque in combination with short length (49mm)
optimal LED light.
fully sterilizable up to 135°C
controllable speed at range 100 - 40 000 rpm
CHIRANA hose connector



CH 660 LED
durable commutator micromotor

from stainless steel
optimal LED light.
high torque controllable at full range of speed 60 - 40 000 rpm using special Chirana slow-speed regulation PCB
air filter, removable coat sterilizable up to 135°C
CHIRANA hose connector



CH 660
durable commutator micromotor

from stainless steel
high torque controllable at full range of speed 60 - 40 000 rpm using special Chirana slow-speed regulation PCB
air filter, removable coat sterilizable up to 135°C
CHIRANA hose connector



LIGHTING

LED LIGHTING AND DURABLE FIBER LIGHT ROD IMPROVES THE VISIBILITY OF OPERATIVE FIELD, GENERATES NATURAL WHITE LIGHT AND ELIMINATES HEATING OF HANDPIECES.



Smioil spray 300ml / 500ml

High-quality cleaning and oiling
for daily care of dental instruments.



for *MULTIFLEX®
coupling turbines



for handpieces
and heads



for Midwest,
Borden turbines

*Multiflex® is a registered brand of company Kallenbach & Voigt Co. Kg, Biberach.

PRECISION

OUR TOOLS ARE MADE TO BE A PIECE OF ART
MADE BY OUR ENGINEERS AND PROFESSIONAL
EQUIPMENT.



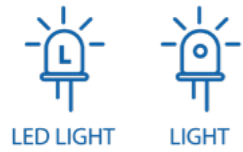
You can ensure a long life for your instruments by right cleaning and oiling.
We recommend you to use Smioil spray.

After **one month**
without proper
maintenance



After **one year**
with proper
maintenance





Optimal ways of lighting



Small head for better accessibility



Comfort push-button chucking system



Very light and durable body



Oil free maintenance



Designed for effective sterilization



High precision ceramic bearings



4-spray for optimal cooling



5-spray for optimal cooling



Quick Stop up to 1 second



4-ISO-Midwest connection



6-ISO-Midwest connection

Stainless steel and titanium

Bodies and functional parts from stainless steel and titanium means high hygienic standard with possibility to use washing automat, disinfection and sterilization.

Ceramic bearings

Guarantee reliability and long life. Quiet, vibration-free operation.

Oilless bearings

save costs on operation.

Quick stop function

Rotor is stopped up to 1 sec. That eliminates a risk of injuring and suction from patient's cavity.

Vacuum elimination

Air non-return valve prevents to suck oral fluids and other contaminants into the handpiece.

Optimum cooling

by side spray, 4-nozzle spray or 5-nozzle spray.

Lighting

The CHIRANA Medical instruments are available in versions without light and with light LED. LED lighting improves the visibility of operative field, generates natural white light similar to daylight, eliminates heating of handpieces and as longer life cycle as a traditional bulb.

PICTOGRAMS

Turbine handpiece - technical data

Model	TGL637A	TGL637A Small	TGL656	TG656
Coupling	Quick connection Multiflex***	Quick connection Multiflex***	hose connection 6-ISO MIDWEST	hose connection 6-ISO MIDWEST
Light	durable glass rod	durable glass rod	durable glass rod + LED	-
Spray	5 - side	5 - side	5 - side	5 - side
Head size	Ø 13mm	Ø 11mm	Ø 13mm	Ø 13mm
Speed	380 000 rpm +/-10% *	420 000 rpm +/-10% *	380 000 rpm +/-10% *	380 000 rpm +/-10% *
Power	18W	14W	18W	18W
Noise level	60dB	60dB	60dB	60dB
Weight	49g	48g	53g	47g
Operating pressure (optimum/max.)	0,21-0,23/0,3MPa	0,21-0,23/0,3MPa	0,21-0,23/0,3MPa	0,21-0,23/0,3MPa
Air consumption	38±2 l.min-1	40±2 l.min-1	38±2 l.min-1	38±2 l.min-1
Drill clamping force	35N	35N	35N	35N
Shank of drill	Ø1.59 - 1.60mm	Ø1.59 - 1.60mm	Ø1.59 - 1.60mm	Ø1.59 - 1.60mm
Max. operating part diameter	2mm	2mm	2mm	2mm
Max. length	25mm	21mm	25mm	25mm
Bearings	high precision ceramic	high precision ceramic	high precision ceramic	high precision ceramic
Body material	stainless steel	stainless steel	coating brass	coating brass
Sterilization	up to 135°C	up to 135°C	up to 135°C	up to 135°C
Special function: Quick stop (up to 1s) Lube-free bearings	TGL637AH TGL637AHF	TGL637AH Small TGL637AHF Small	TGL656H TGL656HF	TG656H TG656HF
Warranty	12 months	12 months	12 months/ 6 months (EASY packing)	12 months/ 6 months (EASY packing)

* speed in max. operating pressure

***Multiflex* is a registered brand of company Kaltenbach & Voigt Co. KG, Biberach

Micromotor handpieces - technical data

Model	120LR	120LB	120L + 168D-T Intralux®***	120 + 168D-T Intralux®***	110D (straight)
Transmission	1:5	1:1	1:1	1:1	1:1
Light	durable glass rod	durable glass rod	durable glass rod	-	-
Spray	4 - side	4 - side	1 - side	1 - side	1 - side
Head size	Ø 9,7mm	Ø 9,7mm	Ø 10mm	Ø 10mm	-
Weight	79g	79g	78g	77g	71g
Shank of drill	Ø1.59 - 1.60mm	Ø2.35mm	Ø2.35mm	Ø2.35mm	Ø2.35mm
Max. operating part diameter	2mm				
Max. length	25mm	30mm	25mm	25mm	44mm
Max. input speed	40 000 rpm	40 000 rpm	40 000 rpm	40 000 rpm	40 000 rpm
Coupling	ISO 3964	ISO 3964	ISO 3964	ISO 3964	ISO 3964
Body material	coating brass	coating brass	stainless steel	stainless steel	stainless steel
Sterilization	up to 135°C	up to 135°C	up to 135°C	up to 135°C	up to 135°C
Warranty	12 months	12 months	12 months	12 months	12 months

*** Intralux® is a registered brand of company Kaltenbach & Voigt Co. KG, Biberach

Micromotor - technical data

Model	Ch660Bless	Ch660LED	Ch660
Light	LED	LED	-
Speed	100 - 40 000rpm	100(60) - 40 000rpm	100(60) - 40 000rpm
Torque	20mNm	35mNm	35mNm
Length (without coupling)	49mm	65mm	60mm
Weight	90g	110g	101g
Coupling	ISO 3964 (short compatible)	ISO 3964	ISO 3964
Spray	internal	internal	internal
Operating mode (use/rest)	2min / 3min	2.5min / 7.5min	2.5min / 7.5min
Body material	stainless steel	stainless steel	stainless steel
Sterilization	up to 135°C	-	-
Warranty	12 months	12 months	12 months



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