

\*The SDS for Ball Clasps Stainless Steel can be found at 090-034\*

## PRODUCT-DATA SHEET

- High-grade steel products –

Please note that our stainless steel products should not be exposed to MRT (magnetic resonance tomography)

No.	Product name	Alloy
1a)	<u>Prothetic clasps and bars</u> - O, OK, J, JM, T, TK, N, NK, B, Jaw Fracture Splints, Poly-J	Chromium-nickel steel, Material No. 1.4301, Alloy components: C ≤ 0,07 % Si ≤ 1,00 % Mn ≤ 2,00 % P ≤ 0,045 % S ≤ 0,015 % Cr = 17,50 - 19,50 % Mo = --- Ni = 8,00 - 10,50 % V = --- Others = N ≤ 0,11 % Fe = rest
1b)	<u>Orthodontic clasps and bars:</u> Scheu-Anchor STEADY-bar	Chromium-nickel steel, Material No. 1.4301, Alloy components: C ≤ 0,07 % Si ≤ 1,00 % Mn ≤ 2,00 % P ≤ 0,045 % S ≤ 0,015 % Cr = 17,50 - 19,50 % Mo = --- Ni = 8,00 - 10,50 % V = --- Others = N ≤ 0,11 % Fe = rest
1c)	Adamik-Anchor	a) Chromium-nickel steel, Material No. 1.4305, Alloy components: C ≤ 0,10 % Si ≤ 1,00 % Mn ≤ 2,00 % P ≤ 0,045 % S ≤ 0,15 – 0,35 % Cr = 17,00 - 19,00 % Mo = --- Ni = 8,00 - 10,00 % V = --- Others = Cu ≤ 1,00 %; N ≤ 0,11 % Fe = rest

## PRODUCT-DATA SHEET

- High-grade steel products –

Please note that our stainless steel products should not be exposed to MRT (magnetic resonance tomography)

No.	Product Name	Alloy																																																																		
2)	<p><u>Orthodontic clasps and wires:</u> Arrow clasps, Triangle clasp, ADAMS- and VOSS clasps, A-parts, U-Bar, CHROMIUM-Wires</p> <p>Arrow- and Triangle clasps, Quad Helix Coffin-springs, MENZANIUM-Wires</p>	<p>a) Chromium-nickel-steel, Material No. 1.4310, Alloy components:</p> <table> <tr><td>C</td><td>=</td><td>0,05 – 0,15 %</td></tr> <tr><td>Si</td><td>≤</td><td>2,00 %</td></tr> <tr><td>Mn</td><td>≤</td><td>2,00 %</td></tr> <tr><td>P</td><td>≤</td><td>0,045 %</td></tr> <tr><td>S</td><td>≤</td><td>0,015 %</td></tr> <tr><td>Cr</td><td>=</td><td>16,00 -19,00 %</td></tr> <tr><td>Mo</td><td>≤</td><td>0,80 %</td></tr> <tr><td>Ni</td><td>=</td><td>6,00 - 9,5 %</td></tr> <tr><td>V</td><td>=</td><td>---</td></tr> <tr><td>Others</td><td>=</td><td>N ≤ 0,11 %</td></tr> <tr><td>Fe</td><td>=</td><td>rest</td></tr> </table> <p>b) partially already available in the nickel-free alloy MENZANIUM, material No. 1.4456 (Please pay attention to the label), alloy components:</p> <table> <tr><td>C</td><td>≤</td><td>0,10 %</td></tr> <tr><td>Si</td><td>≤</td><td>1,00 %</td></tr> <tr><td>Mn</td><td>=</td><td>16,00 - 20,00 %</td></tr> <tr><td>P</td><td>≤</td><td>0,05 %</td></tr> <tr><td>S</td><td>≤</td><td>0,05 %</td></tr> <tr><td>Cr</td><td>=</td><td>16,00 - 20,00 %</td></tr> <tr><td>Mo</td><td>=</td><td>1,80 – 2,50 %</td></tr> <tr><td>Ni</td><td>≤</td><td>0,20 %</td></tr> <tr><td>V</td><td>≤</td><td>0,20 %</td></tr> <tr><td>Others</td><td>=</td><td>N 0,70 – 1,00 %</td></tr> <tr><td>Fe</td><td>=</td><td>rest</td></tr> </table>	C	=	0,05 – 0,15 %	Si	≤	2,00 %	Mn	≤	2,00 %	P	≤	0,045 %	S	≤	0,015 %	Cr	=	16,00 -19,00 %	Mo	≤	0,80 %	Ni	=	6,00 - 9,5 %	V	=	---	Others	=	N ≤ 0,11 %	Fe	=	rest	C	≤	0,10 %	Si	≤	1,00 %	Mn	=	16,00 - 20,00 %	P	≤	0,05 %	S	≤	0,05 %	Cr	=	16,00 - 20,00 %	Mo	=	1,80 – 2,50 %	Ni	≤	0,20 %	V	≤	0,20 %	Others	=	N 0,70 – 1,00 %	Fe	=	rest
C	=	0,05 – 0,15 %																																																																		
Si	≤	2,00 %																																																																		
Mn	≤	2,00 %																																																																		
P	≤	0,045 %																																																																		
S	≤	0,015 %																																																																		
Cr	=	16,00 -19,00 %																																																																		
Mo	≤	0,80 %																																																																		
Ni	=	6,00 - 9,5 %																																																																		
V	=	---																																																																		
Others	=	N ≤ 0,11 %																																																																		
Fe	=	rest																																																																		
C	≤	0,10 %																																																																		
Si	≤	1,00 %																																																																		
Mn	=	16,00 - 20,00 %																																																																		
P	≤	0,05 %																																																																		
S	≤	0,05 %																																																																		
Cr	=	16,00 - 20,00 %																																																																		
Mo	=	1,80 – 2,50 %																																																																		
Ni	≤	0,20 %																																																																		
V	≤	0,20 %																																																																		
Others	=	N 0,70 – 1,00 %																																																																		
Fe	=	rest																																																																		

## PRODUCT-DATA SHEET

- High-grade steel products –

Please note that our stainless steel products should not be exposed to MRT (magnetic resonance tomography)

No.	Product Name	Alloy
3)	<u>Prothetische Bars</u> Profi-Bar          Lingualbar	a) Material No. 1.4303 Alloy components: C            ≤        0,06 % Si           ≤        1,00 % Mn          ≤        2,00 % P            ≤        0,045 % S            ≤        0,015 % Cr           =        17,00 - 19,00 % Mo          =        --- Ni           =        11,00 - 13,00 % V            =        --- Others      =        N ≤ 0,11% Fe           =        rest  b) Material No. 1.4310 Alloy components: C            =        0,05 – 0,15 % Si           ≤        2,00 % Mn          ≤        2,00 % P            ≤        0,045 % S            ≤        0,015 % Cr           =        16,00 -19,00 % Mo          ≤        0,80 % Ni           =        6,00 - 9,5 % V            =        --- Others      =        N ≤ 0,11 % Fe           =        rest
4)	Face-Bows	a) Material No. 1.4310 (Inner and outer bow): C            =        0,05 – 0,15 % Si           ≤        2,00 % Mn          ≤        2,00 % P            ≤        0,045 % S            ≤        0,015 % Cr           =        16,00 -19,00 % Mo          ≤        0,80 % Ni           =        6,00 - 9,5 % V            =        --- Others      =        N ≤ 0,11 % Fe           =        rest  b) Colour coating Polyesterlaque

## PRODUCT-DATA SHEET

- High-grade steel products –

Please note that our stainless steel products should not be exposed to MRT (magnetic resonance tomography)

5)	Distance Rings	<p>Chromium-nickel steel, Material No. 1.4305, Alloy components:</p> <table> <tr><td>C</td><td>≤</td><td>0,10 %</td></tr> <tr><td>Si</td><td>≤</td><td>1,00 %</td></tr> <tr><td>Mn</td><td>≤</td><td>2,00 %</td></tr> <tr><td>P</td><td>≤</td><td>0,045 %</td></tr> <tr><td>S</td><td>≤</td><td>0,15 – 0,35 %</td></tr> <tr><td>Cr</td><td>=</td><td>17,00 -19,00 %</td></tr> <tr><td>Mo</td><td>=</td><td>---</td></tr> <tr><td>Ni</td><td>=</td><td>8,00 -10,00 %</td></tr> <tr><td>V</td><td>=</td><td>---</td></tr> <tr><td>Others</td><td>=</td><td>Cu ≤ 1,00 %; N ≤ 0,11 %</td></tr> <tr><td>Fe</td><td>=</td><td>rest</td></tr> </table>	C	≤	0,10 %	Si	≤	1,00 %	Mn	≤	2,00 %	P	≤	0,045 %	S	≤	0,15 – 0,35 %	Cr	=	17,00 -19,00 %	Mo	=	---	Ni	=	8,00 -10,00 %	V	=	---	Others	=	Cu ≤ 1,00 %; N ≤ 0,11 %	Fe	=	rest																																	
C	≤	0,10 %																																																																		
Si	≤	1,00 %																																																																		
Mn	≤	2,00 %																																																																		
P	≤	0,045 %																																																																		
S	≤	0,15 – 0,35 %																																																																		
Cr	=	17,00 -19,00 %																																																																		
Mo	=	---																																																																		
Ni	=	8,00 -10,00 %																																																																		
V	=	---																																																																		
Others	=	Cu ≤ 1,00 %; N ≤ 0,11 %																																																																		
Fe	=	rest																																																																		
6)	HERNER Guiding Telescopes, HERBST hinges, Hinge System 44	<p>Chromium-nickel steel, Material No. 1.4305, Alloy components:</p> <table> <tr><td>C</td><td>≤</td><td>0,10 %</td></tr> <tr><td>Si</td><td>≤</td><td>1,00 %</td></tr> <tr><td>Mn</td><td>≤</td><td>2,00 %</td></tr> <tr><td>P</td><td>≤</td><td>0,045 %</td></tr> <tr><td>S</td><td>≤</td><td>0,15 – 0,35 %</td></tr> <tr><td>Cr</td><td>=</td><td>17,00 -19,00 %</td></tr> <tr><td>Mo</td><td>=</td><td>---</td></tr> <tr><td>Ni</td><td>=</td><td>8,00 -10,00 %</td></tr> <tr><td>V</td><td>=</td><td>---</td></tr> <tr><td>Others</td><td>=</td><td>Cu ≤ 1,00 %; N ≤ 0,11 %</td></tr> <tr><td>Fe</td><td>=</td><td>rest</td></tr> </table> <p>and</p> <p>Chromium-nickel steel, Material No. 1.4301, Alloy components:</p> <table> <tr><td>C</td><td>≤</td><td>0,07 %</td></tr> <tr><td>Si</td><td>≤</td><td>1,00 %</td></tr> <tr><td>Mn</td><td>≤</td><td>2,00 %</td></tr> <tr><td>P</td><td>≤</td><td>0,045 %</td></tr> <tr><td>S</td><td>≤</td><td>0,015 %</td></tr> <tr><td>Cr</td><td>=</td><td>17,50 - 19,50 %</td></tr> <tr><td>Mo</td><td>=</td><td>---</td></tr> <tr><td>Ni</td><td>=</td><td>8,00 - 10,50 %</td></tr> <tr><td>V</td><td>=</td><td>---</td></tr> <tr><td>Others</td><td>=</td><td>N ≤ 0,11 %</td></tr> <tr><td>Fe</td><td>=</td><td>rest</td></tr> </table>	C	≤	0,10 %	Si	≤	1,00 %	Mn	≤	2,00 %	P	≤	0,045 %	S	≤	0,15 – 0,35 %	Cr	=	17,00 -19,00 %	Mo	=	---	Ni	=	8,00 -10,00 %	V	=	---	Others	=	Cu ≤ 1,00 %; N ≤ 0,11 %	Fe	=	rest	C	≤	0,07 %	Si	≤	1,00 %	Mn	≤	2,00 %	P	≤	0,045 %	S	≤	0,015 %	Cr	=	17,50 - 19,50 %	Mo	=	---	Ni	=	8,00 - 10,50 %	V	=	---	Others	=	N ≤ 0,11 %	Fe	=	rest
C	≤	0,10 %																																																																		
Si	≤	1,00 %																																																																		
Mn	≤	2,00 %																																																																		
P	≤	0,045 %																																																																		
S	≤	0,15 – 0,35 %																																																																		
Cr	=	17,00 -19,00 %																																																																		
Mo	=	---																																																																		
Ni	=	8,00 -10,00 %																																																																		
V	=	---																																																																		
Others	=	Cu ≤ 1,00 %; N ≤ 0,11 %																																																																		
Fe	=	rest																																																																		
C	≤	0,07 %																																																																		
Si	≤	1,00 %																																																																		
Mn	≤	2,00 %																																																																		
P	≤	0,045 %																																																																		
S	≤	0,015 %																																																																		
Cr	=	17,50 - 19,50 %																																																																		
Mo	=	---																																																																		
Ni	=	8,00 - 10,50 %																																																																		
V	=	---																																																																		
Others	=	N ≤ 0,11 %																																																																		
Fe	=	rest																																																																		

## PRODUCT-DATA SHEET

- High-grade steel products –

Please note that our stainless steel products should not be exposed to MRT (magnetic resonance tomography)

7)	Activator-Tubes acc. to Teuscher	Material QC-985.174 similar 1.4435 Alloy Components:  Cr                           16,2 % Ni                            4,5 % Cu                            3,6 % Ta + Nb                    0,2 % Si                            0,5 % max. Mn                           0,5 % max. C                             0,03 % max. Fe                            rest
----	----------------------------------	--