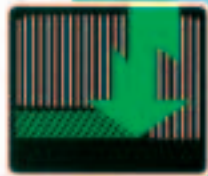




TECHNOGENIA



TECHNOGENIA S.A.
 Z.A. des Marais - BP 151
 74410 SAINT-JORIOZ - FRANCE
 Tél. : +33 (0)4 50 68 56 60
 Fax : +33 (0)4 50 68 62 77
 E-mail : technogenia@technogenia.fr
 Web Site : <http://www.technogenia.com>



TECHNOPOWDERS

The solution to a wide range of resurfacing problems

The Technopowders products cover range of hardness from 20Rc to 60Rc and even greater with tungsten carbide powders.



Imprimerie SADAG - 01200 Bellegarde-sur-Vaeraine - ☎ 04 50 48 25 35 - E-mail : Sadags@vanadoo.fr

TECHNOGENIA



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Technogenia markets three classes of Technopowder®.

1. Nickel-based resurfacing powders
2. Premixed fused tungsten carbide powders
3. Lasercarb® powders for special laser applications

The Technopowders have F.D.A. approval and can therefore be used in the agrifood industry.

Sphérotène® is a very high hardness fused tungsten carbide in the form of spherical grains.

Other compositions and types of powder can be supplied on request.



Nickel-based Resurfacing Powders

Supplied in 1 and 5 kg pots

Technopowder 20Rc: Nickel Resurfacing Powder

Hardness: 20Rc
Base composition : Ni B Si
Machining: possible
Grinding: possible
Main application: resurfacing of glassworks moulds
Method of application:
oxyacetylene torch: Technokit 2000

Technopowder MB40: Underlayer Powder

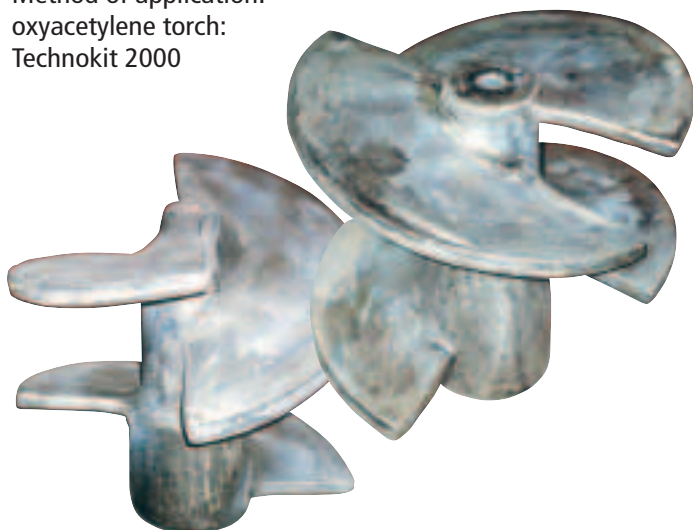
Hardness: 40Rc
Main application: rust-inhibiting underlayer for Technodur® and Technosphère®
Method of application:
oxyacetylene torch: Technokit 2000

Technopowder 40 RC

Hardness 40 RC
Chrome nickel powder
Main application: glassworks punches
Method of application: oxyacetylene torch:
Technokit 2000

Technopowder 60Rc : TP 60Rc

Hardness: 60Rc
Main application: finishing or sliding coat for barrel extruder and screw conveyor faces
Method of application:
oxyacetylene torch:
Technokit 2000



Premixed Carbide Powders

Supplied in 1kg pots

Technopowder 2030

Nickel base + crushed fused tungsten carbide
1800 to 2400 Hv
Applications: thin hardfacing
Machining: not possible
Grinding: possible
Method of Application:
oxyacetylene torch: Technokit 2000

Technopowder 40/40

Nickel base + crushed fused tungsten carbide:
1800 to 2400 Hv
Applications: Hardfacing, medium thicknesses, causes very few deformations.
Crack-free hardfacing
Recommended for stainless steels, for example.
Machining: not possible
Grinding: possible / depending on the shape
Method of application: oxyacetylene torch:
Technokit 2000

Technopowder 4000

Nickel base + : Sphérotène® 3000 Hv ± 500 Hv
Very high hardness spherical fused tungsten carbide
Applications: very high performance surfacing, low thicknesses
Machining: not possible
Grinding: possible / depending on the shape
Method of application: oxyacetylene torch: Technokit 2000

Technopowder 4040S

Nickel base + : Sphérotène® 3000 Hv ± 500 Hv
Very high hardness spherical fused tungsten carbide
Applications: very high performance resurfacing, medium thicknesses on subfinishes susceptible to deformation, e.g. stainless steels.
Crack-free resurfacing.
Machining: not possible
Grinding: possible / depending on the shape
Method of application: oxyacetylene torch:
Technokit 2000

Special Powders for Laser Applications

Supplied in 1kg pots

Technolase 60 S

Base Nickel + Sphérotène®: very high hardness spherical fused tungsten carbide
Special powder for laser resurfacing.
Applications: boring tools, screens, protective plates, etc., for all types of parts, including weldable cast iron and stainless steel.
Machining: not possible
Grinding: possible / depending on the shape
Thickness: 0.5 to 3 mm (up to 5mm possible)
Method of application: heavy-duty laser
Technogénia's Lasercarb® process

Technolase 40S

Nickel base + Sphérotène®: very high hardness spherical fused tungsten carbide
Special powder for laser resurfacing
Applications: pump shafts, rolls in the iron and steel and paper industries, for all types of parts, including weldable cast iron and stainless steel.
Machining: not possible
Grinding: possible / depending on the shape
Thickness: 0.5 to 6 mm (up to 8 mm possible)
Method of application: heavy-duty laser
Technogénia's Lasercarb® process



Summary Table : TechnoPowder

Item	Base Alloy	Alloy Hardness	Melting Point	Deposit Density	Spherotene Carbide Hardness	Crushed Carbide Hardness	Carbide Concentration	Carbide Size	Recomm. Dep. Thickness	Cat.
20RC	NiCr	20 HRc	1050°C	8.6	no				1 to 3mm	Powder NiCr
MB40	NiCr	40 HRc	1087°C	8.2	no				0.5 mm	Powder NiCr
TP 40 RC	NiCr	40 HRc	1087°C	8.2	no				0.5 to 3 mm	Powder NiCr
TP 60 RC	NiCr	60 HRc	1038°C	7.8	no				1 to 2mm	Powder NiCr
TP2030	NiCr	60 HRc	1038°C	11.2	no	1800 / 2400 HV	40% by weight	40-80µ	1 to 2mm	Powder WC
TP40/40	NiCr	40 HRc	1087°C	10.5	no	1800 / 2400 HV	40% by weight	40-100µ	1 to 2mm	Powder WC
TP4000	NiCr	60 HRc	1038°C	12	3000± 500 HV		40% by weight	40-100µ	1 to 2mm	Powder WC Spherotene
TP 4040S	NiCr	40 HRc	1087°C	10.5	3000± 500 HV		40% by weight	40-100µ	1 to 2mm	Powder WC Spherotene
T.LASE 60S	NiCr	60 HRc	1038°C	13	3000± 500 HV		+ 60% by weight	40-160µ	0.5 to 3mm	Powder Lasercarb®
T.LASE 40S	NiCr	40 HRc	1087°C	13	3000± 500 HV		+60% by weight	40-160µ	0.5 to 8mm	Powder Lasercarb®
		average							Recomm. Th.	