

# Product Information

## HV5R Series for Aluminum

Mil-Tec's HV5R series has been designed for **ramping, helical interpolation** and general milling in aluminum. At ramp angles up to 20°, the HV5R is ideal for HSM and 3D milling. A precision ground mirror finish and Super Shear geometry provides aggressive cutting action. The HV5R insert can be used uncoated or combined with SmoothCoat A1 and TC coatings for added lubricity and wear resistance.



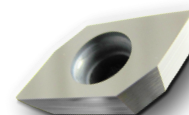
| HV5R Ramping Series |       |        |        |       |     |         |        |
|---------------------|-------|--------|--------|-------|-----|---------|--------|
| Part#               | EDP#  | Dia    | Shank  | Reach | OAL | Inserts | List   |
| HV5R-8-2-8          | 10300 | 1"     | 1"     | 1.8"  | 4"  | 2       | 137.50 |
| HV5R-8-2-8-5        | 10301 | 1"     | 1"     | 2.8"  | 5"  | 2       | 192.50 |
| HV5R-8-2-8-6        | 10302 | 1"     | 1"     | 3.8"  | 6"  | 2       | 159.50 |
| HV5R-8-2-8-7        | 10303 | 1"     | 1"     | 4.8"  | 7"  | 2       | 220.00 |
| HV5R-8-2-8-8        | 10304 | 1"     | 1"     | 5.8"  | 8"  | 2       | 247.50 |
| HV5R-10-3-10        | 10305 | 1-1/4" | 1-1/4" | 1.8"  | 4"  | 3       | 192.50 |
| HV5R-10-3-10-5      | 10306 | 1-1/4" | 1-1/4" | 2.8"  | 5"  | 3       | 247.50 |
| HV5R-10-3-10-6      | 10307 | 1-1/4" | 1-1/4" | 3.8"  | 6"  | 3       | 214.50 |
| HV5R-10-3-10-7      | 10308 | 1-1/4" | 1-1/4" | 4.8"  | 7"  | 3       | 275.00 |
| HV5R-10-3-10-8      | 10309 | 1-1/4" | 1-1/4" | 5.8"  | 8"  | 3       | 286.00 |

All shanks come with flats.

The Mil-Tec HV5R series has a 0° lead and can produce a 90° shoulder. Coolant through feature is available as an option.



| SS Super Shear Geometry Inserts |         |         |         |         |       |  |
|---------------------------------|---------|---------|---------|---------|-------|--|
| Radius Sizes                    |         |         |         |         |       |  |
| Grade                           | .016"   | .032"   | .062"   | .125"   | List  |  |
| 20UC                            | 41020UC | 41030UC | 41040UC | 41050UC | 14.50 |  |
| 20A1                            | 41020A1 | 41030A1 | 41040A1 | 41050A1 | 15.50 |  |
| 20TC                            | 41020TC | 41030TC | 41040TC | 41050TC | 15.50 |  |

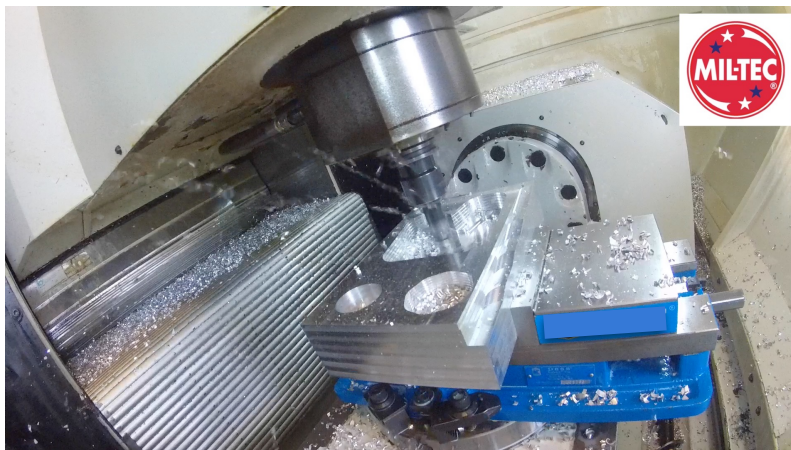


| Part#    | Description     | Price | Package | EDP#  |
|----------|-----------------|-------|---------|-------|
| HVW-10T  | Torx Wrench     | 3.30  | 1       | 99111 |
| HVS-832T | Torx Screw HV5  | 16.50 | 9       | 99114 |
| MT-AS    | Anti-Seize tube | 1.10  | 1       | 99106 |

Screw torque setting 16 to 20 inch lbs



DXF files available



Visit the Tool Alliance YouTube channel to view this video.

## 10° Ramp Angle

2500 SFPM @ .003" CPT Ramping

2500 SFPM @ .006" CPT Straight

Axial DOC .150" / Total Depth 1.020"



## 5° Helical Interpolation

2500 SFPM @ .003" CPT Helical Interpolation

Hole diameter 1.872 / Total Axial Depth 1.100"

Visit the Tool Alliance YouTube channel to view this video.

