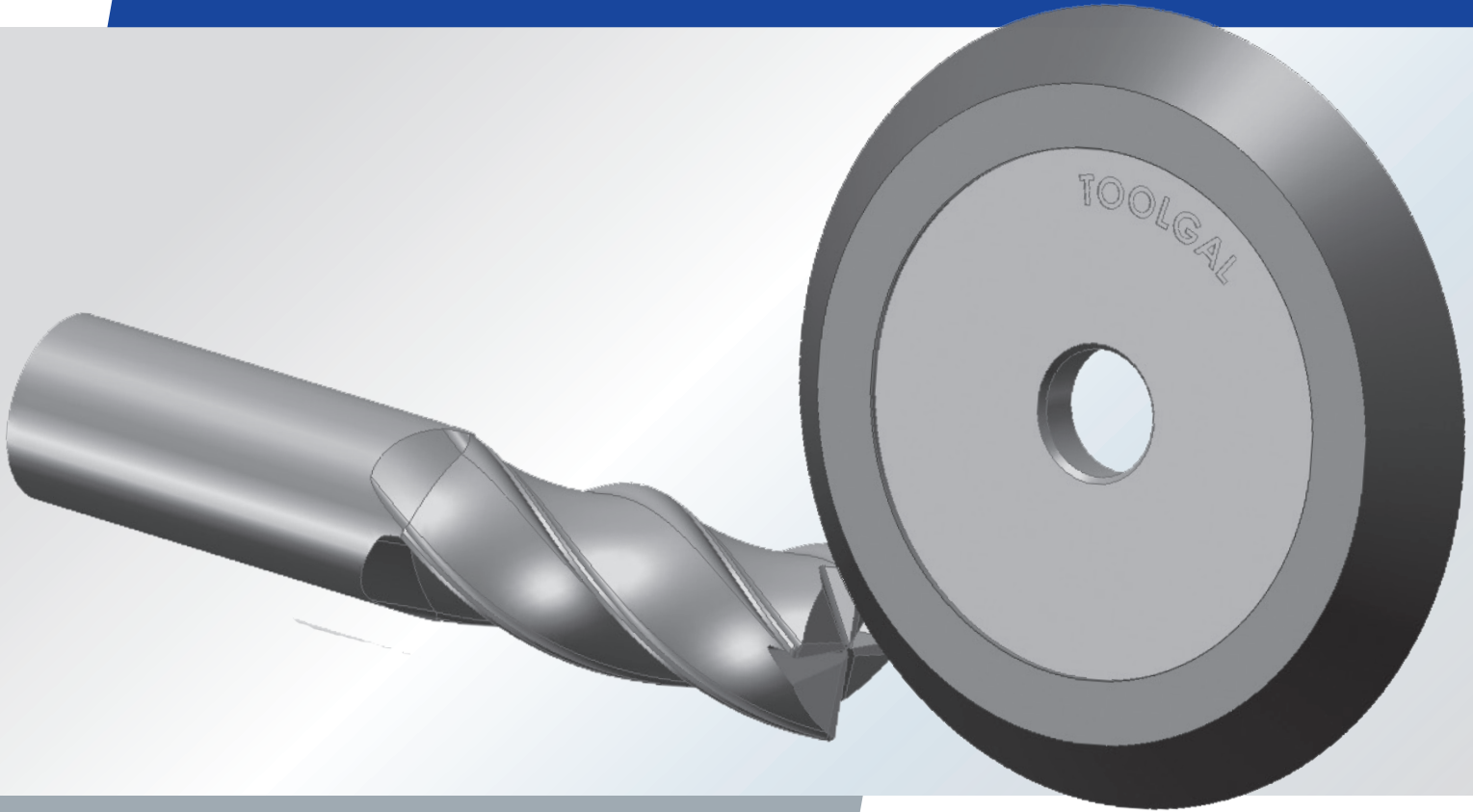




TOOLGAL
Innovative Diamond Tools

GASH GRINDING: THE CHALLENGE



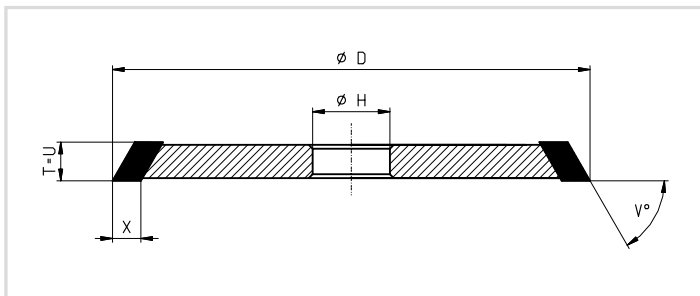
- Gashing requires higher profile consistency (of the grinding wheel) in comparison to fluting, due to the high edge quality required of carbide tools. However, there may still be substantial material removal in the gashing of end cutters. Hence, the demand for large removal capacity is high in this case as well.
- In the gashing operation, contact area is relatively large, requiring proper cooling.
- A peripheral speed of 22-25 m/s is recommended.
- Higher speeds make the wheel work harder, thus requiring more cooling.
- Lower speeds make the wheel work softer, which means rapid wear, but less cooling required.
- The Toolgal RM6/5 Gash Grinding wheels are very effective in the gashing operation, with very large stock removal capacity and high profile consistency.
- Good profile and corner stability
- Fast cutting speed
- Sharp wheel edge
- Optimal grit size: D64 C100 (270#)

Suitable Shapes

1V1, 3V1, 14V1, 12V9

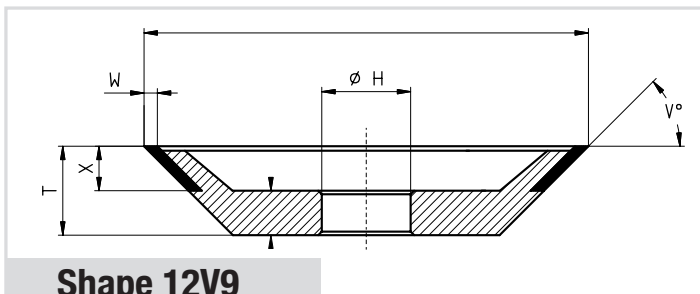
Toolgal Standard Program for Gash Grinding

| Specifications | | Recommended Cutting Speed [m/s] |
|----------------|----------------|---------------------------------|
| Diamond | RM6/5 D64 C100 | 20-25 |
| CBN | RM9 B107 V240 | 25-40 |



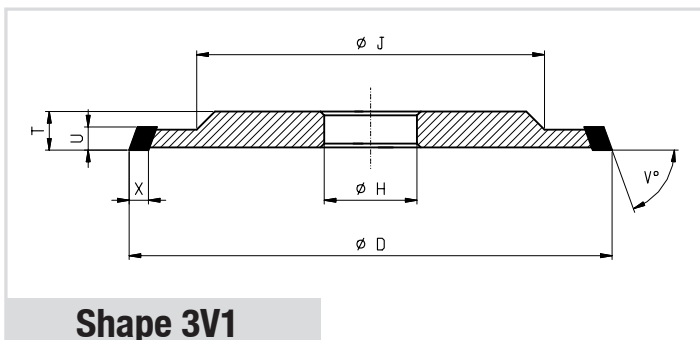
Shape 1V1

| 1V1 | | | | Bonds Available | | |
|----------|--------------|---|----|-----------------|-----|-----|
| D ϕ | T | X | X | Diamond | CBN | |
| 50 | 6,8,10 | 6 | 10 | RM6 | RM5 | RM9 |
| 75 | 6,8,10,12,15 | 6 | 10 | RM6 | RM5 | RM9 |
| 100 | 6,8,10,12,15 | 6 | 10 | RM6 | RM5 | RM9 |
| 125 | 6,8,10,12,15 | 6 | 10 | RM6 | RM5 | RM9 |

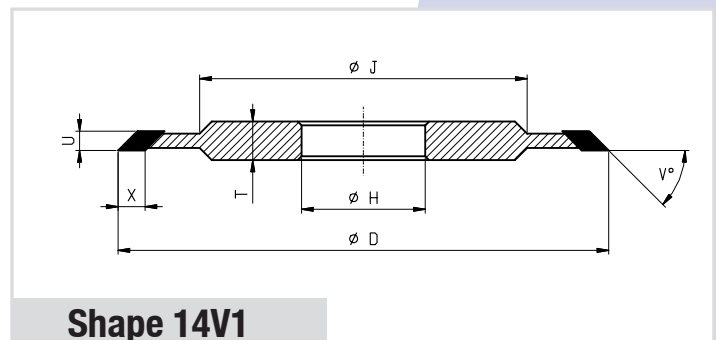


Shape 12V9

| 12V9 | | | Bonds Available | | |
|------|-----|----|-----------------|-----|-----|
| D | U | X | Diamond | CBN | |
| 75 | 2,3 | 10 | RM6 | RM5 | RM9 |
| 100 | 2,3 | 10 | RM6 | RM5 | RM9 |
| 125 | 2,3 | 10 | RM6 | RM5 | RM9 |



Shape 3V1



Shape 14V1

| 3V1 14V1 | | | | Bonds Available | | |
|----------|--------------|-------|--------|-----------------|-----|-----|
| D | U | X=6mm | X=10mm | Diamond | CBN | |
| 50 | 2,4,5 | 6 | | RM5 | | RM9 |
| | 6,8,10 | 6 | 10 | RM5 | RM6 | RM9 |
| 75 | 2,3,4,5 | 6 | | RM5 | | RM9 |
| | 6,8,10,12,15 | 6 | 10 | RM5 | RM6 | RM9 |
| 100 | 2,3,4,5 | 6 | | RM5 | | RM9 |
| | 6,8,10,12,15 | 6 | 10 | RM5 | RM6 | RM9 |
| 125 | 2,3,4,5 | 6 | | RM5 | | RM9 |
| | 6,8,10,12,15 | 6 | 10 | RM5 | RM6 | RM9 |



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