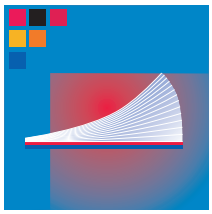
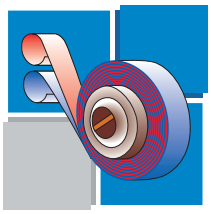
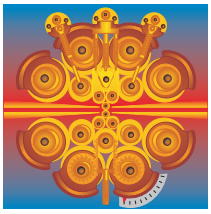
AUERHAMMER
METALLWERK GMBH



Thermostatic Bimetals

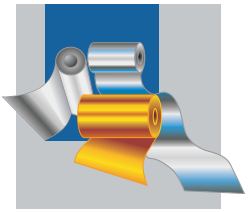


Clad Materials



Metal Strips

Soft-magnetic Iron-Nickel-Alloys
Sealing and Expansion Alloys
Nickel
Nickel-Chromium-Alloys
Nickel-Copper-Alloys
Copper-Nickel-Alloys
Nickel-Manganese-Alloys



Metallic Foils

Product group:

Nickel-Chromium-Alloys

1. Alloy

AMW-Trade name	Alloy	Standard	Material-No. DIN/UNS
Ferrochronin 600	NiCr15Fe	DIN 17742/ASTM B 168	2.4816/N06600
Ferrochronin 601	NiCr23Fe	DIN 17742/ASTM B 168	2.4851/N06601
Chronin 625	NiCr22Mo9Nb	DIN 17744/ASTM B 443	2.4856/N06625
NiCr9	NiCr9		2.4870

2. Average chemical composition

(mass - %)

AMW-Trade name		Ni (+Co)	Cr	Al	C	Cu	Fe	Mn	Si	Ti	Mo	Nb
Ferrochronin 600	min.	72	14		0.025		6					
	max.		17	0.3	0.1	0.5	10	1.0	0.5	0.3		
Ferrochronin 601	min.	58	21	1.0								
	max.	63	25	1.7	0.1	0.5	18	1.0	0.5	0.5		
Chronin 625	min.	58	20								8	3.15
	max.		23	0.4	0.1	0.5	5	0.5	0.5	0.4	10	4.15
NiCr9	min.		9					0.2	0.1			
	max.	bal.	10	0.1	0.1	0.1	0.3	0.4	0.2	0.1		

3. Physical properties

AMW-Trade name	Density		Thermal expansion coefficient		Thermal conductivity		Modulus of elasticity	
			68 to 212 °F	20 °C to 100 °C	at 68 °F	at 20 °C		
	lb/in.³	g/cm³	10^{-6}/°F	10^{-6}/°C	Btu•in./h•ft²•°F	W/m•K	10^3 ksi	GPa
Ferrochronin 600	0.307	8.5	7.7	14	77	11		
Ferrochronin 601	0.296	8.2	7.7	14	77	11	30	207
Chronin 625	0.303	8.4	6.1	11	70	10		
NiCr9	0.300	8.3						

4. Mechanical properties

AMW-Trade name	Temper	Yield strength Rp 0.2		Tensile strength Rm		Elongation	Hardness	
							Rockwell B	Vickers
		ksi	MPa	ksi	MPa	%	HRB	HV
Ferrochronin 600	annealed	39	270	94	650	40	79	150
Ferrochronin 601	annealed	51	350	107	740	40	87	180
Chronin 625	annealed	64	440	132	910	40	94	215
NiCr9	annealed	39	270	80	550	35	76	135

5. Dimensions and tolerances

Thickness tolerances

Thickness		Width		Width		Width	
in.	mm	in. 0.39 to 3.94	mm 10 to 100	in. > 3.94 to 7.87	mm > 100 to 200	in. > 7.87 to 11.81	mm > 200 to 300
0.008 to 0.014	0.20 to 0.35	± 0.0008	± 0.020	± 0.0008	± 0.020	± 0.0012	± 0.030
> 0.014 to 0.024	> 0.35 to 0.60	± 0.0012	± 0.030	± 0.0012	± 0.030	± 0.0016	± 0.040
> 0.024 to 0.039	> 0.60 to 1.00	± 0.0016	± 0.040	± 0.0020	± 0.050	± 0.0020	± 0.050
> 0.039 to 0.059	> 1.00 to 1.50	± 0.0020	± 0.050	± 0.0024	± 0.060	± 0.0028	± 0.070
> 0.059 to 0.098	> 1.50 to 2.50	± 0.0024	± 0.060	± 0.0028	± 0.070	± 0.0031	± 0.080

Other thickness and tolerances on request.

Width tolerances

Width		Thickness		Thickness		Thickness	
in.	mm	in. 0.008 to 0.039	mm 0.20 to 1.00	in. > 0.039 to 0.071	mm > 1.00 to 1.80	in. > 0.071 to 0.098	mm > 1.80 to 2.50
≤ 3.94	≤ 100	± 0.004	± 0.10	± 0.007	± 0.18	± 0.010	± 0.25
> 3.94 to 7.87	> 100 to 200	± 0.006	± 0.15	± 0.010	± 0.25	± 0.014	± 0.35
> 7.87 to 11.81	> 200 to 300	± 0.012	± 0.30	± 0.020	± 0.50	± 0.024	± 0.60

Other width and tolerances on request.

LENGTH TOLERANCES (CUT LENGTH)

THICKNESS		LENGTH	
in.	mm	in. 20 to 118	mm 500 to 3000
0.016 to 0.079	0.40 to 2.00	+ 0.40	+ 10

Other tolerances on request.

6. PRODUCT FORM

FORM	THICKNESS		WIDTH		LENGTH		COIL - ID		COIL - OD	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
Strip	0.008 to 0.098	0.20 to 2.50	0.39 to 11.81	10 to 300			11.81/15.75/19.69	300/400/500	max. 43.3	max. 1100
Cut length	0.016 to 0.079	0.40 to 2.00	1.97 to 11.81	50 to 300	20 to 118	500 to 3000				

Other form on request.

All data contained in this document are for information purposes only.
Other properties can be engineered according to costumer specifications.

Guarantees of specific characteristics or applications require special written agreement.

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