

# Speeds and Feeds



- 1) Select your material in the ISO colored chart.
- 2) Start with the recommended cutting speed,  $v_c$  (ft/min). Adjust the cutting speed based on your cutting conditions.

| Material |          |   | Recommended Cutting Speed |                |               |
|----------|----------|---|---------------------------|----------------|---------------|
| Group    |          | Description                             | Hardness (HB)             | Hardness (HRC) | Cutting Speed |
| ISO      | VDI 3323 |   |                           |                |               |
| P        | 1        | Non-Alloy Steel                         | 125                       |                | 50 - 80       |
|          | 2        |   | 190                       | 13             | 50 - 80       |
|          | 3        |   | 250                       | 25             | 50 - 80       |
|          | 5        |   | 300                       | 32             | 10 - 35       |
| M        | 12       | Stainless Steel                         | 200                       | 15             | 20 - 50       |
|          | 13       |   | 240                       | 23             | 20 - 50       |
|          | 14       |   | 180                       | 10             | 12 - 15       |
| N        | 21       | Aluminum-Wrought Alloy                  | 60                        |                | 50 - 65       |
|          | 22       | Aluminum-Wrought Alloy                  | 100                       |                | 50 - 65       |
|          | 23       | Aluminum-Cast, Alloy                    | 75                        |                | 45 - 90       |
|          | 24       | Aluminum-Cast, Alloy                    | 90                        |                | 45 - 90       |
|          | 27       | Copper and Copper Alloys (Bronze/Brass) | 90                        |                | 30 - 65       |
|          | 28       |   | 100                       |                | 30 - 65       |