VIBROCUT

# VibroCut oscillate

Improves your manufacturing processes
and increases the efficiency of your production!

# Oscillation-assisted turning - VibroCut *oscillate*

## Product line - VibroCut *oscillate*

### Innovative, retrofittable tool holders:

- Driven with live tool of the turret
- Rigid bearing of the tool holder
- Highest oscillation parameters

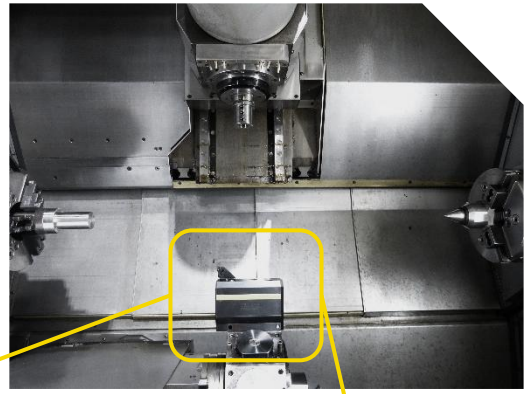
### Performance parameters:

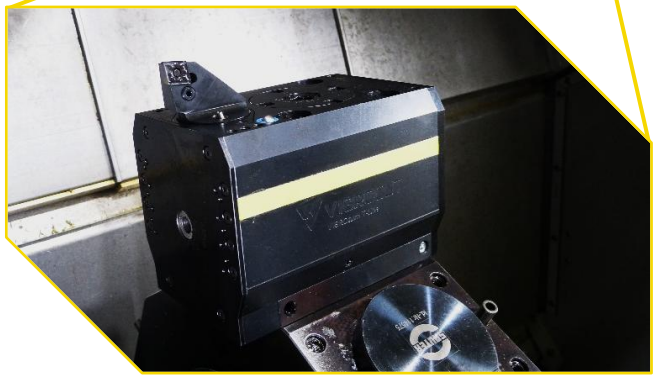
| | |
|---|---|
| Frequency: | $f_{vib}$ = 1...100 Hz |
| Stroke (adjustable): | Â = 0...0.6 mm |
| Process forces: | $f_{c,max}$ = 9 kN |

### Unique position:

- Unique performance
- Gentle on the machine compared to control cycles
- Reliable and adjustable chip breaking
- Control-independent

➢ Flexible retrofitting independent of the machine manufacturer!

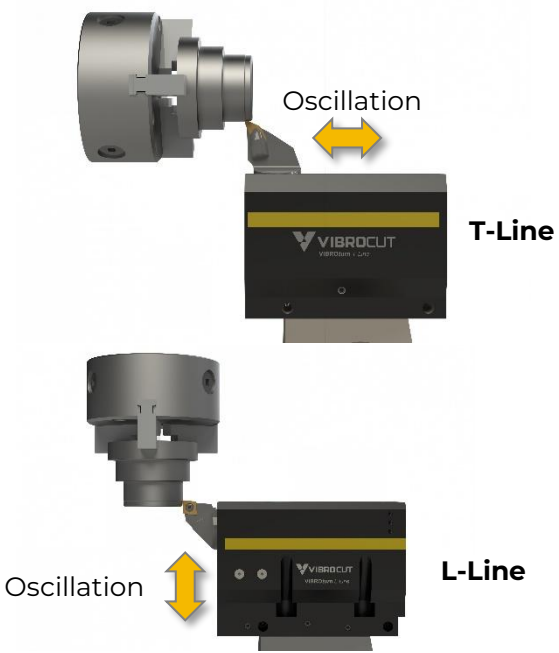


Oscillating system for turret axle

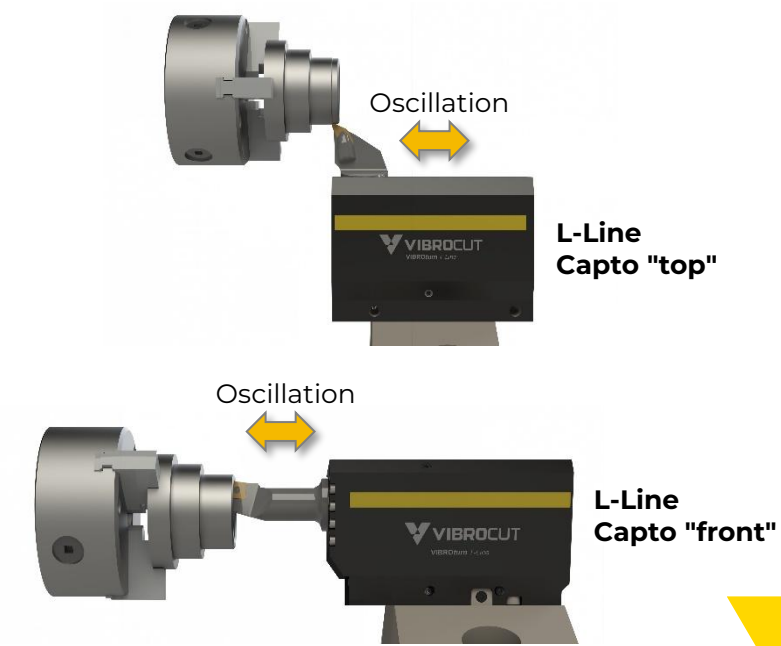
# Oscillation-assisted turning - VibroCut *oscillate*

## VibroCut *oscillate - Tool holder variants*

Different directions of movement




Different tool orientations



## VibroCut *oscillate - Tool holder variants*

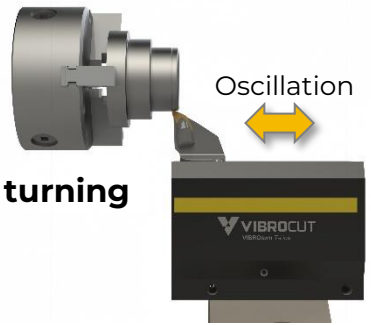
Various machine interfaces


Various tools and technologies

# Oscillation-assisted turning - VibroCut *oscillate*

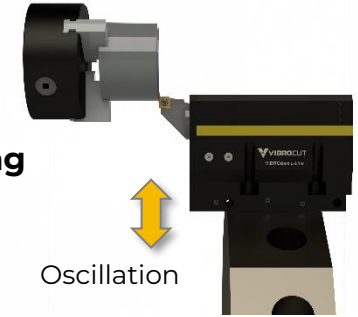
## VibroCut *oscillate - Process variants*

**External longitudinal turning**

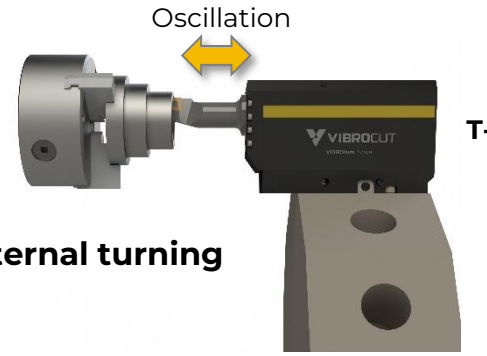



**T-Line**

**Face turning**

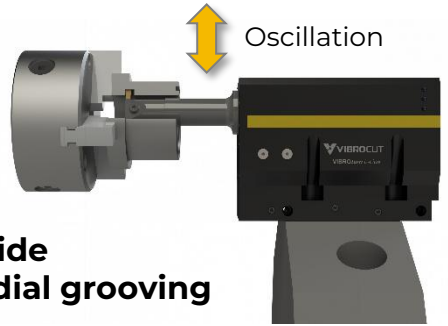



**L-Line**




**Internal turning**

**T-Line**



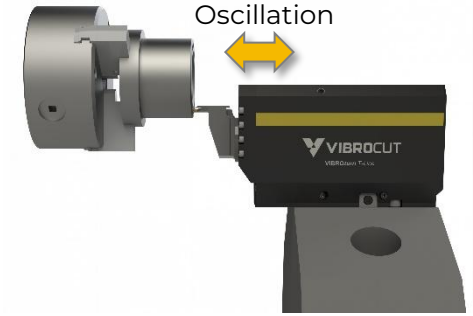

**Inside Radial grooving**

**L-Line**

# Oscillation-assisted turning - VibroCut *oscillate*

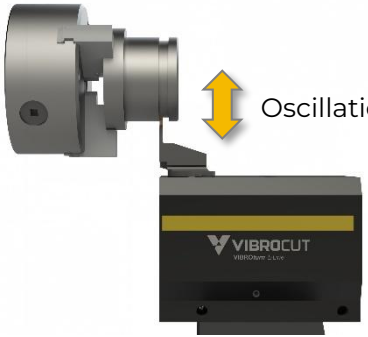
## VibroCut *oscillate - Process variants*

**Axial grooving**

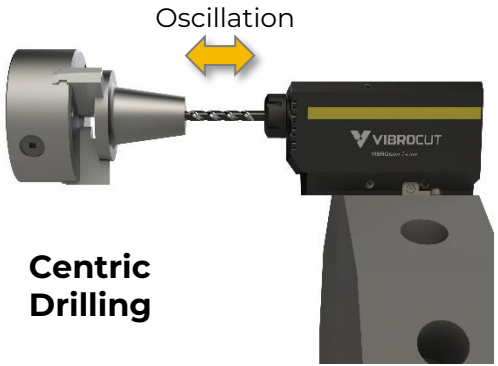



**T-Line**

**Radial grooving**




**L-Line**




**Centric Drilling**

**T-Line**

# Oscillation-assisted turning - VibroCut *oscillate*

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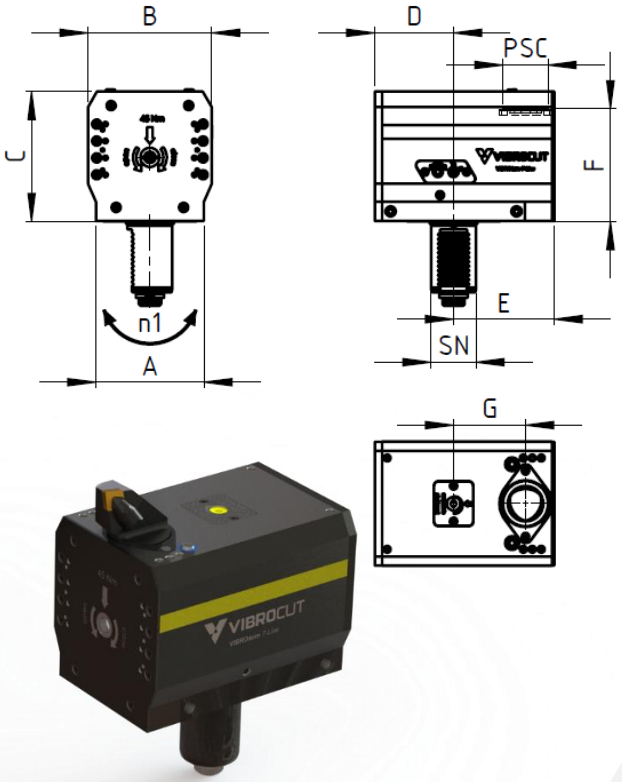
## T-LINE

Orthogonal oscillation direction towards the driving axle

| Dimensions | | Compact | Standard | Heavy |
|---|---|---|---|---|
| | A | 60...75* | 96 | 110 |
| | B | 85...90 | 110 | 140 |
| | C | 90 | 115 | 145 |
| | D | 65 | 70 | 75...80 |
| | E | 70 | 90 | 119 |
| | F | 75 | 100 | 128 |
| | G | 50 | 64 | 75 |
| **Interface** | | | | |
| Machine interface** | | VDI 25<br>VDI 30<br>BMT 45 | VDI 40<br>VDI 50<br>BMT 55<br>BMT 65 | VDI 60<br>VDI 70<br>BMT 65<br>BMT 75 |
| Couplings** | | Double d (DIN 1809,...), Gear (DIN 5480, DIN 5482,...) | | |
| Tool interface** | | PSC 32 | PSC 40 | PSC 63 |
| **Specific information** | | | | |
| Maximum frequency | | 100 Hz | 100 Hz | 60 Hz |
| Maximum Amplitude | | 0,4 mm | 0,6 mm | 0,6 mm |
| Coolant pressure (IKZ+AKZ) | | 20 bar | 20 bar | 20 bar |
| Process forces | | 5 kN | 9 kN | 12 kN |




* depending on machine interface
** Special versions on request

# Oscillation-assisted turning - VibroCut *oscillate*

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## L-LINE

Lateral oscillation direction towards the driving axle

| Dimensions | | Compact | Standard | Heavy |
|---|---|---|---|---|
| | A | 60-75* | 96 | 110 |
| | B | 90 | 110 | 140 |
| | C | 90 | 120 | 154 |
| | D | 65 | 70 | 75 |
| | E | 95 | 95 | 123 |
| | F | 80 | 81,5 | 106 |
| | G | 69 | 95 | 110 |
| **Interfaces** | | | | |
| Machine interface** | | VDI 25<br>VDI 30<br>BMT 45 | VDI 40<br>VDI 50<br>BMT 55<br>BMT 65 | VDI 60<br>VDI 70<br>BMT 65<br>BMT 75 |
| Couplings** | | Double d (DIN 1809,...), Gear (DIN 5480, DIN 5482,...) | | |
| Tool interface** | | PSC 32 | PSC 40 | PSC 63 |
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| Maximum frequency | | 100 Hz | 100 Hz | 60 Hz |
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| Coolant pressure (IKZ+AKZ) | | 20 bar | 20 bar | 20 bar |
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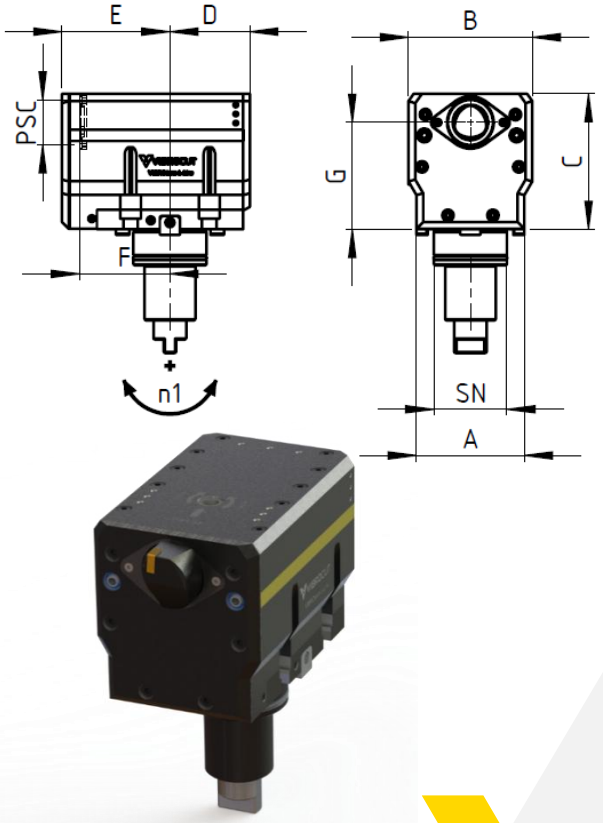


* depending on machine interface
** Special versions on request

# VibroCut – Hybdrid machining

## Contact details


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*"VibroCut combines technique and technology for hybrid machining"*