



**WELCOME AT
SANAT GROUP!**

2020, Eger



Sanatmetal Ltd.

Hungary, Eger

R + D
Production
Commerce

1967-

Sanatmetal CIS

Russia, Obninsk

Production
Commerce

2011- subsidiary
2018- plant

Sanatmetal RO

Romania, Targu Mures

Commerce

2005- subsidiary

myWIWE Ltd.

Hungary, Eger

Production
Commerce

2017-

Equity



3.8 mrd HUF
(11.4 m EUR)

Total assets



10.9 mrd HUF
(33 m EUR)

Headcount



366

Turnover



6.9 mrd HUF
(20.9 m EUR)



25.264 m² area

7.617 m² built-up area





Risk calculation of sudden cardiac death & stroke



www.facebook.com/wiweforhealth

WIWE
MESSAGE FROM THE HEART

- ✓ ECG measurement
- ✓ Risk for Stroke (AFIB)
- ✓ Risk for Sudden Cardiac Arrest
- ✓ Blood oxygen level
- ✓ Pedometer

IF YOU KNOW IT,
YOU CAN CHANGE IT!



 mywiwe.com
 WIWE
 wiweforhealth
 wiwe4you

Stroke is the second leading cause of death in the world, accounting for 5 million deaths a year. Sudden cardiac arrest can happen to anyone, anywhere, anytime, causing 7 million deaths worldwide, annually.

Most deaths occur because the patient does not get to the doctor in time, help arrives too late.

Our body usually warns us of the danger before it happens, but we have not been able to hear the messages, could not decode the signs. Up till now.

- ✓ ECG MEASUREMENT
- ✓ INDEPENDENT RISK EVALUATION
- ✓ SPORTS AND FITNESS FUNCTIONS

Smartphones running
iOS 8.1* or ANDROID 5.0*
*minimum system version with Bluetooth 4.0 (Low Energy)

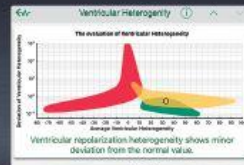
ECG



STROKE (AFIB)



SUDDEN CARDIAC ARREST



"IF YOU KNOW IT,
YOU CAN CHANGE IT"



Dr. George Kozmann (D.Sc.) university teacher, president of the Medical Information Technology R+D at the University of Pannonia, also a Master of Science in Electrical Engineering (BME, 1964) C.Sc. (1981) and a doctor of the MTA (Hungarian Academy of Sciences) (2001). He has been a full-time lecturer at the University of Pannonia since 1998. He is also a scientific advisor for the MTA MFA part-time and the head of the scientific division of the Bioengineering Department. He is the member of two international and five Hungarian professional associations and committees

Sanatmetal®
Manufacturer of Diagnostic and Technology Products

WIWE has been developed and manufactured by Sanatmetal Ltd., the company that has already proven its expertise in health care. In the fields of traumatology, orthopaedics, and spine surgery it is



WIWE is a pocket device that can evaluate the risks of a sudden cardiac arrest and afib-related stroke. The wearable is easy to use and provides instant diagnose through a smartphone application.

From now on anyone can check their heart status or blood oxygen level at home by placing two fingers on the sensors. The device alerts you if you need to visit the doctor or call for immediate help.

Until now, we have not been able to decode the signs our hearts sends us. WIWE enable us to do so. Listen to your heart! It has a message for you!

amongst the Top 40 companies in Europe and over 70% of its income comes from export. With WIWE, Sanatmetal has opened a new chapter in preventing sudden cardiac arrest! By trusting WIWE, you gain time and save life!



József Farkas
Managing director
Member of the
Board of Directors



Péter Farkas
Controlling & IT director
Member of the Board of
Directors



Emese Farkas
Marketing director
Member of the Board
of Directors



Zsolt Majoros
Orthopaedic & Instrument plant
director
Member of the Board of Directors



Ákos Szabó
Technical @ Integrated
management system director
Member of the Board of
Directors



Ágota Szinku
HR director
Member of the
Board of Directors



Ibolya Kovács
Financial director
Member of the Board
of Directors



Viktória Kriston
Sanat Academy director



Marina Pajtók
International sales
director



Balázs Sándor
Traumatologic plant
director



Gábor Szenczi
R&D director



Kinga Süli
Secretariat
manager



Réka Sebestyén
Business development
manager



Brigitta Vass
Domestic sales director



István Tián
Domestic sales director

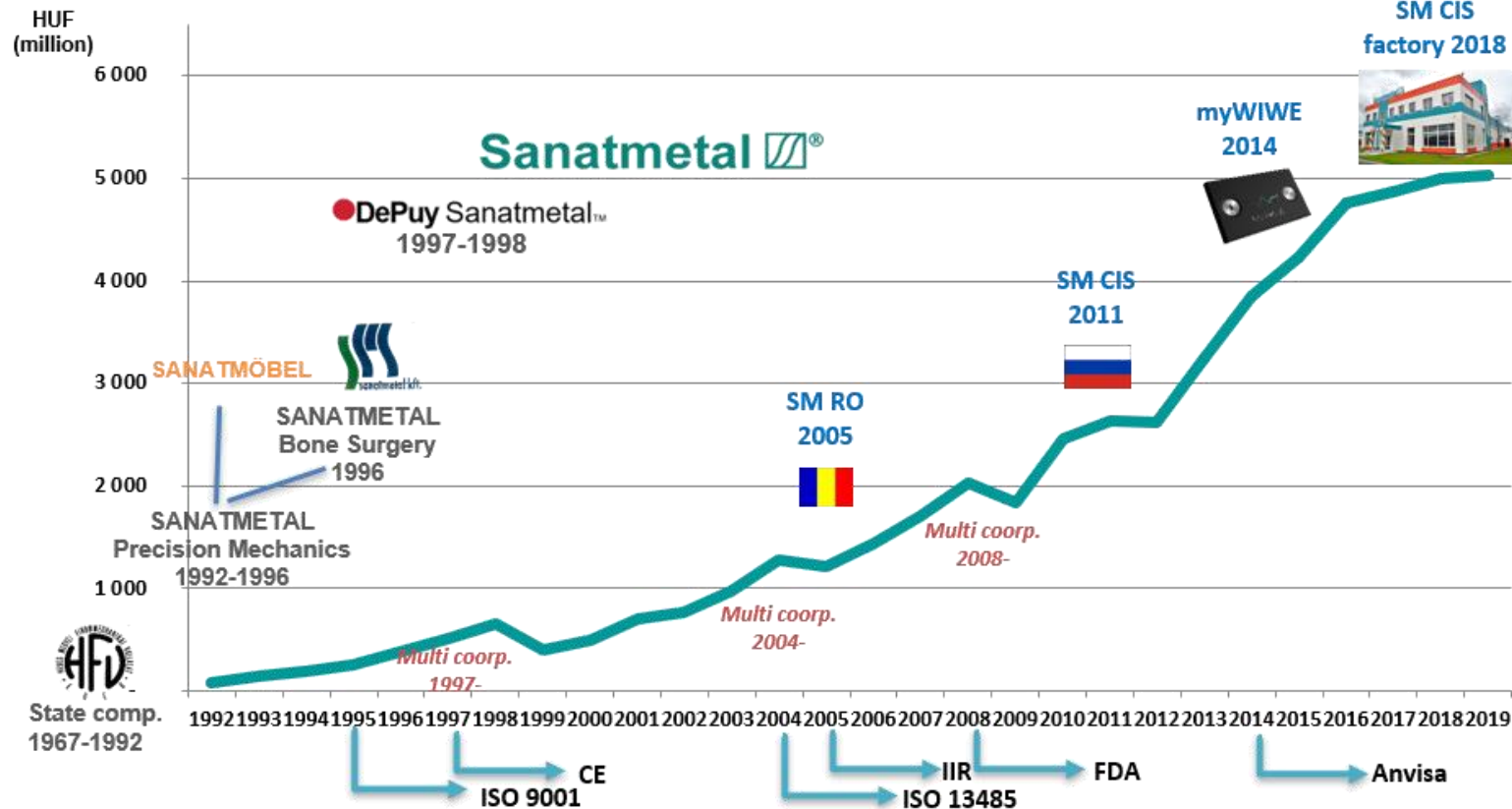


Zsolt Tóbi
Supply chain director

Holding Org. 2019-



SANAT HOLDING





2019	Quality-Innovation 2019 Grand Award
2019	MagyarBrands Award
2019	Gyurós Tibor Award
2019	BIG SEE Product Design Award
2019	Quality - Innovation 2019 (EOQ)
2018	IT Innovation Award
2018	Hungarian Design Award
2018	TOP 10 Most interesting Innovations Grand Award
2017	Pegazus award
2014	Pegazus award
2014	Hungarian Innovation Grand Award
2014	Hungarian Intellectual Property Office Innovation Award
2006	Hungarian Quality Product Award
2006	Quality Enterprise Award of Business and Success
2004	The Most Dynamically Developing SME of the Region
2004	Industrial Innovation Award
2002	National Quality Award
2001	Terplán Award

OUR MISSION:

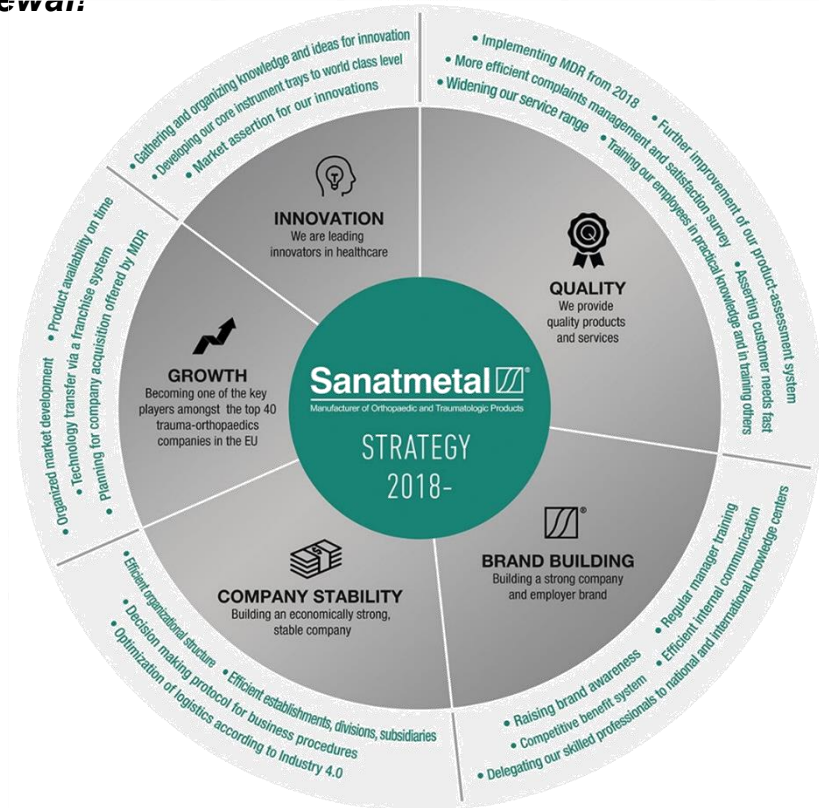
„Improve the quality of life as an international family business besides generating profit that ensures continuous renewal!“

IN ORDER TO ACHIEVE THIS WE:

- Work with national and international knowledge centres, leading multinational companies
- Develop world-class traumatology, spine and dental implants as well as joint replacement prostheses
- Help prevent senseless death cases by developing innovative diagnostic devices
- Spread our knowledge in the form of technology transfer as well as an investor

THIS MISSION CAN BE CARRIED OUT IF:

- Our customers and partners are satisfied
- Our employees grow mentally and physically and live happily off the salary we provide them
- The national and international environment recognize our activities



>16.000 product + 3.000 for multis

COMPETITIVE INNOVATION

■ Vortex Hand & Foot

Polyaxial angle stabilized system

With limited (14 types) plates for the valuable hands and feet!



■ Vortex

Polyaxial angle stabilized system

With 29 types of plates and with surgical freedom to reach every bone fragment!



■ SpectruM

Intramedullary nails

Special hole and „magnetic“ targeting device guarantees the ~100% accuracy at distal locking without using X-ray!



■ A-spire

Variable pitch compression screw

Supplements and completes the fracture reconstruction!



■ Sanatfix

Fixateur externe

Minimal size, weight and simplicity make it easy to handle and economic!



■ Sanat Smile

Dental implant family

Bone Tact nano surface for excellent bone integration!



■ Pannon, Sanat-R 2

Hip prosthesis

Cemented and cementless (Titanium plasma / hydroxi apatite) implant with one instrument set!



■ Sanat Swing

Knee prosthesis

155° flexion with innovative instruments, 35 minute surgery time!



■ Sirtalls

Cerclage band system

The solution for periprosthetic fractures!



■ Sanat Spine

Spine fixation system

Unique flexible (semi rigid) system with a decade of follow up!

"The aim of Sanatmetal, whose name means medicinal metal, is to contribute to curing people with high standard trauma, spinal and dental implants, joint replacement prostheses, instruments, with innovative diagnostic devices, in cooperation with and learning from world leader multinational companies, while reaching profit, which assures continuous renewal. Performing all this in harmony with the environment and guaranteeing the employees the pleasure and rewarding feeling of working for Sanatmetal Ltd."

(Company philosophy, 2016)

Standards & Directives:

- ISO 13485:2016
- ISO 14001:2015
- 93 / 42 / EEC
- 21 CFR 820 (FDA)
- RDC 16/2013 GMP (ANVISA)



Notified Bodies:

- CE Certiso
- Certop

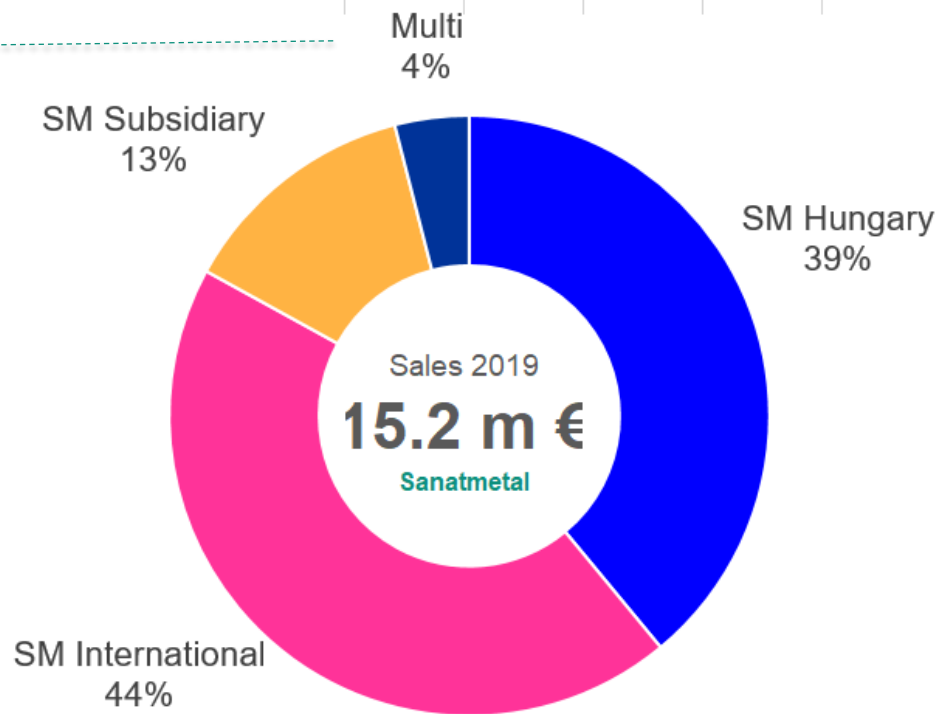
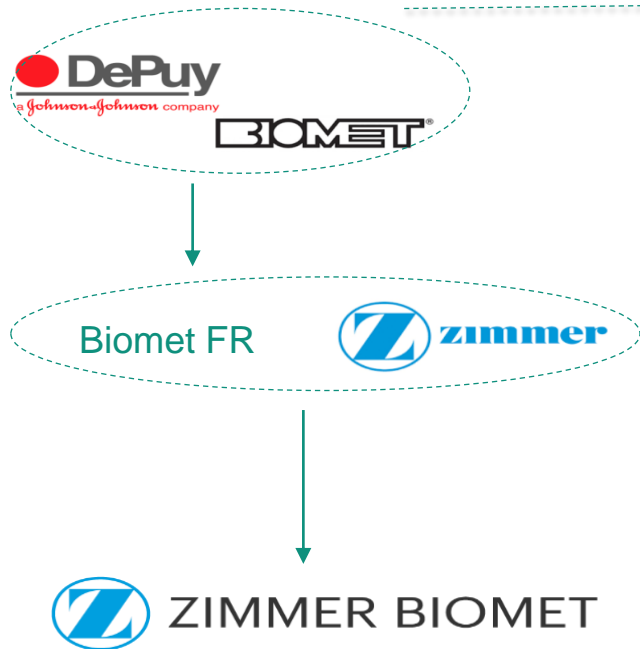


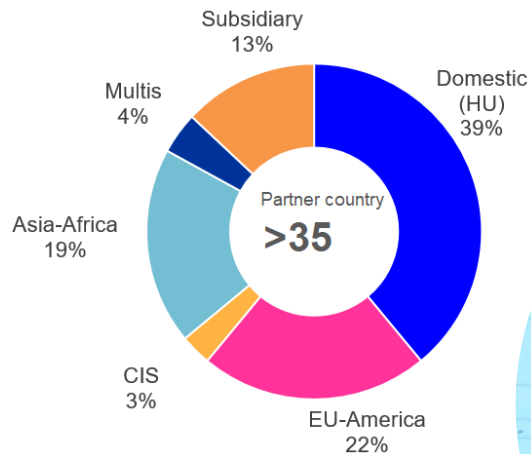
DePuy 1997-

Zimmer 2004-

Biomet 2008-











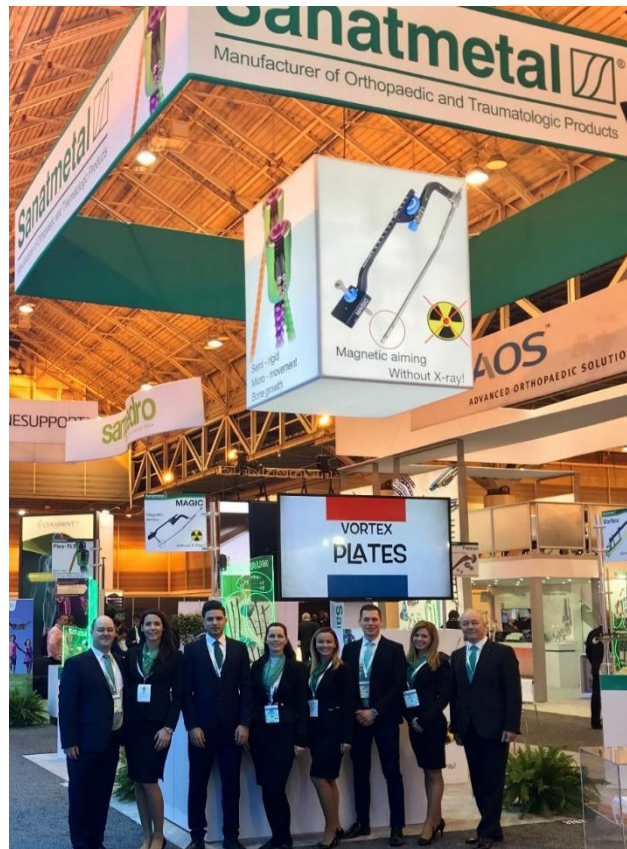
SANAT ACADEMY

„Flag breakdown”

Farkas József

Sanat Akadémia Instructor training
2019, Szeged 2019.jun.13

„The aim of the Academy is to contribute to the innovative procedures of traumatological, orthopaedic, spinal and dental surgical surgery and expand of its scientific knowledge at domestic and international level, developing the high level education of the current medical science.”



AAOS



Creo Parametric planning system :

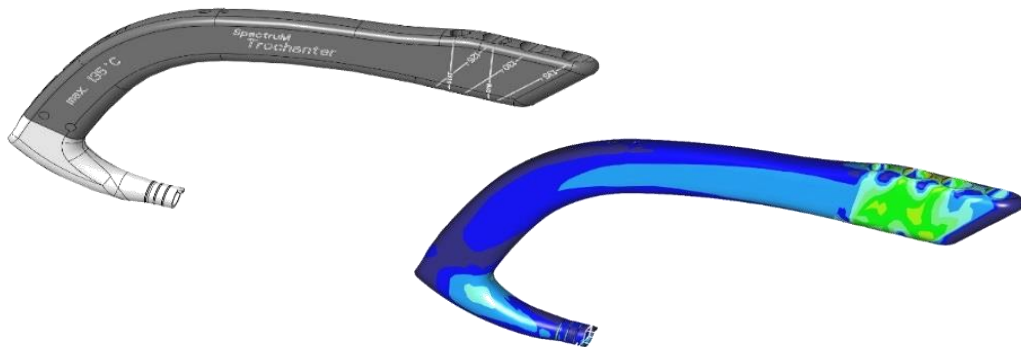
3D

PARAMETRIC

CAD / FEA / CAM

Additive technologies:

3D metal and plastic printing



Sanatmetal®

Bécs

COMPETITIVES

Traumatológus összefogás

**>25.000 products
+ 3.000 for multis !!**

Europe's TOP 40

Sanatmetal®

CAB hook system

Csermátó Zoltán
Sikeres védés MTA doktora
2015. okt. 15

Sanatmetal®

ReSpace Cage

• TLIF (Transforaminalis lumbalis) műtéttechnika lehetővé teszi a csigolyák közötti távolság növelését

Bevezetés

Sanatmetal®

Sanat Swing térdprotézis

prof. Margolyás László

Sanatmetal®

Csípő protézis

Prof. Csermátó Zoltán
Prof. Balogh Árpád

Sanatmetal®

Flexible & rigid spine

Prof. Dr. Varga Péter PhD
BOKI Ép

Sanatmetal®

Vállprotézis 2018-ra

Dr. Csizy János
Dr. Kiss János
Prof. Szabó István
Dr. Dalkóczy Gábor



Sanatmetal®

Innováció a 2. halálok ellen

WIWE
„Szívvel jövő szemmel”
„Ha tudsz róla, lehetsz ellene!”

prof. Mervely Dóra

Sanatmetal®

Fogászati Implantátum

Lesz SOTE-SM magyar siker implantátum – közelítési árszinten!

• Csontvisszahúzó gátló lézerkezelés felület fejlesztése

Prof. Wondsch Péter

Traumatology

TRAUMATOLÓGIA



Orthopaedics

ORTOPÉDIA



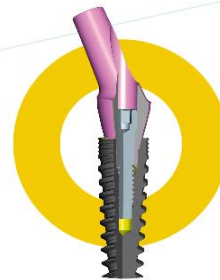
Spine

GERINC



Dental

FOGÁSZAT





MAGIC



100%
REDUCTION

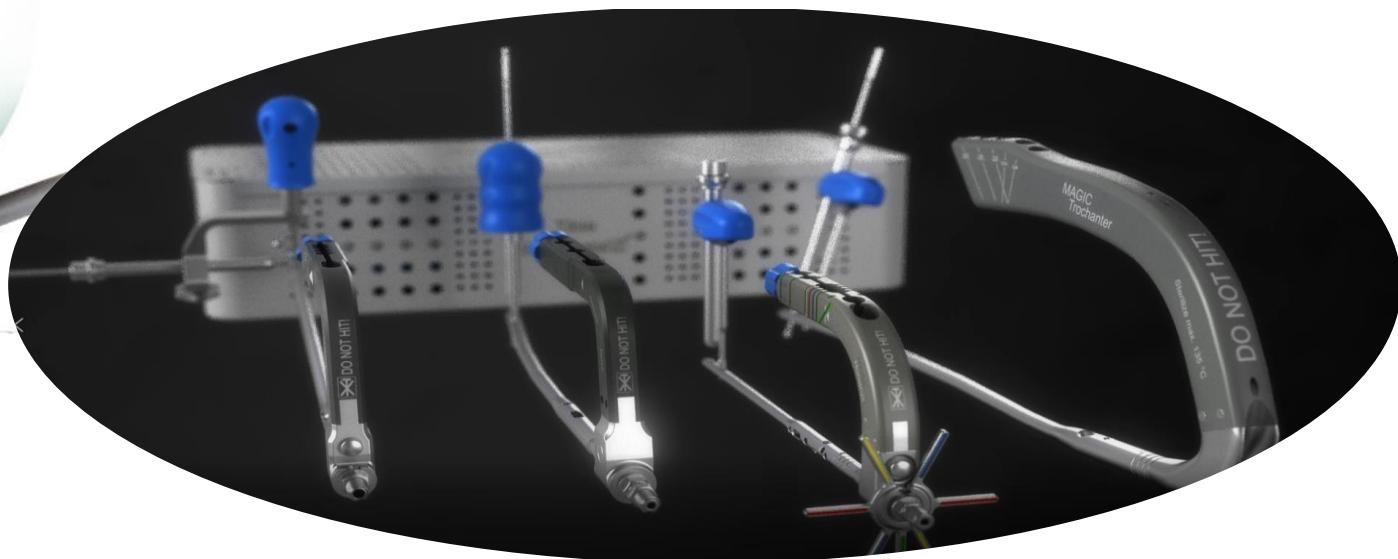


100%
ACCURACY



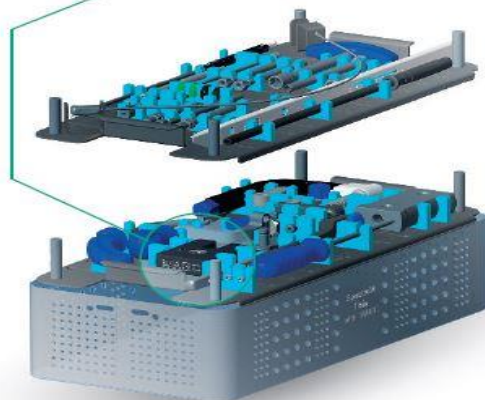
25%
REDUCTION

LESS RADIATION!



INSTRUMENT TRAY

INCLUDING MINI COMPUTER



Maximum sterilization
temperature: **135°C**



Power source enough for
1000 operations

WHY MAGIC?

- ✓ Shorter operation time
- ✓ More accurate targeting
- ✓ Less radiation load
- ✓ Less stress, longer life
- ✓ World-unique product
- ✓ Good business opportunity



100%
REDUCTION



100%
ACCURACY



25%
REDUCTION

MAGIC

FOR THE DISTAL TARGETING
OF THE INTRAMEDULLARY NAIL



LESS RADIATION

PERFECT AIMING?

NO X-RAY JUST A BIT OF MAGIC!

3300 Eger, Faiskola u. 5., Hungary
Phone: +36 36 512 900
E-mail: metal@sanatmetal.hu

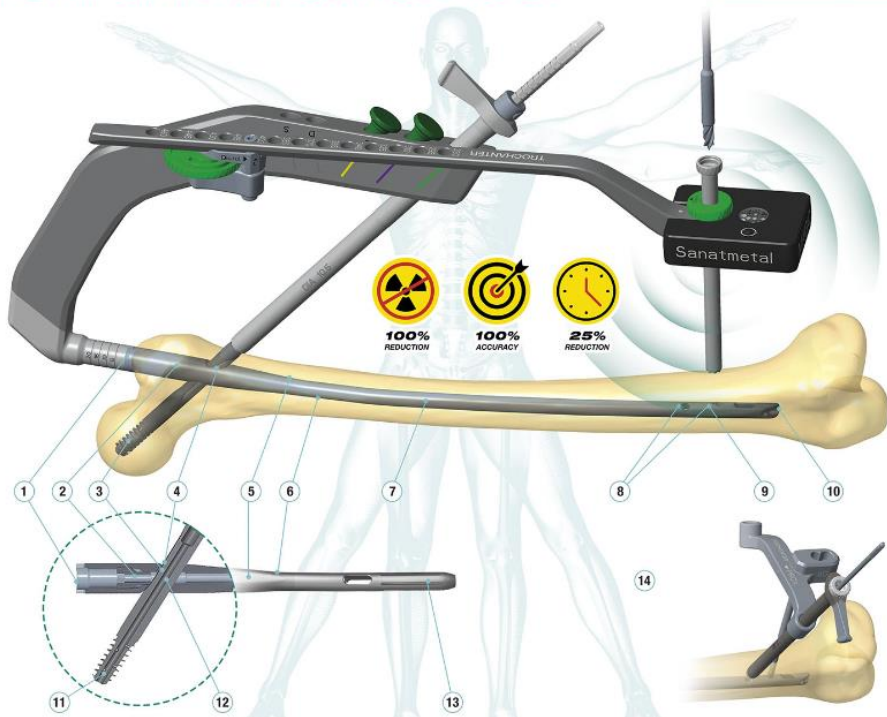


REV_A_201611_ENG

All in one + MAGIC!

FOR PERFECT SURGERIES!

PRECISE AND QUICK



TECHNICAL FEATURE	ADVANTAGE	BENEFIT
1 Dual groove for connection	Stronger connection between nail and target device	Safe targeting
2 Screw integrated into the nail, but lets through the guide rod	No screw-loss	Reduced time spent in interlocking
3 Spiral / screw	Interchangeability	Deciding it during surgery
4 Complex hole lightening	Increased fatigue strength	Lower risk of nail fracture
5 Lateral splicing	Easier insertion with no sticking	Saving time during nail insertion
6 Streamlined pass-through	Easier insertion with no sticking	Saving time during nail insertion
7 More curved shape of the long nail	Anatomical fit	Correct reposition

TECHNICAL FEATURE	ADVANTAGE	BENEFIT
8 Dual-plane locking	More stable distal locking	Keeping reposition
9 Special slot	Drilling the locking hole "blindly" using manual targeting device basis	Shorter operative time
10 Spliced distal end of the long nail	Easier nail insertion	Simpler surgery with shorter operative time
11 Increased flow section	Quicker cement flowthrough	Stabile (cemented fixation)
12 Variable hole positions at different CCD angles	No nail overhang or length compensation	Simple closing cap selection
13 Elastic nail end	Mechanical stress reduction	Lower risk of femoral fracture
14 Ti6Al7Nb material	Increased fatigue strength	Lower risk of nail fracture

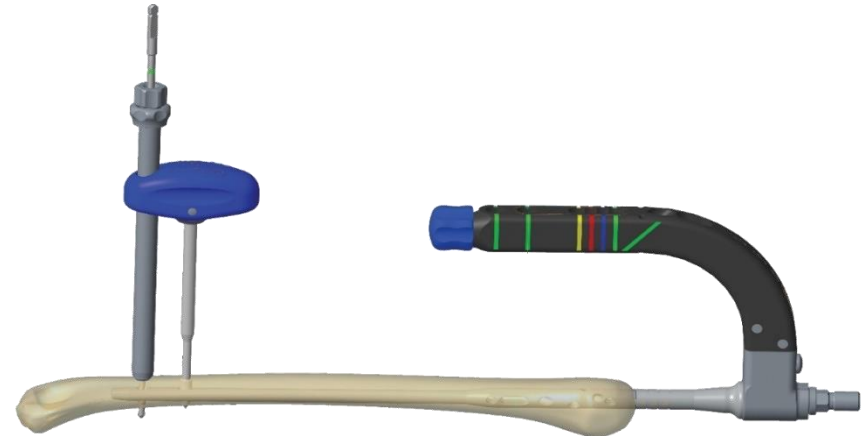
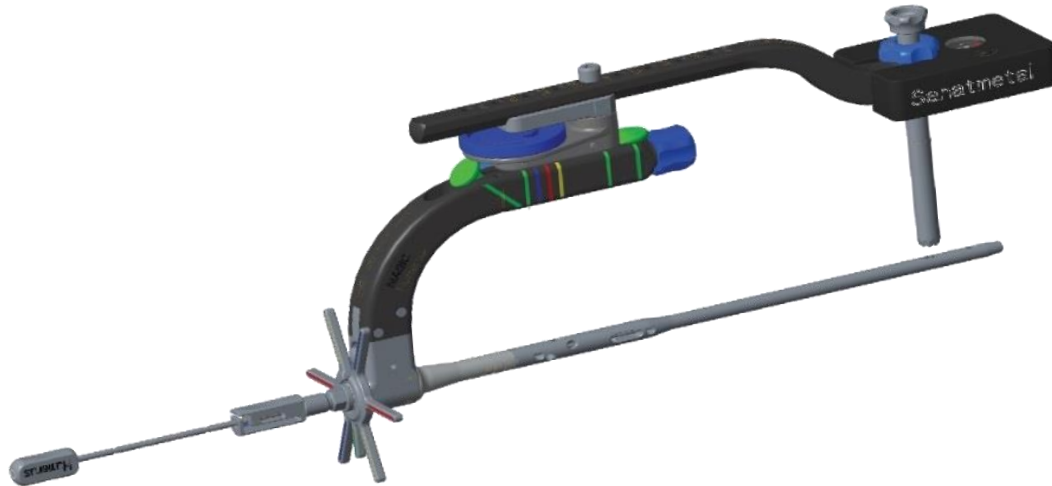
OTHER FEATURES:
 Cannulated nails, Dynamic interlocking possible,
 Anti-rotation screw secured against loosening,
 Groove providing limited backslide,

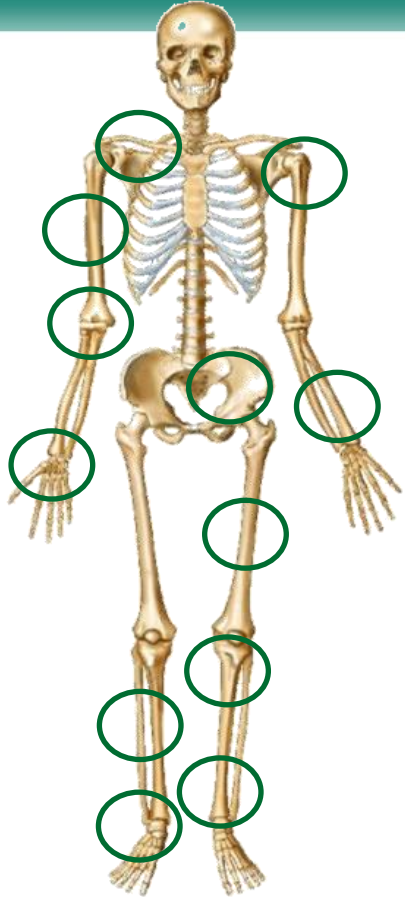
Custom thread profile for easier screw insertion,
 Closing caps in different lengths,
 Sterile-packaged, sterile nails pre-assembled
 with anti-rotation screw

Reduced X-ray radiation

By special locking hole

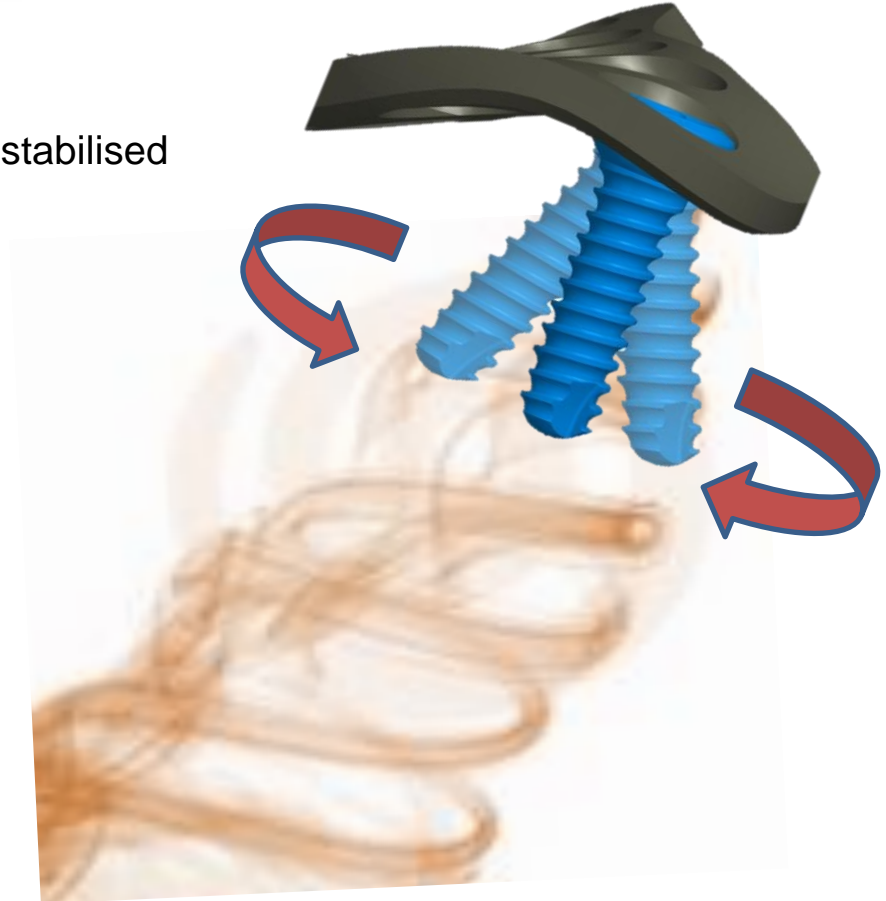
- Manual Targeting Device





$\pm 15^\circ$ Poliaxial angle stabilised

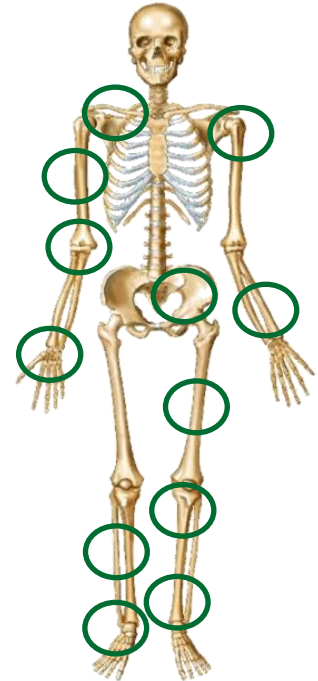
$\Sigma = 30^\circ$ Freedom































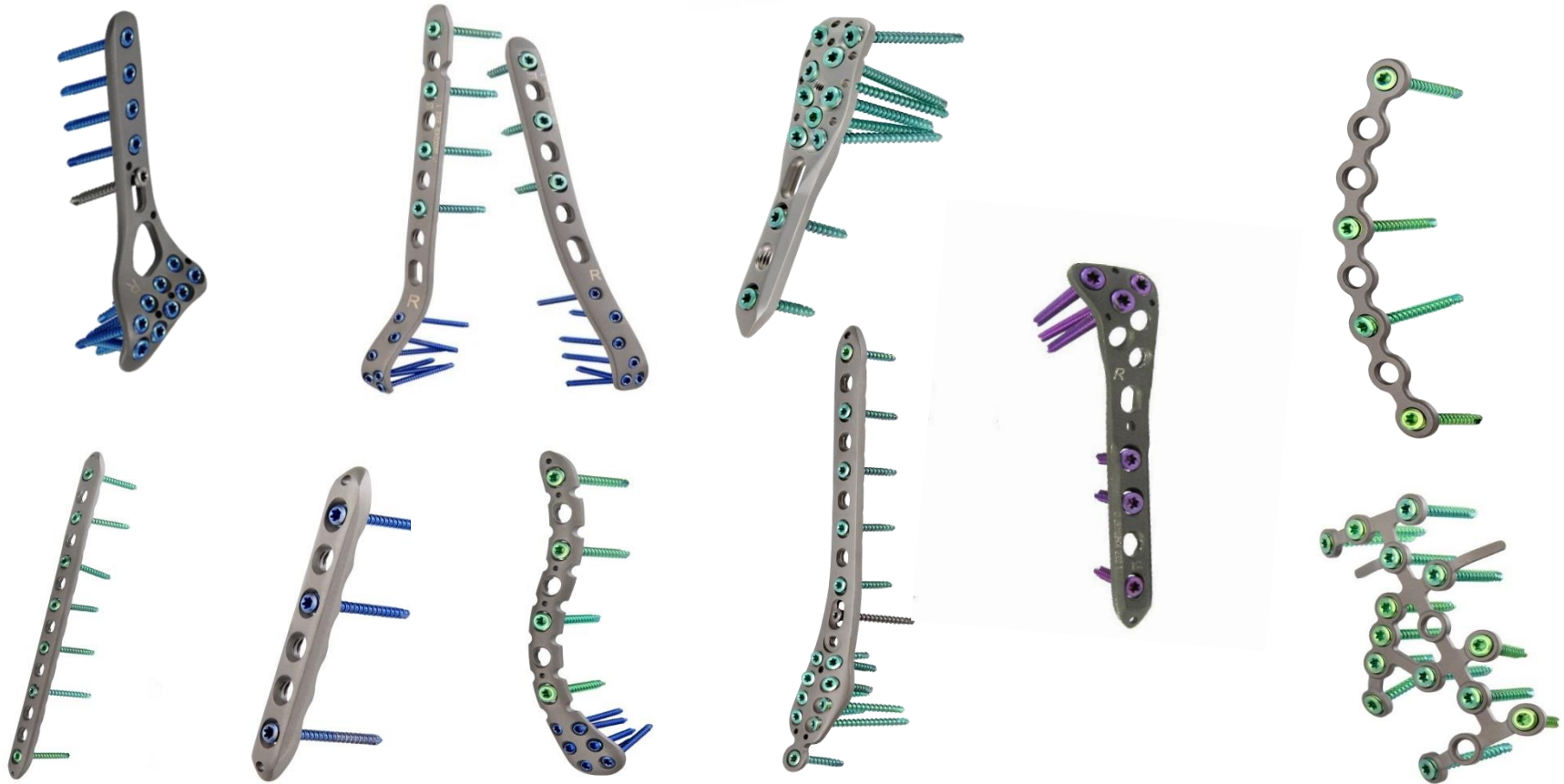
The Poliaxial System















30 plates

3 screw diameter



Description		Indication field	Cross section (mm)	Image	Plate size	Plate length (mm)	Screw		
							Polyaxial	Cortical	Cancellous
Clavicular plates	Normal	Clavicula	10x4,2		6H-10H	84,6 - 123,6	2,7	3,5	4,0
	H	Clavicula	10x4,2		6H head 4H - 7H tail	75,1 - 111,8	2,7	3,5	4,0
	MA	Clavicula	10x4,2		6H - 8H	80 - 104	2,7	3,5	4,0
	Hooded	Clavicula	10x4,2		3H head, 3H, 6H tail	Length of hook 15-19-21	2,7	3,5	4,0
Proximal Humerus plate		Proximal Humerus	12x4		6H head 3H - 12H tail	84 - 192	2,7	3,5	-
Distal Humerus plates	Dorsolateral	Distal Humerus	11x3		6H head 3H - 13H tail	91 - 211	2,7	3,5	-
	Medial				6H head 3H - 13H tail	86,7 - 206,7	2,7	3,5	-
	EDL				6H head 3H - 13H tail	90,2 - 210,2	2,7	3,5	-
	SM				6H head 3H - 13H tail	100,5 - 196,5	2,7	3,5	-
	Olecranon	Olecranon			7H head 3H - 11H tail	97 - 188,6	2,7	3,5	-
Distal Radius plates		Distal Radius	10x2		5-7-9 H head 3-5-8H tail	54 - 84 (step) 62 - 88 (locking) 60 - 100 (step) 58 - 88 (locking) 60 - 80 (crush)	2,7	2,7	-
Pelvis plates	Reconstruction plates			Pelvis	11x3		7H - 16H	95 - 221	3,5
					10H - 16H	118 - 202			
					6H - 8H	79 - 104			
		12x3			4H	-			
		12x3			5H	54			
	Symphysis plate	Symphysis	12x4,5		4H - 6H	62 - 88	2,7	3,5	4,0
Distal Femur plate		Distal Femur	17x6,6		7H head 6-16H tail	167,3-345,2	5,1	5,1	6,5
Tibia plates	Lateral	Proximal Tibia	15x5		6H head 2H - 12H tail	98,5 - 258,5	5,1	5,1	-
	Medial - T	Proximal Tibia	15x5		3H head 3-15H tail	115 - 307	5,1	5,1	6,5
Distal Tibia plate		Distal Tibia	12x4		6H head 6H - 18H tail	137 - 281	3,5	3,5	-
Calcaneus plates	Small	Calcaneus	2,5		16H	64,0	3,5	3,5	-
	Medium					74			
	Large					83,0			
Diaphysis plates	Large	Femur (Humerus)	17x6,6		6H - 16H	123 - 303	5,1	5,1	6,5
		Humerus Pelvis, Femur, Tibia	15x5		6H - 16H	113 - 273	5,1	5,1	6,5
	Small	Ulna-Radius	12x3		5H - 20H	74 - 254	3,5	3,5	4,0
		Pelvis, Fibula, Humerus	12x3		5H - 20H	74 - 254	3,5	3,5	4,0
Mini plates		Hand, Foot	8x2,5		4H - 10H	47 - 101	2,7	2,7	-
Distal Fibula		Fibula	10x3		5H 3H-15H	73 - 229	2,7	3,5	-

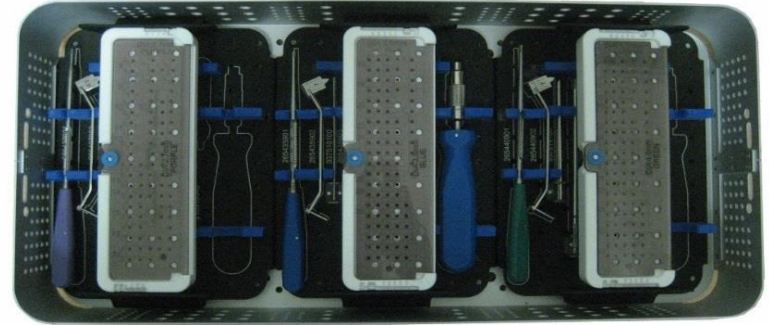
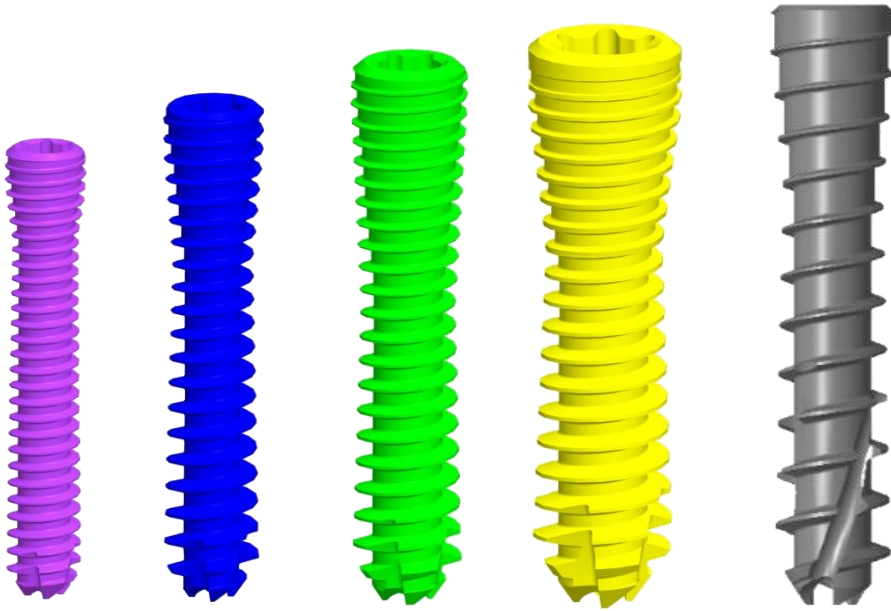


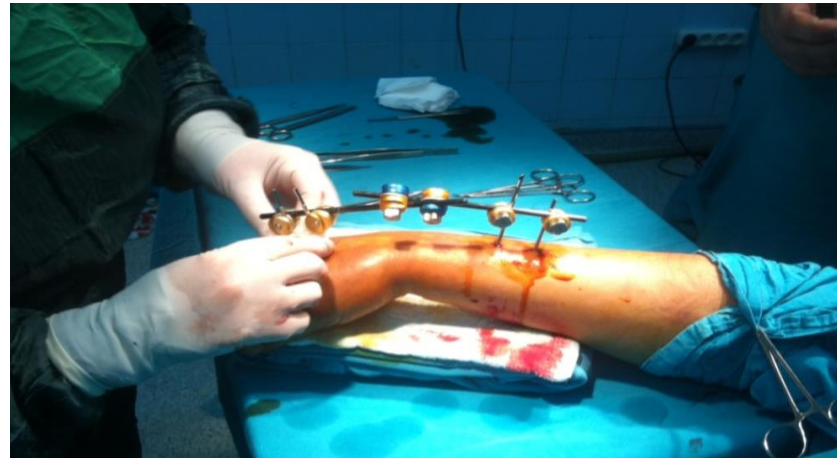
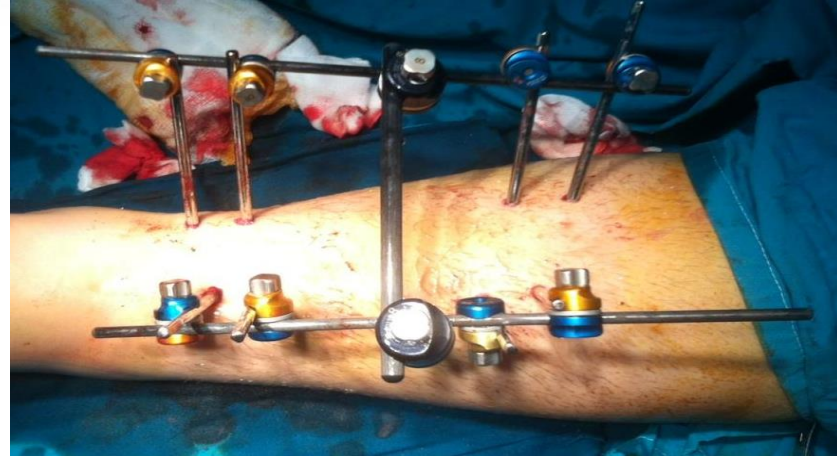
Description		Field of Indication	Plate cross section (mm)	Image	Plate size	Plate length (mm)	Screw	
							Polyaxial	Cortical
1,5 XS straight plate		Hand	5x1,3		6H; 12H	38-77	1,5	1,5
1,5 XS T-plate		Hand	5x1,3		3-5H head 5-11H tail	38-77	1,5	1,5
1,5 XS L-plate		Hand	5x1,3		6H; 12H	38-77	1,5	1,5
1,5 XS parallel plate		Hand	5x1,3		4H; 6H; 8H	27-57	1,5	1,5
2,0 XS straight plate		Hand	6x1,8		6H; 12H	44-89	2,0	2,0
2,0 XS T-plate		Hand	6x1,8		3-5H head 5-11H tail	44-89	2,0	2,0
2,0 XS L-plate		Hand	6x1,8		6H; 12H	44-89	2,0	2,0
2,0 XS parallel plate		Hand	6x1,8		4H; 6H; 8H	33-69	2,0	2,0
Spider plate		Hand	17x1,8 20x1,8		small large	-	2,7	2,7
Arthrodesis plate	straight	Hand	8/12x3		4+5H	120	2,7	2,7
							3,5	3,5
	curved	Hand	8/12x3		4+4H	117,5	2,7	2,7
							3,5	3,5
Mini straight plate		Hand, Foot	8x2,5		4H; 10H	47-101	2,7	2,7
Mini T-plate		Foot	7x2		3-5H head 5-11H tail	50-101	2,7	2,7
Mini L-plate		Foot	7x2		6H; 12H	50-101	2,7	2,7

For precious hands



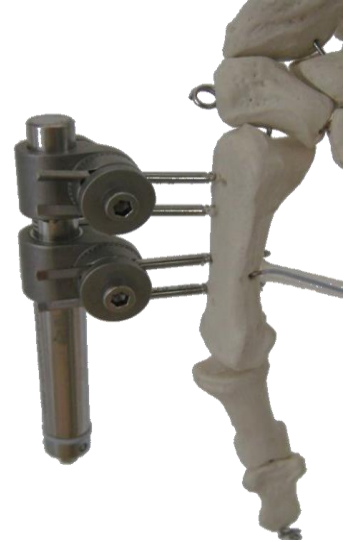
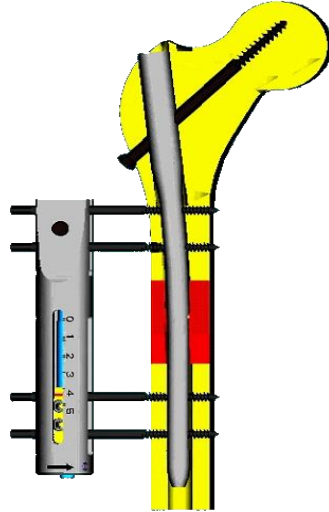
VORTEX Hand & Foot
Safe system for your success!




























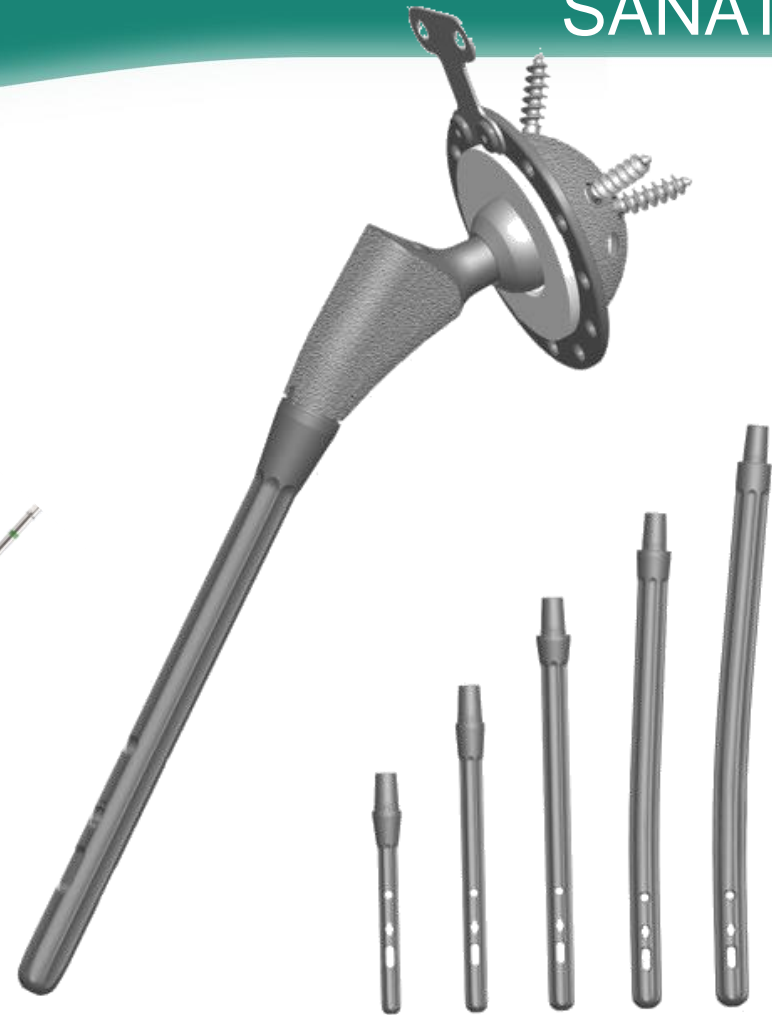
Femur & Tibia (8cm)



Finger
lengthener



Stems										
Sanat-E	Sanat-M	Pannon family							Sanat-R2	Sanat-CLM
		C	C-Lat	C-Rev	CL	CL-HA	CL-Lat-Ha	CL-Rev	 	
Centralizer										
Head										
										
Ceramic head (BioloX Delta)										
										
Bipolar head				Bipolar head				Bipolar head		
										
Cups										
C					ConeTact = CL					
  					 Shell-S  Shell-R  Shell ring-R  Flanges  Liner-N  Liner-L  Ceramic liner (BioloX Delta)					





Sanatmetal 
Ortopédiai és Traumatológiai Eszközök Gyártó Kft.

Sirtalis
Megoldás
nehéz esetekre!



Vortex lemez
(egyenes és Vortex Disztális Femur)

+ Rátét lemez

+ Sirtalis kötöző

www.sanatmetal.hu

Cím: 3300 Eger, Faiskola út 5.
Telefon: +36 36 512-900
Fax: +36 36 512-932
e-mail: metal@sanatmetal.hu



Cemented
Cementless
CC Revision



155°
flexion



TiN



Flex
Rigid
PEEK



Sanatmetal®
Ortopédiai és Traumatológiai Eszközök Gyártó Kft.

Sanat Spine

Castle Cage

CFF Cage

TPS bevonattal!

Whirllock lemez

TLT-rendszer

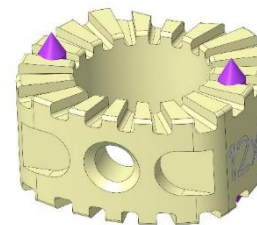
ReSpace Cage

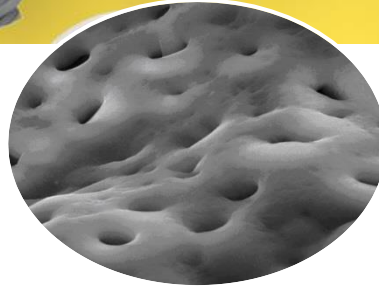
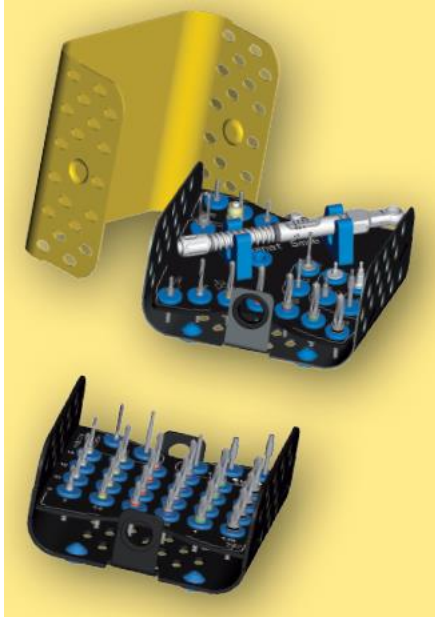
Emerald Cage

Nemzeti termék a közös jövőnk!

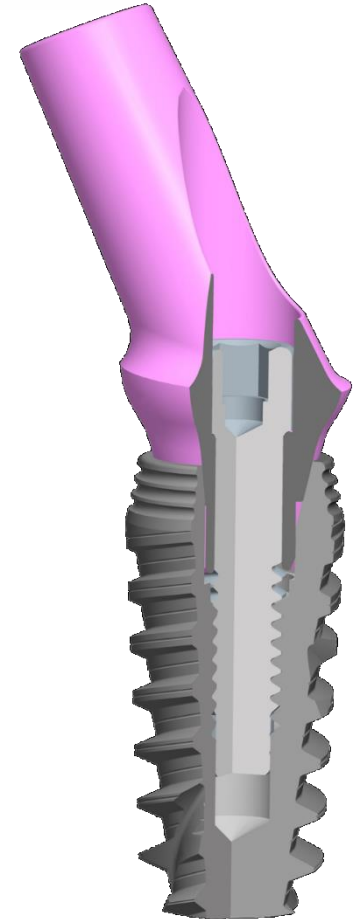
www.sanatmetal.hu

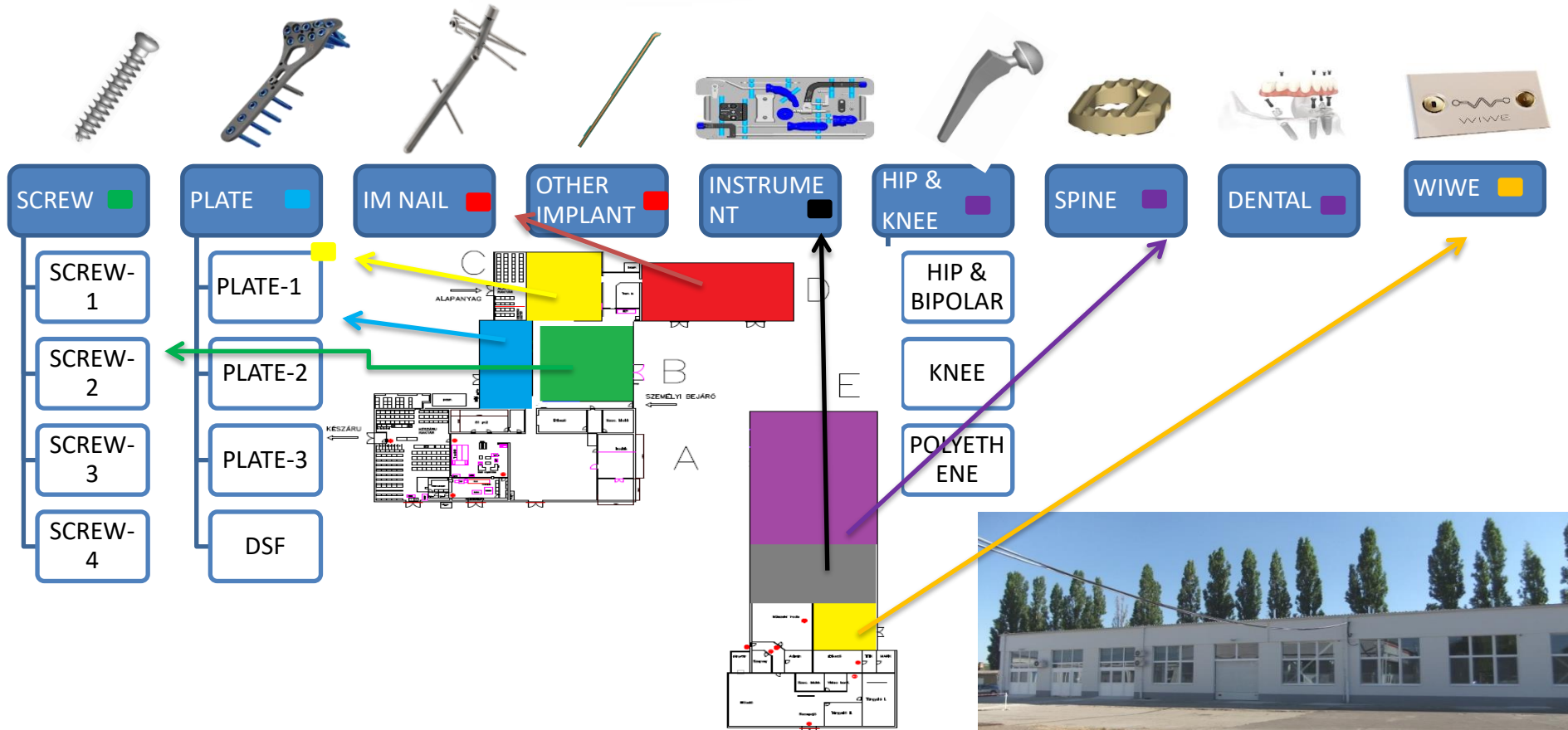
Cages
Plates

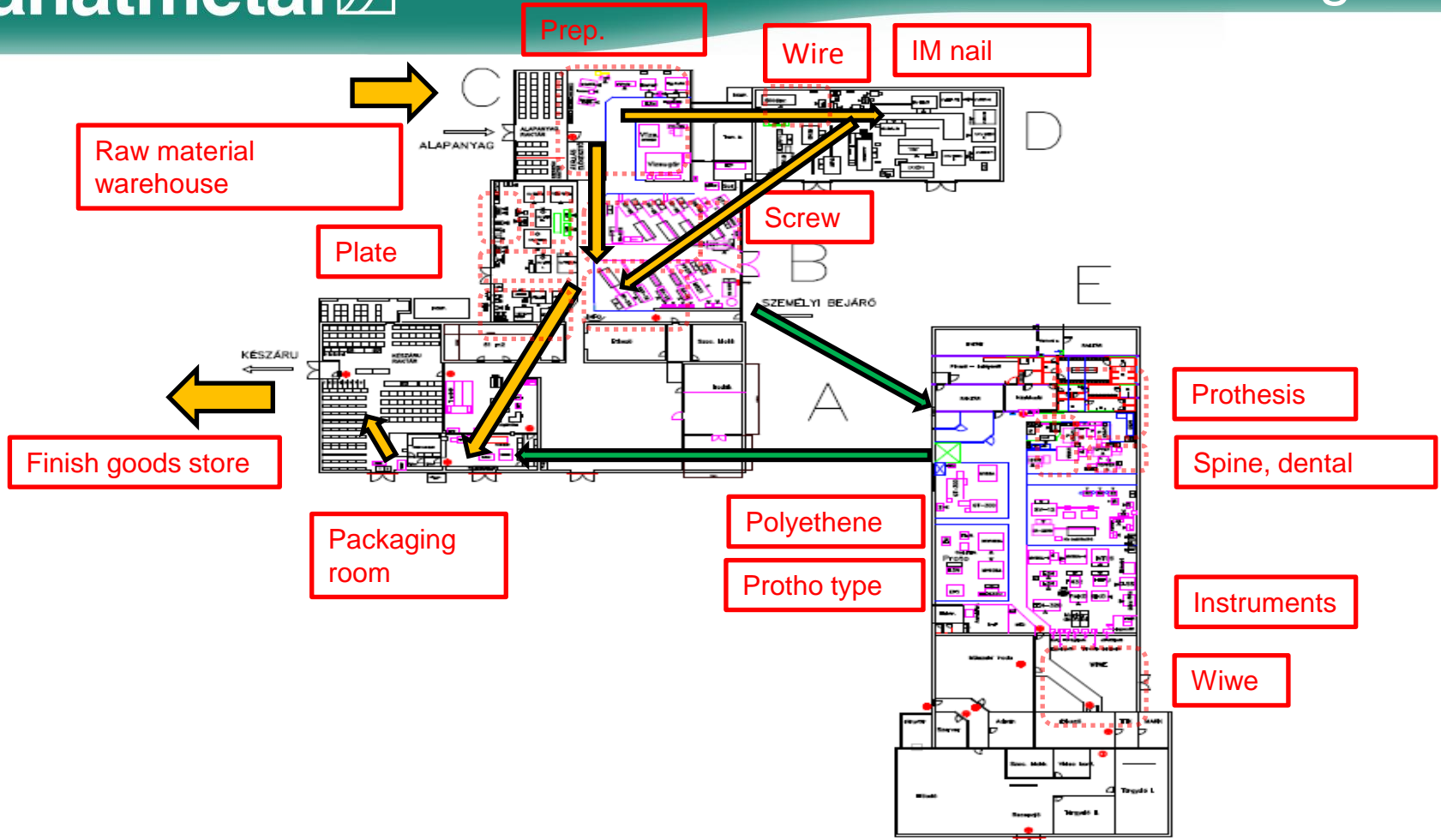




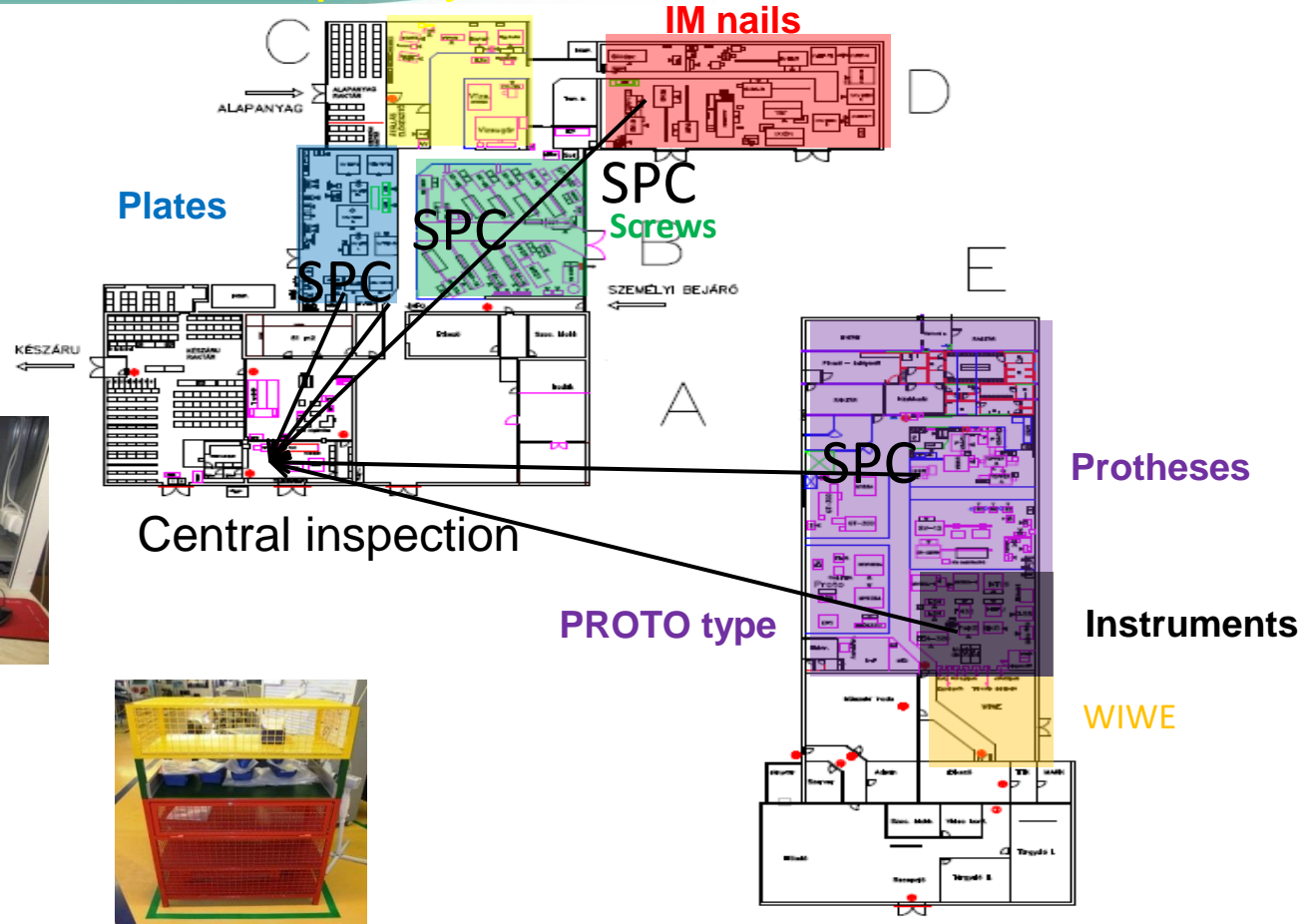
BoneTact
Nano surface







Preparatory





A Sanatmetal...

Traumatológia, ortopédia,
gerinc, fogászat, diagnosztika



- Nemzetközivé válás, több leányvállalat, export 35 országba
- Első technológiai transzfer Oroszországba
- Európa TOP 40 cég között
- Stratégiai kapcsolat a világ 2. legnagyobbjával
- Innovációs Nagydíj
- Creo tervezőrendszer, SAP - HANA, Office 365, CRM
- Controlling szervezet, változásmenedzsment, Lean, SPC és sok minden más.

- Raw material from qualified suppliers
- Notified body: CE Certiso (Hungarian NB)
- CE and FDA
- Earlier British -American –Hungarian JV
- Cooperation with worldwide companies
- Innovative products, unique design
- Competitive pricing!

