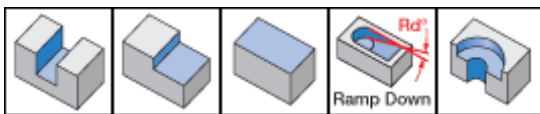
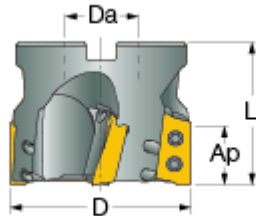




**HP F90AT-19** : HELIPLUS, 90°face mills with HP AD.. 1906... long edged inserts.



| Designation              | D      | Z | ap    | L     | Da    | Rd?/b> | Arbor | Kg   |
|--------------------------|--------|---|-------|-------|-------|--------|-------|------|
| HP F90AT D50-3-22-19     | 50.00  | 3 | 18.00 | 50.00 | 22.00 | 5.0    | A     | 0.50 |
| HP F90AT D50-4-22-19     | 50.00  | 4 | 18.00 | 50.00 | 22.00 | 5.0    | A     | 0.33 |
| HP F90AT D63-4-25.4-19   | 63.00  | 4 | 18.00 | 50.00 | 25.40 | 3.5    | A     | 0.77 |
| HP F90AT D63-4-27-19     | 63.00  | 4 | 18.00 | 50.00 | 27.00 | 3.5    | A     | 0.76 |
| HP F90AT D63-5-25.4-19   | 63.00  | 5 | 18.00 | 50.00 | 25.40 | 3.5    | A     | 0.72 |
| HP F90AT D63-5-27-19     | 63.00  | 5 | 18.00 | 50.00 | 27.00 | 3.5    | A     | 0.76 |
| HP F90AT D80-4-25.4-19   | 80.00  | 4 | 18.00 | 50.00 | 25.40 | 2.5    | B     | 1.01 |
| HP F90AT D80-4-27-19     | 80.00  | 4 | 18.00 | 50.00 | 27.00 | 2.5    | B     | 0.72 |
| HP F90AT D80-6-25.4-19   | 80.00  | 6 | 18.00 | 50.00 | 25.40 | 2.5    | B     | 0.72 |
| HP F90AT D80-6-27-19     | 80.00  | 6 | 18.00 | 50.00 | 27.00 | 2.5    | B     | 0.72 |
| HP F90AT D100-5-31.75-19 | 100.00 | 5 | 18.00 | 50.00 | 31.75 | 2.0    | B     | 1.74 |
| HP F90AT D100-5-32-19    | 100.00 | 5 | 18.00 | 50.00 | 32.00 | 2.0    | B     | 1.68 |
| HP F90AT D100-7-31.75-19 | 100.00 | 7 | 18.00 | 50.00 | 31.75 | 2.0    | B     | 0.72 |
| HP F90AT D100-7-32-19    | 100.00 | 7 | 18.00 | 50.00 | 32.00 | 2.0    | B     | 1.41 |

Insert clamping/unclamping procedure: First loosely attach the rear clamping screw, then the face screw. In the same order, tighten them both.