



Superscrews

**Product description
& surgical technique**

**Descrizione prodotto
e tecnica chirurgica**



Index

Indice

pag. 4

INDICATIONS

INDICAZIONI

pag. 5

MATERIALS

MATERIALI

pag. 5

TECHNICAL FEATURES

CARATTERISTICHE TECNICHE

pag. 6

PRODUCT CODES

CODICI PRODOTTO

pag. 18

INSTRUMENT SET

STRUMENTARIO

pag. 20

SYNOPTIC TABLE SCREWS

QUADRO SINOTTICO VITI

pag. 21

SURGICAL TECHNIQUES

TECNICHE CHIRURGICHE

pag. 26

BIBLIOGRAPHY

BIBLIOGRAFIA

Indications

Ø 2.7 mm screws

- hand and foot surgery
- small bones fractures.

Ø 3.5 - 4 and 4.5 mm screws

- lateral fractures of the malleolus
- intra-articular fractures of the distal tibia
- radius and ulna fractures
- olecranon fractures
- distal fractures of the humerus
- pelvic ring fractures.

Ø 5 mm screws

- fractures of metaphyseal segments
- tibial plateau fractures
- femoral condyle fractures
- distal fractures of the tibia
- malleolar fractures
- tibiotarsic and subastragalic arthrodesis.

Ø 6.5 - 7.2 mm screws

- femoral neck fractures
- femoral condyle fractures
- basicervical femoral fractures
- subcapitate fractures of femur
- proximal femoral fractures with fragments in the medial region
- tibial plateau fractures
- tibiotarsic and subastragalic arthrodesis.

Indicazioni

viti Ø 2,7 mm

- chirurgia di mano e piede
- fratture di piccole ossa.

viti Ø 3,5 - 4 e 4,5 mm

- fratture del malleolo laterale
- fratture intra-articolari della tibia distale
- fratture di radio e ulna
- fratture dell'olecrano
- fratture distali di omero
- fratture dell'anello pelvico.

viti Ø 5 mm

- fratture di segmenti metafisari
- fratture del piatto tibiale
- fratture dei condili femorali
- fratture distali di tibia
- fratture malleolari
- artrodesi tibiotarsiche e sottoastragaliche.

viti Ø 6,5 - 7,2 mm

- fratture del collo del femore
- fratture dei condili femorali
- fratture basi cervicali del femore
- fratture sottocapitate del femore
- fratture prossimali del femore con frammenti in regione mediale
- fratture del piatto tibiale
- artrodesi tibiotarsiche e sottoastragaliche.



Materials

Ti6Al4V titanium alloy in conformity with ISO 5832-3

Materiali

Lega di titanio Ti6Al4V conforme alla norma ISO 5832-3

Technical features

Self-drilling and self-tapping to allow shorter surgery times.

The Ti6Al4V titanium alloy in conformity with ISO 5832-3 standard assures good flexibility, fatigue resistance, biocompatibility and allows MRI controls.

Colour code to differentiate diameters.

Availability of models with various diameters and threads (cortical and cancellous) to suit different morphological configurations.

Caratteristiche tecniche

Autoperforanti ed autofilettanti per ridurre i tempi operatori.

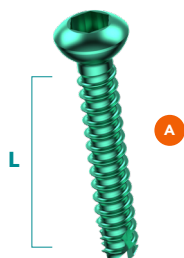
Lega di titanio Ti6Al4V conforme alla norma ISO 5832-3 che garantisce una buona elasticità, resistenza alla fatica, biocompatibilità e permette il controllo con risonanza magnetica.

Codice colore per differenziare i vari diametri.

Disponibilità di modelli con differenti diametri e filetti (da corticale e da spongiosa) per adattarsi alle diverse configurazioni morfologiche.

Product codes

Codici prodotto



Cortical screw full thread Vite da corticale filetto totale

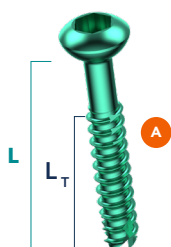
Ti6Al4V

A Ø 2.7 mm
B Ø 1.1 mm

L [mm]

HMV 110-010ST	10
HMV 110-012ST	12
HMV 110-014ST	14
HMV 110-016ST	16
HMV 110-018ST	18
HMV 110-020ST	20
HMV 110-022ST	22
HMV 110-024ST	24
HMV 110-026ST	26
HMV 110-028ST	28
HMV 110-030ST	30

Sterile single packaging.
Confezione singola sterile.



Cortical screw partial thread Vite da corticale filetto parziale

Ti6Al4V

A Ø 2.7 mm
B Ø 1.1 mm
L_T 12 mm

L [mm]

HMV 111-010ST	10
HMV 111-012ST	12
HMV 111-014ST	14
HMV 111-016ST	16
HMV 111-018ST	18
HMV 111-020ST	20
HMV 111-022ST	22
HMV 111-024ST	24
HMV 111-026ST	26
HMV 111-028ST	28
HMV 111-030ST	30

Sterile single packaging.
Confezione singola sterile.

Hexagonal socket

Cava esagonale

Ø 2.5 mm

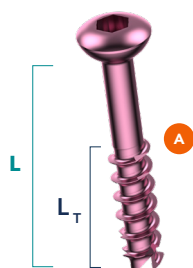


A Thread diameter / Diametro filetto
B Cannulation / Cannulatura

L_T Thread length / Lunghezza filetto

Product codes

Codici prodotto



Cancellous screw partial thread Vite da spongiosa filetto parziale

Ti6Al4V

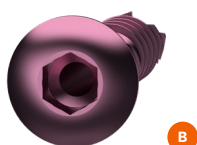
	A Ø 3.5 mm B Ø 1.6 mm	L [mm]	L_T [mm]
HMV 114-010ST		10	8
HMV 114-012ST		12	10
HMV 114-014ST		14	
HMV 114-016ST		16	
HMV 114-018ST		18	
HMV 114-020ST		20	
HMV 114-022ST		22	12
HMV 114-024ST		24	
HMV 114-026ST		26	
HMV 114-028ST		28	
HMV 114-030ST		30	
HMV 114-032ST		32	
HMV 114-034ST		34	
HMV 114-036ST		36	
HMV 114-038ST		38	
HMV 114-040ST		40	16
HMV 114-042ST		42	
HMV 114-044ST		44	
HMV 114-046ST		46	
HMV 114-048ST		48	
HMV 114-050ST		50	
HMV 114-055ST		55	
HMV 114-060ST		60	20
HMV 114-065ST		65	
HMV 114-070ST		70	

Sterile single packaging.
Confezione singola sterile.

Hexagonal socket

Cava esagonale

Ø 2.5 mm



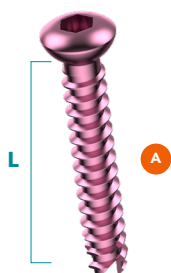
A Thread diameter / Diametro filetto

B Cannulation / Cannulatura

L_T Thread length / Lunghezza filetto

Product codes

Codici prodotto



Cortical screw full thread Vite da corticale filetto totale

Ti6Al4V

A Ø 3.5 mm

B Ø 1.6 mm

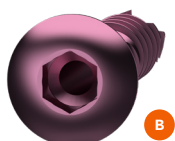
L [mm]

HMV 115-010ST	10
HMV 115-012ST	12
HMV 115-014ST	14
HMV 115-016ST	16
HMV 115-018ST	18
HMV 115-020ST	20
HMV 115-022ST	22
HMV 115-024ST	24
HMV 115-026ST	26
HMV 115-028ST	28
HMV 115-030ST	30
HMV 115-032ST	32
HMV 115-034ST	34
HMV 115-036ST	36
HMV 115-038ST	38
HMV 115-040ST	40
HMV 115-042ST	42
HMV 115-044ST	44
HMV 115-046ST	46
HMV 115-048ST	48
HMV 115-050ST	50
HMV 115-055ST	55
HMV 115-060ST	60
HMV 115-065ST	65
HMV 115-070ST	70

Hexagonal socket

Cava esagonale

Ø 2.5 mm



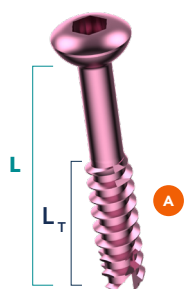
Sterile single packaging.
Confezione singola sterile.

A Thread diameter / Diametro filetto

B Cannulation / Cannulatura

Product codes

Codici prodotto



Cortical screw partial thread Vite da corticale filetto parziale

Ti6Al4V

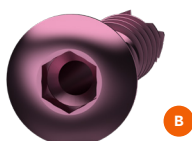
	A Ø 3.5 mm B Ø 1.6 mm	L [mm]	L_T [mm]
HMV 116-010ST		10	8.5
HMV 116-012ST		12	10.5
HMV 116-014ST		14	
HMV 116-016ST		16	
HMV 116-018ST		18	
HMV 116-020ST		20	
HMV 116-022ST		22	12
HMV 116-024ST		24	
HMV 116-026ST		26	
HMV 116-028ST		28	
HMV 116-030ST		30	
HMV 116-032ST		32	
HMV 116-034ST		34	
HMV 116-036ST		36	
HMV 116-038ST		38	
HMV 116-040ST		40	16
HMV 116-042ST		42	
HMV 116-044ST		44	
HMV 116-046ST		46	
HMV 116-048ST		48	
HMV 116-050ST		50	
HMV 116-055ST		55	
HMV 116-060ST		60	20
HMV 116-065ST		65	
HMV 116-070ST		70	

Sterile single packaging.
Confezione singola sterile.

Hexagonal socket

Cava esagonale

Ø 2.5 mm



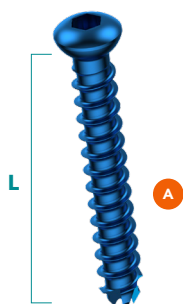
A Thread diameter / Diametro filetto

B Cannulation / Cannulatura

L_T Thread length / Lunghezza filetto

Product codes

Codici prodotto



Cancellous screw full thread Vite da spongiosa filetto totale

Ti6Al4V

A Ø 4 mm B Ø 1.6 mm		L [mm]
HMV 136-010ST		10
HMV 136-012ST		12
HMV 136-014ST		14
HMV 136-016ST		16
HMV 136-018ST		18
HMV 136-020ST		20
HMV 136-022ST		22
HMV 136-024ST		24
HMV 136-026ST		26
HMV 136-028ST		28
HMV 136-030ST		30
HMV 136-032ST		32
HMV 136-034ST		34
HMV 136-036ST		36
HMV 136-038ST		38
HMV 136-040ST		40
HMV 136-042ST		42
HMV 136-044ST		44
HMV 136-046ST		46
HMV 136-048ST		48
HMV 136-050ST		50
HMV 136-055ST		55
HMV 136-060ST		60
HMV 136-065ST		65
HMV 136-070ST		70

Hexagonal socket

Cava esagonale

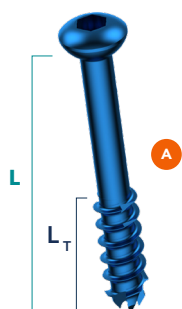
Ø 2.5 mm



Sterile single packaging.
Confezione singola sterile.

Product codes

Codici prodotto



Cancellous screw partial thread Vite da spongiosa filetto parziale

Ti6Al4V

	A Ø 4 mm B Ø 1.6 mm	L [mm]	L _T [mm]
HMV 135-010ST		10	8
HMV 135-012ST		12	10
HMV 135-014ST		14	12
HMV 135-016ST		16	
HMV 135-018ST		18	
HMV 135-020ST		20	
HMV 135-022ST		22	
HMV 135-024ST		24	
HMV 135-026ST		26	
HMV 135-028ST		28	
HMV 135-030ST		30	
HMV 135-032ST		32	
HMV 135-034ST		34	16
HMV 135-036ST		36	
HMV 135-038ST		38	
HMV 135-040ST		40	
HMV 135-042ST		42	
HMV 135-044ST		44	
HMV 135-046ST		46	
HMV 135-048ST		48	
HMV 135-050ST		50	
HMV 135-055ST		55	
HMV 135-060ST		60	
HMV 135-065ST		65	
HMV 135-070ST		70	

Hexagonal socket

Cava esagonale

Ø 2.5 mm



Sterile single packaging.
Confezione singola sterile.

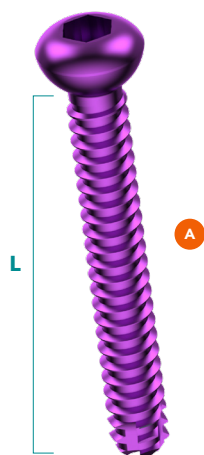
A Thread diameter / Diametro filetto

B Cannulation / Cannulatura

L_T Thread length / Lunghezza filetto

Product codes

Codici prodotto



Cortical screw full thread Vite da corticale filetto totale

Ti6Al4V

A Ø 4.5 mm

B Ø 2.2 mm

L [mm]

HMV 120-020ST	20
HMV 120-022ST	22
HMV 120-024ST	24
HMV 120-026ST	26
HMV 120-028ST	28
HMV 120-030ST	30
HMV 120-032ST	32
HMV 120-034ST	34
HMV 120-036ST	36
HMV 120-038ST	38
HMV 120-040ST	40
HMV 120-042ST	42
HMV 120-044ST	44
HMV 120-046ST	46
HMV 120-048ST	48
HMV 120-050ST	50
HMV 120-055ST	55
HMV 120-060ST	60
HMV 120-065ST	65
HMV 120-070ST	70

Sterile single packaging.
Confezione singola sterile.

Hexagonal socket

Cava esagonale

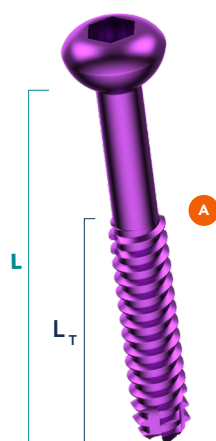
Ø 3.5 mm



A Thread diameter / Diametro filetto
B Cannulation / Cannulatura

Product codes

Codici prodotto



Cortical screw partial thread Vite da corticale filetto parziale

Ti6Al4V

A Ø 4.5 mm

B Ø 2.2 mm

L_T 20 mm

L [mm]

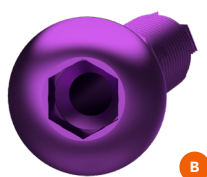
HMV 125-026ST	26
HMV 125-028ST	28
HMV 125-030ST	30
HMV 125-032ST	32
HMV 125-034ST	34
HMV 125-036ST	36
HMV 125-038ST	38
HMV 125-040ST	40
HMV 125-042ST	42
HMV 125-044ST	44
HMV 125-046ST	46
HMV 125-048ST	48
HMV 125-050ST	50
HMV 125-055ST	55
HMV 125-060ST	60
HMV 125-065ST	65
HMV 125-070ST	70

Sterile single packaging.
Confezione singola sterile.

Hexagonal socket

Cava esagonale

Ø 3.5 mm



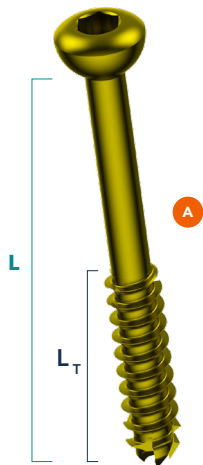
A Thread diameter / Diametro filetto

B Cannulation / Cannulatura

L_T Thread length / Lunghezza filetto

Product codes

Codici prodotto



Cancellous screw partial thread
Vite da spungiosa filetto parziale

Ti6Al4V

A Ø 5 mm
B Ø 2.2 mm
L_T 20 mm

L [mm]

HMV 140-026ST	26
HMV 140-028ST	28
HMV 140-030ST	30
HMV 140-032ST	32
HMV 140-034ST	34
HMV 140-036ST	36
HMV 140-038ST	38
HMV 140-040ST	40
HMV 140-042ST	42
HMV 140-044ST	44
HMV 140-046ST	46
HMV 140-048ST	48
HMV 140-050ST	50
HMV 140-055ST	55
HMV 140-060ST	60
HMV 140-065ST	65
HMV 140-070ST	70

Sterile single packaging.
Confezione singola sterile.

Hexagonal socket
Cava esagonale
Ø 3.5 mm

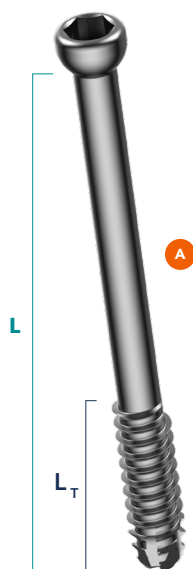


A Thread diameter / Diametro filetto
B Cannulation / Cannulatura

L_T Thread length / Lunghezza filetto

Product codes

Codici prodotto



Cancellous screw partial thread Vite da spongiosa filetto parziale

Ti6Al4V

	A Ø 6.5 mm B Ø 3.5 mm	L [mm]	L_T [mm]
HMV 200-025		25	15
HMV 200-030		30	
HMV 200-035		35	
HMV 200-040		40	
HMV 200-045		45	
HMV 200-050		50	22
HMV 200-055		55	
HMV 200-060		60	
HMV 200-065		65	
HMV 200-070		70	
HMV 200-075		75	
HMV 200-080		80	
HMV 200-085		85	
HMV 200-090		90	
HMV 200-095		95	
HMV 200-100		100	
HMV 200-105		105	
HMV 200-110		110	
HMV 200-115		115	
HMV 200-120		120	

Sterile single packaging.
Confezione singola sterile.

Hexagonal socket

Cava esagonale

Ø 5 mm

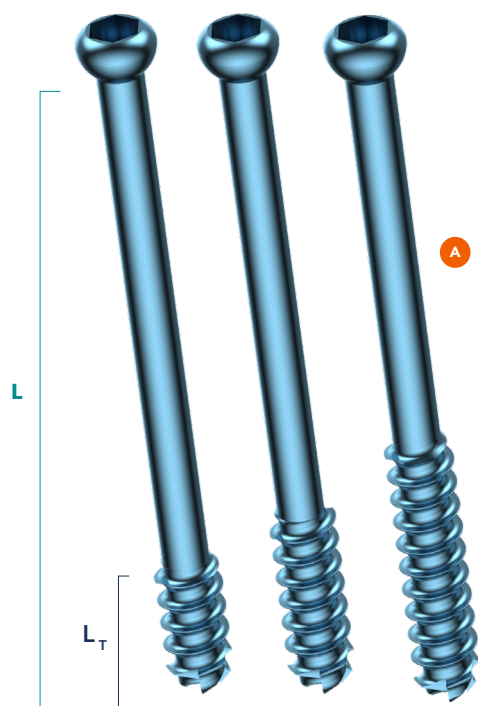


A Thread diameter / Diametro filetto
B Cannulation / Cannulatura

L_T Thread length / Lunghezza filetto

Product codes

Codici prodotto



Hexagonal socket

Cava esagonale

Ø 5 mm



Cancellous screw partial thread
Vite da spugnosa filetto parziale

Ti6Al4V

	A Ø 7.2 mm B Ø 3.5 mm L _T 16 mm	A Ø 7.2 mm B Ø 3.5 mm L _T 22 mm	A Ø 7.2 mm B Ø 3.5 mm L _T 32 mm	L [mm]
HMV 202-025ST	-	-	-	25
HMV 202-030ST	-	-	-	30
HMV 202-035ST	HMV 205-035ST	-	-	35
HMV 202-040ST	HMV 205-040ST	HMV 204-040ST	-	40
HMV 202-045ST	HMV 205-045ST	HMV 204-045ST	-	45
HMV 202-050ST	HMV 205-050ST	HMV 204-050ST	-	50
HMV 202-055ST	HMV 205-055ST	HMV 204-055ST	-	55
HMV 202-060ST	HMV 205-060ST	HMV 204-060ST	-	60
HMV 202-065ST	HMV 205-065ST	HMV 204-065ST	-	65
HMV 202-070ST	HMV 205-070ST	HMV 204-070ST	-	70
HMV 202-075ST	HMV 205-075ST	HMV 204-075ST	-	75
HMV 202-080ST	HMV 205-080ST	HMV 204-080ST	-	80
HMV 202-085ST	HMV 205-085ST	HMV 204-085ST	-	85
HMV 202-090ST	HMV 205-090ST	HMV 204-090ST	-	90
HMV 202-095ST	HMV 205-095ST	HMV 204-095ST	-	95
HMV 202-100ST	HMV 205-100ST	HMV 204-100ST	-	100
HMV 202-105ST	HMV 205-105ST	HMV 204-105ST	-	105
HMV 202-110ST	HMV 205-110ST	HMV 204-110ST	-	110
HMV 202-115ST	HMV 205-115ST	HMV 204-115ST	-	115
HMV 202-120ST	HMV 205-120ST	HMV 204-120ST	-	120
■ HMV 202-125ST	■ HMV 205-125ST	■ HMV 204-125ST	-	125
■ HMV 202-130ST	■ HMV 205-130ST	■ HMV 204-130ST	-	130
■ HMV 202-135ST	■ HMV 205-135ST	■ HMV 204-135ST	-	135
■ HMV 202-140ST	■ HMV 205-140ST	■ HMV 204-140ST	-	140

Sterile single packaging.
Confezione singola sterile.

■ Upon request.
■ Su richiesta.

A Thread diameter / Diametro filetto

B Cannulation / Cannulatura

L_T Thread length / Lunghezza filetto



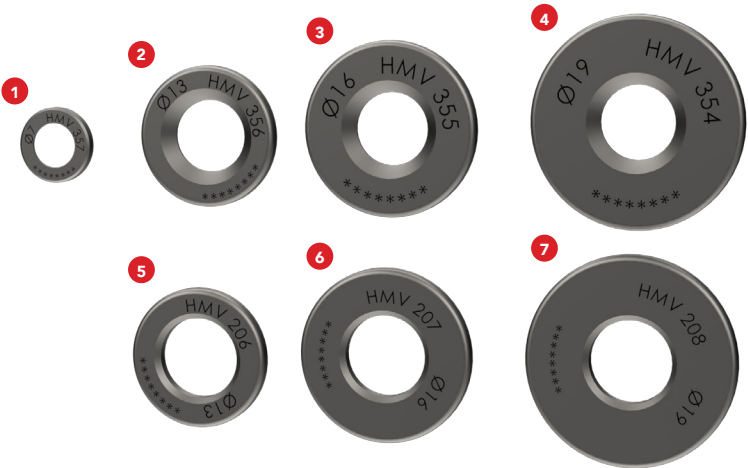
A External diameter
Diametro esterno
B Internal diameter
Diametro interno

Product codes

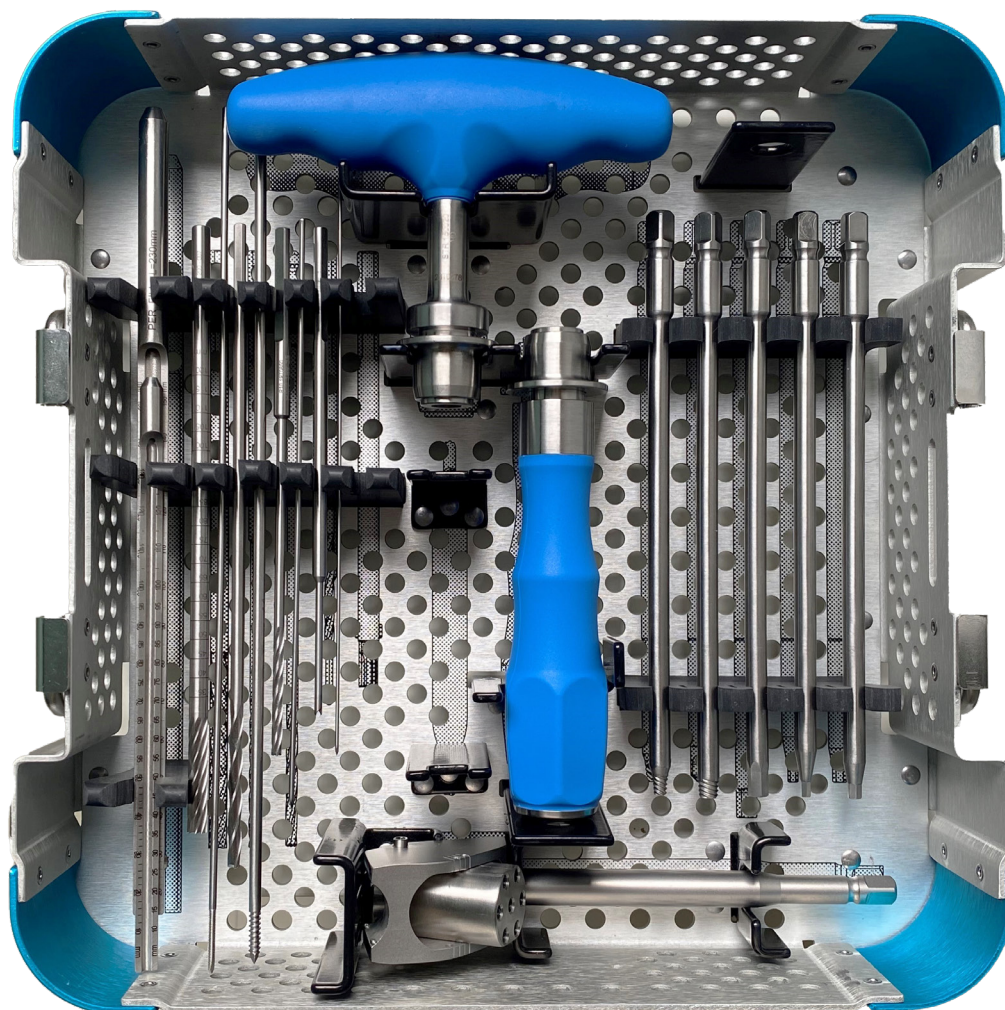
Codici prodotto

Washer Rondella				
Ti6Al4V				
		Screw Ø [mm] Ø Vite [mm]	A Ø [mm]	B Ø [mm]
1	HMV 357ST	2.7 - 3.5 - 4	7	4.2
2	HMV 356ST	4.5 - 5 - 6.5	13	6.7
3	HMV 355ST	4.5 - 5 - 6.5	16	6.7
4	HMV 354ST	4.5 - 5 - 6.5	19	6.7
5	HMV 206ST	7.2	13	7.5
6	HMV 207ST	7.2	16	7.5
7	HMV 208ST	7.2	19	7.5

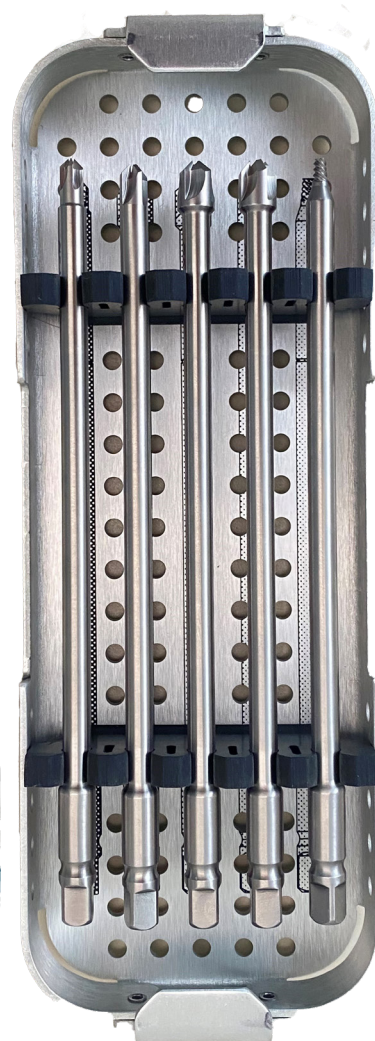
Sterile single packaging.
Confezione singola sterile.



Instrument set



Strumentario



Instrument set

Strumentario

Instrument set / Strumentario completo SCR 100000

Code / Codice		Description / Descrizione		Screws / Viti	
1	HME 353-02	Guide wire	Filo guida	Ø 1 mm L. 155 mm	
2	HMV 311	Cannulated drill bit	Punta cannulata	Ø 2 mm	Ø 2.7 mm HMV 110-111
3	STR 06050A	Cannulated countersink *	Frangicorticale cannulato *	Ø 5 x 1 mm	
4	HMV 115-1	Guide wire	Filo guida	Ø 1.5 mm L. 155 mm	
5	HMV 166-28	Cannulated drill bit	Punta cannulata	Ø 2.8 mm	Ø 3.5 mm HMV 114-115-116 Ø 4 mm HMV 136-135
6	STR 06060A	Cannulated countersink *	Frangicorticale cannulato *	Ø 6 x 1.5 mm	
7	HMV 353-04	Threaded guide wire	Filo guida filettato	Ø 2 mm L. 230 mm	
8	HMV 167-35	Cannulated drill bit	Punta cannulata	Ø 3.5 mm	Ø 4.5 mm HMV 120-125 Ø 5 mm HMV 140
9	STR 06080A	Cannulated countersink *	Frangicorticale cannulato *	Ø 8 x 2 mm	
10	HMV 200-002	Guide wire	Filo guida	Ø 3.2 mm L. 230 mm	
11	HMV 200-007	Cannulated drill bit	Punta cannulata	Ø 5 mm	Ø 6.5 mm HMV 200
12	STR 06080B	Cannulated countersink *	Frangicorticale cannulato *	Ø 8 x 3.2 mm	Ø 7.2 mm HMV 202-204-205
13	HMV 200-001	Adjustable guide	Guida regolabile		
14	STR 031250	Cannulated screwdriver *	Cacciavite cannulato *	Ø 2.5 mm	Ø 2.7 mm HMV 110-111 Ø 3.5 mm HMV 114-115-116 Ø 4 mm HMV 136-135
15	STR 031350	Cannulated screwdriver *	Cacciavite cannulato *	Ø 3.5 mm	Ø 4.5 mm HMV 120-125 Ø 5 mm HMV 140
16	STR 031500	Cannulated screwdriver *	Cacciavite cannulato *	Ø 5 mm	Ø 6.5 mm HMV 200 Ø 7.2 mm HMV 202-204-205
17	HME 353-01	Guide wire measuring device	Misuratore per filo guida		Ø 2.7 mm HMV 110-111 Ø 3.5 mm HMV 114-115-116 Ø 4 mm HMV 136-135
18	HM 00110				Ø 4.5 mm HMV 120-125 Ø 5 mm HMV 140 Ø 6.5 mm HMV 200 Ø 7.2 mm HMV 202-204-205
19	STR 081250			Ø 2.5 mm	Ø 2.7 mm HMV 110-111 Ø 3.5 mm HMV 114-115-116 Ø 4 mm HMV 136-135
20	STR 081350	Extractors *	Estrattori *	Ø 3.5 mm	Ø 4.5 mm HMV 120-125 Ø 5 mm HMV 140
21	STR 081500			Ø 5 mm	Ø 6.5 mm HMV 200 Ø 7.2 mm HMV 202-204-205
22	STR 150020	Cannulated T handle *	Impugnatura a T cannulata *		
23	STR 13R127	Cannulated straight handle *	Impugnatura retta cannulata *		
24	HMV 106-000	Tray	Vassoio		
25	HMV 106-001	Internal tray	Vassoio interno		

* 1/4" coupling / attacco 1/4"

Ø Hegaxon / Esagono

Synoptic table screws

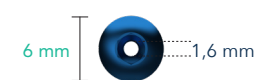
Quadro sinottico viti

Ø head
Ø testa

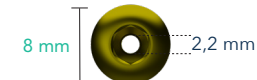
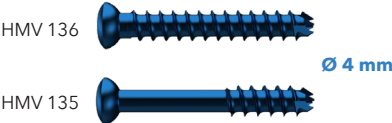
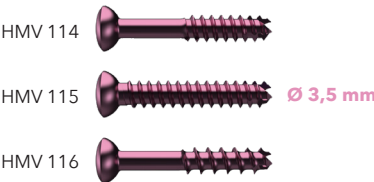
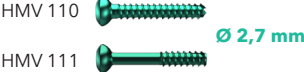
Ø cannulation
Ø cannulatura

code
codice

Ø thread
Ø filetto



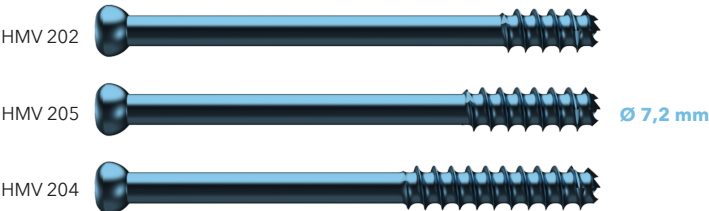
hex
esagono
2,5 mm



hex
esagono
3,5 mm



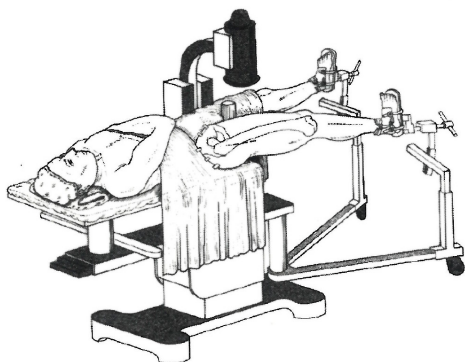
hex
esagono
5 mm



Surgical techniques

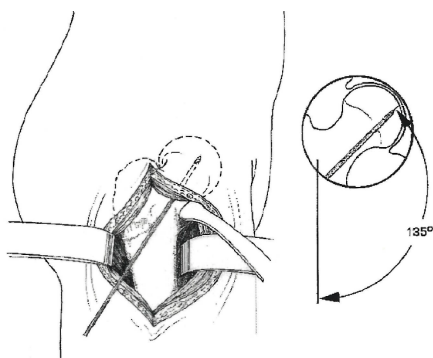
SCREW $\varnothing$ 6.5 e 7.2 mm

1. The patient is placed in the supine position. The fracture is reduced by traction with the leg slightly rotated internally.



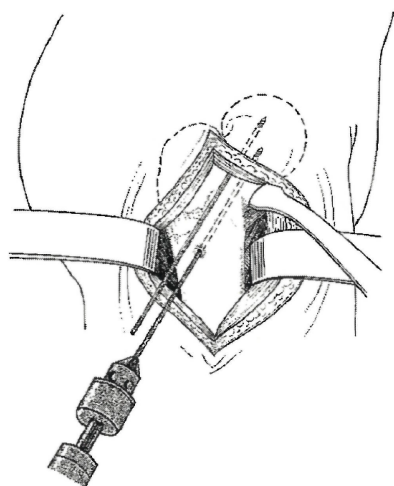
1.

2. Position a guide wire externally and anteriorly to the femoral neck by following the anatomical inclination of the neck with regard to the femoral diaphyseal axis. Use x-rays to verify its correct orientation; if it is wrong, remove the outer guide wire and reposition it.



2.

3. Insert the guide wire HVM 200-002 in the center of the femoral neck, parallel to the outer guide wire, and advance it up to the subchondral bone. Remove the outer guide wire.



3.

Tecniche chirurgiche

VITE $\varnothing$ 6,5 e 7,2 mm

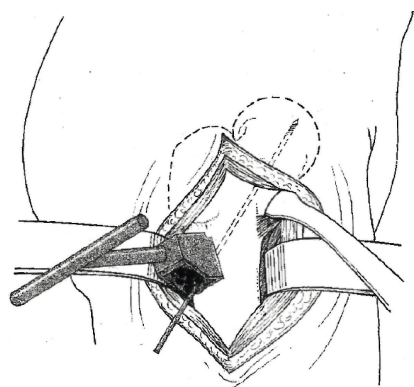
1. Il paziente è in posizione supina. La frattura viene ridotta ponendo l'arto in trazione con leggera rotazione interna.

2. Posizionare esternamente e anteriormente al collo femorale un filo guida seguendo l'inclinazione anatomica del collo rispetto all'asse diafisario femorale. Utilizzare i raggi X per verificarne il corretto orientamento; qualora il posizionamento fosse errato, rimuovere il filo guida esterno e riposizionarlo.

3. Introdurre il filo guida HVM 200-002 al centro del collo del femore, parallelamente al filo guida esterno, e farlo avanzare fino all'osso subcondrale. Rimuovere il filo guida esterno.

Surgical techniques

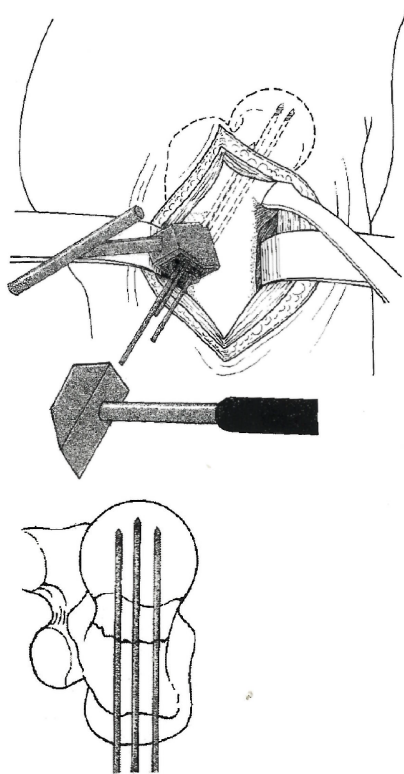
Tecniche chirurgiche



4.

4. Set the adjustable guide HVM 200-001, previously assembled to the handle STR 150020 and lay it down on the bone surface by sliding its central hole over the guide wire. If the support base does not lean against the bone surface, change the inclination of the adjustable guide.

4. Settare la guida regolabile HVM 200-001, precedentemente assemblata all'impugnatura STR 150020 e adagiarla sulla superficie dell'osso facendola scorrere sul filo guida attraverso il foro centrale. Qualora la base di appoggio non aderisca alla superficie dell'osso, modificare l'inclinazione della guida regolabile.



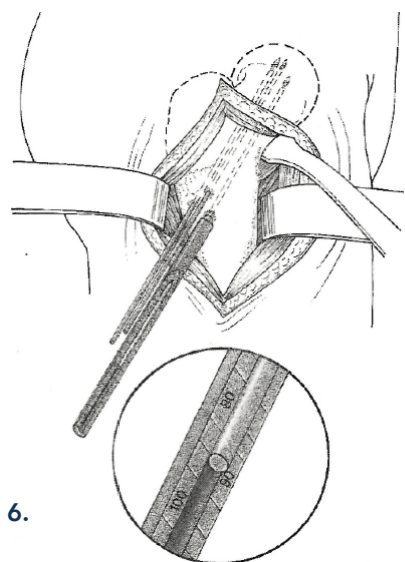
5.

5. Insert two additional guide wires HVM 200-002 through the lateral holes of the adjustable guide up to the subchondral bone. This procedure allows the guide wires to be positioned parallel to each other in a triangular orientation inside the femoral neck. Check the placement of the wires in both AP and axial views.

5. Inserire due ulteriori fili guida HVM 200-002 attraverso i fori laterali della guida regolabile fino al livello subcondrale. Tale procedura consente di posizionare tre fili guida paralleli tra loro con disposizione triangolare all'interno del collo del femore. Controllare il posizionamento dei fili sia in proiezione antero-posteriore che in quella assiale.

Surgical techniques

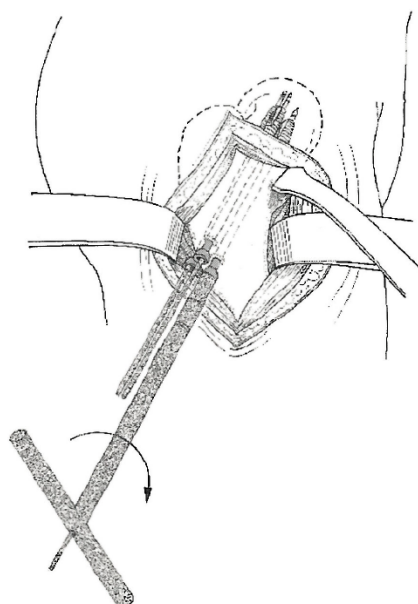
Tecniche chirurgiche



6.

6. Remove the adjustable guide. Slide the measuring device HM 00110 over each guide wire up to the first cortex to determine the length of the screws to be implanted.

6. Rimuovere la guida regolabile. Far scorrere il misuratore HM 00110 su ciascun filo guida fino alla prima corticale per determinare la lunghezza delle viti da impiantare.



7.

7. Insert one screw at a time by sliding it over the guide wire and tighten with the cannulated screwdriver preassembled to the cannulated straight handle STR 13R127; in case of osteoporotic bone, the use of washers is recommended.

7. Inserire quindi una vite per volta facendola scorrere sul filo guida ed avvitare con il cacciavite cannulato STR 031500 assemblato all'impugnatura retta cannulata STR 13R127; in caso di osso osteoporotico è consigliato l'utilizzo di rondelle.

If necessary, it is possible to prepare the place for the screws with the drill bit HMV 200-007, by reaming up to the reference notch which corresponds to the length of the screw to implant. Furthermore, if the head of the screw creates impingement, it is possible to perforate the cortex with the appropriate countersink, by assembling the cannulated T handle STR 150020 and the cannulated countersink STR 06080B, to allow the sinking of the head itself.

Se necessario, è possibile preparare la sede delle viti con la punta HMV 200-007, fresando fino alla tacca di riferimento che corrisponde alla lunghezza della vite da impiantare. Inoltre, nel caso in cui la testa della vite crei problemi di interferenza, è possibile perforare la corticale con l'apposito frangicorticale, assemblando l'impugnatura cannulata STR 150020 e il frangicorticale cannulato STR 06080B, per permettere l'affondamento della testa stessa.

8. Remove the screwdriver, verify the screws final position and remove the guide wires.

8. Rimuovere il cacciavite, verificare il posizionamento finale delle viti e rimuovere i fili guida.

Surgical techniques

General technique

Reduce the fracture.

Introduce the guide wire or the guide wires perpendicular to the fracture rim up to the contact with the second cortex.

Slide the measuring device on the guide wire or on each guide wire up to the contact with the first cortex to determine the length of the screws to be implanted.

Insert the screw or the screws previously determined by sliding them on the guide wire or guide wires and tighten with the screwdriver previously assembled to the handle; if necessary, it is possible to prepare the place for the screws with the proper drill bit previously assembled to the handle.

Furthermore, if the head of the screw creates impingement, it is possible to perforate the cortex with the appropriate countersink previously assembled to the handle to allow the sinking of the head itself.

Tecniche chirurgiche

Tecnica generale

Ridurre la frattura.

Introdurre il filo guida o i fili guida in direzione perpendicolare alla rima di frattura fino al contatto con la seconda corticale.

Far scorrere il misuratore sul filo guida o su ciascun filo guida fino al contatto con la prima corticale per determinare la lunghezza della vite da impiantare.

Inserire la vite o le viti selezionate facendole scorrere sul filo guida o sui fili guida ed avvitare con il cacciavite precedentemente assemblato all'impugnatura; se necessario, è possibile preparare la sede delle viti con l'apposita punta precedentemente assemblata all'impugnatura.

Inoltre, qualora la testa della vite crei problemi di interferenza, è possibile perforare la corticale con l'apposito frangicorticale precedentemente assemblato all'impugnatura per permettere l'affondamento della testa stessa.

Bibliography

Bibliografia

Tauber M, Moursy M, Eppel M, Koller H, Resch H.
Arthroscopic screw fixation of large anterior glenoid fractures.
Knee Surg Sports Traumatol Arthrosc. 2008 Mar;16(3):326-32.

Mumtaz MU, Farooq MA, Rasool AA, Kawoosa AA, Badoo AR, Dhar SA.
Unstable metacarpal and phalangeal fractures: treatment by internal fixation using
AO minifragment plates and screws.
Ulus Travma Acil Cerrahi Derg. 2010 Jul;16(4):334-8.

Burns AE.
Use of small cannulated screws for fixation in foot surgery.
J Am Podiatr Med Assoc. 2000 May;90(5):240-6.

Asnis SE, Bostrom MPG.
Ankle Fractures.
From: Cannulated Screw Fixation – Principles and Operative Techniques, Asnis SE
and Kyle RF, Springer.

Jupiter JB.
Fractures About the Elbow.
From: Cannulated Screw Fixation – Principles and Operative Techniques, Asnis SE
and Kyle RF, Springer.

Mears DC.
Pelvic and Acetabular Fractures.
From: Cannulated Screw Fixation – Principles and Operative Techniques, Asnis SE
and Kyle RF, Springer.

Weiner LS, Mirsky EC.
Composite Fixation for Juxtaarticular Fractures.
From: Cannulated Screw Fixation – Principles and Operative Techniques, Asnis SE
and Kyle RF, Springer.

Asnis SE, Kyle RF.
Intracapsular Hip Fracture.
From: Cannulated Screw Fixation – Principles and Operative Techniques, Asnis SE
and Kyle RF, Springer.

Asnis SE.
Slipped Capital Femoral Epiphysis.
From: Cannulated Screw Fixation – Principles and Operative Techniques, Asnis SE
and Kyle RF, Springer.

Duwelius PJ, Templeman DC.
The Knee: Tibial Plateau Fracture Reduction Techniques Utilizing Cannulated
Screw Fixation.
From: Cannulated Screw Fixation – Principles and Operative Techniques, Asnis SE
and Kyle RF, Springer.

Info

LSM-Med Srl
reserves the right
to make changes.

Info

LSM-Med Srl
si riserva il diritto
di apportare modifiche.

**LSM-Med Srl**

Strada Borrana 38
47899 Serravalle
Repubblica di San Marino
t: + 378 0549 961911
f: + 378 0549 961912
www.lsm-med.com
info@lsm-med.com

**OVERMED Srl**

Via Larga 13
20122 Milano
Italia
www.overmed.eu
info@overmed.eu