KENNAMETAL®
Engineering Your Competitive Edge

# Technical Tip #127 – Milling Insert Nomenclature

| | | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **ANSI** | **Inch** | **S** | **E** | **K** | **R** | **4** | **2** | **AF** | **T** | **N** | **6** | **G** | **D** | **P** |

1. First station indicates shape of insert.

2. Second station shows relief angle or rake angle of the insert.

3. The third station provides a working gage for repeatability. It sets tolerance to the I.C. (inscribed circle) and creates a gage tolerance for the I.C. to the over-the-nose radius along with the thickness of the insert.

4. Fourth station indicates geometry and clamping insert type. It designates with or without hole, shape and size of hole, chipbreaker form, and single- or double-sided insert.

5. Fifth station indicates I.C. size of the insert.

6. Sixth station designates insert thickness.
    i. T = 1/16” inch increments

7. Seventh station designates corner configuration of the insert.

8. Cutting edge form
    i. F for sharp
    ii. E For Honed edge
    iii. T for T-Land
    iv. S for Honed T-Land

9. Designates N for neutral, R for right-handed, or L for left-handed insert.

10. Designates facet width of insert.
    i. 2 - .0312”
    ii. 3 - .0469”
    iii. 4 - .0625”
    iv. 6 - .0938”

11. Edge prep size
    i. L – Light sharp or lightly honed or T-landed
    ii. G – General Medium hone and/or  T-land
    iii. H – Heavy – large hone and/or T-land

12. Rake face angle
    i. Angle on insert prior to installation.
    ii. N – 0 degree, A – 3 degree, B – 5 degree, C – 7 degree, P – 11 degree,
    iii. D- 15 degree, E – 20 degree, F - 25 degree, G – 30 degree.

13. Added Info
    i. J – polished rake face
    ii. P – partial T-land
    iii. W- Wiper Insert