APPLICATION PROCEDURE FOR TECHNOSPHERE AND TECHNODUR FLEXIBLE CORDS

PREPARATION OF THE NEW SURFACE TO BE TREATED

• CLEANING: SAND BLASTING OR HAND GRINDING

It is essential to do a good cleaning job by grinding the area to be treated for the good deposit of hard facing flexible rods. The angles must be « broken ».

It is more advisable to grind the part than to sand it.

The part to be hardfaced must be accurately fixed to an adequate support permitting to deposit the cords flatly and to handle the part easily.

•POWDERING OF THE PART OR AREA TO BE PROTECTED

It is indispensable to powder the new part because:

It protects the base metal from oxydation

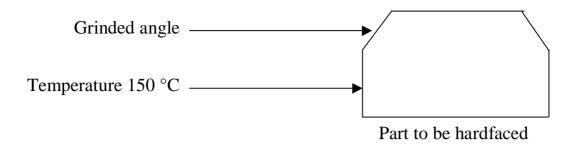
It permits the optimum bonding of Technosphere or Technodur to the metal base and to control the good temperature of the part or the area to be hardfaced.

• OPERATIVE PROCEDURE

Preheating of the part or area to 150°C Pressures to apply for the torch kit TECHNO 2000

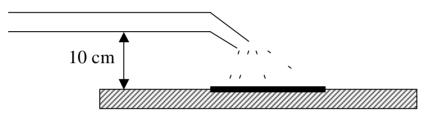
Oxygen: 5 to 6 BarAcetylene: 1 Bar

Powder to apply: Technopowder MB 40



Distance of powdering $\approx 10 \text{ cm}$

There is no need to apply the powdering of the part if it has been already coated with Technosphere or Technodur cords but it must be cleaned by sanding.



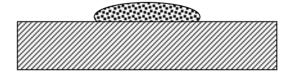
Powdering procedure

HOW TO APPLY TECHNOSPHERE

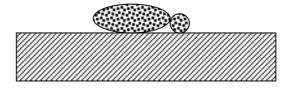
The powder has to be melt before depositing the cord on a new part. If the part has already been coated, the Ni-Cr matrix of the previous coating has to melt.

During these two operations the local temperature is over 350°C. You can start to deposit the Technosphere. The deposit of the Technosphere can be operated.

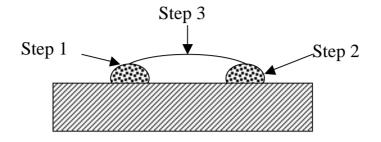
If the temperature of the part is good, the Ni-Cr powder is correctly melted.



If the temperature is inadequate, the molten of Ni-Cr matrix is not correct so there is no brazing but a simple sticking.



Coating of an area: Steps 1-2-3



RECOMMENDATIONS

ü The deposit of the Technosphere-Technodur cords must always be done flatly

ü The pressures to be respected for the torch kit Techno 2000 :

Oxygen: 4 to 6 BarAcetylene: 0.8 to 1 Bar

ü The Technosphere and Technodur cords can be rewelded to themselves without any problem.

ü The mini thicknesses to be respected are the following:

Particle sizes	Thickness
GN	2-3 mm
GG	3-5 mm
TGG	4 to 6 mm

Do not exceed 10 mm for the thickness of the deposit. The most efficient thicknesses are between 3 and 7 mm.

THESE RECOMMENDATIONS HAVE TO BE TAKEN INTO CONSIDERATION FOR TECHNOSPHERE-TECHNODUR CORDS