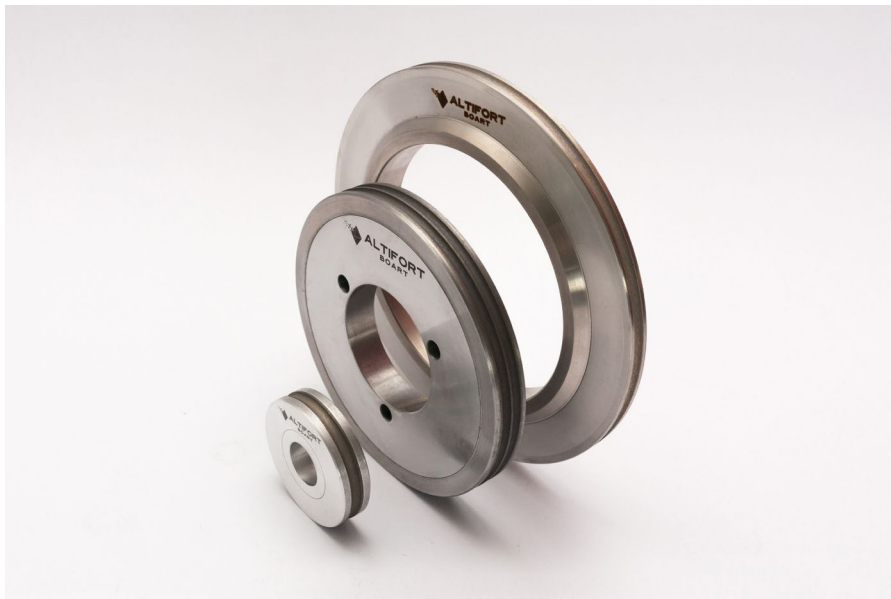


Peripheral Wheels

- [Round edge grinding](#)

Standard

- Pencil edging wheels – Type 1J6Y
- Bevelling wheels – Type 1DD6Y
- Peripheral wheels
 - Types 1A1, 14A1, 1A6Q
 - Type 1A1S



Introduction

The concept of flat glass includes a wide spectrum of product groups such as window glass, automotive glass, mirrors, bullet-proof glass, refractory glass, ...

All these products are manufactured from large glass sheets and require processes such as sawing, cutting, grinding, drilling and polishing.

Edge working, by pencil edging in construction and furniture industries, is most important not only for safety purposes (not to hurt the user) but also from an aesthetic point of view.

Peripheral Wheels

Peripheral wheels are mostly used where very special profiles on the glass edge are required (the best-known profile is the so-called C-profile)

The horizontal CNC machines only use peripheral wheels.

Due to high material removal needs, in most cases, for the manufacturing of these edges, the diamond layer will have a natural deformation tendency after a certain working period.

The wheel will thus have to be reprofiled after this grinding period to retain its original profile.

In addition to the type of wheel used, the actual construction of the machine, the profile to be obtained and the operating conditions (feed speed, rotation, ...) have a direct influence on both geometry and diamond concentration.

When choosing the diamond specification, the parameters of lifetime and tool abrasiveness must be considered.

Therefore, a soft bond allows very high speed but reduces the lifetime of the tool.

Round Edge Grinding

Most machines performing this profile use between 1 and 3 diamond-grinding wheels.

Grit sizes:

- Roughing: D181 to D151
- Semi-roughing: D126 to D91
- Finishing: D76 to D54

These grit sizes depend on the glass thickness.

The concentration should be between 40 and 60.

Horizontal and vertical machines are used for this kind of working process.

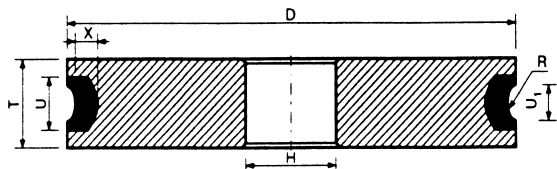
Wear resistance bonds and a sufficient abrasiveness are necessary to keep the profile of the wheel as long as possible; when the profile loses its shape ALTIFORT-BOART offers a reprofiling service by conventional or electro discharge machining.

STANDARD

Order Examples

Pencil edging wheels

Type 1J6Y



Order example

1J6Y D200 verre 5mm – Rough – H60H7 + 3 holes
D10/100 - Benteler machine - Pos:1 Alu Body

D 10 → 40 mm with fitting R1/2"

D 50 → 250 mm

Glass thickness 2 → 19 mm

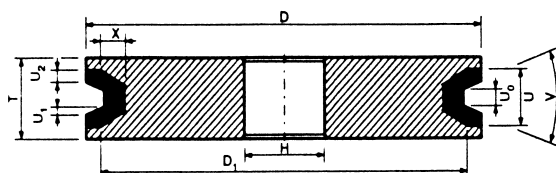
Grits Rough – Medium - Fine

Bodies Steel, aluminium or SST and epoxy

U,U1,R According to glass thickness
T According to machine type

Double aris and edge wheels

Type 1DD6Y



Order example

1DD6Y – Glass 5 mm – D200 – H70H7 + 3 holes
D10/100 – Medium
Benteler machine. Alu Body

D 10 → 40 mm with fitting R1/2"

D 50 → 250 mm

V 60° & 90°

E

Glass thickness 3 → 19 mm

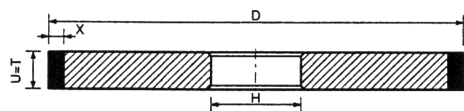
Grits Rough – Medium - Fine

Bodies : Steel, aluminium or SST and epoxy

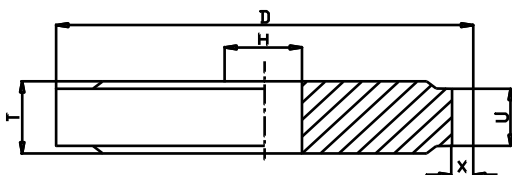
U,U0,U1,U2 According to glass thickness
T According to machine type

Peripheral wheels

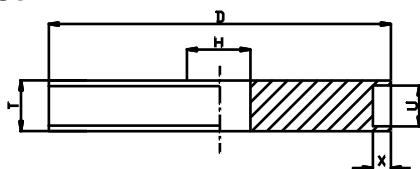
Type 1A1



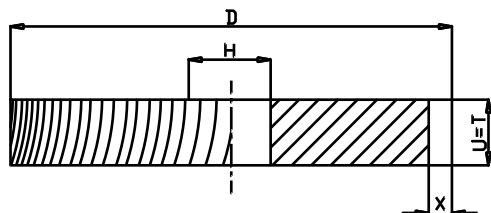
Type 14A1



Type 1A6Q



Type 1A1S



Peripheral wheel types 1A1, 14A1, 1A6Q

D	25 → 250 mm
Grits	Rough – Medium - Fine
Bodies	Steel, aluminium or SST and epoxy
U	According to glass thickness
T	According to machine type

Order example

1A1 Glass 5 mm – D100 – H22H7 Medium
Lovati machine. Steel Body

Peripheral wheel type 1A1S

D	16 & 20 mm with fitting R1/2"
D	100 → 200 mm
Grits	According to glass thickness
Body	Steel
T	According to machine type

Order example

1A1S Glass 12 mm D100 – H22H7
Intermac machine