

# Cross-brand list report

|                |                              |
|----------------|------------------------------|
| List           | Sample: three turning grades |
| Report ID      | sample                       |
| Data snapshot  | 2026-10-15                   |
| Grades in list | 3                            |

This report shows grades that stand at the same ISO 513 application position. Same position does not mean same performance; any change is validated on one machine and one sample part before it is rolled out. Positions come from manufacturer-published charts; nothing in this report is estimated.

## 1. Summary

---

Your list: 3 grades. Reference data in scope: 231 grades, 313 positioning records. 3 of your grades sit at a position supported by two or more manufacturer-published charts.

| Status                                  | Grades |
|-----------------------------------------|--------|
| Match (two or more manufacturer charts) | 3      |
| Candidates only, none confirmed         | 0      |
| No cross-brand answer on file           | 0      |
| Out of scope                            | 0      |

## 2. Grade by grade

---

## GC4325

Match (two or more manufacturer charts)

Matched as Sandvik GC4325 · ISO positions P20, P25, P30 · own position supported by 2 manufacturer chart(s)

5 grade(s) from other makers are confirmed by two or more manufacturer charts across at least half of GC4325's range (up to five shown). 5 further candidate(s) rest on one chart or a partial overlap and are listed separately, not as a recommendation.

### MATCHES

| Maker      | Grade   | Shared positions | Charts | Why it is here                                                        |
|------------|---------|------------------|--------|-----------------------------------------------------------------------|
| Sumitomo   | AC1030U | P20, P25, P30    | 3      | two or more manufacturer charts; covers 100% of the grade's positions |
| Kyocera    | CA025P  | P20, P25, P30    | 2      | two or more manufacturer charts; covers 100% of the grade's positions |
| Mitsubishi | MP3025  | P20, P25, P30    | 2      | two or more manufacturer charts; covers 100% of the grade's positions |
| MOLDINO    | GM25    | P20, P25, P30    | 2      | two or more manufacturer charts; covers 100% of the grade's positions |
| Mitsubishi | VP15TF  | P20, P30         | 4      | two or more manufacturer charts; covers 67% of the grade's positions  |

### FURTHER CANDIDATES: ONE CHART OR PARTIAL OVERLAP (NOT A RECOMMENDATION)

| Maker      | Grade  | Shared positions | Charts | Why it is here                                                              |
|------------|--------|------------------|--------|-----------------------------------------------------------------------------|
| ISCAR      | IC8350 | P30              | 4      | one chart, or partial position overlap; covers 33% of the grade's positions |
| Kennametal | KC9125 | P20              | 4      | one chart, or partial position overlap; covers 33% of the grade's positions |
| Kyocera    | PV720  | P20              | 4      | one chart, or partial position overlap; covers 33% of the grade's positions |
| Kyocera    | PV730  | P30              | 4      | one chart, or partial position overlap; covers 33% of the grade's positions |
| Kyocera    | TN620  | P20              | 4      | one chart, or partial position overlap; covers 33% of the grade's positions |

**GC2220****Match (two or more manufacturer charts)**

Matched as Sandvik GC2220 · ISO positions M15, M20 · own position supported by 2 manufacturer chart(s)

5 grade(s) from other makers are confirmed by two or more manufacturer charts across at least half of GC2220's range (up to five shown). 5 further candidate(s) rest on one chart or a partial overlap and are listed separately, not as a recommendation.

**MATCHES**

| Maker      | Grade  | Shared positions | Charts | Why it is here                                                        |
|------------|--------|------------------|--------|-----------------------------------------------------------------------|
| Kennametal | KCM25B | M15, M20         | 3      | two or more manufacturer charts; covers 100% of the grade's positions |
| Walter     | WSM20S | M15, M20         | 3      | two or more manufacturer charts; covers 100% of the grade's positions |
| Seco       | CP500  | M15, M20         | 2      | two or more manufacturer charts; covers 100% of the grade's positions |
| ISCAR      | IC6025 | M20              | 4      | two or more manufacturer charts; covers 50% of the grade's positions  |
| Kennametal | KC525M | M20              | 3      | two or more manufacturer charts; covers 50% of the grade's positions  |

**FURTHER CANDIDATES: ONE CHART OR PARTIAL OVERLAP (NOT A RECOMMENDATION)**

| Maker     | Grade   | Shared positions | Charts | Why it is here                                                               |
|-----------|---------|------------------|--------|------------------------------------------------------------------------------|
| MOLDINO   | IP100S  | M15, M20         | 1      | one chart, or partial position overlap; covers 100% of the grade's positions |
| Ceratizit | CTCM120 | M20              | 1      | one chart, or partial position overlap; covers 50% of the grade's positions  |
| Ceratizit | CTCM130 | M20              | 1      | one chart, or partial position overlap; covers 50% of the grade's positions  |
| Dijet     | JC5015  | M20              | 1      | one chart, or partial position overlap; covers 50% of the grade's positions  |
| Dijet     | JC8015  | M20              | 1      | one chart, or partial position overlap; covers 50% of the grade's positions  |

## IC8250 **Match (two or more manufacturer charts)**

Matched as ISCAR IC8250 · ISO positions P20, P25 · own position supported by 2 manufacturer chart(s)

5 grade(s) from other makers are confirmed by two or more manufacturer charts across at least half of IC8250's range (up to five shown). 5 further candidate(s) rest on one chart or a partial overlap and are listed separately, not as a recommendation.

### MATCHES

| Maker      | Grade   | Shared positions | Charts | Why it is here                                                        |
|------------|---------|------------------|--------|-----------------------------------------------------------------------|
| Kyocera    | PR1225  | P20, P25         | 3      | two or more manufacturer charts; covers 100% of the grade's positions |
| Kyocera    | PR1725  | P20, P25         | 3      | two or more manufacturer charts; covers 100% of the grade's positions |
| Sumitomo   | AC1030U | P20, P25         | 3      | two or more manufacturer charts; covers 100% of the grade's positions |
| Kennametal | KCP25B  | P20, P25         | 2      | two or more manufacturer charts; covers 100% of the grade's positions |
| Kennametal | KCU25   | P20, P25         | 2      | two or more manufacturer charts; covers 100% of the grade's positions |

### FURTHER CANDIDATES: ONE CHART OR PARTIAL OVERLAP (NOT A RECOMMENDATION)

| Maker     | Grade   | Shared positions | Charts | Why it is here                                                              |
|-----------|---------|------------------|--------|-----------------------------------------------------------------------------|
| Ceratizit | CTCP115 | P20              | 1      | one chart, or partial position overlap; covers 50% of the grade's positions |
| Ceratizit | CTCP125 | P20              | 1      | one chart, or partial position overlap; covers 50% of the grade's positions |
| Ceratizit | CTPM125 | P20              | 1      | one chart, or partial position overlap; covers 50% of the grade's positions |
| Dijet     | CX75    | P20              | 1      | one chart, or partial position overlap; covers 50% of the grade's positions |
| Dijet     | JC5015  | P25              | 1      | one chart, or partial position overlap; covers 50% of the grade's positions |

## 3. Out of scope

---

Every grade in the list is in the reference data.

## 4. Consolidation view

---

No two matched grades in your list share the same full set of ISO positions.

## 5. Cost per part: what decides a switch

---

A grade change is judged on cost per part, not on insert price: machine time + tool cost + downtime. Machine time = machine rate × cutting time. Tool cost = insert price ÷ (edges × parts per edge). Downtime = edge changes × change time × machine rate. Because machine time is usually the largest share, a grade that the manufacturer rates for a clearly higher cutting speed usually wins in stable cuts even at a higher insert price; when edges chip or break early, edge life decides instead. The XLSX file has a calculator sheet where you enter your own machine rate, prices and measured parts per edge.

#### SPEED COMPARISON FROM MANUFACTURER CUTTING DATA (4 OF 15 GRADE PAIRS ON FILE)

| Your grade | Group | Candidate         | Your Vc (m/min) | Candidate Vc (m/min)                                                                              | What it means                                                  | Source              |
|------------|-------|-------------------|-----------------|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------|---------------------|
| GC4325     | P     | Sumitomo AC1030U  | –               | 50-200<br>ISO P reference: unalloyed/low-alloy steel, manufacturer recommended (general turning)  | No matching general-turning row on file for one or both grades | <a href="#">[1]</a> |
| GC4325     | P     | Mitsubishi MP3025 | –               | 180-275<br>ISO P reference: unalloyed/low-alloy steel, manufacturer recommended (general turning) | No matching general-turning row on file for one or both grades | <a href="#">[1]</a> |
| GC2220     | M     | Walter WSM20S     | –               | 110-240                                                                                           | No matching general-turning row on file for one or both grades | <a href="#">[1]</a> |
| IC8250     | P     | Sumitomo AC1030U  | –               | 50-200<br>ISO P reference: unalloyed/low-alloy steel, manufacturer recommended (general turning)  | No matching general-turning row on file for one or both grades | <a href="#">[1]</a> |

## 6. Validation plan

1. Pick one machine and one sample part per change.
2. Run the current grade and the candidate on the same part type, each at its maker's recommended cutting data, until the edge is worn; record good parts per edge and cycle time.
3. Compute cost per cutting edge from your own purchase price and the measured life; keep the change only if the number moves.
4. Roll out one grade at a time.

## 7. Sources and method

Positions in this report come from manufacturer-published charts of: Ceratizit, Dijet, ISCAR, Kennametal, Korloy, Kyocera, MOLDINO, Mitsubishi, NTK, Sandvik, Seco, Sumitomo, TaeguTec, Tungaloy, Walter. Data snapshot 2026-10-15. A match is a grade from another maker that shares at least half of your grade's ISO positions and whose position is supported by two or more manufacturer-published charts. Further candidates (one chart, or covering less than half of your grade's positions) are shown for completeness and are not recommendations. Nothing in this report is estimated or interpolated. The underlying comparison charts are published by the manufacturers themselves; this report reproduces only grade names and ISO 513 positions, never a chart's layout, text or images. Corrections and removal requests from a manufacturer: [research@cuttingtoolsai.eu](mailto:research@cuttingtoolsai.eu).