

# Welding Consumables



**Deutsche Nickel**



# Size Range

Rods (embossed on one or both sides)

Ø 1.6 mm – 3.2 mm x 1.000 m

Ø 0.0625 in – 0.125 in x 36 in

Wire (GMAW, GTAW)

Ø 0.8 mm – 1.2 mm, 15 kg BS 300

Ø 0.035 in – 0.045 in, 33 lb BS 300

Wire (SAW / thermal spray)

Ø 1.6 mm – 3.2 mm, 25 kg / 15 kg K415 / K435 / SH390 / K300

Ø 0.0625 in – 0.125 in, 55 lb / 33 lb K415 / K435 / SH390 / K300

Core wire for coated electrodes

Ø 1.5 mm – 5 mm x 200 – 500 mm

Ø 0.781 in – 0.125 in x 9 in – 18 in

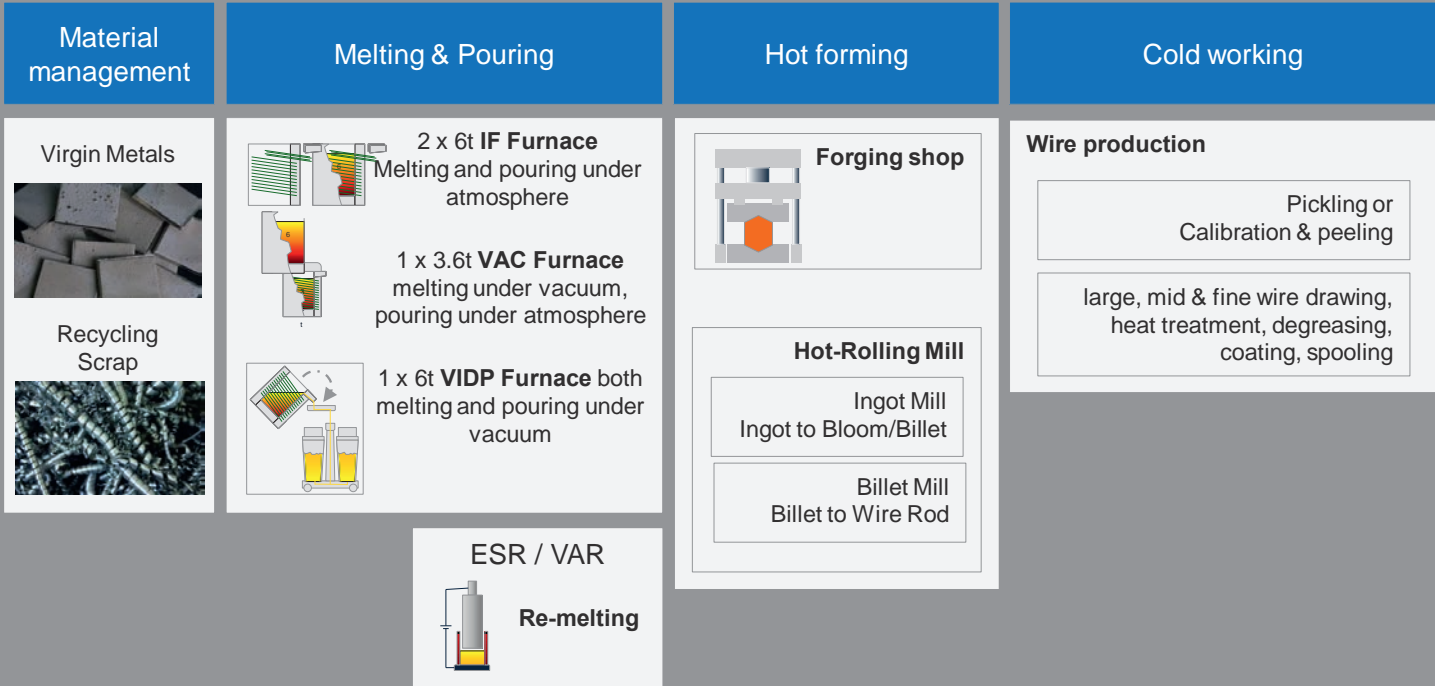
# Alloy Grades

Alloy	DN Trade name	Material No.	AWS	DIN	Chemical analysis
FM 82	IGS-Chronin 82	(2.4806)	AWS A5.14 ERNiCr-3	DIN EN ISO 18274 S Ni 6082	Ni 74%, Cr 20%, Mn 3%, Nb 2.5%
NiCr 80/20	IGS-Chronin 80/20	(2.4639)	AWS A5.14 ERNiCr-6	DIN EN ISO 18274 S Ni 6076	Ni 79%, Cr 20%
FM 65	IGS-Chronin 825	(2.4655)	AWS A5.14 ERNiFeCr-1	DIN EN ISO 18274 S Ni 8065	Ni 42%, Fe 28%, Cr 22%, Mo 3.5%, Cu 2%
FM 718	IGS-Chronin 718	2.4667	AWS 5.14 ERNiFeCr-2	DIN EN ISO 18274 S Ni 7718	Ni 54%, Cr 18%, Fe 18%, Nb 5%, Mo 3%, Ti 1%
FM 182	IGS-Chronin A	-	AWS 5.11 ENiCrFe-3	DIN EN ISO 14172 S Ni 6182	Ni 72%, Cr 17%, Fe 5%, Mn 3%, Nb 2%
FM 617	IGS-Chronin 617	(2.4627)	AWS A5.14 ER- NiCrCoMo-1	DIN EN ISO 18274 S Ni 6617	Ni 55%, Cr 22%, Co 12%, Mo 9%, Al 1.3%
FM 625	IGS-Chronin 625	(2.4831)	AWS A5.14 ERNiCrMo-3	DIN EN ISO 18274 S Ni 6625	Ni 63%, Cr 22%, Mo 9%, Nb 3.5%, Fe 0.3%
FM C276	IGS-Chronin C276	(2.4886)	AWS A5.14 ERNiCrMo-4	DIN EN ISO 18274 S Ni 6276	Ni 57%, Cr 16%, Mo 16%, Fe 5%, W 4%
FM C4	IGS-Chronin C4	(2.4611)	AWS A5.14 ERNiCrMo-7	DIN EN ISO 18274 S Ni 6455	Ni 66%, Cr 16%, Mo 16%, Ti 0.5%
FM 22	IGS-Chronin 22	(2.4635)	AWS A5.14 ERNiCrMo-10	DIN EN ISO 18274 S Ni 6022	Ni 57%, Cr 22%, Mo 13%, Fe 4%, W 3%
FM 59	IGS-Chronin 59	(2.4607)	AWS A5.14 ERNiCrMo-13	DIN EN ISO 18274 S Ni 6059	Ni 59%, Cr 23%, Mo 16%
FeNi36	IGS-Dilaton 36Nb	-	-	-	Fe 62%, Ni 36%, Nb 1.0%, Ti 0.2%
FeNi54	IGS-Dilaton 54Mn	-	AWS A5.15 -	DIN EN ISO 1071 S NiFe-2	Fe 40%, Ni 54%, Mn 3%, Cu 2%, Ti 0.5%

Alloy	DN Trade name	Material No.	AWS	DIN	Chemical analysis
FeNi55	IGS-Dilaton 55	-	AWS A5.15 ENiFe-Cl	DIN EN ISO 1071 S NiFe-1	Ni 55%, Fe 44%
FeNi60	IGS-Dilaton 60	-	-	-	Ni 60%, Fe 39%
Bimetal FeNi58	M-FeNi 58	-	-	-	Ni 58%, Fe 41%
-	IGS-NiMo8	-	AWS A5.14 ERNiMo-8	DIN EN ISO 18274 S Ni 1008	Ni 68%, Mo 20%, Fe 6%, W 3%, Cr 2%
FM 60	IGS-Silverin 400	(2.4377)	AWS A5.14 ERNiCu-7	DIN EN ISO 18274 S Ni 4060	Ni 65%, Cu 29%, Mn 3%, Ti 2%
FM 67	IGS-CuNi30Fe	(2.0837)	AWS A5.7 ERCuNi	DIN EN ISO 24373 S Cu 7158	Cu 67%, Ni 30 %, Mn 0.8%, Fe 0.6%, Ti 0.5%
CuNi 90/10	IGS-CuNi10Fe	(2.0873)	AWS A5.7 -	DIN EN ISO 24373 S Cu 7061	Cu 87%, Ni 10%, Mn 1%, Fe 1,2%, Ti 0.5%
FM 61	IGS-Nickel	(2.4155)	AWS A5.14 ERNi-1	DIN EN ISO 18274 S Ni 2061	Ni 96%, Ti 3%
200	R-Nickel 99,2	2.4066	-	DIN 17740	Ni > 99.2%
NiAl5	NiAl5C	-	-	-	Ni 94%, Al 5%

## Wires for Additive Manufacturing

Alloy	DN Trade name	Material No.	ASTM	DIN	Chemical analysis
Alloy 718	DN-718 AM	2.4668	ASTM B637	DIN 17744	Ni 54%, Cr 18%, Fe 18%, Nb 5%, Mo 3%, Ti 1%
Alloy 625	DN-625 AM	2.4856	ASTM B446	DIN 17744	Ni 60%, Cr 22%, Mo 9%, Fe 4%, Nb 3.5%, Ti 0.3%
-	DN-48Cr6 AM	2.4486	-	-	Ni 47%, Fe 46%, Cr 6%
FeNi36	DN-36Nb AM	-	-	-	Fe 62%, Ni 36%, Nb 1%, Ti 0.2%



# Manufacturing Process



GMAW / GTAW Wire

GTAW Rods

SAW Wires

Core wire for coated electrode production

Thermal spray wires

Wires for additive manufacturing  
(3D Printing / Wire Arc Additive Manufacturing)

# Applications



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GMBH



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