

Specification Guide



ADLER[®] Trauma Range

Traumatology/Orthopaedics

Table of Contents

ADLER° IMPLANTS - The material factor	03
Bone Screws & Washers	
Large Fragment Bone Screws, Washers	04
Small Fragment Bone Screws, Washers	07
Mini Fragment Bone Screws.....	09
Bone Plates	
Large Fragment Plates, Straight.....	10
Large Fragment Plates, Special/Anatomical.....	13
Small Fragment Plates	16
Bone Plates for 2.7mm Screws.....	18
Bone Plates for 2.0mm / 1.5mm Screws.....	19
Implants for Proximal/Distal Femur	
Compression Hip Screw System	20
Angled Blade Plate System.....	22
Hip Replacement	
Hemi-Arthroplasty Implants.....	23
Spine Implants	
Harrington System	24
External Fixators	
Tubular External Fixator 11mm System	25
Universal External Fixator 8mm/4mm System.....	26
Implants for External Fixators	27
Miscellaneous Implants	
Wires	28

^a Not stocked. Please enquire for delivery period / minimum order quantities.

ADLER° IMPLANTS - The material factor

ADLER° implants are crafted to precision using 316 LVM stainless steel which not only meets the International standard for surgical implant grade stainless steel ISO 5832/1: 1997 Composition D, but is also comparable to other International standards such as the BS 7252/1: 1997 Composition D, ASTM F138: 1992 Grade 2 and DIN 17443: 1986 1.4441.

a. Chemical Composition

316 LVM stainless steel is manufactured to exacting and highly demanding standards employing a special remelting process. The high purity of this steel eliminates susceptibility of implants to intergranular corrosion by maintaining Carbon & Sulphur within extremely low limits.

CHEMICAL COMPOSITION OF 316 LVM

Element	ISO 5832/1 Standard	316LVM (Typical sampled values)
Carbon	0.030 Max.	0.018
Silicon	1.0 Max.	0.54
Manganese	2.0 Max.	1.76
Phosphorus	0.025 Max.	0.017
Sulphur	0.010 Max.	<.001
Nickel	13.0 to 15.0	13.76
Molybdenum	2.25 to 3.5	2.76
Nitrogen	0.10 Max.	0.074
Aluminium	Not specified	0.029
Copper	0.5 Max.	0.069
Cobalt	Not specified	0.033

b. The Microstructure

Metallurgical cleanliness of the steel used in the manufacture of surgical implants significantly influences corrosion resistance. While the chemical composition of the steel provides the basic resistance, non-metallic inclusions, i.e. Oxides and Sulphides are known to act as initiation points for corrosion attacks by corrosive body fluids.

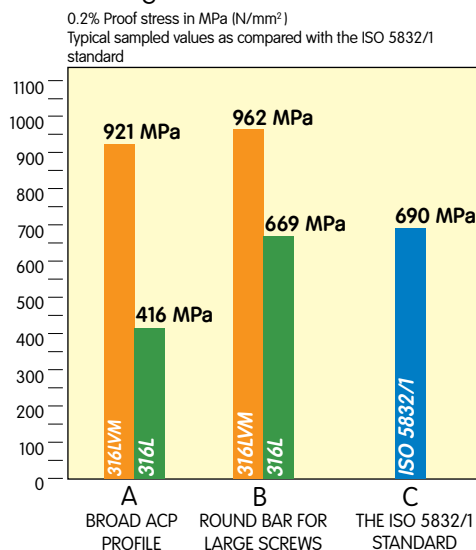
To obtain stainless steel fulfilling these demanding criteria (Evaluation of micro cleanliness is performed according to ASTM E45 Method A) with Oxygen contents lower than 10ppm (parts per million), 316 LVM is manufactured using the Vacuum Arc Remelting (VAR) process which is recognized internationally as the process offering the highest metallurgical microcleanliness demanded by surgical implants.

Compared with 316L (non Vacuum Remelted), the microcleanliness of ADLER° 316LVM provides a striking contrast-

Impurities/inclusions	316L (Typical sampled values)	316LVM (Typical sampled values)
Oxygen Content	30 ppm	<10 ppm
Area - % oxidic inclusions > 5 mm	0.0006%	0.00015%
Sulphur content	30 ppm	<10 ppm

c. Mechanical properties (Tensile strength)

Most of the ADLER° implants are produced with 316LVM which is cold worked or strengthened to meet the especially demanding requirements of tensile strength for these implants. A few exceptions are manufactured with material in the annealed form which allows the ductility needed to contour certain implants for special applications. The extremely low content of impurities (Oxygen and Sulphur content < 10ppm each) in steel manufactured using the VAR process also directly contributes to the high fatigue resistance of 316LVM steel; a critical requirement for surgical implants.



Traceability of ADLER° implants is ensured by marking batch numbers on all implants and/or packaging

Bone Screws & Washers

Large Fragment Bone Screws

Cortex Screws Dia. 4.5mm, Hex. Slot^c

PROFILE	
Thread Dia.	: 4.5mm
Drill bit for threaded hole	: 3.2mm
Drill bit for gliding hole	: 4.5mm
Core Dia.	: 3.0mm
Hexagonal Socket A/F	: 3.5mm
Head Dia.	: 8.0mm
Tap to be used (D0213.45)	: 4.5mm



Code No.	Length
B0112.014	14mm
B0112.016	16mm
B0112.018	18mm
B0112.020	20mm
B0112.022	22mm
B0112.024	24mm
B0112.026	26mm
B0112.028	28mm
B0112.030	30mm
B0112.032	32mm
B0112.034	34mm
B0112.036	36mm
B0112.038	38mm
B0112.040	40mm
B0112.042	42mm
B0112.044	44mm
B0112.046	46mm
B0112.048	48mm
B0112.050	50mm
B0112.052	52mm
B0112.054	54mm
B0112.056	56mm
B0112.058	58mm
B0112.060	60mm
B0112.062	62mm
B0112.064	64mm
B0112.066	66mm
B0112.068	68mm
B0112.070	70mm

Cortex Screws Dia. 4.5 mm Self-Tapping, Hex. Slot^c

PROFILE	
Thread Dia.	: 4.5mm
Drill bit for threaded hole	: 3.2mm
Drill bit for gliding hole	: 4.5mm
Core Dia.	: 3.0mm
Hexagonal Socket A/F	: 3.5mm
Head Dia.	: 8.0mm

Not Illustrated

Code No.	Length
B0126.014	14mm
B0126.016	16mm
B0126.018	18mm
B0126.020	20mm
B0126.022	22mm
B0126.024	24mm
B0126.026	26mm
B0126.028	28mm
B0126.030	30mm
B0126.032	32mm
B0126.034	34mm
B0126.036	36mm
B0126.038	38mm
B0126.040	40mm
B0126.042	42mm
B0126.044	44mm
B0126.046	46mm
B0126.048	48mm
B0126.050	50mm
B0126.052	52mm
B0126.054	54mm
B0126.056	56mm
B0126.058	58mm
B0126.060	60mm
B0126.062	62mm
B0126.064	64mm
B0126.065	65mm
B0126.066	66mm
B0126.068	68mm
B0126.070	70mm

Malleolar Screws Dia. 4.5mm, Hex. Slot

PROFILE	
Thread Dia.	: 4.5mm
Drill bit for threaded hole	: 3.2mm
Core Dia.	: 3.0mm
Hexagonal Socket A/F	: 3.5mm
Head Dia.	: 8.0mm
Shaft Dia.	: 3.0mm



Code No.	Length
B0120.025	25mm
B0120.030	30mm
B0120.035	35mm
B0120.040	40mm
B0120.045	45mm
B0120.050	50mm
B0120.055	55mm
B0120.060	60mm
B0120.065	65mm
B0120.070	70mm

^a Not stocked. Please enquire for delivery period / minimum order quantities.

^c Sizes above 70mm not in standard manufacturing program. Available on request.

Bone Screws & Washers

Large Fragment Bone Screws

Cancellous Screws

Dia. 6.5mm, Hex. Slot,
Thread Length 16mm^c

PROFILE

Thread Dia.	: 6.5mm
Drill bit for threaded hole	: 3.2mm
Shaft Dia.	: 4.5mm
Drill bit for shaft (optional)	: 4.5mm
Core Dia.	: 3.0mm
Hexagonal Socket A/F	: 3.5mm
Head Dia.	: 8.0mm
Tap to be used (D0213.65)	: 6.5mm



Dia. 6.5mm	Length
B0114.025	25mm
B0114.030	30mm
B0114.035	35mm
B0114.040	40mm
B0114.045	45mm
B0114.050	50mm
B0114.055	55mm
B0114.060	60mm
B0114.065	65mm
B0114.070	70mm
B0114.075	75mm
B0114.080	80 mm
B0114.085	85 mm
B0114.090	90 mm
B0114.095	95 mm
B0114.100	100 mm
B0114.105	105 mm
B0114.110	110 mm

Cancellous Screws

Dia. 6.5mm, Hex. Slot,
Thread Length 32mm^c

PROFILE

Thread Dia.	: 6.5mm
Drill bit for threaded hole	: 3.2mm
Shaft Dia.	: 4.5mm
Drill bit for shaft (optional)	: 4.5mm
Core Dia.	: 3.0mm
Hexagonal Socket A/F	: 3.5mm
Head Dia.	: 8.0mm
Tap to be used (D0213.65)	: 6.5mm



Dia. 6.5mm ^c	Length
B0116.040	40mm
B0116.045	45mm
B0116.050	50mm
B0116.055	55mm
B0116.060	60mm
B0116.065	65mm
B0116.070	70mm
B0116.075	75mm
B0116.080	80 mm
B0116.085	85 mm
B0116.090	90 mm
B0116.095	95 mm
B0116.100	100 mm
B0116.105	105 mm
B0116.110	110 mm

Cancellous Screws

Dia. 6.5mm, Hex. Slot,
Fully Threaded^c

PROFILE

Thread Dia.	: 6.5mm
Drill bit for threaded hole	: 3.2mm
Core Dia.	: 3.0mm
Hexagonal Socket A/F	: 3.5mm
Head Dia.	: 8.0mm
Tap to be used (D0213.65)	: 6.5mm



Dia. 6.5mm	Length
B0118.020 ^a	20mm
B0118.025	25mm
B0118.030	30mm
B0118.035	35mm
B0118.040	40mm
B0118.045	45mm
B0118.050	50mm
B0118.055	55mm
B0118.060	60mm
B0118.065	65mm
B0118.070	70mm
B0118.075	75mm
B0118.080	80 mm
B0118.085 ^a	85 mm
B0118.090 ^a	90 mm
B0118.095 ^a	95 mm
B0118.100 ^a	100 mm
B0118.105 ^a	105 mm
B0118.110 ^a	110 mm
B0118.115 ^a	115 mm
B0118.120 ^a	120 mm

WASHER for large screws

Code No.
B1105.01



^a Not stocked. Please enquire for delivery period / minimum order quantities.

^c Sizes above 70mm not in standard manufacturing program. Available on request.

Bone Screws & Washers

Large Fragment Bone Screws

Cannulated Cancellous Screws Ø 7.0mm, Hex. Slot, Thread Length 16mm

PROFILE	
Thread Dia.	: 7.0mm
Drill bit for threaded hole	: 4.5mm
Shaft Dia.	: 4.5mm
Cannulation	: 2.1mm
Core Dia.	: 4.5mm
Hexagonal Socket A/F	: 3.5mm
Head Dia.	: 8.0mm
Tap to be used (D1003.70)	: 7.0mm
Guide Wire to be used	: 2.0mm



Code No.	Length
B0122.030	30mm
B0122.035	35mm
B0122.040	40mm
B0122.045	45mm
B0122.050	50mm
B0122.055	55mm
B0122.060	60mm
B0122.065	65mm
B0122.070	70mm
B0122.075	75mm
B0122.080	80 mm
B0122.085	85 mm
B0122.090	90 mm
B0122.095	95 mm
B0122.100	100 mm
B0122.105	105 mm
B0122.110	110 mm
B0122.115	115 mm

Cannulated Cancellous Screws Ø 7.0mm, Hex. Slot, Thread Length 32mm

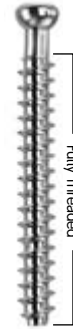
PROFILE	
Thread Dia.	: 7.0mm
Drill bit for threaded hole	: 4.5mm
Shaft Dia.	: 4.5mm
Cannulation	: 2.1mm
Core Dia.	: 4.5mm
Hexagonal Socket A/F	: 3.5mm
Head Dia.	: 8.0mm
Tap to be used (D1003.70)	: 7.0mm
Guide Wire to be used	: 2.0mm



Code No.	Length
B0124.045	45mm
B0124.050	50mm
B0124.055	55mm
B0124.060	60mm
B0124.065	65mm
B0124.070	70mm
B0124.075	75mm
B0124.080	80 mm
B0124.085	85 mm
B0124.090	90 mm
B0124.095	95 mm
B0124.100	100 mm
B0124.105	105 mm
B0124.110	110 mm
B0124.115	115 mm

Cannulated Cancellous Screws Ø 7.0mm, Hex. Slot, Fully Threaded

PROFILE	
Thread Dia.	: 7.0mm
Drill bit for threaded hole	: 4.5mm
Shaft Dia.	: 4.5mm
Cannulation	: 2.1mm
Core Dia.	: 4.5mm
Hexagonal Socket A/F	: 3.5mm
Head Dia.	: 8.0mm
Tap to be used (D1003.70)	: 7.0mm
Guide Wire to be used	: 2.0mm



Code No.	Length
B0130.020	20mm
B0130.025	25mm
B0130.030	30mm
B0130.035	35mm
B0130.040	40mm
B0130.045	45mm
B0130.050	50mm
B0130.055	55mm
B0130.060	60mm
B0130.065	65mm
B0130.070	70mm
B0130.075	75mm
B0130.080	80 mm
B0130.085	85 mm
B0130.090	90 mm
B0130.095	95 mm
B0130.100	100 mm
B0130.105	105 mm
B0130.110	110 mm
B0130.115	115 mm
B0130.120	120 mm
B0130.125	125 mm
B0130.130	130 mm

^a Not stocked. Please enquire for delivery period / minimum order quantities.

Bone Screws & Washers

Small Fragment Bone Screws

Cortex Screws 3.5 mm/1.25 mm Pitch, Hex. Slot^c

PROFILE

Thread Dia.	: 3.5mm
Drill bit for threaded hole	: 2.5mm
Drill bit for gliding hole	: 3.5mm
Core Dia.	: 2.4mm
Hexagonal Socket A/F	: 2.5mm
Head Dia.	: 6.0mm
Tap to be used (D0213.35)	: 3.5 x 1.25mm pitch



Cortex Screws 3.5 mm/1.75 mm Pitch, Hex. Slot^c

PROFILE

Thread Dia.	: 3.5mm
Drill bit for threaded hole	: 2.0mm
Drill bit for gliding hole	: 3.5mm
Core Dia.	: 1.9mm
Hexagonal Socket A/F	: 2.5mm
Head Dia.	: 6.0mm
Tap to be used (D0213.351)	: 3.5 x 1.75mm pitch



Cortex Screws 3.5 mm Self-Tapping, Hex. Slot^c

PROFILE

Thread Dia.	: 3.5mm
Drill bit for threaded hole	: 2.5mm
Drill bit for gliding hole	: 3.5mm
Core Dia.	: 2.4mm
Hexagonal Socket A/F	: 2.5mm
Head Dia.	: 6.0mm

Not Illustrated

Code No.	Length
B0212.10	10 mm
B0212.12	12 mm
B0212.14	14 mm
B0212.16	16 mm
B0212.18	18 mm
B0212.20	20 mm
B0212.22	22 mm
B0212.24	24 mm
B0212.26	26 mm
B0212.28	28 mm
B0212.30	30 mm
B0212.32	32 mm
B0212.34 ^a	34 mm
B0212.36	36 mm
B0212.38 ^a	38 mm
B0212.40	40 mm
B0212.45	45 mm
B0212.50	50 mm
B0212.55	55 mm
B0212.60	60 mm

Code No.	Length
B0214.10	10 mm
B0214.12	12 mm
B0214.14	14 mm
B0214.16	16 mm
B0214.18	18 mm
B0214.20	20 mm
B0214.22	22 mm
B0214.24	24 mm
B0214.26	26 mm
B0214.28	28 mm
B0214.30	30 mm
B0214.32	32 mm
B0214.34 ^a	34 mm
B0214.36	36 mm
B0214.38 ^a	38 mm
B0214.40	40 mm
B0214.45	45 mm
B0214.50	50 mm
B0214.55	55 mm
B0214.60	60 mm

Code No.	Length
B0220.10	10 mm
B0220.12	12 mm
B0220.14	14 mm
B0220.16	16 mm
B0220.18	18 mm
B0220.20	20 mm
B0220.22	22 mm
B0220.24	24 mm
B0220.26	26 mm
B0220.28	28 mm
B0220.30	30 mm
B0220.32	32 mm
B0220.34 ^a	34 mm
B0220.36	36 mm
B0220.38 ^a	38 mm
B0220.40	40 mm
B0220.45	45 mm
B0220.50	50 mm
B0220.55	55 mm
B0220.60	60 mm

^a Not stocked. Please enquire for delivery period / minimum order quantities.

^c Sizes above 70mm not in standard manufacturing program. Available on request.

Bone Screws & Washers

Small Fragment Bone Screws

Cancellous Screw Dia. 4.0 mm, Partly Threaded, Hex Slot^c

PROFILE	
Thread Dia.	: 4.0mm
Drill bit for threaded hole	: 2.5mm
Shaft Dia.	: 2.4mm
Core Dia.	: 1.9mm
Hexagonal Socket A/F	: 2.5mm
Head Dia.	: 6.0mm
Tap to be used (D0213.351)	



Cancellous Screw Dia. 4.0 mm, Fully Threaded Hex Slot^a


PROFILE	
Thread Dia.	: 4.0mm
Drill bit for threaded hole	: 2.5mm
Core Dia.	: 1.9mm
Hexagonal Socket A/F	: 2.5mm
Head Dia.	: 6.0mm
Tap to be used (D0213.351)	
Not to be used as a lag screw	



Code No.	Length
B0216.10	10 mm
B0216.12	12 mm
B0216.14	14 mm
B0216.16	16 mm
B0216.18	18 mm
B0216.20	20 mm
B0216.22	22 mm
B0216.24	24 mm
B0216.26	26 mm
B0216.28	28 mm
B0216.30	30 mm
B0216.35	35 mm
B0216.38	38 mm
B0216.40	40 mm
B0216.45	45 mm
B0216.50	50 mm
B0216.55	55 mm
B0216.60 ^a	60 mm

Code No.	Length
B0217.10	10 mm
B0217.12	12 mm
B0217.14	14 mm
B0217.16	16 mm
B0217.18	18 mm
B0217.20	20 mm
B0217.22	22 mm
B0217.24	24 mm
B0217.26	26 mm
B0217.28	28 mm
B0217.30	30 mm
B0217.32	32 mm
B0217.35	35 mm
B0217.40	40 mm
B0217.45	45 mm
B0217.50	50 mm
B0217.55	55 mm
B0217.60	60 mm

Washer for small screws

Code No.	
B1105.02	

^a Not stocked. Please enquire for delivery period / minimum order quantities.

^c Sizes above 60mm not in standard manufacturing program. Available on request.

Bone Screws & Washers

Mini Fragment Bone Screws

Cortex Screw Dia. 1.5mm Hex Slot

PROFILE

Thread Dia.	: 1.5mm
Drill bit for threaded hole	: 1.1mm
Drill bit for gliding hole	: 1.5mm
Core Dia.	: 1.0mm
Hexagonal Socket A/F	: 1.5mm
Head Dia.	: 3.0mm
Tap to be used (D0213.15)	: 1.5mm



Code No.	Length
B0305.06	6 mm
B0305.07	7 mm
B0305.08	8 mm
B0305.09	9 mm
B0305.10	10 mm
B0305.11	11 mm
B0305.12	12 mm
B0305.14	14 mm
B0305.16	16 mm
B0305.18	18 mm
B0305.20	20 mm

Cortex Screw Dia. 2.0mm Hex. Slot^c

PROFILE

Thread Dia.	: 2.0mm
Drill bit for threaded hole	: 1.5mm
Drill bit for gliding hole	: 2.0mm
Core Dia.	: 1.3mm
Hexagonal Socket A/F	: 1.5mm
Head Dia.	: 4.0mm
Tap to be used (D0213.20)	: 2.0mm



Code No.	Length
B0306.06	6 mm
B0306.08	8 mm
B0306.10	10 mm
B0306.12	12 mm
B0306.14	14 mm
B0306.16	16 mm
B0306.18	18 mm
B0306.20	20 mm
B0306.22	22 mm
B0306.24	24 mm

Cortex Screw Dia. 2.7mm, Hex. Slot

PROFILE

Thread Dia.	: 2.7mm
Drill bit for threaded hole	: 2.0mm
Drill bit for gliding hole	: 2.7mm
Core Dia.	: 1.9mm
Hexagonal Socket A/F	: 2.5mm
Head Dia.	: 5.0mm
Tap to be used (D0213.27)	: 2.7mm



Code No.	Length
B0218.06	6 mm
B0218.08	8 mm
B0218.10	10 mm
B0218.12	12 mm
B0218.14	14 mm
B0218.16	16 mm
B0218.18	18 mm
B0218.20	20 mm
B0218.22	22 mm
B0218.24	24 mm
B0218.26	26 mm
B0218.28	28 mm
B0218.30	30 mm
B0218.32	32 mm

^a Not stocked. Please enquire for delivery period / minimum order quantities.

^c Sizes above 24mm not in standard manufacturing program. Available on request.

Bone Plates

Large Fragment Plates, Straight

Code No.	Holes	Length
B0410.06	6	103 mm
B0410.07	7	119 mm
B0410.08	8	135 mm
B0410.09	9	151 mm
B0410.10	10	167 mm
B0410.11 ^a	11	183 mm
B0410.12	12	199 mm
B0410.14	14	231 mm
B0410.16	16	263 mm
B0410.18	18	295 mm

Broad Plate 4.8mm, Auto Compression Holes^c



PROFILE

Thickness	: 4.8mm	Fixation with 4.5 and 6.5mm Screws.
Width	: 16.0mm	All plate holes are designed as self compressing holes.
Hole Spacing	: 16 & 25mm	The end holes are designed for cancellous bone screws.

Code No.	Holes	Length
B0413.06	6	106 mm
B0413.07	7	124 mm
B0413.08	8	142 mm
B0413.09	9	160 mm
B0413.10	10	178 mm
B0413.11	11	196 mm
B0413.12	12	214 mm
B0413.13 ^a	13	232 mm
B0413.14	14	250 mm
B0413.15 ^a	15	268 mm
B0413.16	16	286 mm
B0413.17 ^a	17	304 mm
B0413.18	18	322 mm

Broad SS-Low Contact Auto Compression Plate^c



PROFILE

Thickness	: 4.8mm	Fixation with 4.5 and 6.5mm Screws.
Width	: 16mm	The specially designed holes allow bi-directional compression.
Hole Spacing	: 18mm	To be used only with SS-Low Contact Auto Compression Plate drill guides. The end holes can be used for cancellous bone screws. Undercuts for vascular preservation.

^a Not stocked. Please enquire for delivery period / minimum order quantities.

^c Sizes above 18 Holes not in standard manufacturing program. Available on request.

Bone Plates

Large Fragment Plates, Straight

Code No.	Holes	Length
B0409.02 ^a	2	39 mm
B0409.03	3	55 mm
B0409.04	4	71 mm
B0409.05	5	87 mm
B0409.06	6	103 mm
B0409.07	7	119 mm
B0409.08	8	135 mm
B0409.09	9	151 mm
B0409.10	10	167 mm
B0409.11	11	183 mm
B0409.12	12	199 mm
B0409.13	13	215 mm
B0409.14	14	231 mm
B0409.15	15	247 mm
B0409.16	16	263 mm
B0409.18	18	295 mm

Narrow Plate 3.6mm, Auto Compression Holes^c



PROFILE

Thickness	: 3.6mm	Fixation with 4.5 and 6.5mm Screws.
Width	: 12.0mm	Hole All plate holes are designed as self compressing holes.
Spacing	: 16 & 25mm	The end holes are designed for cancellous bone screws.

Code No.	Holes	Length
B0412.02	2	34 mm
B0412.03	3	52 mm
B0412.04	4	70 mm
B0412.05	5	88 mm
B0412.06	6	106 mm
B0412.07	7	124 mm
B0412.08	8	142 mm
B0412.09	9	160 mm
B0412.10	10	178 mm
B0412.11	11	196 mm
B0412.12	12	214 mm
B0412.14 ^a	14	250 mm
B0412.16 ^a	16	286mm

Narrow SS-Low Contact Auto Compression Plate^c



PROFILE

Thickness	: 3.6mm	Fixation with 4.5 and 6.5mm Screws.
Width	: 12mm	The specially designed holes allow bi-directional compression. To be used only with SS-Low Contact Auto Compression Plate drill guides. The end holes can be used for cancellous bone screws.
Hole Spacing	: 18.0mm	Undercuts for vascular preservation.

^a Not stocked. Please enquire for delivery period / minimum order quantities.

^c Longer sizes not in standard manufacturing program. Available on request.

Bone Plates

Large Fragment Plates, Straight

Code No.	Holes	Length
B0819.03	3	45 mm
B0819.04	4	61 mm
B0819.05	5	77 mm
B0819.06	6	93 mm
B0819.07	7	109 mm
B0819.08	8	125 mm
B0819.09	9	141 mm
B0819.10	10	157mm
B0819.11	11	173mm
B0819.12	12	189mm
B0819.13	13	205mm
B0819.14	14	221mm
B0819.15	15	237mm
B0819.16	16	253mm

Reconstruction Plate 4.5 mm, Straight



PROFILE

Thickness	: 2.8mm	
Width	: 12.0mm	Fixation with 4.5 & 6.5mm screws.
Hole Spacing	: 16.0mm	Note: Do not bend more than 15°.

Code No.	Holes	Length
B0408.02	2	39 mm
B0408.03	3	55 mm
B0408.04	4	71 mm
B0408.05	5	87 mm
B0408.06	6	103 mm
B0408.07	7	119 mm
B0408.08	8	135 mm
B0408.09	9	151 mm
B0408.10	10	167 mm
B0408.11	11	183 mm
B0408.12	12	199 mm

Semi Tubular Plates



PROFILE

Thickness	: 1.0mm	Fixation with 4.5mm cortex screws.
Width	: 12.0mm	A compression effect can be achieved by eccentric positioning of the screws remote from the fracture line.
Hole Spacing	: 16 & 26mm	

^a Not stocked. Please enquire for delivery period / minimum order quantities.

Bone Plates

Large Fragment Plates, Special/Anatomical

Spoon Plate

Code No.	Holes	Length
B0506.05	5	100 mm
B0506.06	6	120 mm



Plate shown is B0506.06 (6 Holes)

PROFILE

Thickness : 2.0mm Fixation with 4.5mm cortex screws.
 Head Width : 33.0mm Shaft with 'V' profile for fixation on the frontal edge of the tibia.

Code No.	Holes	Length
B0507.03	3	68 mm
B0507.04	4	84 mm
B0507.05	5	100 mm
B0507.06	6	116 mm
B0507.07	7	134 mm
B0507.08	8	148 mm
B0507.09	9	164 mm
B0507.10	10	180 mm

'T' Plate

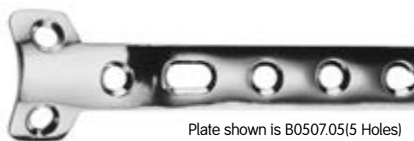


Plate shown is B0507.05(5 Holes)

PROFILE

Thickness : 2.0mm Fixation with 4.5 & 6.5mm screws. Shaft with
 Width : 16.0mm round profile for humeral and tibial head.

Code No.	Holes	Length
B0508.04	4	84 mm
B0508.05	5	100 mm
B0508.06	6	116 mm
B0508.07	7	132 mm
B0508.08	8	148 mm
B0508.09	9	164 mm
B0508.10	10	180 mm

'T' Buttress Plate

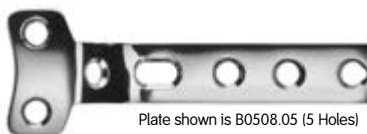


Plate shown is B0508.05 (5 Holes)

PROFILE

Thickness : 2.0mm Fixation with 4.5 & 6.5mm screws.
 Width : 16.0mm With double bend, as buttress for tibial head fractures.

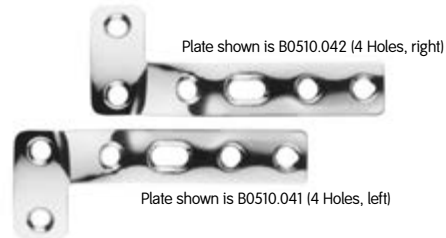
^a Not stocked. Please enquire for delivery period / minimum order quantities.

Bone Plates

Large Fragment Plates, Special/Anatomical

'L' Buttress Plate

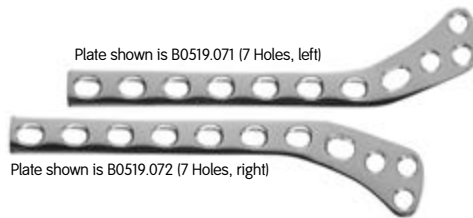
Code No.		Holes	Length
Left	Right		
B0510.031	B0510.032	3	69 mm
B0510.041	B0510.042	4	85 mm
B0510.051	B0510.052	5	101 mm
B0510.061	B0510.062	6	117 mm
B0510.071	B0510.072	7	133 mm
B0510.081	B0510.082	8	149 mm
B0510.091	B0510.092	9	165 mm
B0510.101	B0510.102	10	181 mm



PROFILE
 Thickness : 2.0mm Fixation with 4.5 & 6.5mm Screws. With double bend, as buttress for tibial & humeral head fractures.
 Head Width : 16.0mm Left angled for right leg & right angled for left leg.

Lateral Tibial Head Buttress Plate 4.5mm

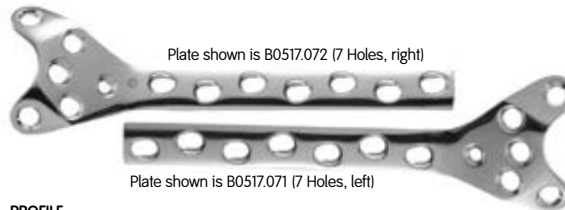
Code No.		Shaft Holes	Length
Left	Right		
B0519.051	B0519.052	5	117 mm
B0519.071	B0519.072	7	149 mm
B0519.091	B0519.092	9	181 mm
B0519.111	B0519.112	11	213 mm
B0519.131	B0519.132	13	245 mm
B0519.151	B0519.152	15	277 mm



SHAFT PROFILE
 Thickness : 3.8mm Fixation with 4.5 & 6.5mm Screws.
 Width : 14.0mm Shaft with Dynamic Compression Holes and Slots for Tension Device. Left angled for right leg & right angled for left leg.
 Hole Spacing : 16.0mm

Condylar Buttress Plate 4.5 mm

Code No.		Holes
Left	Right	
B0517.071	B0517.072	7
B0517.091	B0517.092	9
B0517.111	B0517.112	11
B0517.131	B0517.132	13
B0517.151	B0517.152	15



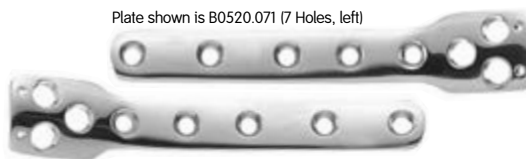
PROFILE
 Thickness : 5.0mm Fixation with 4.5 & 6.5mm screws.
 Width : 16.0mm With Dynamic Compression Holes and slots for tension device. As buttress for femoral condyles, with multiple fragment fractures.
 Hole Spacing : 16.0mm

Bone Plates

Large Fragment Plates, Special/Anatomical

Tibial Plate, Distal-medial

Code No.		Holes	Length
Left	Right		
B0520.071	B0520.072	7	122mm
B0520.091	B0520.092	9	158mm
B0520.111	B0520.112	11	194mm
B0520.131	B0520.132	13	230mm



PROFILE
 Width of shaft : 16.0mm Fixation with 4.5 & 6.5mm screws.
 Width of head : 22.0mm Curved and twisted to conform to the natural shape of the medial aspect of the distal tibia.

Tibial Plate, Proximal-lateral

Code No.		Holes	Length
Left	Right		
B0521.071	B0521.072	7	122mm
B0521.091	B0521.092	9	158mm
B0521.111	B0521.112	11	194mm
B0521.131	B0521.132	13	230mm



PROFILE
 Width of shaft : 16.0mm Fixation with 4.5 & 6.5mm screws.
 Width of head : 22.0mm Pre-formed left and right plates contoured to match the lateral aspect of the proximal tibia. Rarely needs additional correction.

Tibial Plate For Fibulae, Distal - Lateral

Code No.		Holes	Length
Left	Right		
B0522.071	B0522.072	7	122mm
B0522.091	B0522.092	9	158mm
B0522.111	B0522.112	11	194mm
B0522.131	B0522.132	13	230mm



PROFILE
 Width of shaft : 16.0mm Fixation with 4.5 & 6.5mm screws.
 Width of head : 22.0mm Curved and twisted to conform to the natural shape of the lateral aspect of the distal fibulae.

Femoral Plate, Distal - Lateral

Code No.		Holes	Length
Left	Right		
B0523.071	B0523.072	7	122mm
B0523.091	B0523.092	9	158mm
B0523.111	B0523.112	11	194mm
B0523.131	B0523.132	13	230mm



PROFILE
 Width of shaft : 16.0mm Fixation with 4.5 & 6.5mm screws.
 Width of head : 22.0mm Pre-formed plate curved to conform to the natural contour of the distal femur. Two small holes at the end of the plate are for temporary fixation with Kirschner wires.

^a Not stocked. Please enquire for delivery period / minimum order quantities.

Bone Plates

Small Fragment Plates

Code No.	Holes	Length
B0810.02	2	27 mm
B0810.03	3	39 mm
B0810.04	4	51 mm
B0810.05	5	63 mm
B0810.06	6	75 mm
B0810.07	7	87 mm
B0810.08	8	99 mm
B0810.09	9	111 mm
B0810.10	10	123 mm
B0810.11 ^a	11	135 mm
B0810.12	12	147 mm
B0810.13 ^a	13	159 mm
B0810.14 ^a	14	171 mm
B0810.15 ^a	15	183 mm
B0810.16 ^a	16	195 mm

Small Fragment Plate, 3mm Auto Compression Holes



PROFILE

Thickness : 3.0mm
Width : 10.0mm
Hole Spacing : 12 & 16mm

For ulna and radius. Fixation with 3.5 & 4mm screws.

Code No.	Holes	Length
B0820.04	4	51 mm
B0820.05	5	64 mm
B0820.06	6	77 mm
B0820.07	7	90 mm
B0820.08	8	103 mm
B0820.09	9	116 mm
B0820.10	10	129 mm
B0820.11 ^a	11	142 mm
B0820.12 ^a	12	155 mm

Small SS-Low Contact Auto Compression Plate, 3.5mm For Radius & Ulna



PROFILE

Thickness : 3.0mm
Width : 10.0mm
Hole Spacing : 13.0mm

For ulna and radius. Fixation with 3.5 & 4mm screws.

Code No.	Holes	Length
B0821.02	2	28 mm
B0821.03	3	40 mm
B0821.04	4	52 mm
B0821.05	5	64 mm
B0821.06	6	76 mm
B0821.07	7	88 mm
B0821.08	8	100 mm
B0821.09	9	112 mm
B0821.10	10	124 mm
B0821.12	12	148 mm

One-third Tubular Plates with Collar



PROFILE

Thickness : 1.0mm
Width : 9.0mm
Hole Spacing : 12 & 16mm
(One third of tube of 12mm dia)

Used as buttress plates for fibula, metatarsals, and metacarpals. Fixation with 3.5 & 4mm screws. Compression effect can be achieved by eccentric insertion of distal screws far from the fracture.

Code No.	Holes	Length
B0815.05	5	58 mm
B0815.06	6	70 mm
B0815.07	7	82 mm
B0815.08	8	94 mm
B0815.09 ^a	9	106 mm
B0815.10	10	118mm
B0815.11	11	130 mm
B0815.12	12	142mm
B0815.13 ^a	13	154mm
B0815.14 ^a	14	166mm
B0815.15 ^a	15	178mm
B0815.16 ^a	16	190mm
B0815.18 ^a	18	214mm
B0815.20 ^a	20	238mm
B0815.22 ^a	22	262mm

Reconstruction Plate, 3.5 Straight



PROFILE

Thickness : 2.8mm
Width : 10.0mm
Hole Spacing : 12.0mm

Fixation with 3.5 and 4.0mm screws. For pelvic, clavicle and calcaneal fractures. Three dimensional contouring is possible with these plates which is enabled by the design. Not to be bent more than 15°.

^a Not stocked. Please enquire for delivery period / minimum order quantities.

Bone Plates

Small Fragment Plates

Small T' Plate

Code No.	Holes		Length
	Head	Shaft	
B0811.49	3	3	49 mm
B0811.56	4	4	56 mm
B0811.67	3	5	67 mm
B0811.78	4	6	78 mm



Plate shown is B0803.49

SHAFT PROFILE

Thickness : 1.2mm Fixation with 3.5 and 4.0mm screws. For distal radius.
 Width : 10.0mm Can be used for left and right radius.

Small Oblique T' Plate

Code No.	Holes		Length
	Head	Shaft	
B0812.52	3	3	52 mm
B0812.63	3	4	63 mm
B0812.74	3	5	74 mm

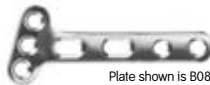


Plate shown is B0804.63

SHAFT PROFILE

Thickness : 1.5mm Fixation with 3.5 and 4.0mm screws.
 Width : 10.0mm For distal radius. Can be used for left and right radius.

Cloverleaf Plate

Code No.	Holes	Length
B0509.03	3	88 mm
B0509.04	4	104 mm
B0509.05	5	120 mm
B0509.06	6	136 mm



SHAFT PROFILE

Thickness : 2.0mm
 Cloverleaf Thickness : 1.2mm
 Shaft Width : 15.5mm Fixation with 3.5 and 4.0mm screws.

Code No.	Holes
B0813.01	12
B0813.02	9

'Y' Plate



PROFILE

Thickness : 2.0 mm

Fixation with 3.5mm screws.
 Notched design to suit condylar fractures of the humerus.
 Plate can be bent in three dimensions to conform to the contours of the bone. Not to be bent more than 15°.

^a Not stocked. Please enquire for delivery period / minimum order quantities.

Bone Plates

Plates For 2.7mm Screws

Code No.	Holes	Length
B0908.02	2	20 mm
B0908.021 ^a	2	26 mm
B0908.03	3	28 mm
B0908.04	4	36 mm
B0908.05	5	44 mm
B0908.06	6	52 mm
B0908.07 ^a	7	60 mm
B0908.08 ^a	8	68 mm
B0908.09 ^a	9	76 mm
B0908.10 ^a	10	84 mm
B0908.11 ^a	11	92 mm
B0908.12 ^a	12	100 mm

Auto Compression Plate 2.7mm



PROFILE
 Thickness : 2.5mm
 Width : 8.0mm
 Hole Spacing : 8 & 12mm, 18mm for B0901.021
 Fixation with 2.7mm screws.

Code No.	Holes	Length
B0914.05	5	40 mm
B0914.06	6	48 mm
B0914.08	8	64 mm
B0914.10	10	80 mm
B0914.12	12	96 mm
B0914.14	14	112 mm
B0914.16	16	128 mm
B0914.18	18	144 mm
B0914.20	20	160 mm
B0914.22	22	176 mm
B0914.24	24	192 mm

Reconstruction Plate 2.7mm Straight



PROFILE
 Thickness : 2.5mm
 Width : 8.0mm
 Hole Spacing : 8.0mm

Code No.	Holes	Length
B0913.03	3	26 mm
B0913.04	4	34mm
B0913.05	5	42 mm
B0913.06	6	50 mm
B0913.07	7	58 mm
B0913.08	8	66 mm

Quarter Tubular Plate with Collar



PROFILE
 Thickness : 1.0mm
 Width : 7.0mm
 Hole Spacing : 8.0mm
 Fixation with 2.7mm Screws.

Multiple Fragment Plate

Code No.
B0910.01



PROFILE
 Thickness : 1.2mm
 Width : 15.0mm
 Fixation with 2.7mm screw. For use in Multiple Fractures in small bones. Slightly concave plate with alternating screw holes.

Small 'L' Plate, 2.7

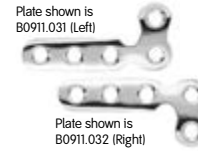


Plate shown is B0911.031 (Left)

Plate shown is B0911.032 (Right)

Code No.	
Left	Right
B0911.031	B0911.032

PROFILE
 Thickness : 1.2mm
 Width : 7.0mm
 Hole Spacing : 8.0mm

For Finger joint - head. Shaft with 3 holes and head with 2 Holes.

Small 'L' Plate Oblique, 2.7

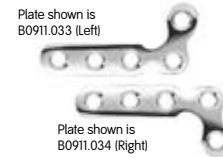


Plate shown is B0911.033 (Left)

Plate shown is B0911.034 (Right)

Code No.	
Left	Right
B0911.033	B0911.034

PROFILE
 Thickness : 1.2mm
 Width : 7.0mm
 Hole Spacing : 8.0mm

For Finger joint - head. Shaft with 3 holes and head with 2 holes.

Small 'T' Plate, 2.7



Code No.
B0912.01

PROFILE
 Thickness : 1.2mm
 Width : 7.0mm
 Hole Spacing : 8.0mm

For Finger joint - head. Shaft with 3 holes and head with 2 holes.

^a Not stocked. Please enquire for delivery period / minimum order quantities.

Bone Plates

Plates For 2.0 mm / 1.5 mm Screws

Straight Mini Plate

Code No.	Holes	Length
B1004.03	3	17 mm
B1004.04	4	23 mm
B1004.05	5	29 mm
B1004.06	6	35 mm



PROFILE
 Thickness : 1.0mm
 Width : 5.0mm
 Hole Spacing : 6.0mm
 Can be cut to required length with a wire cutter.

Mini 'L' Plate



Plate shown is B1005.022 (Right)



Plate shown is B1005.021 (Left)

Code No.	
Left	Right
B1005.021	B1005.022

PROFILE
 Thickness : 1.0mm
 Width : 5.0mm
 Hole Spacing : 6.0mm (Slightly Hollow)
 For head of finger joint shaft with 2 holes and head with 2 holes.

Mini 'L' Plate Oblique



Plate shown is B1005.024 (Right)



Plate shown is B1005.023 (Left)

Code No.	
Left	Right
B1005.023	B1005.024

PROFILE
 Thickness : 1.0mm
 Width : 5.0mm
 Hole Spacing : 6.0mm (Slightly Hollow)
 For head of finger joint shaft with 2 holes and head with 2 holes.

Mini 'T' Plate



Code
B1006.01

PROFILE
 Thickness : 1.0mm
 Width : 5.0mm
 Hole Spacing : 6.0mm (Slightly Hollow)
 For head of finger joint shaft with 2 holes and head with 2 holes.

^a Not stocked. Please enquire for delivery period / minimum order quantities.

Implants For Proximal/Distal Femur

Compression Hip Screw System

C.H.S. Barrel Plate 38mm Barrel Auto Compression Holes

PROFILE

Thickness	: 5.8mm	
Width	: 19mm	
Hole Spacing	: 16mm	Fixation with 4.5mm Cortex Screw.
Outer Barrel Dia	: 12.5mm	With slot for Tension Device. For Pertrochanteric and Intertrochanteric fractures.

	130°	135°	140°	145°	150°	Holes
		B0723.1352 ^a	B0723.1402 ^a	B0723.1452 ^a	B0723.1502 ^a	2
B0723.1303		B0723.1353				3
B0723.1304		B0723.1354	B0723.1404 ^a	B0723.1454 ^a	B0723.1504 ^a	4
B0723.1305		B0723.1355	B0723.1405 ^a	B0723.1455 ^a	B0723.1505 ^a	5
B0723.1306		B0723.1356	B0723.1406 ^a	B0723.1456 ^a	B0723.1506 ^a	6
B0723.1307 ^a		B0723.1357 ^a				7
B0723.1308		B0723.1358			B0723.1508 ^a	8
B0723.1309 ^a		B0723.1359 ^a				9
B0723.1310 ^a		B0723.1360			B0723.1510 ^a	10
B0723.1311 ^a		B0723.1361 ^a				11
B0723.1312 ^a		B0723.1362			B0723.1512 ^a	12
B0723.1313 ^a		B0723.1363 ^a				13
B0723.1314 ^a		B0723.1364				14
B0723.1315 ^a		B0723.1365 ^a				15
B0723.1316 ^a		B0723.1366				16



C.H.S. Barrel Plate 25mm Barrel Auto Compression Holes

	130°	135°	Holes
B0725.1303 ^a		B0725.1353	3
B0725.1304		B0725.1354	4
B0725.1305		B0725.1355	5
B0725.1306		B0725.1356	6
B0725.1307 ^a		B0725.1357	7
B0725.1308 ^a		B0725.1358	8
B0725.1309 ^a		B0725.1359 ^a	9
B0725.1310 ^a		B0725.1360 ^a	10
B0725.1312 ^a		B0725.1362 ^a	12
B0725.1314 ^a		B0725.1364 ^a	14
B0725.1316 ^a		B0725.1366 ^a	16

PROFILE

Thickness	: 5.8mm
Width	: 19mm
Hole Spacing	: 16mm
Outer Barrel Dia	: 12.5mm

Fixation with 4.5mm Cortex Screw. With Auto Compression Holes and slot for Tension Device. For Pertrochanteric and Intertrochanteric fractures.

^a Not stocked. Please enquire for delivery period / minimum order quantities.

Implants For Proximal/Distal Femur

Compression Hip Screw System

Code No.	Holes
B0726.06	6
B0726.07	7
B0726.08	8
B0726.09	9
B0726.10	10
B0726.11	11
B0726.12	12
B0726.13	13
B0726.14	14
B0726.16	16
B0726.18	18
B0726.20	20
B0726.22	22



95° Condylar Screw Plate 'XL' Auto Compression Holes^a

PROFILE

Thickness	: 5.4mm
Width	: 16 mm
Hole Spacing	: 16mm
Outer Barrel Dia	: 12.5mm
Barrel Length	: 25mm

Fixation with 4.5mm cortex screw. for condylar fractures, avoids further damage to bone.

Code No.	Length
B0714.050	50mm
B0714.055	55mm
B0714.060	60mm
B0714.065	65mm
B0714.070	70mm
B0714.075	75mm
B0714.080	80mm
B0714.085	85mm
B0714.090	90mm
B0714.095	95mm
B0714.100	100mm
B0714.105	105mm
B0714.110	110mm
B0714.115	115mm

CHS Lag Screw^c



PROFILE

Thread Dia.	: 12.5mm
Thread Length	: 22mm
Shaft Dia.	: 8mm

CHS Compression Screw Hex. Slot^a



Code No.	Length
B0715.01	36mm

Use with C.H.S & Dynamic Condylar Screw Plates.
With hexagonal socket 3.5mm a/f.

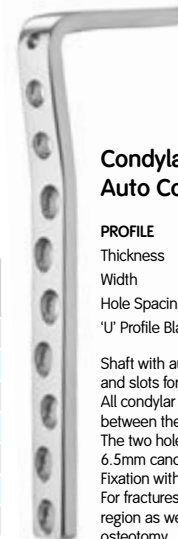
^a Not stocked. Please enquire for delivery period / minimum order quantities.

^c Sizes above 115mm not in standard manufacturing program. Available on request .

Implants For Proximal/Distal Femur

Angled Blade Plate System

Blade				Holes	Length
50 mm	60 mm	70 mm	80 mm		
B0605.5005	B0605.6005	B0605.7005	B0605.8005	5	92
B0605.5007	B0605.6007	B0605.7007	B0605.8007	7	124
B0605.5009	B0605.6009	B0605.7009	B0605.8009	9	156
B0605.5012	B0605.6012	B0605.7012	B0605.5012	12	204
B0605.5014	B0605.6014	B0605.7014	B0605.5014	14	236
B0605.5016	B0605.6016	B0605.7016	B0605.5016	16	268
B0605.5018	B0605.6018	B0605.7018	B0605.5018	18	300



Condylar Plate 95°, Auto Compression Holes^a

PROFILE

Thickness : 5.6mm
 Width : 16.0mm
 Hole Spacing : 16.0mm
 'U' Profile Blade

Shaft with auto compression holes and slots for tension device. All condylar plates have an angle of 95° between the blade and the shaft. The two holes next to the blade are suitable for 6.5mm cancellous bone screws. Fixation with 4.5mm cortex screws. For fractures in distal and proximal femoral region as well as intertrochanteric valgus osteotomy.

4 Holes 60mm shaft	6 Holes 104mm shaft	9 Holes 152mm shaft	12 Holes 200mm shaft	Blade Length
B1313.5004	B1313.5006			50mm
B1313.5504				55mm
B1313.6004	B1313.6006			60mm
B1313.6504				65mm
B1313.7004	B1313.7006	B1313.7009	B1313.7012	70mm
B1313.7504				75mm
B1313.8004	B1313.8006	B1313.8009	B1313.8012	80mm
B1313.8504				85mm
B1313.9004	B1313.9006	B1313.9009	B1313.9012	90mm
B1313.9504				95mm
B1313.1004				100mm
B1313.1054				105mm
B1313.1104				110mm



Angled Blade Plate 130°, Auto Compression Holes^a

PROFILE

Thickness : 5.6 mm
 Width : 16.0 mm
 Hole Spacing : 12.0 mm upto 60.0mm length & 16.0 mm for others
 'U' Profile Blade

Shaft with Auto Compression holes and slots for tension device (from 6 holes up). These plates have an angle of 130° between blade and shaft. Fixation with 4.5mm cortex screws. For femoral neck and pertrochanteric fractures.

^a Not stocked. Please enquire for delivery period / minimum order quantities.

Hip Replacement

Hemi-Arthroplasty Implants^c

Code No.		Dia.
Narrow Stem	Standard Stem	
A0607.035	A0611.035	35
A0607.036 ^a	A0611.036 ^a	36
A0607.037	A0611.037	37
A0607.038 ^a	A0611.038 ^a	38
A0607.039	A0611.039	39
A0607.040 ^a	A0611.040 ^a	40
A0607.041	A0611.041	41
A0607.042 ^a	A0611.042 ^a	42
A0607.043	A0611.043	43
A0607.044 ^a	A0611.044 ^a	44
A0607.045	A0611.045	45
A0607.046 ^a	A0611.046 ^a	46
A0607.047	A0611.047	47
A0607.048 ^a	A0611.048 ^a	48
A0607.049	A0611.049	49
A0607.050 ^a	A0611.050 ^a	50
A0607.051	A0611.051	51
A0607.052 ^a	A0611.052 ^a	52
A0607.053	A0611.053	53
A0607.054 ^a	A0611.054 ^a	54
A0607.055	A0611.055	55

**Austin-Moore Prosthesis XL,
Narrow/Standard Stem (Non-sterile)**



Code No.	Dia.
Non-sterile	
A0608.035	35
A0608.036 ^a	36
A0608.037	37
A0608.038 ^a	38
A0608.039	39
A0608.040 ^a	40
A0608.041	41
A0608.042 ^a	42
A0608.043	43
A0608.044 ^a	44
A0608.045	45
A0608.046 ^a	46
A0608.047	47
A0608.048 ^a	48
A0608.049	49
A0608.050 ^a	50
A0608.051	51
A0608.052 ^a	52
A0608.053	53
A0608.054 ^a	54
A0608.055	55

**Thompson Prosthesis XL
(Non-sterile)**



^a Not stocked. Please enquire for delivery period / minimum order quantities.

^c Sterile packed available on request.

Spine Implants

Harrington System

Harrington Rod

Code No.		L Length
	Short Length Collar End	
A1407.032 ^a	A1407.0321 ^a	3.25"
A1407.035 ^a	A1407.0351 ^a	3.50"
A1407.040	A1407.0401 ^a	4.00"
A1407.042		4.25"
A1407.045	A1407.0451 ^a	4.50"
A1407.050	A1407.0501 ^a	5.00"
A1407.055		5.50"
A1407.060		6.00"
A1407.065		6.50"
A1407.070		7.00"
A1407.075		7.50"
A1407.080		8.00"
A1407.085		8.50"
A1407.090		9.00"
A1407.095		9.50"
A1407.100		10.00"
A1407.105		10.50"
A1407.110		11.00"
A1407.115		11.50"
A1407.120		12.00"



Luque Rod^a



Code No.	Dia.
A1409.48	4.8 mm
A1409.63	6.35 mm

Sacral Rod With Nut^a



Code No.	Dia.
A1411.14	1/4"
A1411.18	1/8"

'C' Washer For Harrington Rod

Code No.
A1412.00



Beaded Suture Wire

Code No.
A1410.00

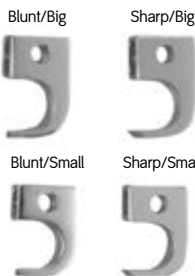
Not Illustrated

Code No.	Gauge
A1509.16	16mm
A1509.18	18mm
A1509.20	20mm
A1509.22	22mm
A1509.24	24mm
A1509.26	26mm
A1509.28	28mm
A1509.30	30mm

Suture Wire Reel

Not Illustrated

Harrington Hook



	Blunt	Sharp
Small	A1408.011	A1408.021
Big	A1408.012	A1408.022

The Harrington method of treatment of Scoliosis involves implanting a system of rods and hooks to apply corrective forces and stabilize the treated segments in the corrected position by skeletal fixation. Corrective forces are applied to the scoliotic spine through distraction forces on the concave side and compression forces on the convex side. A ratcheted rod applies the distraction force and a threaded rod is used to apply the compression force. The only supplementary instrument is the sacral rod. This is usually used only when kinetic force imbalances with pelvic obliquity and tilt. The rods and hooks may be used in many combinations to accomplish correction, stabilization, adjustment and fixation of the scoliotic spine.

^a Not stocked. Please enquire for delivery period / minimum order quantities.

External Fixators

Tubular External Fixator 11mm System

Single Adjustable Clamp



Code No.
G1004.01

Open Clamp



Code No.
G1004.02

Universal Joint
for two Tubes



Code No.
G1004.03

Consists of
G1004.031 - 1 unit
G1004.01 - 2 units (except vice plates)

Tube to Tube Clamp



Code No.
G1004.04

Tranverse Pin Adjusting Clamp



Code No.
G1004.05

Open Compressor, 11mm



Code No.
G1002.03

Code No.	Length
G1003.1110	100mm
G1003.1112 ^a	125mm
G1003.1115	150mm
G1003.1120	200mm
G1003.1125	250mm
G1003.1130	300mm
G1003.1135	350mm
G1003.1140	400mm
G1003.1145	450mm
G1003.1150	500mm
G1003.1155	550mm
G1003.1160	600mm
G1003.1165	650mm

Tubes Dia. 11mm



^a Not stocked. Please enquire for delivery period / minimum order quantities.

External Fixators

Universal External Fixator 8mm System

Universal Clamp, Large



Code No.	Consists of	
G2004.10	G2004.1118	- 1 unit
	G2005.02	- 1 unit
	G2004.1225	- 1 unit
	G2006.22	- 1 unit



Spacer Disc, large

Code No.	Thickness (mm)
G2005.02	2
G2005.03	3
G2005.04	4
G2005.05	5
G2005.06	6
G2005.07	7
G2005.08	8
G2005.09	9
G2005.10	10



Pin Element, large

Threaded	G2004.1215
Unthreaded	G2004.1225



Tube Element, large

Threaded	G2004.1118
Unthreaded	G2004.1128



Hex. Bolt, large

Code No.	Length (mm)
G2006.22	22
G2006.25	25
G2006.35	35
G2006.50	50

Code No.	Length (mm)
G1003.0810	100
G1003.0815	150
G1003.0820	200
G1003.0825	250
G1003.0830	300
G1003.0835	350
G1003.0840	400
G1003.0845	450
G1003.0850	500
G1003.0855	550
G1003.0860	600
G1003.0865 ^a	650

Tubes Dia. 8mm



Compressor, 8mm



Code No.

G2002.01

4mm System

Connecting Rod, 4mm

Code No.	Length (mm)
F0201.4010	100
F0201.4012 ^a	120
F0201.4014 ^a	140
F0201.4015	150
F0201.4016 ^a	160
F0201.4018 ^a	180
F0201.4020	200
F0201.4025	250
F0201.4030 ^a	300



Universal Clamp, Small



Code No.	Consists of	
G2104.10	G2104.1114	- 1 unit
	G2104.1223	- 1 unit
	G2106.00	- 1 unit
	G2105.01	- 1 unit



Pin Element, small

Threaded	G2104.1213
Unthreaded	G2104.1223



Rod Element, small

Threaded	G2104.1114
Unthreaded	G2104.1124



Hex. Bolt, small

G2106.00

Spacer disc, small



Code No.	Thickness
G2105.01	1mm
G2105.005	0.5mm

^a Not stocked. Please enquire for delivery period / minimum order quantities.

External Fixators

Implants for External Fixators

Schanz Screws



Dia. 2.5 mm	Length
B1231.2510	100
B1231.2515	150

PROFILE

Thread Dia.	: 2.5mm
Thread profile	: Buttress
Thread Length	: 25mm
Core Dia.	: 1.9mm
Tip type	: Flat tip, self-tapping
Pre drilling	: 2.0mm

Dia. 3.5 mm	Length
B1231.3510	100
B1231.3515	150

PROFILE

Thread Dia.	: 3.5mm
Thread profile	: Buttress
Thread Length	: 25mm
Core Dia.	: 2.4mm
Tip type	: Flat tip, self-tapping
Pre drilling	: 2.5mm

Dia. 4.5 mm	Length
B1232.4510	100
B1232.4512 ^a	125
B1232.4515	150
B1232.4517	170
B1232.4520	200
B1232.4525	250

PROFILE

Thread Dia.	: 4.5mm
Thread profile	: Buttress
Thread Length	: 18mm
Core Dia.	: 2.4mm
Tip type	: Flat tip, self-tapping
Pre drilling	: 2.5mm

Dia. 5.0 mm	Length
B1231.5010	100
B1231.5012	125
B1231.5015	150
B1231.5017	175
B1231.5020	200
B1231.5025	250
B1231.5030	300

PROFILE

Thread Dia.	: 5.0mm
Thread profile	: Buttress
Thread Length	: 50mm
Core Dia.	: 3.8mm
Tip type	: Flat tip, self-tapping
Pre drilling	: 3.5mm

The 5 x 3.8mm Schanz Screws with flat tip offer relatively better holding in metaphyseal regions due to the radial preloading achieved with the use of a 3.5mm drill bit.

Steinmann Pins

Code No.	Length	Dia.
B1230.3512	125	3.5
B1230.3515	150	3.5
B1230.4015	150	4.0
B1230.4017	175	4.0
B1230.4020	200	4.0
B1230.4512	125	4.5
B1230.4515	150	4.5
B1230.4517	175	4.5
B1230.4520	200	4.5
B1230.4522	225	4.5
B1230.5012	125	5.0
B1230.5015	150	5.0
B1230.5017	175	5.0
B1230.5020	200	5.0
B1230.5022	225	5.0
B1230.5025	250	5.0
B1230.5027	275	5.0
B1230.5030	300	5.0

Centrally Threaded Pins, Dia. 5.0 mm (Denham's Pin)^a



Code No.	Length
B1233.5015	150
B1233.5017	175
B1233.5020	200
B1233.5022	225
B1233.5025	250
B1233.5027	275
B1233.5030	300

Protection Cap for Pins



Code No.	Dia
G1005.25	2.5mm
G1005.35	3.5mm
G1005.45	4.5mm
G1005.50	5.0mm

^a Not stocked. Please enquire for delivery period / minimum order quantities.

Miscellaneous Implants

Wires

Kirschner Wires^c

150mm	300mm	Dia.
B1105.0815	B1105.0830	0.80mm
B1105.1015	B1105.1030	1.0mm
B1105.1215	B1105.1230	1.2mm
B1105.1415 ^a	B1105.1430 ^a	1.4mm
B1105.1515	B1105.1530	1.5mm
B1105.1615 ^a	B1105.1630 ^a	1.6mm
B1105.1815	B1105.1830	1.8mm
B1105.2015	B1105.2030	2.0mm
B1105.2515	B1105.2530	2.5mm
B1105.3015 ^a	B1105.3030 ^a	3.0mm

Kirschner Wires with Threaded Tip

Not Illustrated

150mm	Dia.
B1104.1515	1.5mm
B1104.1815	1.8mm
B1104.2015	2.0mm
B1104.2515	2.5mm
B1104.3015 ^a	3.0mm

^a Not stocked. Please enquire for delivery period / minimum order quantities.

^c Special sizes available on request

PRECAUTIONS TO BE TAKEN BEFORE USAGE OF IMPLANTS

Surgical implants are internal aids to normal healing and are not intended to replace normal body structure. Since they also assist healing, full weight bearing is not indicated when the bone is incompletely healed.

Please note the following while using orthopaedic implants:

1. PATIENT SELECTION

The following criteria need to be taken into account:

a) IMMUNOLOGICAL INTOLERANCE

Some patients may have immunological intolerance and foreign body sensitivity tests should be performed in such cases, where material sensitivity is suspected due to immunological intolerance of implanted devices.

b) DEGENERATIVE DISEASES

In cases where patients suffer from degenerative diseases, implanted devices may aggravate the degenerative disease and lead to a consequent decrease in the life of the implant. In such cases, implant surgery may be considered to be only a temporary relief.

c) MENTAL ILLNESS

Patients suffering from mental illnesses or schizophrenia may ignore the limitations and precautions related to implant surgery which may lead to failure of the implanted device and other associated complications.

d) ALCOHOL AND DRUG ADDICTION

Complications may arise out of implant failure in patients who are addicted to alcohol and/or drugs, as these patients in their state of stupor or during the state of withdrawal may ignore the necessary precautions following surgery.

e) OVERWEIGHT

Obese patients produce abnormal stresses leading to an increased load on the implant. Such abnormal loads create conditions which would result in failure of the implanted device.

f) ACTIVITY

Activities by the patient which may involve significant muscular strain of the operated area with an implanted device could lead to failure of the device.

2. IMPLANT SELECTION

Selection of the proper size, shape and design of the implanted device is an important parameter for successful implant surgery.

The size and shape of the human bone imposes limitations on the size and stress tolerance of implants during fracture management and reconstructive surgery.

3. IMPLANT HANDLING

In cases where the plate should conform to the shape of the bone, this must be achieved only by accurate contouring of the plate with the requisite instruments. The technique of using the screws to bend the plate to shape on implantation is not advised as this leads to the screws being subjected instantly to a strong expelling force which could lead to the failure of the device.

Plates should be contoured by plate benders designed for this purpose.

Care should be taken that there are no scratches or distortions at the site of the screw hole, notches, sharp dents or reverse bends.

These may cause defects of surface finish, result in improper bonding and may predispose the implanted device to failure.

4. UNSTABLE FIXATION

Plates even if bent and properly fixed may fatigue and break. Breakage may be due to unstable implant fixation or insufficient support. If the screw is not properly centered as it is being tightened, there will be a tendency for the counter sink in the plate to force it to one side, thereby damaging the good threads already cut in the bone and producing a strain which will probably lead to necrosis and early loosening of the screw.

5. IMPLANT REMOVAL

The surgeon must take the final decision on implant removal. It is recommended that the implant used as an aid for healing should be removed once its service is over, particularly in younger and more active patients.

6. POST OPERATIVE CARE

Patients must be made aware of the limitations of metallic implants and precautions to avoid unnecessary stress to the implant.

No partial weight bearing or non-weight bearing device can be expected to withstand the unsupported stresses of full weight bearing or excessive muscular activity when there is an ununited fracture.

Bony union is a must, and the patient must restrict his/her activities to assist in healing.

7. SECOND-HAND IMPLANTS

Every implant must be discarded after use and should never be reused. Used implants which appear undamaged may have internal and external defects. Even a thorough individual stress analysis of each part fails to reveal the accumulated stresses which develop within metals as a result of use within the body. Reuse of implants may lead ultimately to implant failure.

8. INCOMPATIBLE IMPLANT COMBINATION

Implant components from one manufacturer should not be used with those of another. Implants from each manufacturer may have metal and design differences, so that use in conjunction with different devices could lead to inadequate fixation or corrosion of the implant due to generation of Peizo currents.

REFERENCES

- Bechtol, C.O., Ferguson, A.B., Jr. and Laing, P.G. : Metals and engineering in bone and joint surgery. Williams and Willins, Baltimore, 1959
- Peterson, L.T.: Fixation on Bones by Plates and Screws, J. Bone & Joint Surgery, 29A:335
- Cave, F(Ed): Fractures and Other Injuries, The Year Book Publishers, Inc., Chicago 1958, Chapter 12
- Martz, Carl D.: Bones-Metals-Surgeons. Journal Ind. St. Assn., 52:60
- Bowden, F.P. Williamson, J.B.P. and Laing P.G.: The significance of Metallic Transfer in Orthopaedic Surgery. J. Bone & Joint Surg., 37B:676
- Scales, J.T. : Internal Prosthesis: The problem in relation to materials, J. Bone & Joint Surg., 38B:754
- Manual of Internal fixation by Prof. M.E., Muller, Prof. M. Allgower et al, 2ed.1979 AO/ASIF Instrumentation by F. Sequin et al 1981

Manufactured by
ADLERMEDIEQUIP PVT. LTD.
Sushrut House, Survey No. 288, Next to MIDC Hinjewadi Phase II,
At Mann, Tal. Mulshi, Pune 411 057, India. Tel: +91(0)2066520700
Fax: +91(0)2066520800 e-mail: adler-in.info@smith-nephew.com Internet: www.adlermediequip.com



CE 0434

° Trademark of Smith & Nephew