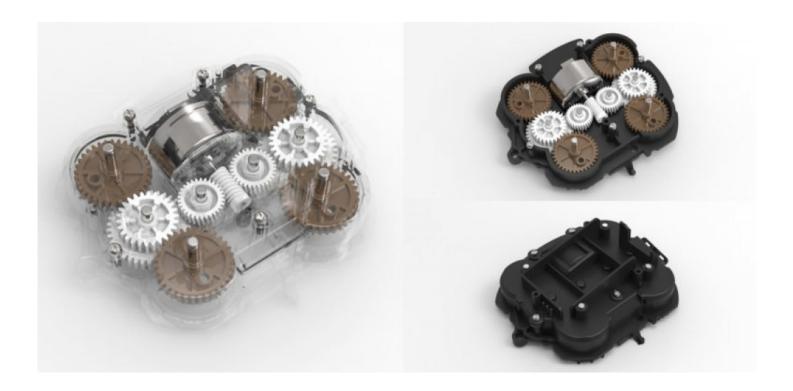
DC Motors for Medical Applications Are Improving Health



Los Angeles, Jul 30, 2020 (Issuewire.com) - Since it was initially reported on 31 December 2019, the illness is known as Coronavirus Disease 2019 (COVID-19) has spread rapidly, having the world on edge. As of 12 June, close to 7.3 million confirmed cases and over 413,400 deaths have been reported globally since the outbreak began in more than 200 countries, territories and areas, with new cases and countries reporting daily. Always, better health is central to human happiness and well-being. Never before has medical technology played a greater role in public health than during the COVID-19 pandemic. DC motors are often applied to medical advancements, giving medical applications greater accuracy and professional control. ZHAOWEI develops a wide variety of medical gearboxes for demanding medical applications, no matter for surgical, clinical or laboratory settings.

ZHAOWEI DC Motors Empower the Medical Applications

Medical Massage — Optimized Control

A soothing massage after a tiring day at work is the most convenient way to wind down. Massage therapy helps relax knotted muscles, eliminate chronic aches and pains, and improve circulation. It could also help release muscle tension and improve the mobility of the joints. Medical massage occupies a large part in medical applications, especially eye, scalp and visage massage.

Massaging the eye area can increase oxygen to the eyes and brain. Using kneading or rolling compression, sometimes along with heat, the devices can stimulate blood flow and reduce eye fatigue. The multi-stage gear transmission mechanism for eye massager launched by ZHAOWEI enables such functions. The dedicated planetary gear design greatly helps to reduce the noise when the eye massager is operating while different stages (2-stage, 3-stage and 4-stage) of gear transmission helps to easily control the frequency and intensity of the eye massager according to the design

requirements. <u>Scalp and visage massager</u> is no exception. ZHAOWEI optimizes the design of gearbox structure to achieve high torque, low noise and long service life.

<u>Ventilator</u> – Intelligent Adjustment

According to Global Ventilator Market: Regulatory Landscape, Analysis and Forecast, 2021-2030, the global ventilator market was valued at \$1,142.0 million in 2019 and has witnessed a growth surge of up to 172% in 2020 due to the rise in demand pertaining to the coronavirus outbreak. Moreover, the market is anticipated to normalize from 2022 and grow consistently with a CAGR of 15.13% during the forecast period 2021-2030. It does enjoy a promising prospect. Besides, according to WHO, one in six COVID-19 patients becomes seriously ill and can develop breathing difficulties. Thus, ventilators – mechanical breathing devices – are crucial in the fight to save patients whose lungs are assailed by the virus.

ZHAOWEI intake valve motors can help the ventilator to intelligently adjust the intake volume. The design principle is that the regulating valve of medical ventilators can achieve the intelligent adjustment of the size of the oxygen jet hole under the combination of helical worm and pressure of intake valve. Choose the corresponding orifice-plate diameter under different output flow, achieving great absorbing and back-pressure ability. Compared with the existing technology, ventilators with intelligent adjustment makes a lower oxygen concentration and higher stability possible under the same backpressure and different flow.

Cochlear Implant- Light-duty Application

The artificial cochlea or cochlear implant is an electronic device that transmits a sense of sound to the person severely deaf. The implant consists of an external portion that sits behind the ear and a second portion that is surgically placed under the skin. Global Cochlear Implants Market – Industry Trends and Forecast to 2027 shows that the global cochlear implant market is expected to rise to an estimated value of USD 10.54 billion by 2026, registering a substantial CAGR in the forecast period of 2019-2026. To meet the requirements of both quantity and quality, related industries will adopt advanced components like medical motors and gears to achieve cochlear implant upgrading. This happens to what ZHAOWEI offers. ZHAOWEI pushes a solution combining the plastic gearbox with the stepper motor (or customized type). Plastic gearbox aims to reduce weight and increase efficiency, contributing to no burden on the ears. It can absorb shock and vibration as a result of elastic compliance and keeps quiet when running. Moreover, the stepper motor is well-suited for such a light-duty application since it combines high torque and compact design, which in turn gives them an excellent response, responsive acceleration and easy position control.

• Insulin Pump— Reliable Insulin Delivery

Diabetes, a widespread disease, is getting more and more attention in our daily life. More and more patients are switching to an insulin pump delivery system to provide customized, fast, reliable, and precise insulin delivery in a compact size. The insulin pump gearbox provided by ZHAOWEI is conducive to smart control of the insulin injection volume, keeping the blood sugar balanced. It controls the screw ejection by the transmission of the stepper motor (or customized type of motor) so that the designed gearbox can reach the expected size of the matchbox. ZHAOWEI firmly runs after the extremely high demands of each DC motor: In order to keep down the weight of the wearable device, the DC motor must be compact, and as a rule, the diameter must be suitable. Then, the DC motor must be reliable and precise, since too little or too much insulin is harmful to the patient.

The insulin pump is primarily used by diabetes patients as a wearable medical pump, but other application areas are also emerging. ZHAOWEI medical motor service with gears are already in use.

The Final Verdict

Health is an eternal topic, which makes an important contribution to social progress. Complete customizable and precise drive solutions for various medical applications are available by <u>ZHAOWEI</u> to reduce assembly costs while providing outstanding performance. No matter what next challenge the medical industry will be confronted with, ZHAOWEI will strive to meet and even exceed customers' needs in miniature medical motors with gearboxes.



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