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Endoscopes — Medical endoscopes and endotherapy devices —

Part 6: Vocabulary

Endoscopes — Endoscopes médicaux et dispositifs d'endothérapie — Partie 6: Vocabulaire

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 172, *Optics and photonics*, Subcommittee SC 5, *Microscopes and endoscopes*.

This second edition cancels and replaces the first edition (ISO 8600-6:2005), which has been technically revised.

The main changes compared to the previous edition are as follows:

— General revision of terms in regards of adoption from terms from other parts of ISO 8600 (all parts);

— General revision of category classifications;

— Terms for Endoscopes from aspect of Intended use have been added;

— Terms for specifications have been added;

— Document was editorially revised.

A list of all parts in the ISO 8600 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Endoscopes — Medical endoscopes and endotherapy devices —

Part 6: Vocabulary

1 Scope

This document defines terms for endoscopes and endotherapy devices commonly used in the endoscopic area. This document does not define general medical terms or other general terms. This document does not define terms that should be defined in other ISO 8600 (all parts).

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1 General terms

3.1.1
active endotherapy device
device, consists of a probe/*electrode* (3.3.24) which is inserted through the working channel of an endoscope into natural or surgically created body cavities or *instrument channels* (3.5.43), and a generator which supplies the energy to be transmitted to the distal end of the device, used for endotherapy, e.g. cutting/coagulating/vaporizing/ablation of tissue, by using energy, including, e.g. high frequency, electromagnetic, ultrasonic or laser energy sources

3.1.2
capsule endoscope
capsule shaped endoscope which is introduced into a digestive tract by swallowing by the patient through the mouth

3.1.3
endoscope
medical instrument having viewing means, with or without optics, introduced into a body cavity through a natural or surgically created body opening for examination, diagnosis or therapy

Note 1 to entry: It may be of rigid or flexible type; all types may have different image-transmitting systems (e.g., optical, via lenses, or fibre bundles) and image pick-up systems (e.g., video or ultrasonic sensors).

Note 2 to entry: An endoscope can also be tube with illumination.

3.1.4
endotherapy device
medical device intended to be inserted into a natural or surgically created body opening during endoscopic procedures, whether through the same or a different orifice from the *endoscope* (3.1.3) for examination, diagnosis or therapy

Note 1 to entry: Endotherapy devices include the instrument to create the body opening through which an endoscope or endotherapy device is inserted, such as a guide tube, *trocar pin* (3.3.79), *trocar sleeve* (3.3.80) or sliding tube. Endotherapy devices include the devices to be inserted through the openings other than the opening for an endoscope to ensure the safety of the devices for the intended use under the endoscopic view.

[SOURCE: IEC 60601-2-18:2009, 201.3.205]

3.1.5
fibrescope
endoscope (3.1.3) in which the image is transmitted via a fibre bundle

3.1.6
flexible endoscope
endoscope (3.1.3) device whose *insertion portion* (3.5.41) is intended to conform to natural or surgically created body cavities or *instrument channels* (3.5.43)

Note 1 to entry: The image-transmitting systems may be optical via fibre bundles, or electrical via image sensors.

3.1.7
flexible endotherapy device
endotherapy device (3.1.4) whose *insertion portion* (3.5.41) is intended to conform to natural or surgically created body cavities or *instrument channels* (3.5.43)

3.1.8
rigid endoscope
endoscope (3.1.3) device whose *insertion portion* (3.5.41) is intended to be unyielding to natural or surgically created body cavities or *instrument channels* (3.5.43)

Note 1 to entry: The image-transmitting systems may be optical via lenses or fibre bundles, or electrical via image sensors.

3.1.9
rigid endotherapy device
endotherapy device (3.1.4) whose *insertion portion* (3.5.41) is intended to be unyielding to natural or surgically created body cavities or *instrument channels* (3.5.43)

3.1.10
speculum
surgical instrument with blunt *distal tip* (3.5.15) usually made of stainless steel or plastic, used for examination or the insertion of other instrumentation by expanding or stretching a lumen, body orifice or canal when inserted and opened; a pivot point joints two arms whose portion proximal to the pivot point usually forms the *handle* (3.5.36) of the device while those distal to the pivot point open when force is exerted, some of which have their own built-in illumination transmitting mechanism, e.g., fibreoptic bundle

3.1.11
telescope
component of an *endoscope* (3.1.3) introduced into the *sheath* (3.3.66) which consists of several elements including a connector to a fibre cable to transport light from a *light source* (3.5.52) and an image-transmission system synonymous to an *endoscope* (3.1.3)

3.1.12
ultrasonic endoscope
endoscope (3.1.3) with an electro-acoustical image pick-up system

3.1.13
ultrasound endoscope
endoscope (3.1.3) with an electro-acoustical image pick-up system

3.1.14
video endoscope
endoscope (3.1.3) in which the image is transmitted by a solid-state imaging device

3.2 Names of endoscopes from aspect of Intended use

3.2.1
adenoscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the nasal cavity, e.g., during the removal of the adenoids

3.2.2
angioscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the lumen and patency of the veins or arteries, which is inserted percutaneously

3.2.3
anoproctoscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the rectum and anus, which is inserted into the body through the anus during the procedure called proctoscopy and anoscopy

3.2.4
anoscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the anus and rectum

3.2.5
antroscope
endoscope (3.1.3) used for observation, diagnosis, and treatment mainly of the maxillary antrum

3.2.6
arterioscope
endoscope (3.1.3) used for observation, diagnosis, and some treatment of coronary arteries, peripheral vessels, and intracardiac structures

3.2.7
arthroscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the interior of the joints such as the knee, shoulder or elbow, which is introduced into the joint cavity usually through an artificial orifice

3.2.8
auditory canal endoscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the middle ear and the ear canal (the canal from the ear opening to the tympanic membrane or the ear drum)

3.2.9
bronchoscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the trachea, bronchi and lungs which is inserted through the mouth or nose

3.2.10
cholangioscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the choledoch (common bile duct) which is inserted via an incision in the abdomen or via a flexible *duodenoscope* (3.2.18)

3.2.11
choledochoscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the choledoch (common bile duct) which is inserted via an incision in the abdomen or via a flexible *duodenoscope* (3.2.18)

3.2.12
colonoscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the colon which is inserted through the anus

3.2.13
culdoscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the female peritoneal cavity and organs, inserted into the rectouterine pouch (pouch of Douglas) through the posterior vaginal fornix

3.2.14
cystoscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the bladder and the urinary tract, inserted through the natural urinary orifice into the urethra

3.2.15
cystourethroscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the bladder and urethra including the prostate region, inserted through the natural urinary orifice into the urethra

3.2.16
directoscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the larynx and its peripheral parts

3.2.17
discoscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the spine, which is inserted through an artificial orifice in the body

3.2.18
duodenoscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the duodenum

3.2.19
enteroscope
endoscope (3.1.3) that is used for the visual examination and treatment of the small intestine (the duodenum, jejunum, and ileum), which is inserted into the body through the mouth or the anus

3.2.20
ESDP endoscope
dedicated device used for the treatment of varicose veins, i.e., endoscopic subfascial dissection of perforating veins (ESDP), which is inserted through an artificial orifice transcutaneously alongside the outside of the perforating vein which is then cauterized

3.2.21
gastroduodenoscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the upper gastrointestinal tract (oesophagus, stomach, and duodenum), pancreas, and bile duct

3.2.22
gastroscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the oesophagus and the stomach

3.2.23
hysteroresectoscope
endoscope (3.1.3) with a rigid inserted portion that is used for observation, diagnosis and treatment, especially resecting, of the canal of the cervix and the uterine cavity (uterus)

3.2.24
hysteroscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the canal of the cervix and the uterine cavity (uterus), which is inserted from the vagina

3.2.25
intubation laryngoscope
laryngoscope (3.2.28) used specifically for insertion and positioning of an airway tube (endotracheal tube) into the trachea

3.2.26
lacrimalscope
endoscope (3.1.3) used for observation, diagnosis, and treatment within the lacrimal passage

3.2.27
laparoscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of organs within the abdominal/retroperitoneal cavities, which is inserted into an artificial orifice in the abdominal wall

3.2.28
laryngoscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the larynx and its peripheral parts

3.2.29
laryngopharyngoscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the larynx and oropharynx

3.2.30
laryngostroboscope
endoscope (3.1.3) used for observation of the glottis action during phonation, which operates by illuminating a stroboscopic light

3.2.31
lumbarscope
endoscope (3.1.3) that is used for the visual examination and treatment of the lumbar region of the spine (region between the lowest ribs and the hipbones), which is inserted into the body through an artificial orifice created by an incision

3.2.32
lumboscope
endoscope (3.1.3) used for observation, diagnosis, and treatment in the loin and inserted from an artificial orifice

3.2.33
mammary-ductoscope
endoscope (3.1.3) used for observation, diagnosis, and treatment within the mammary duct

3.2.34
mediastinoscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the mediastinal space, (the intrapleural space located behind the sternum, between two pleural membranes)

3.2.35
myeloscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the spinal cord, and inserted from an artificial orifice

3.2.36
nasolaryngoscope
endoscope (3.1.3) used for the observation, diagnosis, and treatment of the nasolarynx (the upper part of the throat behind the nose)

3.2.37
nasopharyngoscope
endoscope (3.1.3) used for the observation, diagnosis, and treatment of the nasopharynx (the upper part of the throat behind the nose)

3.2.38
nephroscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the kidney, and inserted percutaneously into the renal pelvis

3.2.39
neuroscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the central nervous system, and inserted through a pre-drilled hole in the cranium

3.2.40
oesophagoscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the oesophagus

3.2.41
ophthalmic endoscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the eyeball and the related organs

3.2.42
otoscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the auris media and the auditory canal (the canal from the ear opening to the ear drum)

3.2.43
pancreatoscope
endoscope (3.1.3) used for observation and diagnosis in the pancreas, which is usually introduced through a working channel of a *duodenoscope* (3.2.18) and inserted through the Vater's papilla

3.2.44
pelviscope
endoscope (3.1.3) used for observation and diagnosis in the pelvis of pelvic viscera, which is inserted percutaneously from an artificial orifice

3.2.45
pharyngoscope
endoscope (3.1.3) used for the observation, diagnosis, and treatment of the pharynx, which is inserted through the mouth or nose

3.2.46
plastic surgery endoscope
endoscope (3.1.3) that is used in plastic surgery for suction of subcutaneous tissue, reconstructive surgery, etc., which typically consists of a *telescope* (3.1.11) and several *sheaths* (3.3.66) or tubes

3.2.47
proctoscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the rectum and anus, which is inserted into the body through the anus during the procedure called proctoscopy

3.2.48
pyeloscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the kidney, and inserted percutaneously into the renal pelvis

3.2.49
rectoscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the rectum and anus, which is inserted into the body through the anus during the procedure called proctoscopy

3.2.50
resectoscope
endoscope (3.1.3) used for observation, diagnosis, and treatment, especially resecting, of prostatic hyperplasia and cervical myoma resection, etc., which typically consists of a rigid *outer sheath* (3.5.55), a *telescope* (3.1.11), a *working guide* (3.5.68) element and a variety of interchangeable electrosurgical *electrodes* (3.3.24)

3.2.51
rhino-laryngoscope
endoscope (3.1.3) intended to be used for observation, diagnosis, and treatment of the nasal cavities, nasopharynx, oropharynx and larynx

3.2.52
rhinoscope
endoscope (3.1.3) intended to be used for observation, diagnosis, and treatment of the interior of the nose by way of the anterior nostrils

3.2.53
rigid bronchoscope
open straight tube-type *rigid endoscope* (3.1.8) fitted with a means of illumination through the distal end and intended to be introduced into the tracheobronchial airway, having an internal lumen sufficiently large to permit free respiration of the patient

3.2.54
rigid jet ventilation bronchoscope
rigid bronchoscope (3.2.53) provided with a *jet-injector* (3.5.44)

Note 1 to entry: Rigid bronchoscopes provided with only a gas nipple should not be included within the category of jet-ventilation bronchoscopes, because the venturi principle does not necessarily function sufficiently to ventilate the patient.

3.2.55
rigid ventilation bronchoscope
rigid bronchoscope (3.2.53), fitted with a removable *end-cap* (3.5.18) at the proximal end of the open straight tube and having an internal lumen sufficiently large to permit ventilation of the patient through an integral ventilation connector

3.2.56
salpingoscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the ovarian duct, for obtaining of ova, for injection of fertilized ova, etc, which is inserted through the abdominal cavity or the vagina and the uterine cervix

3.2.57
sigmoidoscope
endoscope (3.1.3) used for visual examination and treatment of the sigmoid colon (the distal S-shaped part of the large intestine leading to the rectum), which is inserted through the anus

3.2.58
sinoscope
endoscope (3.1.3) intended to be used for observation, diagnosis, and treatment of the paranasal sinuses

3.2.59
sphincteroscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the anal sphincter, which is inserted into the body through the anus

3.2.60
spinoscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the spine, which is inserted through an artificial orifice in the body

3.2.61
TEM rectoscope
device used for microsurgical intervention, treatment of the lower part of the bowel by way of the anus using a special rectoscopic tube, a process known as transanal endoscopic microsurgery (TEM), which is a *rigid endoscope* (3.1.8) system and includes, besides the optical viewing *telescopes* (3.1.11), facilities to introduce gas to distend the field of view, and dedicated surgical instruments

3.2.62
thoracoscope
endoscope (3.1.3) used for visual examination, and treatment of the thoracic cavity, which is inserted through an incision made in the chest into the intercostal cavity

3.2.63
transabdominal amnioscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the amnion, which is inserted from an artificial orifice through the maternal abdominal wall into the amniotic cavity

3.2.64
transcervical amnioscope
endoscope (3.1.3) used for the direct observation, diagnosis, and treatment of the foetus, and for the observation of the colour and amount of amniotic fluid through the maternal uterine cervix

3.2.65
ureterorenoscope
endoscope (3.1.3) intended to be used for observation, diagnosis, and treatment of the ureter and the renal pelvis via the external urethral orifice and bladder

3.2.66
ureteroscope
endoscope (3.1.3) intended to be used for observation, diagnosis, and treatment of the ureter via the external urethral orifice and bladder

3.2.67
urethroscope
endoscope (3.1.3) intended to be used for observation, diagnosis, and treatment of the urethra

3.2.68
utroscope
endoscope (3.1.3) used for observation, diagnosis, and treatment of the canal of the cervix and the uterine cavity (uterus), which is inserted from the vagina

3.2.69
vaginoscope
endoscope (3.1.3) used for examination of the vagina, usually in children, which comprises a vaginal *speculum* (3.1.10), cold-light lighting and a magnification device

3.3 Name of endotherapy devices

3.3.1
aspiration needle
needle which is intended to be used to aspirate liquid or tissue during endotherapy

3.3.2
balloon catheter
catheter (3.3.10) intended to be used to dilate a vessel, lumen, papilla or fistula, which is manufactured with a tube and a *balloon* (3.5.4) at the distal end for dilation

3.3.3
balloon dilator
catheter (3.3.10) intended to be used to dilate a vessel, lumen, papilla or fistula, which is manufactured with a tube and a *balloon* (3.5.4) at the distal end for dilation

3.3.4
biopsy forceps
endotherapy device (3.1.4), consists of a rigid or flexible metal coil or plastic tube whose distal end is equipped with a pair of *cups* (3.5.13) which is operated by a control *handle* (3.5.36) attached at the proximal end of the instrument, used through a compatible *endoscope* (3.1.3) introduced into the body cavity through an artificial orifice of the body or the working channel of the *endoscope* (3.1.3) to obtain specimens for histological/pathological diagnosis during endoscopy

Note 1 to entry: Some biopsy forceps can apply high frequency electricity for coagulation to prevent internal bleeding. See *hot biopsy forceps* (3.3.42).

3.3.5
biopsy needle
device typically constructed of a coil, tube or pipe whose distal end is equipped with a needle which is typically operated by a control *handle* (3.5.36) attached at the proximal end of the instrument to obtain specimens for histological/pathological diagnosis during endoscopy, which is introduced into the body cavity through an artificial orifice of the body or the working channel of the *endoscope* (3.1.3)

3.3.6
bipolar endotherapy coagulator
specialized *electrosurgical unit* (3.5.17), intended to be used during endoscopy for high frequency endoscopic electrosurgery, which coagulates or cuts tissue with high temperatures by creating a high frequency electrical current transmitted through the tissue between the two electrical contacts of the instrument

3.3.7
bougie
flexible or rigid, rod-shaped surgical instrument of various diameters that is intended for use in probing or dilating a tubular passage for the diagnosis and treatment of strictures

3.3.8
brachytherapy applicator
device, which is considered a component of the afterloading system and is typically designed for use with a specific remote-afterloading brachytherapy system and/or for the treatment of a specific body area, with configurations such as hollow needles, tubes or *catheters* (3.3.10) which are affixed or implanted on or within the body, which serve as a guide for computer controlled temporary placement and removal of single or multiple therapeutic radioactive sources at a treatment site either on the surface of the body (topical) or to locations within the body, e.g. interstitial, intravascular, intracavity or intraluminal

3.3.9
cannula
device intended to be used during endoscopy to feed medicine or a contrast medium into a body cavity for diagnosis and treatment or to introduce/accommodate of another device

3.3.10
catheter
flexible tube designed for insertion into a blood vessel, organ, or body cavity for purposes that include introducing/withdrawing fluids, occluding/dilating openings, or taking physical measurements, some of which are implantable, e.g. in a blood vessel to function as a filter

3.3.11
catheter introducer
sheath (3.3.66) used to facilitate placing a *catheter* (3.3.10) through the skin and into a vein or artery

3.3.12
clip
device to ligate vessel or tissue for haemostasis, closure of mucosa defects or perforation during endoscopy

3.3.13
clip applier
device consisting of an insertion *sheath* (3.3.66), a *clip* (3.3.12) attached at the distal end of the *sheath* (3.3.66), and a control *handle* (3.5.36) and operation wire connected to both the *clip* (3.3.12) and control *handle* (3.5.36), used to ligate a vessel or tissue for haemostasis, closure of mucosa defects or perforation during endoscopy

3.3.14
clip fixing device
device consisting of an insertion *sheath* (3.3.66), a clip attached at the distal end of the *sheath* (3.3.66), and a control *handle* (3.5.36) and operation wire connected to both the clip and control *handle* (3.5.36), used to ligate a vessel or tissue for haemostasis, closure of mucosa defects or perforation during endoscopy

3.3.15
clip remover
surgical instrument resembling *scissors* (3.3.64) or tweezers with two blades joined at their proximal end or midpoint which are designed for grasping, opening and removing a clip

3.3.16
contraceptive
device implanted and applied to the fallopian tube to constrict the tube and prevent the passage of ova typically used during tubal ligation procedures and is considered a contraceptive

3.3.17
curette
device intended to be used to obtain specimens for histological/pathological diagnosis during endoscopy whose *insertion portion* (3.5.41) is made from coil, pipe or tube, and at the distal end is a curette formed like a sharp nail for securing the biopsy

3.3.18
cytology brush
device consisting of an *insertion portion* (3.5.41), made from, e.g. a coil, tube or pipe, whose distal end is equipped with a brush for harvesting mucosa, intended to be used to collect cells of the mucosa for pathological diagnosis during endoscopy

3.3.19
dilation balloon catheter
catheter (3.3.10), which is manufactured with a tube and a *balloon* (3.5.4) at the distal end for dilation, intended to be used to dilate a vessel, lumen, papilla or fistula, or treatment spaces during endotherapy

3.3.20
dilation catheter
device forming a rod or tube used to dilate a lumen in order to enable or ease the introduction of *endotherapy device* (3.1.4) into this cavity or treat stricture, with which the dilatation can be carried out

3.3.21
dilator
slender hollow or solid surgical instrument made of metal, plastic or other suitable material in a cylindrical form and in a range of sizes and flexibilities which may include a mechanism to expand the portion of the device inserted and the degree of expansion made with which may be indicated on a dial

3.3.22
dissecting forceps
surgical instrument equipped with two blades, which are joined at their proximal end forming a *handle* (3.5.36), whose distal ends may have various configurations and serrations to facilitate grasping, manipulation, compression or joining of tissue during dissection

3.3.23
drainage tube
device intended to be used for drainage, which is used in combination with a compatible *endoscope* (3.1.3)

3.3.24
electrode
electrical conductor applied to a dedicated body target to transmit an electrical signal, which may be either invasive or non-invasive, with different sizes and shapes, e.g. plates or needles

3.3.25
electrosurgical coagulating forceps
forceps (3.3.35) intended to be used to coagulate tissue by using a high frequency current during endotherapy

3.3.26
electrosurgical cutting forceps
forceps (3.3.35) intended to be used to cauterize and cut tissue by using a high frequency current during endotherapy

3.3.27
electrosurgical hemostatic forceps
device intended to be used to coagulate bleeding tissue by using a high frequency current during endotherapy, which typically consists of an insulated insertion *sheath* (3.3.66), a couple of distal parts attached to the distal end of the *sheath* (3.3.66), and an operating wire connected with both the part and the *handle* (3.5.36) which controls the operating wire whose proximal end is connected to a high frequency power supply unit

3.3.28
electrosurgical incision forceps
device intended to be used to cauterize and cut tissue by using a high frequency current during endotherapy, which consists of an insulated insertion *sheath* (3.3.66), a couple of distal *cups* (3.5.13) attached to the distal end of the *sheath* (3.3.66), and an operating wire connected with both the *cups* (3.5.13) and the *handle* (3.5.36) which controls the operating wire whose proximal end is connected to a high frequency power supply unit

3.3.29
electrosurgical knife
device intended to be used to cauterize, and cut tissue by using a high frequency current during endotherapy, which consists of an insulated insertion *sheath* (3.3.66), a distal *electrode* (3.3.24) attached to the distal end of the *sheath* (3.3.66), an operating wire connected with both the distal *electrode* (3.3.24) and the *handle* (3.5.36) which controls the operating wire whose proximal end is connected to a high frequency power supply unit

3.3.30
electrosurgical needle
device intended to be used to cauterize, and cut tissue by using a high frequency current during endotherapy, which consists of an insulated insertion *sheath* (3.3.66), a distal *electrode* (3.3.24) attached to the distal end of the *sheath* (3.3.66), and an operating wire connected with both the distal *electrode* (3.3.24) and the *handle* (3.5.36) which controls the operating wire whose proximal end is connected to a high frequency power supply unit

3.3.31
electrosurgical snare
device intended to be used to ligate, cauterize, and cut tissue or polyps by using a high frequency current during endotherapy, which consists of an insulated insertion *sheath* (3.3.66), a *snare loop* (3.5.60) attached to the distal end of the *sheath* (3.3.66), and an operating wire connected with both the loop and the *handle* (3.5.36) which controls the operating wire whose proximal end is connected to a high frequency power supply unit

3.3.32
electrosurgical thermal diode
instrument, used for, e.g. the sterilization of women by sealing the fallopian tubes or the coagulation of bleeding tissue, coated e.g. with Polytetrafluoroethylene (PTFE) with a built-in *thermal diode* (3.3.77) at the distal end which can be supplied with different applications, e.g. coagulating *electrode* (3.3.24) or grasping *forceps* (3.3.36)

3.3.33
endoscopic mucosal resection kit
kit which can readily be used consisting of several *endotherapy devices* (3.1.4) such as *spray catheter* (3.3.70), injection needle and *electrosurgical snare* (3.3.31)

3.3.34
endotherapy laser guide
device used to guide or direct a laser beam during endoscopic laser therapy and typically made of fibreoptic materials, which will be connected to the delivery arm of the laser

3.3.35
forceps
instrument, typically constructed of a flexible or rigid *sheath* (3.3.66) whose distal end is equipped with a pair of grasping claws or *cups* (3.5.13) which are operated through a *handle* (3.5.36) at the proximal end of the *sheath* (3.3.66), introduced into the body cavity through natural or surgically created body cavities or *instrument channels* (3.5.43) which is intended to be used during endotherapy, such as to grasp tissue or foreign bodies, to cut tissue or suture

3.3.36
grasping forceps
instrument intended to be used to grasp tissue, stones or foreign bodies during endotherapy whose *insertion portion* (3.5.41) is typically constructed of a coil, tube or pipe

3.3.37
guide catheter
device intended to be used to assist insertion of *endotherapy devices* (3.1.4) during endotherapy

3.3.38
guide wire
device intended to be used to assist insertion/positioning of an *endoscope* (3.1.3) or *endotherapy devices* (3.1.4) during endotherapy which is manufactured with flexible coil or wire

3.3.39
heating coagulator
device intended to be used to coagulate tissue by heating element during endotherapy

3.3.40
heat probe
device intended to be used to coagulate tissue by a heating element during endotherapy, which consists of an insulated insertion *sheath* (3.3.66), a thermal element attached to the distal end of the *sheath* (3.3.66) and a wire whose proximal end is connected to a power supply unit

3.3.41
hook
shaft-like *endotherapy device* (3.1.4) with proximal end forming a *handle* (3.5.36) while distal end forming a hook used to fix or apply traction to various anatomical structures

3.3.42
hot biopsy forceps
device intended to be used to sample tissue by using a high frequency current during endotherapy, consists of an insulated insertion *sheath* (3.3.66), a couple of distal *cup* (3.5.13) attached to the distal end of the *sheath* (3.3.66), an operating wire connected with both the *cup* (3.5.13) and the *handle* (3.5.36) which controls the operating wire whose proximal end is connected to a power supply unit

3.3.43
injector
instrument intended to be used to perform various needle functions (e.g. injection, aspiration, irrigation, puncture) during endotherapy, with distal end comprising a coil, tube or pipe to form a needle and with proximal portion being a connector for a syringe, whose *insertion portion* (3.5.41) is typically constructed of a coil, tube or pipe

3.3.44
injector needle
instrument intended to be used to perform various needle functions (e.g., injection, aspiration, irrigation, puncture) during endotherapy, with the distal end comprising a coil, tube or pipe to form a needle and with the proximal portion being a connector for a syringe, whose *insertion portion* (3.5.41) is typically constructed of a coil, tube or pipe

3.3.45
internal ultrasonic lithotriptor
device consisting of an ultrasound transducer which converts the sound waves to transverse and longitudinal vibrations that propagate along the hollow probe which is brought into contact with the stone(s) where the mechanical vibrations cause the stone to fragment, and a hollow steel probe which may be connected to a suction pump which aspirates the stone fragments through the probe lumen

3.3.46
knot-tying device
device used during endotherapy for uniting internal wounds by intertwining the ends of the sutures together

3.3.47
ligator
endotherapy device (3.1.4) introduced into the body cavity through the working channel of the *endoscope* (3.1.3), used for the deployment of a *ligature loop* (3.3.49) that is typically applied to intraluminal structures (e.g., varix, polyps, appendix)

3.3.48
ligating device
endotherapy device (3.1.4) introduced into the body cavity through the working channel of the *endoscope* (3.1.3), used for the deployment of a *ligature loop* (3.3.49) that is typically applied to intraluminal structures (e.g., varix, polyps, appendix)

3.3.49
ligature loop
device consist of a rubber or elastomer band, a control *handle* (3.5.36) and operation wire or pneumatic operation tube connected to both the band and control *handle* (3.5.36), intended to ligate using rubber or elastomer band for haemostasis and necrosis during endoscopy

3.3.50
ligature wire
thin metal cord that is tied tightly around a blood vessel, the pedicle of a tumour, or other structure in order to constrict it

3.3.51
lithotriptor
endotherapy device (3.1.4) used to fracture intracorporeal stones

3.3.52
loop
device that is used to constrict a protruding tissue, e.g., a varix or a polyp to prevent or control bleeding during an endoscopic procedure, which is applied using a dedicated endotherapy *ligator* (3.3.47)

3.3.53
loop cutter
device intended to be used during endoscopy to cut tissue or sutures through a working channel of the *endoscope* (3.1.3)

3.3.54
loop ligature
endotherapy device (3.1.4) introduced into the body cavity through the working channel of the *endoscope* (3.1.3), used for the deployment of a *ligature loop* (3.3.49) that is typically applied to intraluminal structures (e.g., varix, polyps, appendix)

3.3.55
mandrin
element inserted into a *sheath* (3.3.66) having a distal profile such that it minimizes any risk of trauma during insertion into a body cavity

3.3.56
monopolar endotherapy coagulator
specialized *electrosurgical unit* (3.5.17), intended to be used during endoscopy for high frequency electrosurgery, which coagulates or cuts tissue with high temperatures by creating a high frequency electrical current transmitted through the tissue between the *electrode* (3.3.24) tip of the instrument and a patient plate attached to the outer body surface

3.3.57
nonactive endotherapy device
device that functions without electricity such as high frequency, electromagnetic, ultrasonic, laser energy or shockwaves, used for mechanical work, e.g. grasping or retrieving tissue or foreign bodies, resection, clipping, ligating, feeding medicinal liquid, aspirating, dilating a tract/lumen or guiding during endotherapy

3.3.58
obturator
component of an *endoscope* (3.1.3) assembly that has a distally rounded head or end that is placed into the *sheath* (3.3.66) of a *rigid endoscope* (3.1.8) in order to fill out the sheath's lumen (open end), thereby assisting its insertion into the body and protecting against adverse damage to the patient

3.3.59
over tube
device intended to be used to secure pathway for *endoscope* (3.1.3) or *catheter* (3.3.10) during endoscopy

3.3.60
papillotomy knife
wire knife to cut a sphincter of the duodenum papilla using radiofrequency current

3.3.61
periosteal elevator and raspatory
device intended to be used to lift/separate or tunnel under the periosteum, which is equipped with a scraping edge at the shaft end

3.3.62
remote afterloading
device which is considered a component of the afterloading system and is typically designed for use with a specific remote-afterloading brachytherapy system and/or for the treatment of a specific body area, with configurations such as hollow needles, tubes or *catheters* (3.3.10) which are affixed or implanted on or within the body, which serve as a guide for computer controlled temporary placement and removal of single or multiple therapeutic radioactive sources at a treatment site either on the surface of the body (topical) or to locations within the body, e.g., interstitial, intravascular, intracavity or intraluminal

3.3.63
rongeur
strong biting *forceps* (3.3.35) with strong blades for gouging or biting away hard/tough tissues such as bone during endotherapy

3.3.64
scissors
instrument intended to be used to cut tissue or suture during endotherapy, introduced into the body cavity through the working channel of an *endoscope* (3.1.3) or an *endotherapy device* (3.1.4) typically constructed of a rigid or flexible metal coil or plastic tube whose distal end is equipped with a pair of scissors which is operated through a control *handle* (3.5.36) at the proximal end

3.3.65
shaver system
device typically comprise a hand piece, cutting instruments, motor unit, and control unit and a coble/hose, typically used for operations through the skin on the joints, e.g. knee or shoulder while some systems may be dedicated for other areas, e.g. the nasal cavity, which is typically used in combination with dedicated *endoscopes* (3.1.3) providing the operating surgeon with an overview

3.3.66
sheath
component of an *endoscope* (3.1.3) which consists of several elements in order to function which is shaped as a thin metal tube through which other elements are introduced and assembled to create the complete operative endoscopic unit

3.3.67
snare
device intended to be used to ligate, cauterize, and cut tissue and polyps, which typically consists of an insulated insertion *sheath* (3.3.66), a *snare loop* (3.5.60) attached to the distal end of the *sheath* (3.3.66), an operating wire connected with both the loop and the *handle* (3.5.36) which controls the operating wire whose proximal end is connected to a high frequency power supply unit, or other devices are only intended for mechanical cutting or removal

3.3.68
sphincterotome
wire knife to cut a sphincter of the duodenum papilla or to increase the size of the opening of the common bile duct/pancreatic duct into the duodenum (ampulla of Vater and sphincter of Oddi) by using radiofrequency current

3.3.69
sponge grasping
manual *endotherapy device* (3.1.4) used to carry an absorbent pad of folded gauze or cotton into the site of intervention

3.3.70
spray catheter
device intended to be used during endoscopy to spray water or medicinal liquid into a body cavity for diagnosis or treatment

3.3.71
spray tube
device intended to be used during endoscopy to spray water or medicinal liquid into a body cavity for diagnosis or treatment

3.3.72
stone extraction balloon
device, manufactured with a tube and a *balloon* (3.5.4) at the distal end in which the stones can be extracted, which is intended to be used to remove stones during endotherapy

3.3.73
stone removal extractor
device used in combination with a dedicated *endoscope* (3.1.3), manufactured with long thin shanks and a wire *basket* (3.5.5) at the distal end in which the stones are caught (picked up) for extraction, intended to be used to grasp and remove stones during endotherapy

3.3.74
stone retrieval balloon catheter
device manufactured with a tube and an inflatable *balloon* (3.5.4) at the distal end in which the stones can be extracted, which is intended to be used to remove stones during endotherapy

3.3.75
stone retrieval forceps
device intended to be inserted through the working channel of a compatible *endoscope* (3.1.3) to grasp and remove stones or foreign bodies during an endoscopic procedure

3.3.76
suturing
device used in combination with a dedicated *endoscope* (3.1.3) during endotherapy, which is used for mechanical work and is intended to be used for the closing of a wound or an incision with materials, e.g., silk or catgut

3.3.77
thermal diode
instrument resembling plastic tube with a built-in thermal diode at the distal end, used for, e.g. the coagulation of bleeding tissue, whose distal end can be supplied with different applications, e.g. coagulating *electrode* (3.3.24) or *grasping forceps* (3.3.36)

3.3.78
trocar
endotherapy device (3.1.4) consisting of two elements: trocar pin and *trocar sleeve* (3.3.80) to gain internal access and perform endoscopy

3.3.79
trocar pin
endoscopic element with a sharp pyramidal or conical point, typically assembled and used together with a compatible *trocar* (3.3.78) sleeve filling its lumen which allow the introduction of this assembly, used to puncture body cavities

3.3.80
trocar sleeve
endoscopic element used together with a *trocar pin* (3.3.79) to create an artificial orifice for puncturing body cavities

3.3.81
tubal occlusion clip/band
device implanted and applied to the fallopian tube to constrict the tube and prevent the passage of ova, typically used during tubal ligation procedures and is considered a *contraceptive* (3.3.16)

3.3.82
ultrasound transducer assembly
component of a diagnostic or therapeutic ultrasound (US) system such as US imaging system or Doppler system which uses ultrasonic energy to achieve a desired therapeutic effect, including a transducer assembly composed of either a single transducer element or an array of transducer elements, i.e. piezoelectric element(s), active element(s), or crystal(s) and associated damping, backing, and matching layer materials, which is available in a variety of configurations such as hand held, extracorporeal, intracorporeal, catheter-enclosed or gantry-mounted, and is typically enclosed in an acoustically and electrically insulated casing or housing

3.3.83
unipolar endotherapy coagulator
specialized *electrosurgical unit* (3.5.17), intended to be used during endoscopy for high frequency electrosurgery, which coagulates or cuts tissue with high temperatures by creating a high frequency electrical current transmitted through the tissue between the *electrode* (3.3.24) tip of the instrument and a patient plate attached to the outer body surface

3.3.84
urethrotome
surgical instrument designed like a long *catheter* (3.3.10) or thin *flexible endoscope* (3.1.6) shape with a lateral movable small knife at the distal end which is used for incising strictures in the urethra, whose designs may incorporate an optical channel for endoscopic visual control

3.3.85
washing tube
tube whose *insertion portion* (3.5.41) is typically constructed of a coil, tube or pipe, intended to be used to wash lumen or body cavity using water or medicinal liquid during endotherapy

3.4 Specifications

This category lists the terms used in the specifications of endoscopes and endotherapy devices.

3.4.1
angulation range
angle (in degrees) between the *normal axis* (3.4.10) of the *flexible endoscope* (3.1.6) (0°) and the central axis of the deflected distal end

3.4.2
backward side-viewing
type of *endoscope* (3.1.3) having a direction of view larger than 90°

3.4.3
bending capability
angle (in degrees) between the *normal axis* (3.4.10) of the *endoscope* (3.1.3) (0°) and the central axis of the deflected distal end

3.4.4
bending range
angle (in degrees) between the *normal axis* (3.4.10) of the *endoscope* (3.1.3) (0°) and the central axis of the deflected distal end

3.4.5
end viewing
type of *endoscope* (3.1.3) having a 0° direction of view

[SOURCE: IEC 60601-2-18:2009]

3.4.6
fore-oblique
type of *endoscope* (3.1.3) having a direction of view larger than 0° and less than 90°

3.4.7
forward oblique viewing
type of *endoscope* (3.1.3) having a direction of view larger than 0° and less than 90°

3.4.8
forward-viewing
type of *endoscope* (3.1.3) having a 0° direction of view

3.4.9
knife length
blade length of an *electrosurgical knife* (3.3.29), which part enable cauterize, haemostasis, and cut tissue

3.4.10
normal axis
central axis of the portion to be inserted with an *endoscope* (3.1.3) or an *endotherapy device* (3.1.4)

3.4.11
overall length
distance between the proximal and distal ends of an *endoscope* (3.1.3) or *endotherapy device* (3.1.4)

3.4.12
retro-viewing
type of *endoscope* (3.1.3) having a direction of view larger than 90°

3.4.13
side-viewing
type of *endoscope* (3.1.3) having a 90° direction of view

3.4.14
side-viewing with *θ*° forward view
type of *endoscope* (3.1.3) having a direction of view larger than 0° and less than 90°

3.4.15
side-viewing with *θ*° retro-view
type of *endoscope* (3.1.3) having a direction of view larger than 90°

3.4.16
tip deflection
angle (in degrees) between the *normal axis* (3.4.10) of the *endoscope* (3.1.3) (0°) and the central axis of the deflected distal end

3.4.17
tip length
length from the *distal tip* (3.5.15) of the working portion to the distal end of the *sheath* (3.3.66)

3.5 Others

This category lists the terms used in accessories, portions and peripheral products of endoscopes and endotherapy devices.

3.5.1
active cord
cord to flow high frequency current from a high frequency *electrosurgical unit* (3.5.17) to a high frequency tool

3.5.2
air/water feed nozzle
that part of the distal end for feeding air or water

3.5.3
air/water nozzle
that part of the distal end for feeding air or water

3.5.4
balloon
inflatable portion made of rubber, polymer or resin

3.5.5
basket
element of a distal portion made of multiple wires used to grasp a foreign body, a tissue or stone

3.5.6
biopsy port
portion of an *endoscope* (3.1.3) or *endotherapy device* (3.1.4) which is the proximal end of the working channel

3.5.7
bridge
element which connects a *telescope* (3.1.11) to a *sheath* (3.3.66)

3.5.8
cleaning brush
device used to remove dirt or debris from the working channel (s) and irregular surface of the *endoscope* (3.1.3) prior to disinfection and sterilization, which consists of a flexible *insertion tube* (3.5.42) or metal coil as a flexible kind or a metal tube as a rigid one and a plastic brush at the end

3.5.9
c-mount endoscope
endoscope (3.1.3) which is designed to connect to a standard c-mount video camera

3.5.10
coil sheath
element of an *endotherapy device* (3.1.4) that is a long and thin cover made of metallic coil

3.5.11
colonoscope stiffener
special wire inserted through a flexible *colonoscope* (3.2.12) to provide added stiffness during colonoscopy

3.5.12
controllable portion
part of the *insertion portion* (3.5.41) of an *endoscope* (3.1.3) or *endotherapy device* (3.1.4) whose motion is intended to be remotely controlled by the user

3.5.13
cup
distal portion of *forceps* (3.3.35) used to grasp, remove, or collect tissue

3.5.14
distal attachment
device which is attached on the distal end of the *endoscope* (3.1.3), also called as a distal attachment, used in combination with a compatible *endoscope* (3.1.3) to assist insertion of *endoscope* (3.1.3) or to assist treatment during endotherapy

3.5.15
distal tip
farthest point of *endoscope* (3.1.3) or *endotherapy device* (3.1.4) from user

3.5.16
electrosurgical return electrode
electrical conductor, fastened to the patient's body typically where full area contact is best achieved for a particular intervention, intended to provide an electrical connection (possibly in conjunction with a cable) between the output terminals of an electrosurgical generator and a patient at which no electrosurgical effect is intended

3.5.17
electrosurgical unit
device commonly known as ESU or surgical diathermy which can also be used together with *endoscopes* (3.1.3) during endotherapy, used for cutting and coagulating soft body tissue during surgery by the application of a high frequency current between an active and a neutral *electrode* (3.3.24), creating a heating effect that causes tissue destruction, which may also be used to cauterize tissue/minor blood vessels, or the electrical energy may be converted into ultrasonic or mechanical vibrations which because of their extreme frequency are extremely suitable to cut soft tissue with minimal damage

3.5.18
end-cap
removable fitting at the proximal end of an *endoscope* (3.1.3) or *endotherapy device* (3.1.4) to seal its lumen

3.5.19
endoscope element
component of an *endoscope* (3.1.3) with various types and functions, supplied with their own device type labelling indicating that they are individual devices and must be allocated a generic device group name for classification, which consist as one of the several elements which are interchangeable upon purpose and assembled together to form an *endoscope* (3.1.3) typically a rigid one

3.5.20
endoscope fixing balloon
device consists of a *balloon* (3.5.4) and flexible tube, may include syringe or connector, which is attached on the distal end of the *endoscope* (3.1.3) to stabilize *endoscope* (3.1.3) into the tract during endotherapy

3.5.21
endoscope holder
device which consists of joints and/or rigid or semi-rigid arms intended to be used to maintain or adjust an *endoscope* (3.1.3) including a *laparoscope* (3.2.27) in an intended position during the surgical intervention

3.5.22
endoscopic insufflator
device that blows air or other gas through an *endoscope* (3.1.3) in order to prevent dew/mist accumulating at the lens, and/or, in order to enlarge the space directly forward of the distal end in order to obtain a better field of view for the operator

3.5.23
endoscopic irrigation-aspiration unit
dedicated endoscopic device intended to irrigate and also aspirate (a flushing effect) a body cavity or a lumen with a fluid to facilitate observation with an *endoscope* (3.1.3), which is used together with appropriate *endoscopes* (3.1.3) and their accessories