

Special Form PVA Grinding Wheel

(Cylinder abrasive grinding wheel for plate making in photogravure printing)

As the demand for printing precision has become stricter over the years,

abrasive grinding wheel traces that are directly transcribed to printed materials have come to be regarded as a problem of round-shaped grinding wheels that are traditionally used as cylinder abrasive grinding wheels for plate making in photogravure printing. The octagon grinding wheel was invented to meet the demand for a grinding wheel shape which prevents traces on transcripts.

(Patent number 3006591)



Octagon grinding wheel shape

A grinding wheel shape that generates abrasive traces which are not easily transferred to printed materials. Further improved grinding wheels have been developed.

(Applied for design registration)

New grinding wheel Features of 704-type / 878-type

- [1] Traces are not easily transferred to printed materials.
- [2] The grinding wheel lifetime is the same as with round-shaped grinding wheel.
- [3] Damage does not occur to the grinding wheel during polishing.
- [4] The abrasive traces are uniformly aligned, and pitch traces are not generated.
- [5] Can be used by any abrasive machine.





Shape of 704-type grinding wheel

Shape of 878-type grinding wheel



Abrasive trace of 704-type grinding wheel



Abrasive trace of 878-type grinding wheel

Table of abrasive attributes by grinding wheel shapes

Grinding wheel shapes	Cutting amount (µ / reciprocation)	Grinding wheel consumption amount (µ / reciprocation)	Grinding wheel consumption in comparison with round-shaped grinding wheel
Round-shaped grinding wheel	8.0	700	1.0
704-type grinding wheel	8.5	700	1.0
878-type grinding wheel	8.4	700	1.0
Octagon grinding wheel	8.0	800	1.2

[Conditions of abrasive evaluation] Grinding wheel used: SD-R #2000 of Shinano Electric Refining Abrasive machine: SM-W of Sankoh Machinery Abrasive load: 30kg Number of grinding wheel revolutions: 950r.p.m. Number of roll revolutions: 200r.p.m. Feed speed: 300mm/min Abrasive Number: three reciprocations (Measured by Shinano Electric Refining)



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