

## Extend Tool Life with Penta HD

Dormer Pramet adds to the Pramet indexable offer with the Penta HD, a highly productive milling cutter for heavy duty roughing.

The Penta HD allows operators to utilize the full power of machines, as well as safely perform heavy roughing operations including full depth-of-cut machining.

An innovative clamping system allows changing of the insert without removing the screw. The Penta HD is a hard working product with depth-of-cut capability of 0.394 inches, suitable for demanding applications.

Available in diameters of 4" - 12"

### Your Benefits

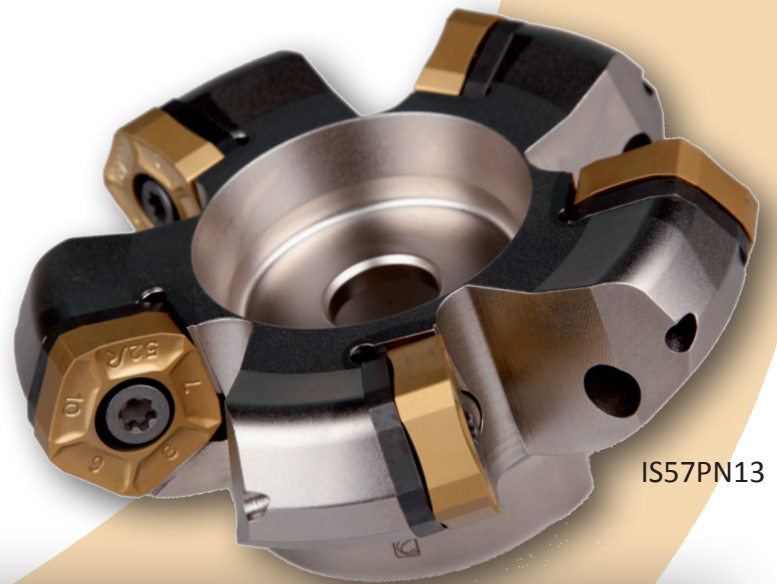
- Increased metal removal due to double-sided insert design with 10 cutting edges
- No cool down period required before indexing, allowing for more machine uptime



PNMQ



PNMU



IS57PN13

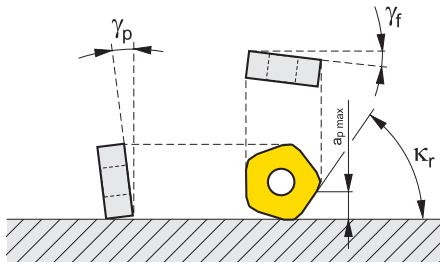
### Want to learn more?

Ask for our technical handbook or sign up for eLearning online.

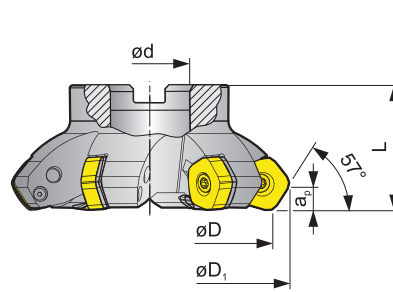
**Your one-stop manufacturer** - Ask about our Solid Carbide End Mills

# Penta HD

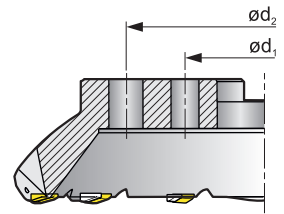
## Negative Face Milling Cutters



|            |           |             |         |
|------------|-----------|-------------|---------|
| $\gamma_p$ | -4°       | $\kappa_r$  | 57°     |
| $\gamma_f$ | -8° - -5° | $a_{p,max}$ | .394 in |



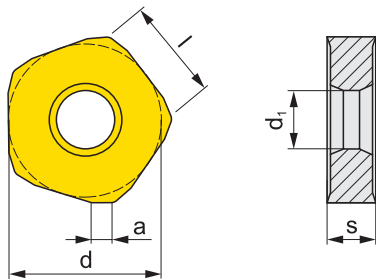
$\varnothing 4.000 - 6.000$  in



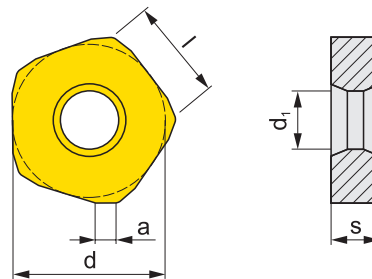
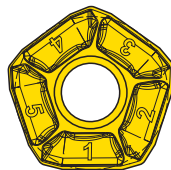
$\varnothing 8.000 - 12.000$  in

| Designation       | Availability | Dimensions |        |       |       |       |       |             | lbs   |
|-------------------|--------------|------------|--------|-------|-------|-------|-------|-------------|-------|
|                   |              | D          | $D_1$  | d     | $d_1$ | $d_2$ | L     | No of teeth |       |
| 400A05R-IS57PN13  | Standard     | 4.000      | 4.629  | 1.500 | —     | —     | 1.969 | 5           | 2.63  |
| 500B06R-IS57PN13  | Standard     | 5.000      | 5.629  | 1.500 | 2.205 | —     | 2.480 | 6           | 5.03  |
| 600B08R-IS57PN13  | Standard     | 6.000      | 6.628  | 2.000 | 3.465 | —     | 2.480 | 8           | 7.04  |
| 800C10R-IS57PN13  | Standard     | 8.000      | 8.627  | 2.500 | 4.000 | —     | 2.480 | 10          | 14.73 |
| 1000C12R-IS57PN13 | Non-standard | 10.000     | 10.627 | 2.500 | 4.000 | —     | 2.480 | 12          | 27.54 |
| 1200C14R-IS57PN13 | Non-standard | 12.000     | 12.627 | 2.500 | 4.000 | 7.000 | 3.150 | 14          | 45.52 |

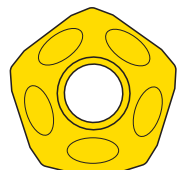
## Inserts for Negative Face Milling Cutters



PNMU



PNMQ



| Designation     | Grades |       |      |      | Dimensions |      |      |       |      |
|-----------------|--------|-------|------|------|------------|------|------|-------|------|
|                 |        |       |      |      | l          | d    | s    | $d_1$ | a    |
| PNMU 1308DNSR-M | M9340  | M8345 | 8215 | 8230 | .512       | .961 | .313 | .394  | .118 |
| PNMQ 1308DNSN   | M9340  | M8345 |      | 8230 | .512       | .961 | .313 | .394  | .118 |