

90.19 - Mechano-therapy appliances; massage apparatus; psychological aptitude-testing apparatus; ozone therapy, oxygen therapy, aerosol therapy, artificial respiration or other therapeutic respiration apparatus.

- 9019.10 - Mechano-therapy appliances; massage apparatus; psychological aptitude-testing apparatus
- 9019.20 - Ozone therapy, oxygen therapy, aerosol therapy, artificial respiration or other therapeutic respiration apparatus

(I) MECHANO-THERAPY APPLIANCES

These appliances are mainly used to treat diseases of the joints or muscles, by mechanical reproduction of various movements. It should be noted that such treatment is usually carried out under medical supervision; the apparatus of this heading should therefore be distinguished from the ordinary physical culture or medical exercising equipment designed for use in the home or in specially equipped premises (**heading 95.06**) (e.g., elastic cable extenders or exercisers; spring grips of various kinds; "rowing" machines for reproducing rowing movements; stationary one-wheeled cycles for training purposes or for developing leg muscles).

Since mechano-therapy refers only to treatment involving movement of the joint, etc., this heading **excludes** wholly stationary apparatus (e.g., steps, ladders, parallel bars) even if they are for use in the rehabilitation of the limbs; such articles are classified in their respective headings. For the purposes of this heading, however, apparatus may be regarded as mechanical even if it incorporates only comparatively simple mechanical devices such as springs, wheels, pulleys, etc.

Subject to the above conditions, the heading includes :

- (1) Apparatus for rotation exercises of the wrist.
- (2) Apparatus for rehabilitation of the fingers.
- (3) Apparatus for rotation exercises of the feet.

Most of these three types of appliances consist mainly of grips linked to levers, adjustable counterweights, devices for holding the limbs, the whole mounted on a base. They are hand-operated.

- (4) Apparatus for simultaneous flexion and extension of the knee and hip.
- (5) Apparatus for trunk exercises.
- (6) Apparatus for walking exercises, consisting of a frame, with supporting crutches and hand grips, resting on a series of wheels.
- (7) Apparatus for improving the circulation, strengthening heart muscles and rehabilitating the lower limbs, consisting of a kind of wheel-less cycle fixed on a frame, which can be pedalled when the patient is sitting up or lying down.
- (8) Universal-type apparatus, power-operated, which by the use of interchangeable accessories, can be employed for numerous mechano-therapeutic purposes (e.g., for treatment of diseases of the joints or muscles of the neck, shoulder, elbow, wrist, fingers, hip, knee, etc.).

90.19

(II) MASSAGE APPARATUS

Apparatus for massage of parts of the body (abdomen, feet, legs, back, arms, hands, face, etc.) usually operate by friction, vibration, etc. They may be hand- or power-operated, or may be of an electro-mechanical type with a motor built in to the working unit (vibratory-massaging appliances). The latter type in particular may include interchangeable attachments (usually of rubber) to allow various methods of application (brushes, sponges, flat or toothed discs, etc.).

This group includes simple rubber rollers or similar massaging devices. It also covers hydromassage appliances for all-over or partial massage of the body, using the action of water or a blend of water and air under pressure. Examples of these appliances include spa baths, presented complete with pumps, turbines or blowers, ducts, controls and all fittings; devices for massaging the breasts, using the action of water distributed by a series of small nozzles mounted inside a form fitted over the breast, and made to revolve by a stream of water introduced through a flexible tube.

The following are also regarded as massage apparatus within the meaning of this heading : mattresses designed to prevent or treat bedsores by constantly varying the places at which the weight of the patient's body rests and also providing a superficial massage effect on tissues liable to necrosis.

(III) PSYCHOLOGICAL APTITUDE-TESTING APPARATUS

This is used by doctors, etc., to test the speed of reflex actions, co-ordination of movements or other physical or psychological reactions. It is used in particular to test people whose occupations demand special aptitudes (airmen, drivers, etc.), or to test the educational or vocational aptitudes of children.

The heading covers various types of such apparatus (e.g., appliances for testing mechanical aptitudes or manual dexterity; revolving seats designed for variable speeds and abrupt stopping to test the reactions of aircraft pilots).

It should, however, be noted that the heading **excludes** apparatus of a kind normally used for medical diagnosis of sight, hearing, the heart, etc. (**heading 90.18**). Similarly, articles having the character of constructional or building sets and equally suitable for use as amusements and for aptitude testing are classified as games or toys (**Chapter 95**).

(IV) OZONE THERAPY APPARATUS

This apparatus provides for the treatment of diseases of the respiratory organs by using the therapeutic properties of ozone (chemical formula O_3), e.g., by inhaling.

(V) OXYGEN THERAPY, ARTIFICIAL RESPIRATION OR OTHER THERAPEUTIC RESPIRATION APPARATUS

These are used in cases of drowning, electrocution, acute poisoning (e.g., carbon monoxide), for weak newly-born babies, post-operative shock, infantile paralysis (poliomyelitis), acute asthma, insufficient lung development, etc.

These appliances include :

- (A) **Appliances used instead of manual methods of artificial respiration**, e.g., mechanical devices operating by bringing pressure to bear on the patient's chest, by a rocking movement, by forced inhalation, etc.
- (B) **Oxygen therapy appliances proper**. These operate either by inhalation of oxygen or of a mixture of oxygen and carbon dioxide through a mask, or by feeding oxygen into a respiratory chamber consisting of a tent of transparent plastics fitted to the patient's bed.
- (C) **Appliances known as "iron lungs" and the like**. These consist essentially of :
 - (1) A chamber, made of metal, wood or glass fibre, to accommodate the patient's body (the head remaining outside), or a smaller chamber of transparent plastics covering only the chest.
 - (2) An independent unit comprising an air suction system and an emergency blower which may be power- or hand-operated.
 - (3) A thick air-tight tube connecting the blower system to the chamber.

Certain oxygen therapy appliances described above (in particular oxygen tents) may also be used for administration of aerosols, the patient receiving simultaneously an inhalation of oxygen and a medicament dispersed as a micro-spray (see Part (VI) below).

The heading **does not include** hyperbaric or decompression chambers (**heading 90.18**).

(VI) AEROSOL THERAPY APPARATUS

This is used for the application of a therapeutic agent in the treatment of pulmonary, cutaneous, oto-rhino-laryngologic, gynaecologic diseases, etc., by the dispersion (nebulisation) in the form of a mist of various medicinal solutions (hormones, vitamins, antibiotics, broncho-dilating preparations, essential oils, etc.).

Some of these appliances are of the individual type (nebulisers) designed for connecting to cylinders of oxygen or compressed air, or for fitting to the oxygen tents described in Part (V) above. Others are of the aerosol generator type for doctors' consulting rooms or hospitals; these consist of a cabinet containing a motor-compressor unit, measuring instruments, the generator proper and various application devices (masks, nasal, buccal, gynaecological, etc., nozzles). The heading includes aerosol-type hand-sprays for spraying teeth or gums which operate by compressed gas contained in a screw-on cartridge; the action of the medicinal substance used cleans the mouth and treats diseases such as periodontitis.

PARTS AND ACCESSORIES

Subject to the provisions of Notes 1 and 2 to this Chapter (see the General Explanatory Note), parts and accessories of apparatus or appliances of this heading remain classified here. Such parts and accessories include tents and tent fixing devices for oxygen therapy apparatus.