

S + g abrasives Ltd

THE CUTTING EDGE OF INDUSTRY

Proudly New Zealand Owned & Operated

STRUCTURE OF THE WHEEL ...THE SECRET OF SAFETY IN THE HEART OF THE WHEEL!

Globe wheels are manufactured in the maximum respect of safety rules and are severely tested in order to grant a safe operation, even in the most difficult conditions. Layers of abrasive mixture are alternated with fiberglass cloths (European production) impregnated with resins. The strong adhesion between the reinforcing elements and the mixture binder gives the wheel convenient strength features.

Special care is given to wheels' balancing that in Globe products always comply with still more strict values than those of the UNI EN ISO 6103 reference norm.

An accurate balancing is achieved thanks to the original cross filling of the mixture up to diameter 230 mm and rotary distribution for diameters higher than 230 mm.

Tolerance limits for the bore conform to UNI EN ISO 525. Bores that are too small prevent proper mounting and bores that are too large cause vibrations due to the eccentric rotation of the wheel.

The wheels assembled with their individual components, layers of abrasive mixture alternated with reinforcement cloths (fibreglasses impregnated with phenolic resins) are pressed into fully automatic machines, transferred on baking stands, loaded on trolleys that are then pushed into polymerization process tunnels.

Globe grinding wheels are structurally conceived with a fine grit top layer, to better absorb impact and maintain even wear around the edge, and with coarse grit bottom layers to maximize removal capacity.

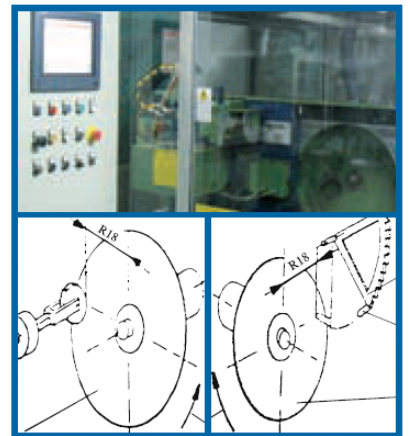
Controlled by sophisticated electronic instruments, our tunnels generate a precise cycle of temperatures that are gradually increased up to 180°C.

The constancy of this cycle ensures the wheels receive a perfect thermal treatment, resulting in optimal polymerization and performance.

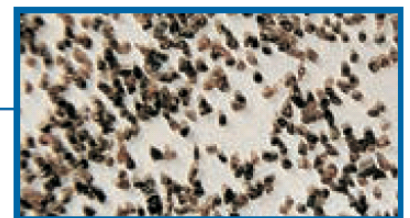
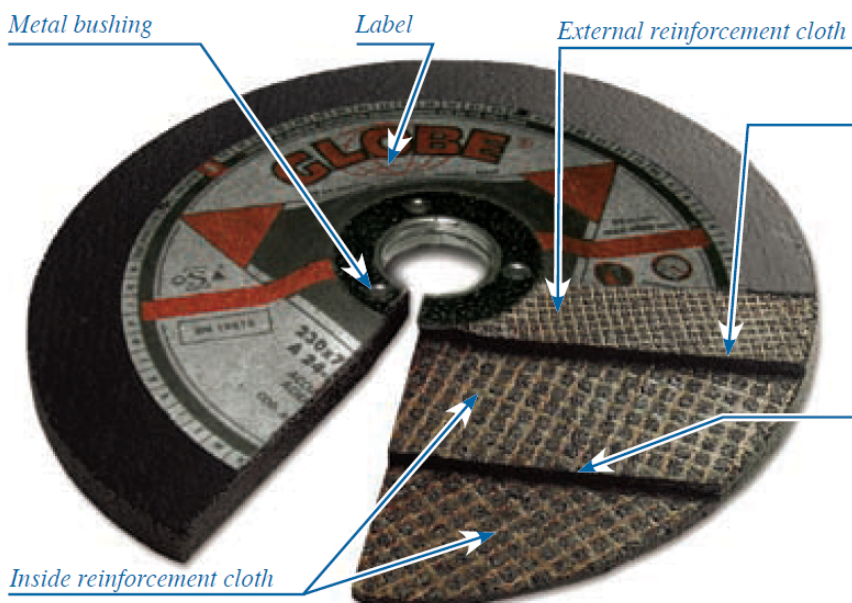
The label is also pressed together with the wheel to enable identification and guarantees that the product is original.



Burst test machine



Side load test and impact test



Abrasive grains used in the layer of fine grit mixture enlarged 4 times



Abrasive grains used in the layer of coarse grit mixture enlarged 4 times

READING THE LABEL.



1) Manufacturer (name, address and declaration of origin):

IAP - GLOBE srl. Via La Spezia, 160 - 43126 Parma - Italia

2) OSA: Membership brand

Organization for the Safety of Abrasives

3) Sizes of the wheel:

external diameter, thickness and bore.

4) Colored stripe:

green: 100 m/s peripheral speed

yellow: 63 m/s peripheral speed

red: 80 m/s peripheral speed

blue: 45 m/s peripheral speed

5) Wheel's operating speed:

in RPM and m/s

6) Content specifications:

Iron, Sulphur, Chlorine

7) Type of abrasive:

A-Corundum (Aluminium oxide)

Z-Alumina zirconia

C-Silicon carbide

SG-Sol Gel (ceramic abrasive)

8) Grit size:

coarse: 16/24

medium: 30/60

fine: 70/120

9) Hardness:

P-Q: medium

R-S: hard

T: very hard

10) Directions for specific applications:

Al: Aluminium

G: Cast iron

X: Stainless steel

E: Building materials

11) Type of binder:

B = phenolic resin

12) Type of reinforcements:

F = Fiberglass cloths

13) Colour of identification of the type of use:

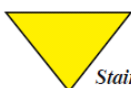
the colour of triangles identifies the type of material where to use the wheel.



Iron/Steel



Iron



Stainless steel



Cast Iron



Stone



Aluminium

14) Safety pictograms:



Follow
safety
indications



Use of
coolant
not
allowed



Use of
coolant
allowed



Use
safety
guard



Use only with
backing pad
(fiber
sanding discs)



Do not
use if
damaged



Protect
eyes



Protect
ears



Protect
hands



Protect
lungs



Do not use
on portable
machines



Not
suitable
for
grinding

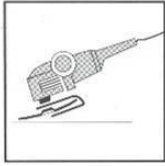
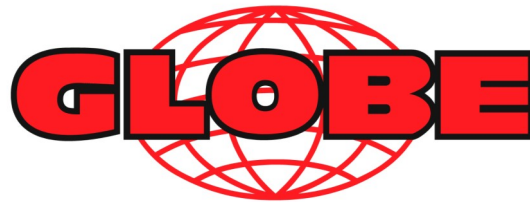
15) Decoding production data through the "zero" point:

useful for decoding the cuts on the label's external diameter, showing the expiry date (dd,mm,yy) and the operator in charge of the pressing phase, through the use of a special template for decoding data. The template can be downloaded from our web site page: www.globeabrasives.com/recalls where instructions can be found for its correct use.

Wheels have a 3 year validity, therefore to trace the manufacturing year, 3 years have to be subtracted from the expiry year marked on the label (day and month of expiry correspond to day and month of production). Every operator in charge of wheels' manufacturing is univocally identified by a code: combinations of letters from a to v. The operator in charge of checks in the final stage of product's choice before boxing is identified by the initials printed on the box label, where also the production date and boxing date are shown.

16) Wheel's bushing:

the expiry date (V=validity), shown with month and year (mm, yy) is also printed on the wheel's bushing.



SHEET 03
TYPE 29

TURBOTWISTER THE FLEXIBLE WHEEL



TURBOTWISTER evolved from the semi-flexible Superflex disc which Globe had been producing for many years.

The **original patent** was complemented by a **new patent** regarding the disc's working surface, which has grooves forming a diamond pattern, with size increasing towards the outside and forming an evolving spiral.

This peculiar shape contributed to significantly improve its removal and cooling rate, thanks to increased roughness and to air being forced through the helicoidal grooves on contact with the work-piece.

The result of this is improved wheel and material surface cooling.

It comes in two types of mixture, for metals (corundum) and for stone-marble, plastic and non ferrous metals (silicon carbide).

A wide range of grit is also available to make sure that the tool is suited to the degree of finishing to be achieved.

By enhancing the reinforcements, Globe have obtained a disc that is so resistant it can even be used **without an elastic backing pad**, like any other wheel.

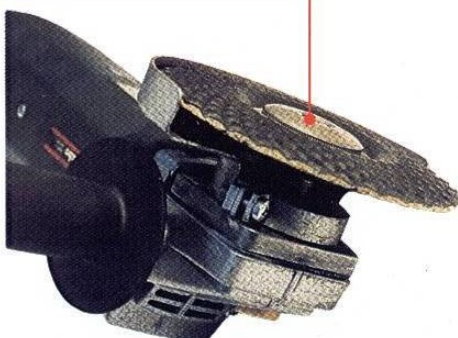
The extra-deep recess allows for **complete housing of the automatic ring nuts** of modern grinders.

This means nothing will protrude from the disc making it possible to perform flat grinding, which is the most common application for this product.

The type for metal is suitable for all ferrous and non ferrous metals as well as stainless steel, with a guarantee that ferrites, sulphur and chlorine compounds are less than 0.1% (certificates available).

The exceptional flexibility lets the disc adhere perfectly to curved surfaces. It reduces noise levels improving comfort of use. It is an excellent substitute for flap discs.

Even the thickest automatic ring nuts can fit fully inside the wheel depression.



The new grooved surface guarantees greater power and colder cutting on all metals.



The nylon backing pad is no longer needed.

Extreme flexibility to easily adapt to curved surfaces



Use-by date