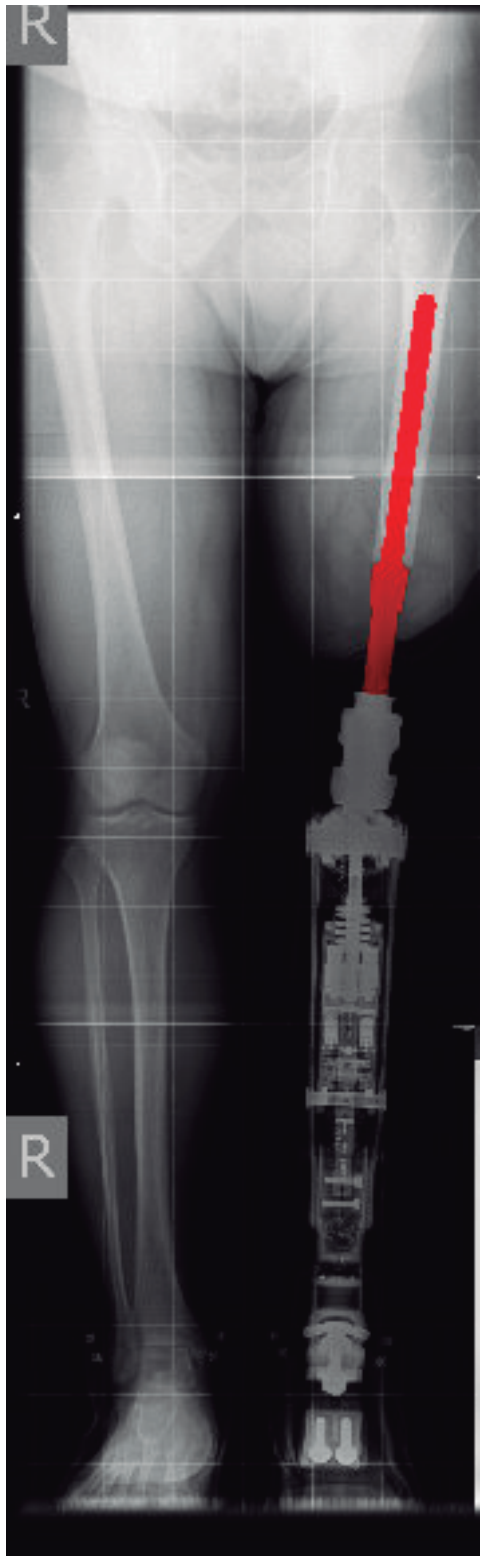
Made for walking

Better sitcomfort



OTN Implants

OTN Implants B.V. is settled in The Netherlands and is manufacturer and distributor of both standard class IIb CEcertified and custom made osseointegration implants for upper and lower limb amputees.

OTNI Femoral Osseointegration System

OTN Implants systems are used for permanent anchorage of an artificial limb to the human skeleton based on osseointegration. In a surgical procedure a titanium implant is inserted into the bone of the arm or leg and this implant penetrates through the skin to create the stoma . The artificial limb (prosthesis) is attached to this implant by use of a connector.

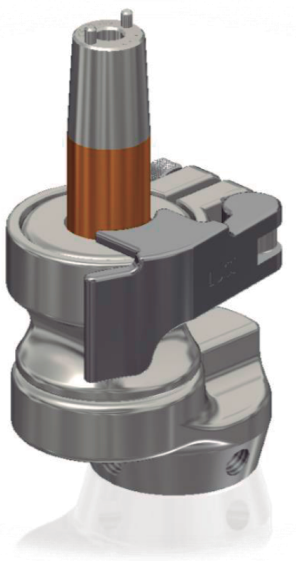
The OTN Implants system is developed for amputees who experience problems with conventional socket prostheses. The OTN Implants system has proved to be successfull in several clinical studies and is available for both upper and lower legs.

Osseointegration Implants

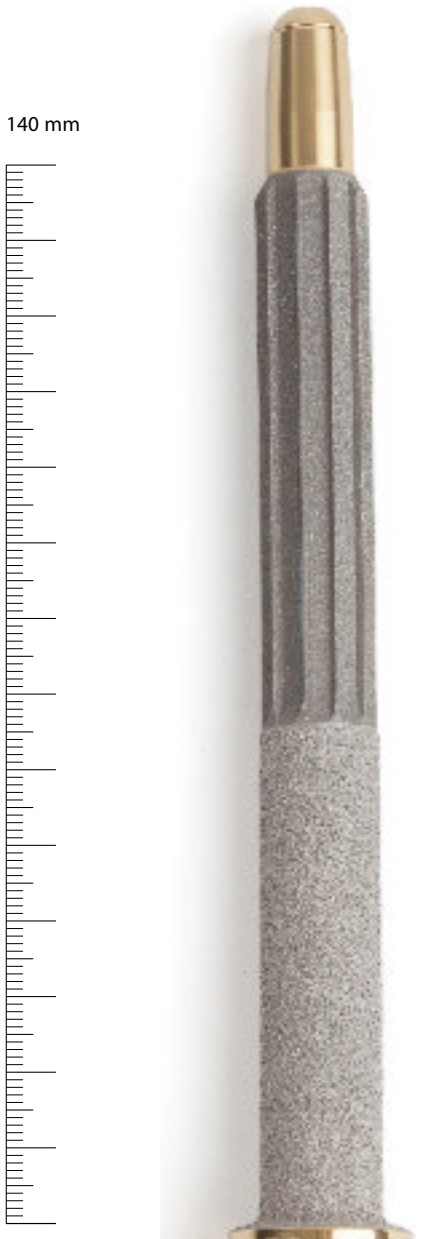
The OTN Implants intramedullary osseointegration implants are made of Titanium Aluminum Niobium alloy (Ti6Al7Nb) in compliance with ISO5832/11 standards.
Maximum osseointegration capacity is provided by a porous titanium plasma spray coating (TPS) on the contact area of the implant system.

The average coating thickness is 350µm ±50 µm and 55µm ±15 µm roughness with 30% ±10% porosity and >22MPa adhesive strength.

The anchorage of the OTN Implants is achieved through primary press fit stabilization without the use of bone cement. The device does not contain ferromagnetic materials and is therefore MRI compatible.



140 mm



Femur Stem

+ Healing Plug

OTN31101OTNI Femur Stem Ø15x140

OTN31102 OTNI Femur Stem Ø16x140

OTN31103 OTNI Femur Stem Ø17x140

OTN31104 OTNI Femur Stem Ø18x140

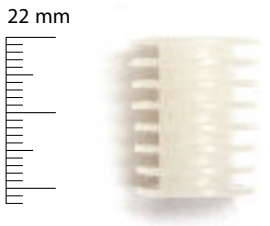
OTN31105 OTNI Femur Stem Ø19x140

OTN31106 OTNI Femur Stem Ø20x140

OTN31107 OTNI Femur Stem Ø21x140

OTN31108 OTNI Femur Stem Ø22x140

22 mm



80 mm

Dual Cone Adapter

+ Locking Screw

OTN31201 OTNI DC Adapter Sz 70

OTN31202 OTNI DC Adapter Sz 80

OTN31203 OTNI DC Adapter Sz 90

OTN31204 OTNI DC Adapter Sz 100

OTN31205 OTNI DC Adapter Sz 110

57 mm

Prosthesis does not loosen

This is a 48 year old female with a transtibial amputation after crush injury with split skin grafts covering her stump. Consequently she was unable to walk more than 100m without ulcerations to her skin which sometimes took days to heal. After implantation of this custom-made osseointegration implant she was able to walk unrestrictedly distances without crutches within 3 months.

90 mm

Custom-Made Tibia Implant

For patients with femur remnants ofless than 140mm and for patients with transtibial amputation, OTN Implants delivers custom-made implants with locking screws for primary stabilisation.

These short implants are covered with a 0.5mm macroporous 3D mesh coating for rapid osseointegration. The shape and diameter of the custom made OTNi tibial stem is determined by use of standard calibrated CT scans and orthopedic pre-surgical planning software. The custom-made stems are 3D printed in titanium for an optimal fit and osseointegration performance.

This is a 36 year old male with a short femoral remnant after amputation for chondrosarcoma. Due to the short stump this patient did not fit a socket and was therefore wheelchair bound. One year after implantation of his custom-made osseointegration implant this man was able to walk unrestricted.

100 mm

Custom-Made Femur Implant

More control and stability

IDEAR
INVESTIGACIÓN
Y DESARROLLO
EN SALUD

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