

■ HOSE GOLD FOOD



### Innovation • Technology • Quality • Experience

## **Advanced weaving Products**

- Standard reeds for every weft insertion
- Airjet reeds up to 450 dents per 100 mm
- Special reeds for glas, silk, kevlar fabrics etc.
- Reeds for forming fabric and wire fabric
- Super fine reeds for filtration, silk-screen printing, medical applications etc.



- Lease reeds/ reeds for advanced weaving processes, extension combs
- Waterjet reeds
- Reeds for belt/narrow fabric
- Reeds with tin or brass application
- Heddles and droppers
- Wide range of weaving machine accessories

# Information for our PMC/Dryer customers

- Surface finish: Our Surface appearance is defined in terms of brightness and color. Surface roughness is measured with a special trailing-stylus instrument. The terminology and measuring methods can be found in EN ISO 4287 and EN ISO 4288.
- Surface Class limit R<sub>a</sub>, μm (μin.): 0.05-0.125 (2-5) roughtness: Class mean R<sub>a</sub>, μm (μin.): 0.08 (3)
- Surface appearance:
- White, free from oxide discoloration and with uniform color
- Highest degree of:
- Bending and impact fatigue strength
- Flatness
- Surface quality
- Wear resistance
- Purity
- Blanking properties
- MOST PRECISE EDGE FINISH
- HIGHEST DEGREE OF PURITY
- EXCELLENT GEOMETRICAL PROPERTIES
- BETTER WEAR RESISTANCE







#### EDGES

Reed steel can be delivered with a variety of edge finishes, to meet customer requirements. The choice of edge finish depends on the application; it also depends on steel grade, size and type of fabric as well.



Chromium Steel - width 7 mm and 12 mm						
Thickness	Tolerance width	Tolerance thickness	Tensile strength	Steel grade		
(mm)	(mm)	(mm)	(MPa)			
< 0.025						
0.025- < 0.040	)					
0.040- < 0.076	6					
0.076- < 0.100	) .+/-0.02	.+/-0.003	1800 +/- 100	7C27Mo2		
0.100- < 0.125	i .+/-0.02	.+/-0.003	1800 +/- 100	7C27Mo2		
0.125- < 0.175	i .+/-0.02	.+/-0.003	1800 +/- 100	7C27Mo2		
0.175- < 0.225	i .+/-0.02	.+/-0.004	1800 +/- 100	7C27Mo2		
0.225- < 0.275	i .+∕-0.02	.+/-0.004	1800 +/- 100	7C27Mo2		
0.275- < 0.375	i .+∕-0.02	.+/-0.005	1800 +/- 100	7C27Mo2		
0.375- < 0.425	i .+∕-0.02	.+/-0.006	1800 +/- 100	7C27Mo2		
0.425- < 0.475	i .+∕-0.02	.+/-0.006	1800 +/- 100	7C27Mo2		
0.475- < 0.625	5 .+/-0.02	.+/-0.007	1800 +/- 100	7C27Mo2		
0.625- < 0.825	5 .+/-0.02	.+/-0.008	1800 +/- 100	7C27Mo2		
0.825- < 1.000	) .+/-0.02	.+/-0.010	1800 +/- 100	7C27Mo2		
1.001- < 1.250	*.+/-0.02*	.+/-0.012*	1800 +/- 100*	7C27Mo2*		
1.250- < 1.400	*.+/-0.02*	.+/-0.014*	1800 +/- 100*	7C27Mo2*		
*12 mm on	ly					

	Carbon Steel – wid	dth 7 mm and 1	12 mm		
	Thickness	Tolerance width	Tolerance thickness	Tensile strength	Steel grade
	(mm)	(mm)	(mm)	(MPa)	
	< 0.025				
е	0.025- < 0.040	)			
	0.040- < 0.076	3			
	0.076- < 0.100	) .+/-0.02	.+/-0.003	2100 +/- 100	200
ered	0.100- < 0.125	5 .+/-0.02	.+/-0.003	2100 +/- 100	200
	0.125- < 0.175	5 .+/-0.02	.+/-0.003	2050 +/- 100	200
	0.175- < 0.225	5 .+/-0.02	.+/-0.004	2000 +/- 100	200
	0.225- < 0.275	5 .+/-0.02	.+/-0.004	1950 +/- 100	200
	0.275- < 0.375	5 .+/-0.02	.+/-0.005	1900 +/- 100	200
	0.375- < 0.425	5 .+/-0.02	.+/-0.006	1850 +/- 100	200
	0.425- < 0.475	5 .+/-0.02	.+/-0.006	1800 +/- 100	200
	0.475- < 0.625	5 .+/-0.02	.+/-0.007	1750 +/- 100	200
	0.625- < 0.825	5 .+/-0.02	.+/-0.008	1700 +/- 100	200
	0.825- < 1.000	) .+/-0.02	.+/-0.010	1650 +/- 100	200
	1.001- < 1.250	1*		1500 +/- 100*	15LM*
	1.250- < 1.575	*		1500 +/- 100*	15LM*
	1.575- < 1.830	1*		1450+/- 100*	15LM*
	1.830-*			1350 +/- 100*	15LM*
	*12 mm on	ly			





## The essential differences...

... are as follows:

- exceptionally smooth surface
- highly densified material composition
- radii absolutely smooth and completely free of grooves due to a unique flange processing technique

#### Please note the following explanations:

In order to successfully polish the surface of tempered steel immense force is necessary for the actual finishing of the flange. Due to these immense forces, the potential for deterioration of the material structure and density of the flange increases, particularly during strain caused by warp tension, possibly resulting in breakage and rough edges and causing damage to warp material.

Carbon steel is hardened via heat, may, however, lose its durability and become brittle and refractory, if, for example, it overheats during heavy polishing.

The special steel which we developed in close cooperation with our steel manufacturer, offers super high density and therefore less potential loss of original durability. Thanks to our unique, thermo-monitored flange finishing procedure, we are able to maintain the initial high durability of the material. Although this procedure is costly in terms of time, we have secured exceptional test-results in all friction coefficient tests performed.

Yet another advantage of this is, that we are able to offer all of our steel product dimensions, not only hardened, but also rust-proof, that is stainless steel; which of course means that rust caused by high humidity which in turn results in damage to the reed is no longer an issue.



Material	AWT e	co AWT stand	ard AWT tech	AWT H-tech	AWT Form	
resistance to wear	+	+	++	+++	++++	
tensile strength	850/10	1000/120	0 1200/1450	1400/1700	1650/2200	
friction coefficient (	dry) +	+	++	+++	++++	
abrasion resistance	e +	+	+	++	++++	
roughness	0,6	0,6	0,3	0,3	0,3	
planning mm (t)	+	+	++	++	++++	
twisting (V5)	+	+	+	+++	+++	
width tolerance	+/- 0,0	)5 +/- 0,05	0,03/0,05	0,03/0,05	0,03/0,05	
thickness tolerance	1		+/-0,005	+/-0,005	+/-0,005	
sliding performance	. +	+	++	+++	+++	
corrosion-restistant	; no	yes	yes	yes	yes, on demand	
range of application Textile Fabrics (no abrasive mate e.g. silk, glass fibr information High quality steel angle and good re		brics ive materials, glass fibre, jute etc.) ity steel with a plain I good resistances to	Technical Fabri Medical Fabric Glass-, Plastic, Carrier-grid for and bulk-storaç High quality sta high hardness	ics s Carbon-fibre-fabrics microelectronic ge-industry eel with extra plain a and highest resistan	Technical Fabrics Medical Fabrics Plastic-Fabrics Filter for Paperindustry Forming Fabric Heavy-Fabrics Wire-Fabrics Ingles, equable nce to wear	
SURFACE	Standard ELO FORM	polished by m extreme plair edges, withou machine polis	polished by machine, plain surface extreme plain polished surface by machine and polished edges, without transitions machine polished, extreme smooth surface with most chamfering edges.			
	<u></u>	absolutely bu manually pos	absolutely burr-free and without any transition edges/surface ck-production, manually postprocessing and control			
HIXATION	Standard binding-	system 2-component suitable for a	2-component adhesive, able to work under pressure, suitable for all Standards Textile/Technical			
	repairable binding CUOCOMP®	system 3-tier Epoxyd suitable for a	resin-adhesive, able to Imost every range of a	o work under pressu application	re, repairable	



#### www.kuenzel-awt.com

firmest, multistage special-binding-system for maximal fixedness

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HT3-binding-system