

HR1-FC

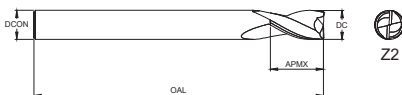
- ▶ Tooling solutions for automobile, general engineering, mining, energy and die & mould industries.
- ▶ High performance tooling for high efficiency & high-speed machining of up to 45 HRC steels.
- ▶ Superior coating and geometry extend tool life allowing maximum production rate and minimal machine downtime.
- ▶ Next-generation HiPIMS technology FerroCon coating results in maximum tool surface hardness and smoothness resulting in increased tool life and maximum productivity.
- ▶ Roughing & finishing machining can be done in mild steel, carbon steels, alloy steels, pre-hardened steels.



| | | | | | |
|---|---|---|---|---|---|
| P | M | K | N | S | H |
| ● | ○ | ● | ○ | | |

● Recommended ○ Good

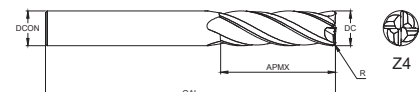
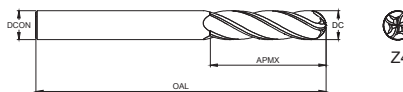
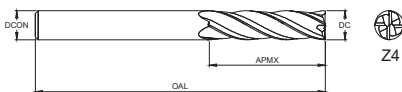
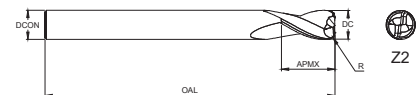
SQUARE END MILL



BALLNOSE END MILL



CORNER RADIUS END MILL



Note: R = RD (CR Radius)

BALLNOSE END MILL - Z4



units in mm

| CODE | DC | DCON | APMX | OAL |
|--------------------------------------|----|------|------|-----|
| MS-HR1-BA-4-0300-015-00-03-050-00-FC | 3 | 3 | 15 | 50 |
| MS-HR1-BA-4-0300-025-00-03-075-00-FC | 3 | 3 | 25 | 75 |
| MS-HR1-BA-4-0300-040-00-03-100-00-FC | 3 | 3 | 40 | 100 |
| MS-HR1-BA-4-0300-040-00-03-150-00-FC | 3 | 3 | 40 | 150 |
| MS-HR1-BA-4-0400-015-00-04-050-00-FC | 4 | 4 | 15 | 50 |
| MS-HR1-BA-4-0400-025-00-04-075-00-FC | 4 | 4 | 25 | 75 |
| MS-HR1-BA-4-0400-040-00-04-100-00-FC | 4 | 4 | 40 | 100 |
| MS-HR1-BA-4-0400-040-00-04-150-00-FC | 4 | 4 | 40 | 150 |
| MS-HR1-BA-4-0500-015-00-05-050-00-FC | 5 | 5 | 15 | 50 |
| MS-HR1-BA-4-0500-025-00-05-075-00-FC | 5 | 5 | 25 | 75 |
| MS-HR1-BA-4-0500-040-00-05-100-00-FC | 5 | 5 | 40 | 100 |
| MS-HR1-BA-4-0500-060-00-05-150-00-FC | 5 | 5 | 60 | 150 |
| MS-HR1-BA-4-0600-015-00-06-050-00-FC | 6 | 6 | 15 | 50 |
| MS-HR1-BA-4-0600-030-00-06-075-00-FC | 6 | 6 | 30 | 75 |
| MS-HR1-BA-4-0600-040-00-06-100-00-FC | 6 | 6 | 40 | 100 |
| MS-HR1-BA-4-0600-080-00-06-150-00-FC | 6 | 6 | 80 | 150 |
| MS-HR1-BA-4-0800-023-00-08-060-00-FC | 8 | 8 | 23 | 60 |
| MS-HR1-BA-4-0800-030-00-08-075-00-FC | 8 | 8 | 30 | 75 |
| MS-HR1-BA-4-0800-040-00-08-100-00-FC | 8 | 8 | 40 | 100 |
| MS-HR1-BA-4-0800-080-00-08-150-00-FC | 8 | 8 | 80 | 150 |
| MS-HR1-BA-4-1000-030-00-10-075-00-FC | 10 | 10 | 30 | 75 |
| MS-HR1-BA-4-1000-050-00-10-100-00-FC | 10 | 10 | 50 | 100 |
| MS-HR1-BA-4-1000-080-00-10-150-00-FC | 10 | 10 | 80 | 150 |
| MS-HR1-BA-4-1000-100-00-10-200-00-FC | 10 | 10 | 100 | 200 |
| MS-HR1-BA-4-1200-030-00-12-075-00-FC | 12 | 12 | 30 | 75 |
| MS-HR1-BA-4-1200-050-00-12-100-00-FC | 12 | 12 | 50 | 100 |
| MS-HR1-BA-4-1200-080-00-12-150-00-FC | 12 | 12 | 80 | 150 |
| MS-HR1-BA-4-1200-100-00-12-200-00-FC | 12 | 12 | 100 | 200 |
| MS-HR1-BA-4-1400-050-00-14-100-00-FC | 14 | 14 | 50 | 100 |
| MS-HR1-BA-4-1400-080-00-14-150-00-FC | 14 | 14 | 80 | 150 |
| MS-HR1-BA-4-1400-100-00-14-200-00-FC | 14 | 14 | 100 | 200 |
| MS-HR1-BA-4-1600-050-00-16-100-00-FC | 16 | 16 | 50 | 100 |
| MS-HR1-BA-4-1600-080-00-16-150-00-FC | 16 | 16 | 80 | 150 |
| MS-HR1-BA-4-1600-100-00-16-200-00-FC | 16 | 16 | 100 | 200 |
| MS-HR1-BA-4-1800-050-00-18-100-00-FC | 18 | 18 | 50 | 100 |
| MS-HR1-BA-4-1800-080-00-18-150-00-FC | 18 | 18 | 80 | 150 |
| MS-HR1-BA-4-1800-100-00-18-200-00-FC | 18 | 18 | 100 | 200 |
| MS-HR1-BA-4-2000-050-00-20-100-00-FC | 20 | 20 | 50 | 100 |
| MS-HR1-BA-4-2000-080-00-20-150-00-FC | 20 | 20 | 80 | 150 |
| MS-HR1-BA-4-2000-100-00-20-200-00-FC | 20 | 20 | 100 | 200 |