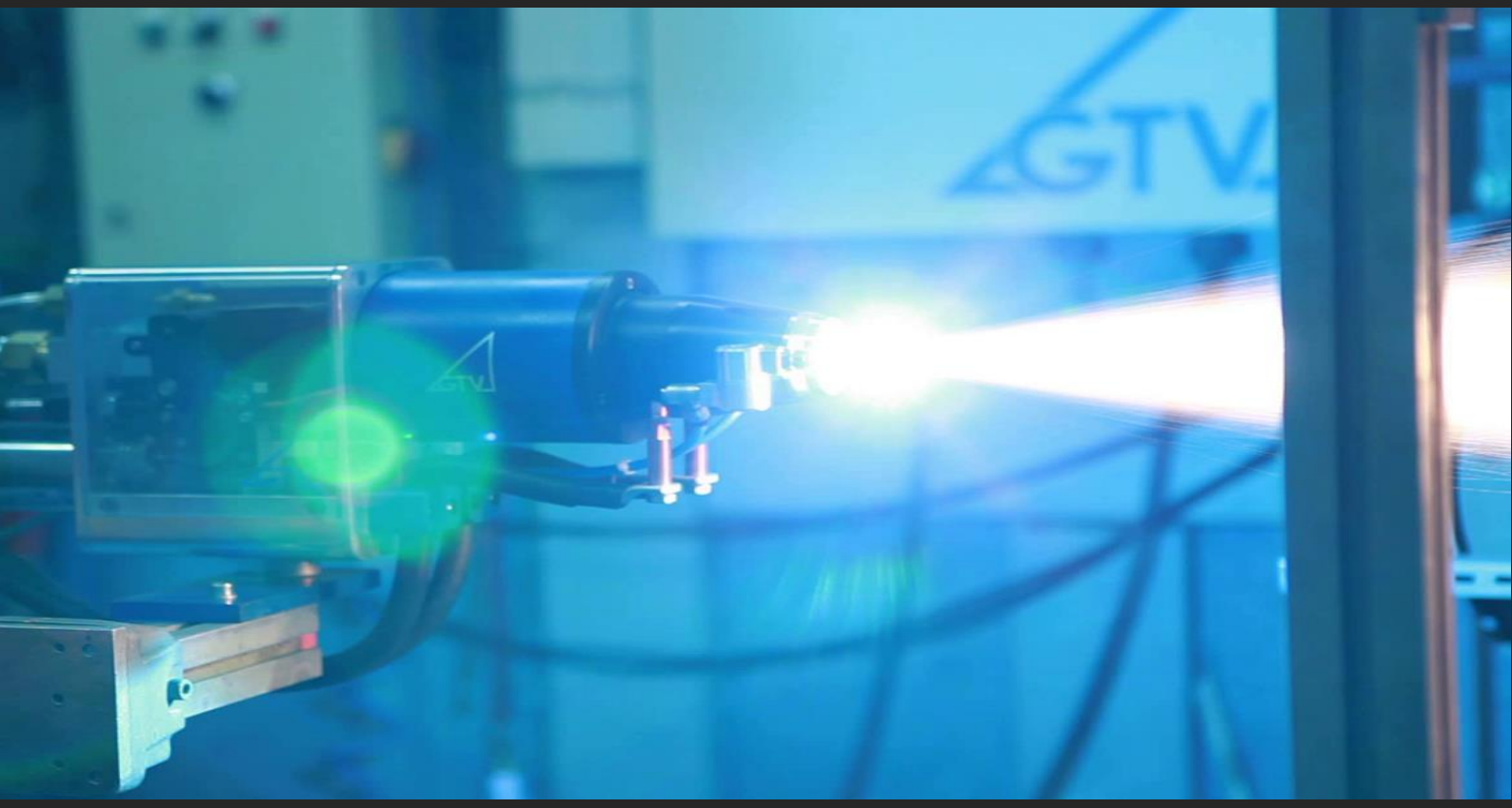
GTV SPRAY WIRE CATALOGUE

in accordance with DIN EN ISO 14919



Version 2.0

APPLICATION AREAS

- overhaul / repair
- wear protection
- corrosion protection
- bond coats

The third constituent (behind the second dot) of the GTV article number indicates the wire diameter:

1. 2.3 mm
2. 1/8“, 3.17 mm
3. 4 mm
4. 3/16“, 4.75 mm
5. 2.5 mm
6. 1/16“, 1.6 mm
7. 2 mm
8. 1,2 mm
9. 3 mm

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1. ALUMINIUM BASED MATERIALS

GTV article no.	Description	Al	Si
50.11.	aluminium 95%	99	-
50.28.	aluminium silicon 88/12	88	12

Characteristics / Application areas

50.11.

- repair of aluminium and magnesium based alloys
- corrosion protection application from pH 5 - 8.3
- applicable for temperatures up to approx. 500 °C
- hardness: 25 - 30 HB

50.28.

- repair of aluminium and magnesium based alloys
- corrosion protection application from pH 5 - 8.3
- hardness: 35 - 40 HB

2. MOLYBDENUM BASED MATERIALS

GTV article no.	Description	Mo
50.07.	molybdenum	> 99.5

Characteristics / Application areas

50.07.

- high resistance to all wear mechanisms, especially adhesive wear, with excellent sliding properties
- self-bonding due to high particle temperature and chemical reactivity
- coating hardness: 60 HRC
- applicable for temperatures up to approx. 320 °C
- not oxidation-resistant in air

3. IRON BASED MATERIALS

GTV article no.	Description	C	Mn	Si	Cr	Mo	Fe
50.30.	0.01 % C-steel	0.01	2	1	-	-	balance
50.18.	0.1 % C-steel	0.1	0.5	-	-	-	balance
50.32.	0.3 % C-steel CrMo4	0.3	0.8	0.2	1	0.2	balance
50.17.	0.4 % C-steel	0.4	0.5	0.2	-	-	balance
50.13.	0.8 % C-steel	0.8	0.5	0.2	-	-	balance
50.14.	1.0 % C-steel	1.0	0.3	0.3	1.5	-	balance

Characteristics / Application areas

50.30.
- machinable steel for repair and build-up
- hardness: 20 HRC

50.18.
- machinable steel for repair and build-up
- hardness: 30 HRC

50.32.
- machinable steel for repair and build-up
- engine block repair, internal coating of cylinders
- hardness: 35 - 40 HRC

50.17
- machinable steel for repair and build-up
- hardness: 40 HRC

50.13.
- machinable steel for repair and build-up
- engine block repair, internal coating of cylinders
- hardness: 50 HRC

50.14.
- grindable steel for repair and build-up
- hardness: 62 HRC

*The values presented in this chart are approximate values from reference analyses
Specified wires represent a selection only.
We ask for your detailed inquiry.

GTV article no.	Description	C	Mn	Si	Cr	Mo	Ni	Al	Fe
50.02.	13 % Cr-steel	-	0.5	0.3	12.5	-	-	-	balance
50.62.	17 % Cr-steel	-	< 1	0.5	15 - 17	1	-	-	balance
50.05.	18/8-steel	-	7	0.8	18.5	-	8	-	balance
50.01.	20/10-steel	-	1.7	0.5	20	-	10	-	balance
50.04.	CrNiMoMn-steel	-	1.7	0.9	18.5	2.6	12.2	-	balance
50.67.	FeCrAl-steel „AlCro“	-	-	-	20			5	balance

Characteristics / Application areas

50.02.
- machinable steel for repair and build-up
- hardness: 52 HRC
- oxidation-resistant

50.62.
- machinable steel for repair and build-up
- hardness: 55 HRC
- oxidation-resistant

50.05.
- machinable austenitic steel for repair and build-up
- high corrosion resistance in various media
- hardness: 30 - 35 HRC

50.01.
- machinable austenitic steel for repair and build-up
- high corrosion resistance in various media
- hardness: 35 HRC

50.04.
- machinable austenitic steel for repair and build-up
- high corrosion resistance in various media
- hardness: 32 HRC

50.67.
- corrosion protection of boiler- and exhaust pipes
- particularly suitable in sulphurous environment
- applicable for temperatures up to approx. 500 °C

4. COPPER BASED MATERIALS

GTV article no.	Description	Al	Mn	Sn	Zn	Fe	Cu
50.12.	copper 99%	-	-	-	-	-	> 99.8
50.06.	Fe aluminium-bronze	9,5	-	-		1,5	balance
51.06.	aluminium-bronze 94/6	7.7	0.22	-	-	-	balance
50.15.	CuSn 94/6	-	-	6 - 7	-	-	balance
50.16.	CuSn 88/12	-	-	11 - 12	-	-	balance
50.22.	CuZn 60/40	-	-	-	37	-	balance

Characteristics / Application areas

50.12.
- high electrical and thermal conductivity
- repair of parts made of copper based alloys
- hardness: 35 - 40 HB

50.06.
- bearing material featuring excellent gliding and dry-running operation properties
- repair of parts made of copper based alloys
- hardness: 100 HB
- applicable for temperatures up to approx. 230 °C

51.06.
- bearing material featuring excellent gliding and dry-running operation properties
- repair of parts made of copper based alloys
- hardness: 90 HB
- applicable for temperatures up to approx. 230 °C

50.15.
- bearing material featuring excellent gliding and dry-running operation properties
- repair of parts made of copper based alloys
- hardness: 195 – 225 HV
- applicable for temperatures up to approx. 230 °C

50.16.
- bearing material featuring excellent gliding and dry-running operation properties
- repair of parts made of copper based alloys
- hardness: 245 – 270 HV
- applicable for temperatures up to approx. 230 °C

50.22.
- bearing material featuring excellent gliding and dry-running operation properties
- repair of parts made of copper based alloys
- decorative applications
- coating hardness: 70 - 80 HB

5. NICKEL BASED MATERIALS

GTV article no.	Description	Al	Fe	Mn	Si	Ti	Cu	Cr	Ni
50.08.	nickel	-	-	-	-	-	-	-	> 99
50.00.6	Ni/Al 95/5	4.7	-	0.15	-	-	-	-	balance
52.00.2	Ni/Al 80/20 welted cored wire	20	-	-	-	-	-	-	balance
51.00.	Ni/Ti 96/4	-	-	0.4	0.3	3.5	-	-	balance
50.21.	Ni/Cu 65/35	-	1.5	0.1	-	-	33 - 35	-	balance
50.20.	Ni/Cr 80/20	-	-	-	-	-	-	20	balance
50.03.	Ni/Fe/Cr 60/25/15	-	25	-	-	-	-	15	balance

Characteristics / Application areas

50.08.

- machinable material for repair and build-up of nickel and nickel based alloys
- high temperature oxidation resistant and corrosion resistant in many media
- hardness: 55 - 60 HB

50.00.6

- excellent bonding agent
- machinable material for repair and build-up
- repair of components made of nickel based alloys
- hardness: 70 HB
- applicable for temperatures up to approx. 800 °C

52.00.2

- machinable material for repair and build-up
- high resistance to all wear mechanisms
- high toughness and impact resistance
- corrosion resistant in many media
- „self-bonding“ due to chemical reactivity of the components
- hardness: 225 HB
- applicable for temperatures up to approx. 700 °C

51.00.

- excellent bonding agent
- machinable material for repair and build-up
- repair of components made of nickel based alloys
- hardness: 75 - 85 HB
- applicable for temperatures up to approx. 800 °C

50.21.

- machinable material for repair and build-up
- hardness: 50 HB
- applicable up to approx. 550 °C (oxidising atmosphere), up to approx. 600 °C (reducing atmosphere)

50.03.

- excellent bond coat material
- machinable material for repair and build-up
- high hot gas corrosion and oxidation resistance
- high corrosion resistance in various media
- hardness: 90 HB

50.20.

- excellent bond coat material
- machinable material for repair and build-up
- high hot gas corrosion and oxidation resistance
- high corrosion resistance in various media
- hardness: 85 - 95 HB
- applicable for temperature up to approx. 980 °C

6. TIN BASED MATERIALS

GTV article no.	Description	Sb	Cu	Pb	Sn
50.70.	tin 99%	-	-	-	> 99
50.09.	tin-antimony (babbitt)	7.3	3.3	0.3	balance
50.69.	tin/copper 97/3	-	3 - 4	-	balance

Characteristics / Application areas

50.70.

- bearing material featuring excellent gliding and dry-running operation properties

50.09.

- bearing material featuring excellent gliding and dry-running operation properties

50.69.

- repair material e.g. for antiques or cast metal
- solderable